

# Pilot Study of the Emerging Frontiers in Research and Innovation Program's Monitoring System

Client: National Science Foundation

## Overview

The Emerging Frontiers in Research and Innovation (EFRI) Program promotes innovative, interdisciplinary initiatives in engineering research and education. EFRI pursues research projects that embrace new frontiers in engineering research and supports projects that generate transformative ideas in areas with a demonstrated need. EFRI aimed to create a new outcome monitoring system to streamline the data collection process and provide clear measures of how funded projects achieve their long-term goals after the funding period ends.

For the National Science Foundation (NSF), Insight launched a new survey on program outcomes for past, present, and future EFRI grantees. Insight—

- Evaluated EFRI goals and the logic model from a prior survey
- Reformulated survey questions to meet program objectives

- Refined the logic model, targeting measurable outcomes for the program
- Conducted in-depth interviews with NSF staff to identify existing data sources and items for data collection
- Conducted cognitive interviews with a targeted sample of EFRI grantees and transcribed and coded the completed interviews
- Collected online data with EFRI principal investigators (PIs), co-PIs, and students
- Collected the first wave of survey results and assessment of survey and item response rate

Insight's final report on the survey process provided recommendations for improvement and analysis of the first wave of survey responses from PIs, co-PIs, and students. A nonresponse bias analysis illustrated the sample reflected characteristics of the EFRI population. The majority of grantees began partnerships with businesses after their grants ended, typically to license their products. They also reported using their NSF EFRI funding and results to secure additional funding to refine their efforts and innovations.

## Products

Report on cognitive interview results (February 2015), online survey instrument (November 2014), database housing the first wave of EFRI grantee responses (April 2015), final report summarizing survey results and future data collection recommendations (May 2015)

