



# The FY 2016 Merit Review Report

National Science Board Meeting - 8/15/2017

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# Report Overview

NSB 77-150 & 84-114

- Executive Summary
- Introduction
- **Proposal & Award Data**
- **Merit Review Process**
- Appendices

## Changes

- Shorter section on merit review pilots
- **No merit review survey this year**
- The pre-2009 definition of a “new PI” is not included
- **Old Appendix 3 has been split into two (#3 & #4)**

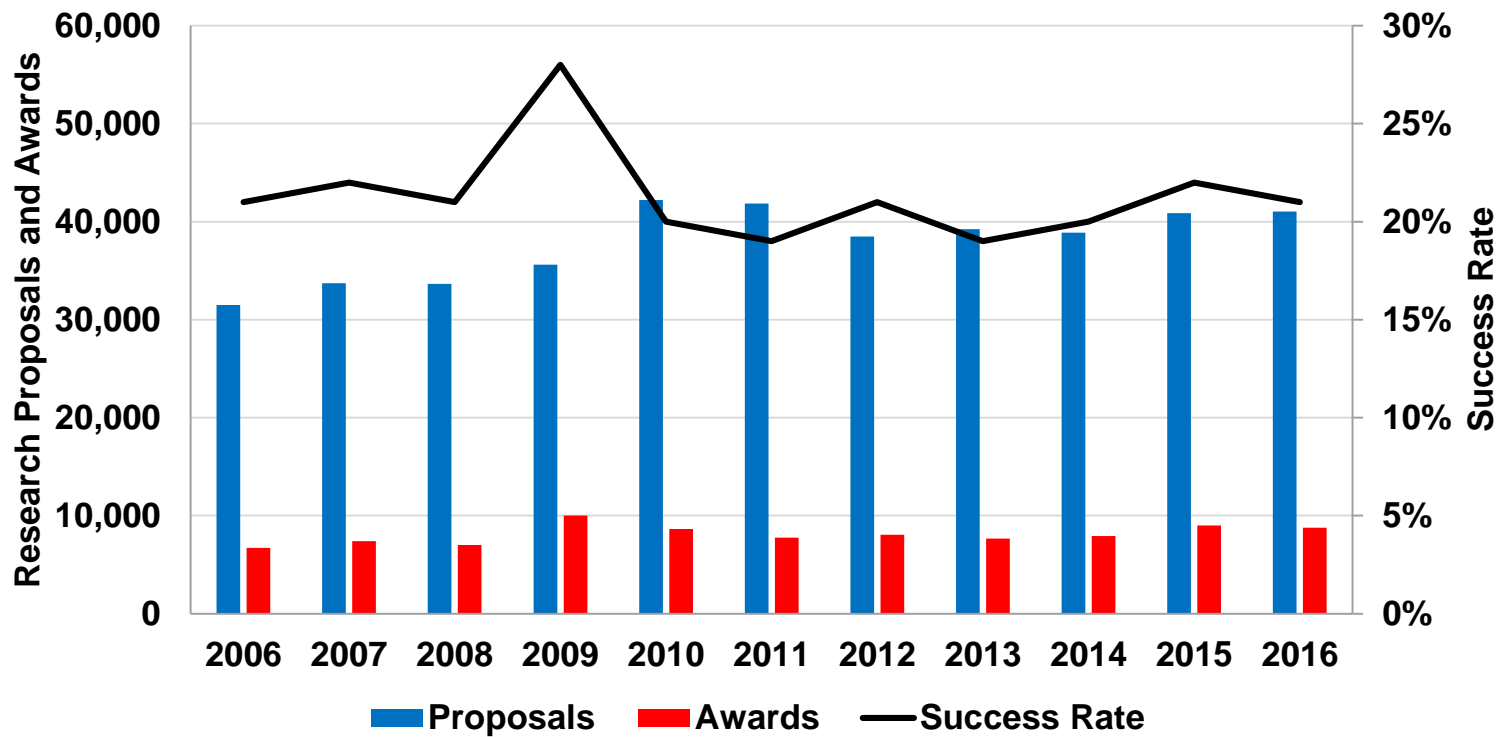


# Highlights

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- NSF proposal and award rates stable for FY 2013 – FY 2016
- Success rate for competitive proposals = 24.1%
- With preliminary proposals, success rate = 22.6%
- Success rate for research proposals = 21%
- No-deadline pilot continues to lower submission rates
- Proportion of funds awarded to academic institutions = 76%
- 22% of research grants to PIs within 7 years of highest degree
- 7% of research grants went to HBCUs, HSIs or TCUs

# Research Proposals, Awards and Success Rate, by Fiscal Year

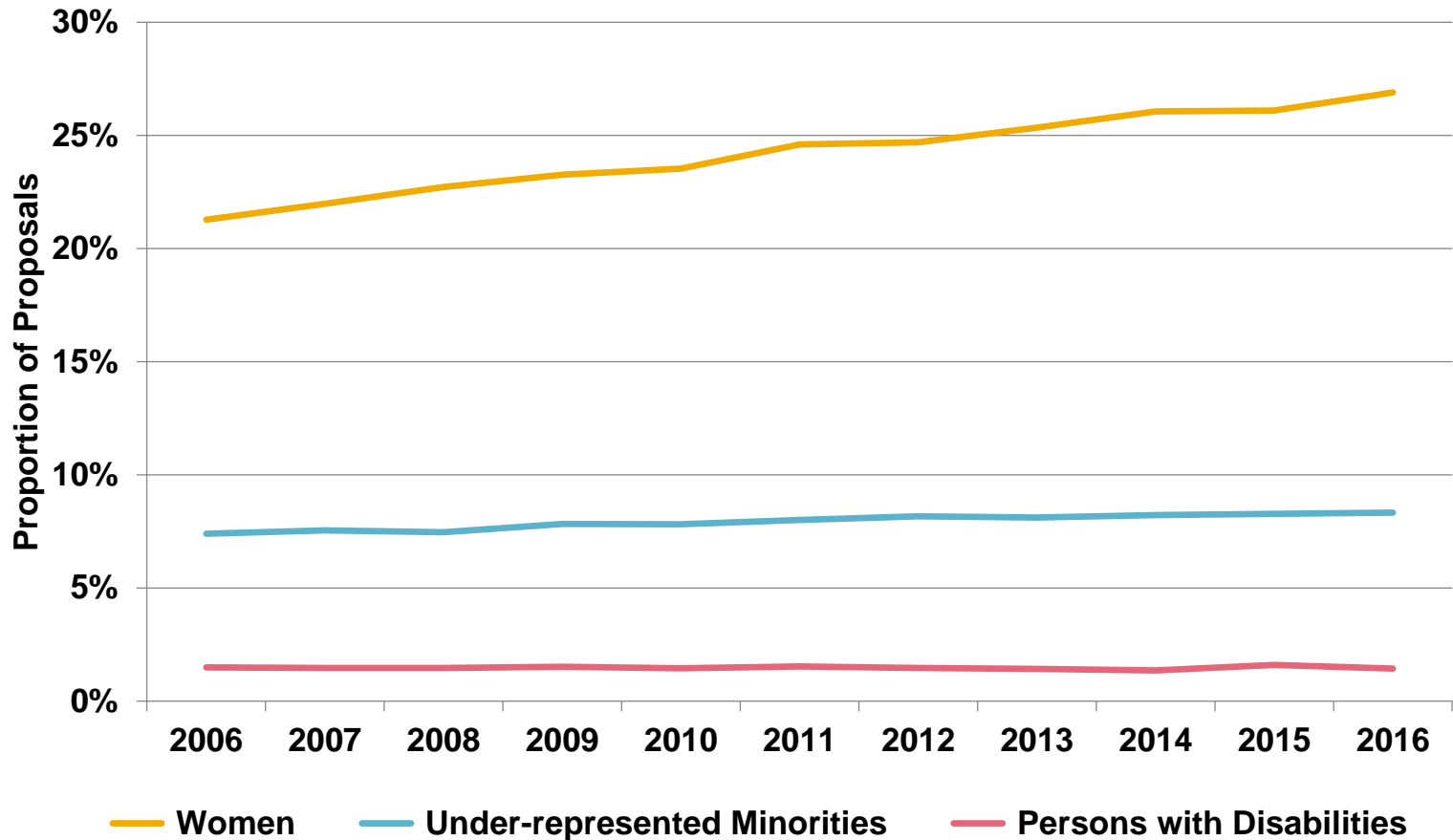


**+ Preliminary Proposals: 4,520  
~ 10% of total**

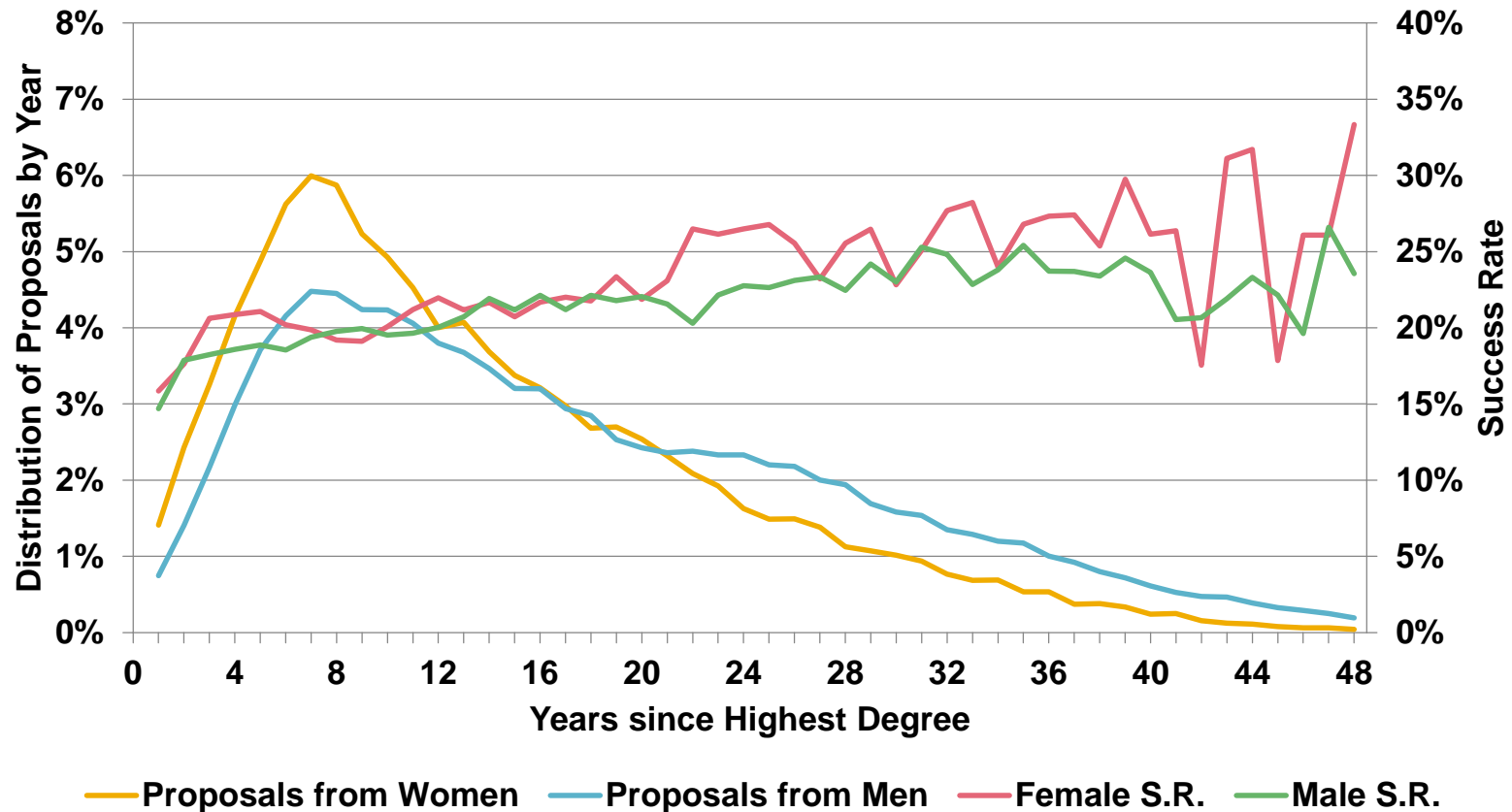
(Excludes: centers and facilities, equipment and instrumentation grants, conferences and symposia, Small Business Innovation Research grants, and education and training grants )

**FY 2009 and FY 2010 include American Recovery and Reinvestment Act awards.**

# Proportions of Proposals from various Demographic Groups, by Fiscal Year

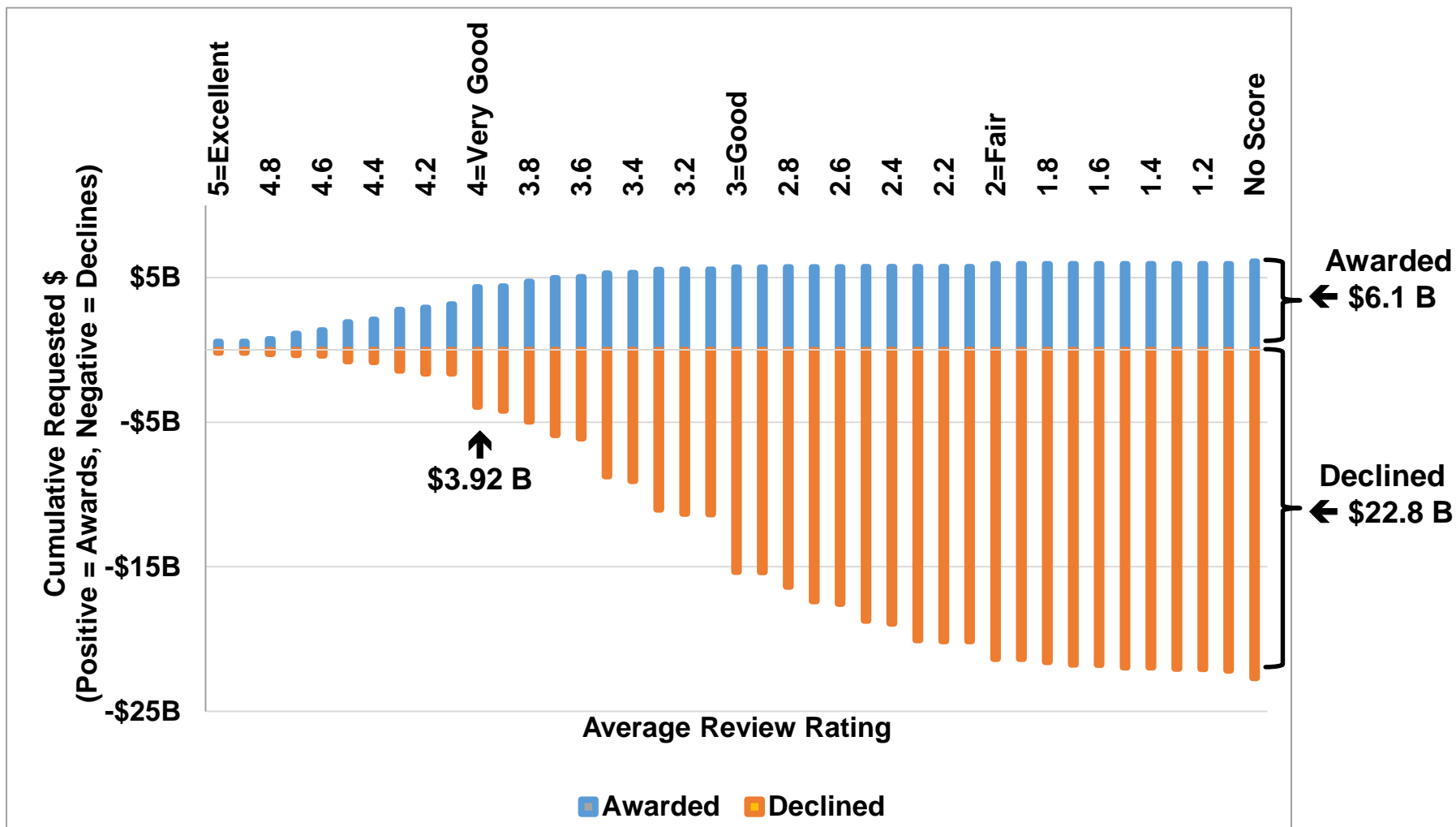


# Research Proposals and Success Rates, FY 2013 – FY 2016, by Years Since Highest Degree and by Gender



Proportion of full-time faculty positions occupied by women STEM PhDs in 2013:  
Junior: 44.9%; Senior: 29.5%. [Source: Science and Engineering Indicators 2016]

# Cumulative Requested Amounts for Awarded and Declined Proposals by Average Reviewer Rating, FY2016



# Merit Review Pilot:

## Impact of Eliminating Program Deadlines

Proposals to four EAR programs before and after transition to no deadlines

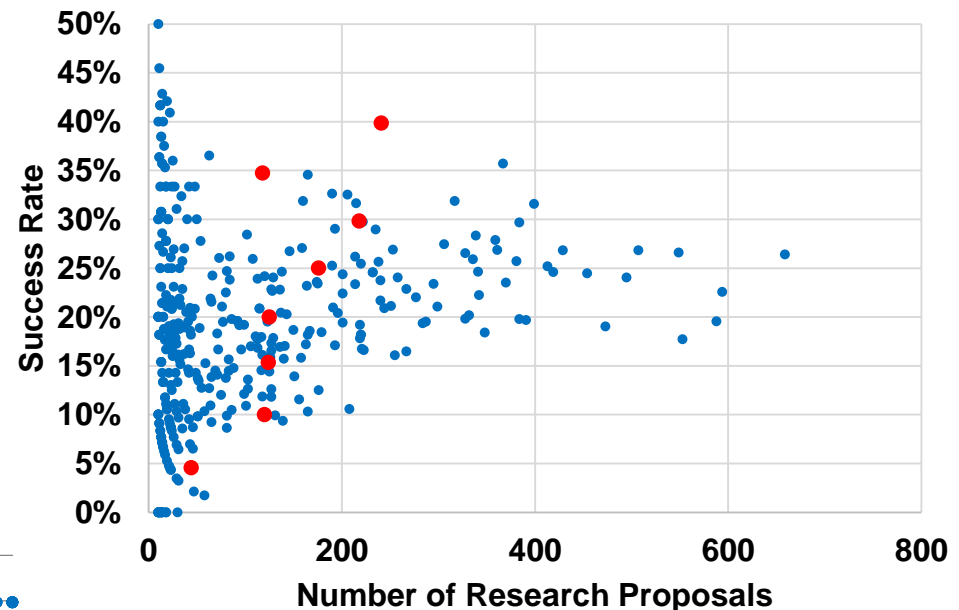
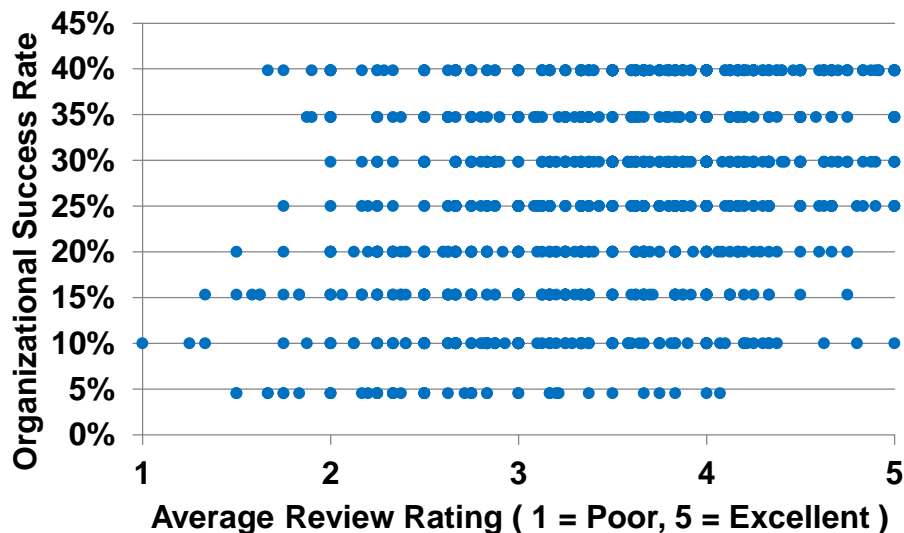
Program	2013	2014	2015-2016	2016-2017
	01/01/2014 - 12/31/2014	01/01/2014 - 12/31/2014	04/09/2015 - 04/09/2016	04/10/2016 - 04/09/2017
Geobiology and Low-Temperature Geochemistry	203	214	83	83
Sedimentary Geology and Paleontology	214	217	119	125
Geomorphology and Land-Use Dynamics	157	137	68	62
Hydrologic Sciences	261	237	97	89

- Increases success rates
- Reduces burden on investigators and reviewers
- No reduction in proposal quality



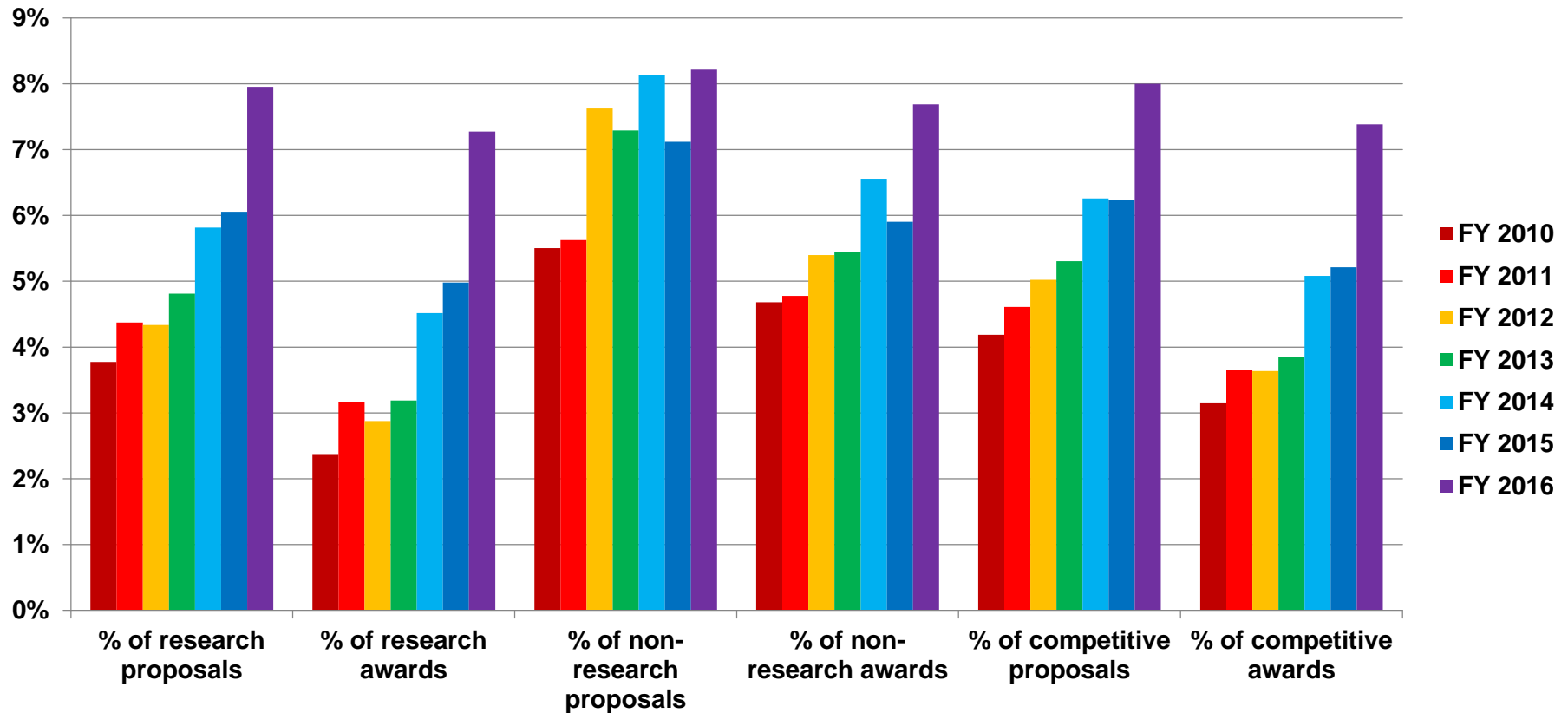
# Variation in Institutional Submission and Success Rates

Success rates of organizations submitting more than 10 research proposals →

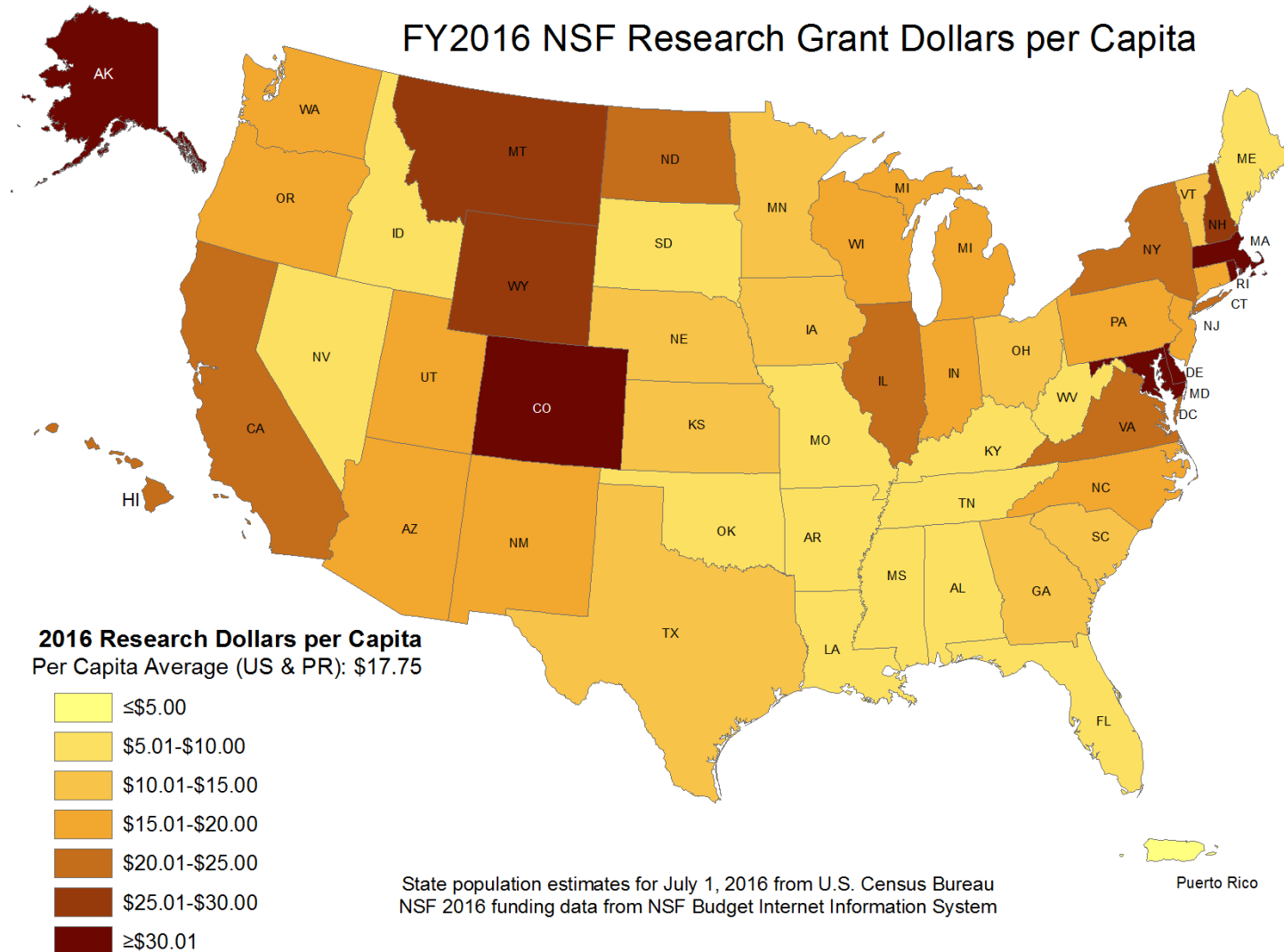


← Variation in average review ratings of proposals from 8 arbitrary organizations (red dots above)

# Proposals and Awards: HBCU, HSI & TCU



# Research Funding per Capita



# Acknowledgements

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