Addendum A: "Status Report on the Disproportionately High Numbers of Terminations among African American Apprentices with an Exit Date between 2006 and 2010"

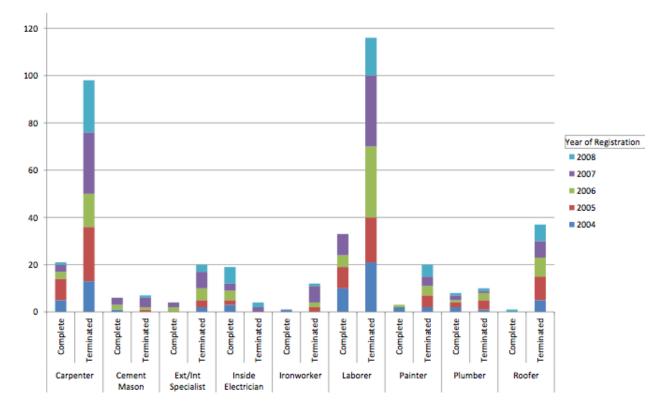
## A joint public policy research project between Oregon Bureau of Labor and Industry and the Oregon Commission on Black Affairs, January, 2015

This addendum to the "Status Report on the Disproportionately High Numbers of Terminations among African American Apprentices with an Exit Date between 2006 and 2010" [hereinafter "Status Report"] seeks to provide an alternate analysis of the data referenced in the Status Report.

The Status Report provides a cross-sectional study of completion and termination rates for minority apprentices in the years 2006 through 2010 based on the exit dates of apprentices. The Status Report's cross-sectional study found that minority apprentices, in particular, African American apprentices, experienced disproportionately high rates of termination as compared to white, non-Hispanic male apprentices. The data in the Status Report was analyzed by looking at a given year and recording the number of completions and terminations for that year. This type of analysis is helpful to provide a broad overview of trends, but it may fail to take into account current social or economic factors impacting retention. In contrast, a longitudinal analysis provides a more detailed perspective of the data because it examines a group of people within a population and observes them over a period of time.

In this addendum, cohorts of apprentices were studied based on their year of registration in an apprenticeship program. If the apprentice finished their apprenticeship and fulfilled all the program requirements then they were counted as "completed." However, if an apprentice left the program, whether it was voluntarily or involuntarily, they were counted as "terminated" from the program. The longitudinal study of the data reveals the same disproportionality as the cross-sectional study. In all of the trades, African Americans are more likely than white, non-Hispanic apprentices to be terminated from an apprenticeship.

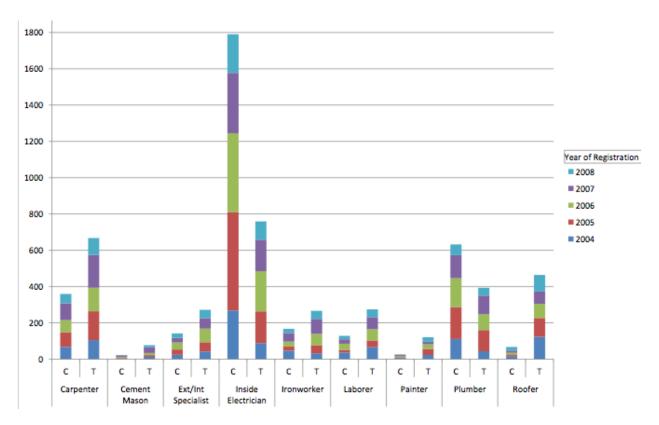
The first graph below illustrates completion and termination rates for African American apprentices in the nine most common trades based on their year of entry into the program. This chart shows that African Americans are generally more likely to terminate from an apprenticeship program than they are to complete the program. The exception to this general rule is the Inside Electrician program, where completion rates exceed termination rates by a ratio of 19 to 4.



African American Apprentices, Registered 2004-2008, 9 Most Common Trades

**Chart 1:** This graph analyzes the completion and termination numbers for male and female African American apprentices based on their year of registration. Each color represents a group of apprentices based on their year of registration. Next the data is broken down into the nine most common apprenticeship trade programs. Finally, the data is further broken down into two categories: completions and terminations. This chart reveals that African American apprentices are generally more likely to terminate from an apprenticeship program than they are to complete the program, with the exception of the Inside Electrician apprenticeship program.

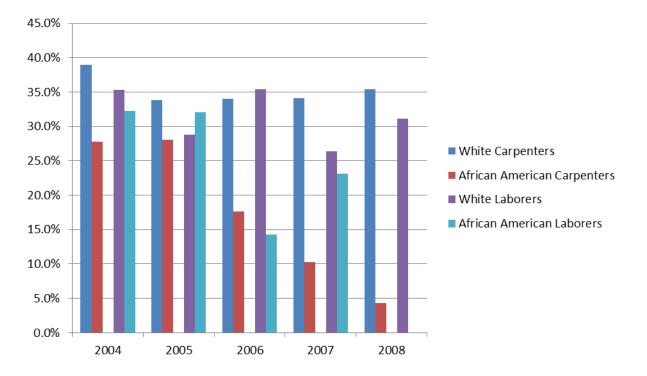
The next graph illustrates completion and termination rates of white, non-Hispanic apprentices in the nine most common trades based on their year of entry into the program. This chart reveals that white, non-Hispanic apprentices are also generally more likely to terminate an apprenticeship program than they are to complete it, with the exception of Inside Electrician and Plumber apprenticeship programs. However, the gap between completion and termination rates for white, non-Hispanic apprentices is significantly smaller than the gap between completion and termination and termination rates for African American apprentices.



## White, Non-Hispanic Apprentices, Registered 2004-2008, 9 Most Common Trades

**Chart 2:** This chart analyzes the completion and termination numbers for white, non-Hispanic male apprentices based on their year of registration. Each color represents a cohort of apprentices based on their year of registration. Next the data is broken down into the 9 most common apprenticeship trade programs. Finally, the data is further broken down into two categories: completions and terminations. The chart reveals that white, non-Hispanic apprentices also struggle to complete apprenticeship programs. However, the gap between the completion and termination rates are significantly smaller for white, non-Hispanic apprentices then they are for African American apprentices.

For example, looking at the two programs with the highest termination rates of any of the trades, Carpenters and Laborers, we still see that the termination rates of African Americans are significantly higher than the termination rates of white, non-Hispanic apprentices. In the carpenter apprenticeship programs, on average only 17.6% of African American apprentices completed their program, as compared to 35% of white, non-Hispanic apprentices.<sup>1</sup> In the laborer apprenticeship programs, the average completion rate for African Americans was 22.1%, while the average completion rate for white, non-Hispanic apprentices was 31.8%. The chart below illustrates these discrepancies.



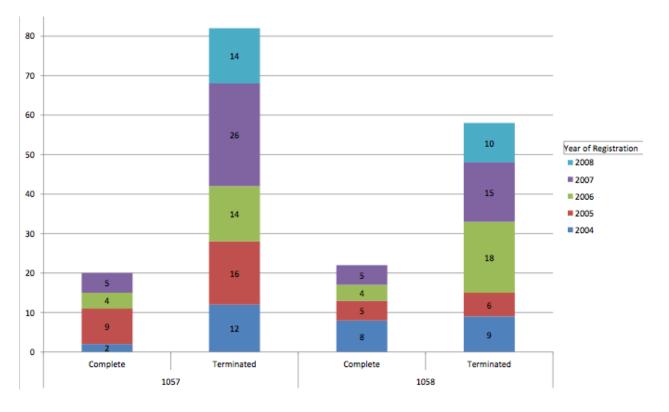
Completion Rates for White, Non-Hispanic and African American Apprentices in Carpenter and Laborer Apprenticeships

**Chart 3:** This chart compares completion rates of white, non-Hispanic apprentices with the completion rates of African American apprentices in Carpenter and Laborer apprenticeship programs. Each color represents a cohort of apprentices based on their year of registration, their ethnicity, and their apprenticeship program. This chart reveals that even in the two apprenticeships programs with the highest rates of terminations for all apprentices, African Americans still experience disproportionality higher rates of termination than their white, non-Hispanic counterparts.

The next chart breaks the numbers down further to illustrate the number of terminations and completions in the Union Carpenter and Union Laborer apprenticeship programs. On average only 19.6% of African Americans, who registered for a Union Carpenter apprenticeship (1057) between 2006 to 2010 successfully completed their apprenticeship, and only 27.5% of African

<sup>&</sup>lt;sup>1</sup> Of the apprentices who registered for an apprenticeship between 2006–2008

Americans in Union Laborer apprenticeships (1058) completed their apprenticeship. While, these numbers are slightly higher than the overall completion rates for carpenter (17%) and laborer (23%) apprentices referenced above, this chart reveals that union programs are also struggling with retention of African American apprentices.

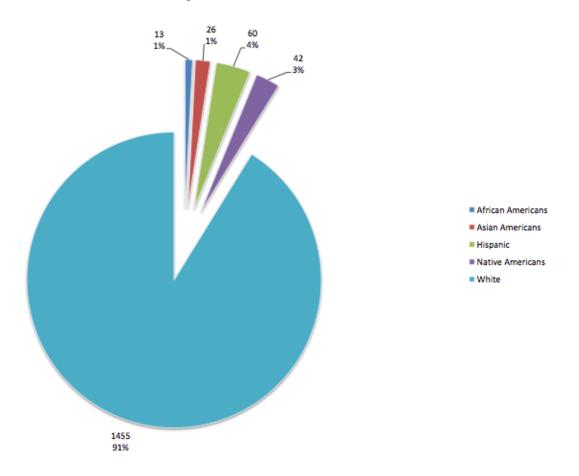


African American Apprentices, Registered 2004-2008, Union Carpenters and Laborers

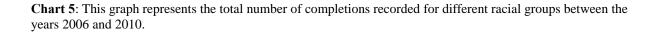
**Chart 4:** This graph illustrates completions and terminations for cohorts of African American union laborer and carpenter apprentices based on the apprentice's year of entry into the program. 1057 is the code for Union Carpenters and 1058 is the code for Union Laborers.

Finally, as was mentioned earlier, Inside Electrician apprenticeship programs appear to be doing fairly well in terms of retaining their African American apprentices. This was the only trade where the number of terminations for African American apprentices did not exceed the number of completions. Moreover, apprentices of all races have roughly the same proportion of completions to terminations. Thus, we do not see that any one race is disproportionality being pushed out of these apprenticeship programs. One possible explanation for the more favorable retention numbers is that Inside Electricians apprenticeship programs are more selective about

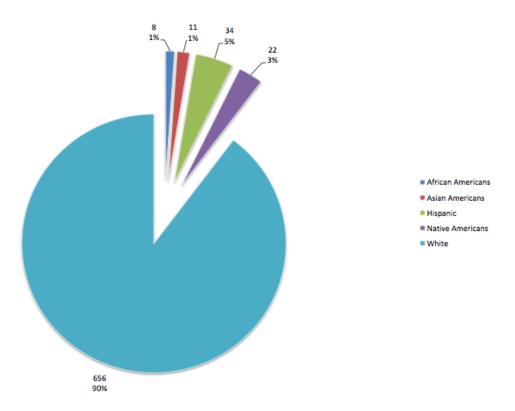
whom they admit. Additionally, since this is a licensed trade, apprentices cannot switch back and forth between jobs that provide apprenticeship training and jobs that do not provide apprenticeship training, whereas in other trades, such as construction, an apprentice could easily transfer their construction skills to non-apprentice work. These programs may warrant further study, however, to determine if there are other reasons contributing to the higher retention rates for African American apprentices.

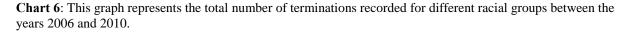


Inside Electricians with Completions between 2006 and 2010.



Inside Electricians with Terminations between 2006 and 2010.





In conclusion, whether the data is viewed by conducting a cross-sectional analysis or a longitudinal analysis, the results are the same. Apprenticeship programs in Oregon consistently struggle with retention of African American apprentices. African American apprentices terminate their programs prior to completion at a disproportionately high rate in comparison to white, non-Hispanic apprentices.