

Program Title: Reducing University Risk through Innovative Collaborations

I. Formative Evaluation – Planning

Bloomington Indiana is the home of Indiana University's (IU) flagship campus, which geographically represents nearly half of the 90,000 residents. Historic data revealed that the City averaged 1.54 fire-related fatalities per year with the worst year (2008) having four fatalities. 88 percent of fire fatalities did not have working smoke alarms. IU false alarms increased 96 percent between 2006 and 2016 and IU fire calls were holding steady at an average of 51 calls per year despite national averages declining. The Bloomington Fire Department (BFD), responsible for the safety of the IU students and staff, found themselves understaffed and ill-equipped to evaluate the data and underlying issues or implement any real solutions to proactively engage in Community Risk Reduction (CRR).

Three major obstacles to an effective risk reduction program were identified: no established relationships between the department and IU, a lack of data and data analysis needed to target the risk, and ambiguities concerning authority over IU campus, Greek housing (fraternities and sororities), and other structures owned by the university. Beginning in 2017, BFD established modern data collection methodologies that included imported computer-aided dispatch data, quality assurance programs, and training on the proper use of the National Fire Incident Reporting System. Baseline goals for IU were established to guide the process included: reducing fire calls by ten percent per year, reducing false alarms by three percent per year, and facilitating two fire safety events per year. The first step of this journey included building relationships with the people who could manage the risk or were responsible for creating the risk.

II. Process Evaluation – Implementing

IU, like most colleges, has a unique dynamic that consists of students, academic faculty (professors), and university staff. BFD worked to establish formal relationships with the various factions of IU. What started as a weekly meeting with academic faculty has evolved into the [Crisis Technology Innovation Lab \(CTIL\)](#). This lab provided undergraduate, graduate, and doctoral informatic students who completed extensive data cleanup projects of historic responses, data analysis projects establishing common causes of responses and ultimately used or created several tools to help prioritize risk reduction efforts. While national comparatives were reviewed, the department focused on local data to make decisions.

Simultaneously, the department began establishing relationships with the university staff to work within four separate divisions at IU in order to affect change. This integration provided opportunities to develop and deliver educational programming to IU students, created target risk educational materials such as posters and magnets that were distributed at open house events and resident advisor training by IU and BFD staff, clarified lines of authority for inspections of the Greek houses, and made BFD a part of the system that held IU students accountable. Reaching the students would have been impossible without the support of IU academic faculty and university staff. Every interaction provided opportunities to educate the students and establish BFD's presence as IU's Fire Department. Large events such as "The Great Escape," where portions of a building were filled with theatrical smoke to train students to get out of a building, with limited visibility, became popular with both students and firefighters.

III. Impact Evaluation – Short-Term Results

The results of these innovative collaborations are remarkable. False alarm calls on campus have reduced 26 percent, fire calls on campus have reduced 80 percent, and there has been a reduction of 37 percent for all calls at IU. Students regularly joke about the posters or magnets that remind them to add water to their ramen noodles. BFD staff have also changed throughout this process. They are more engaged, report issues that were once ignored by IU staff, and find opportunities to meet with our IU counterparts. Ultimately, behaviors have changed to improve the safety and health of a large portion of our community.

IV. Outcome Evaluation – Long-Term Results

Since 2017, (until 2020) IU (and the entire City) have had zero fire-caused fatalities.

Remarks:

Fire departments that want to become proactive managers of risk must invest in leveraging community support when problems seem too large to accomplish on their own. This innovative collaboration brought together those who had the responsibility to manage risk (BFD), people with technical capabilities that were lacking in the department (academic faculty and data science students), and those with the capacity to affect legitimate change (university staff). This innovative collaboration is proof that community risk reduction is possible when the right people come together with the purpose of making the world a safer place.