

Analysis of Women-Owned and Socially-Disadvantaged Small Business Underreporting

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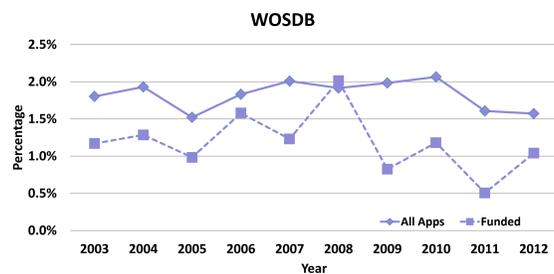
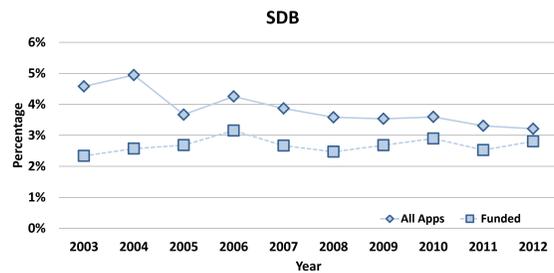
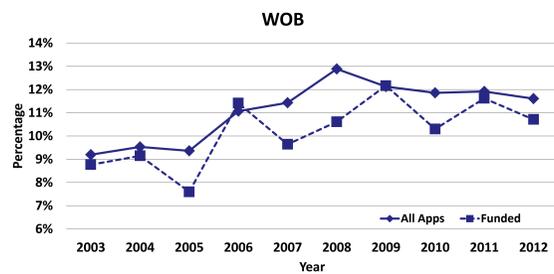
National Institute of Neurological Disorders and Stroke

National Heart, Lung, and Blood Institute

Small Business Programs

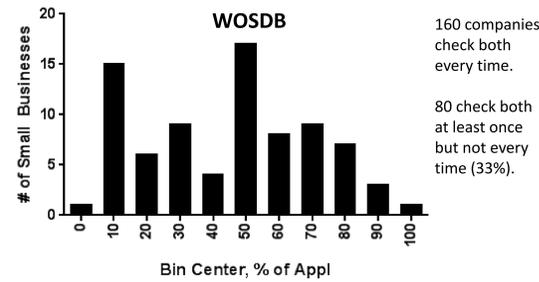
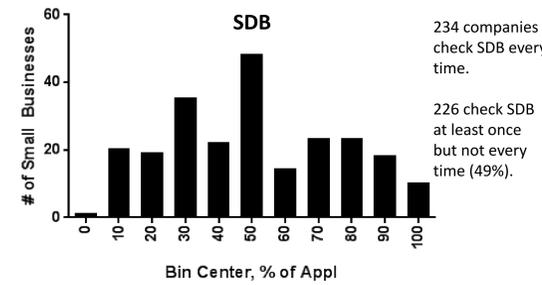
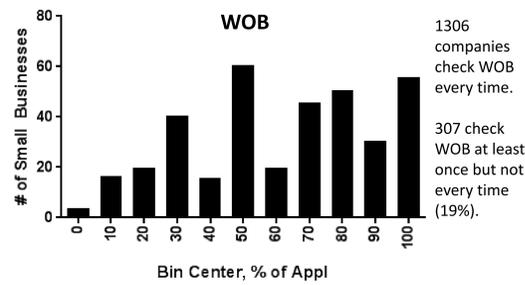
One of the goals of the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs is to “foster and encourage participation by socially and economically disadvantaged small businesses (SDBs), and by women-owned small businesses (WOBs), in technological innovation.” (http://www.sbir.gov/sites/default/files/sbir_pd_with_1-8-14_amendments_2-24-14.pdf) This analysis was done to better understand how to make progress toward that goal.

Woman-Owned and Socially-Disadvantaged Small Businesses Have Lower Rates of Funding



As a baseline, we looked at the percentages of SDBs and WOBs in the overall pool of applicants and funded awards between 2003 and 2012 and found the two groups were quite different. The percentage of SBIR applications across the NIH from WOBs between 2003 and 2008 increased from nine to 12 percent, and remained at that level through 2012. Applications across the NIH from SDBs peaked at 4.9% in 2004, and then hovered around 3.5% for the rest of the decade. The percentage of WOB applications in the funded pool, tracked fairly closely with their representation in the applicant pool. However, during the same period the percentage of funded SBIR awards from SDBs remained constant despite changes in the overall percentage of applications.

11.5% of NIH's Applications Came from Companies that Did Not Consistently Self-Identify (2007-2013)

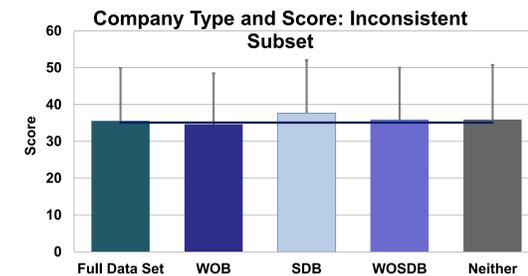


The NIH is working to increase the number of applications and awards from WOBs and SDBs to the SBIR and STTR programs. However, NIH only knows if an application is from a WOB and/or a SDB if the applicant self-identifies on the application form by checking the corresponding box(es). Thus it is likely that the number of applications from WOBs and SDBs is underestimated, which complicates our ability to monitor the participation of these sub-categories of small businesses in the SBIR and STTR programs. The goal of this analysis was to better understand the problem of inconsistent self-identification by companies and, indirectly, underreporting in general. We requested from QVR a list of SBIR/STTR companies that inconsistently self-identified

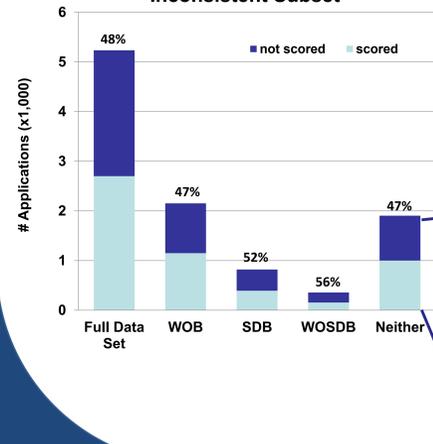
since 2007. It was found that 11.5% of SBIR/STTR applications from FY2007-2013 came from companies that didn't consistently self-identify as WOBs and/or SDBs. While it is possible that the actual ownership can change, it is not expected to happen often.

Self-Identification Does Not Appear to Affect Score, but the Number of Non-Discussed Applications Needs to be Monitored

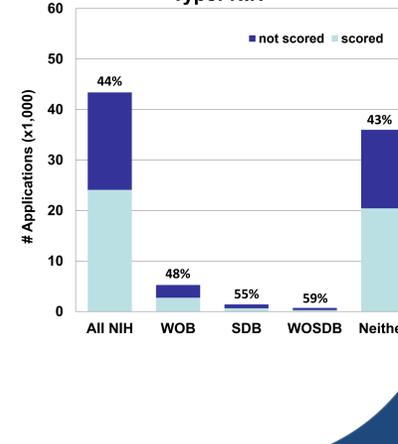
Reviewers can see if a company self-identified on the application form and the inconsistent subset identified offered a unique opportunity to investigate potential reviewer bias. For this subset, there appears to be no evidence of reviewer bias as the score was not adversely affected by identification as either a WOB or SDB. However, there is a small difference in the number of non-discussed applications for this data set. Across NIH, a larger percentage of applications from WOBs and SDBs were unscored compared to other applications. Given the small n, it is difficult to draw definitive conclusions, however the potential trend will need to be monitored.



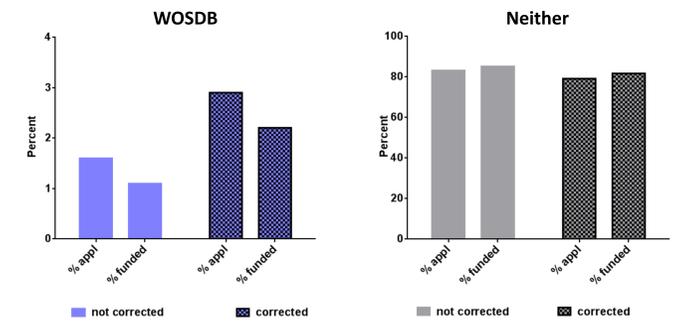
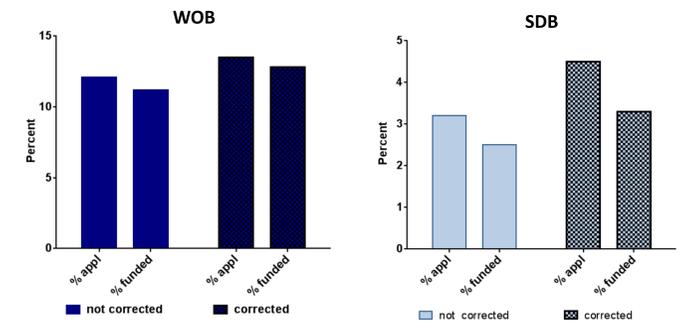
Number Scored by Company Type: Inconsistent Subset



Number Scored by Company Type: NIH



'Correcting' the Identification of Applications from Inconsistent Companies Does Not Improve the Overall Success Rate



Applications that were not designated WOB or SDB from companies that inconsistently self-identified were assigned to either the WOB or SDB categories based on the prior self-identification of the company. It was found the relationship between percent of applications from WOB and SDB compared to funded applications did not significantly improve, indicating that self-reporting inconsistencies are not the cause of lower success rates.

Conclusion

In conclusion, there is an indication that WOBs and SDBs are two distinctive groups based on the application and funding patterns over the last decade. In addition, underreporting is a significant issue for tracking applications from WOBs and SDBs. We found that 11.5% of applications come from companies that don't consistently self-identify. It is also likely that a sizable number of applications come from WOBs and SDBs that never self-identify in the application. Inconsistent self-identification does not account for the difference in funding patterns between the groups. We also found that self-identification does not appear to affect score, however non-discussed rates should continue to be monitored. NIH is using this information to change how we perform outreach to these communities to better meet the mission of both the SBIR and STTR programs.