

FOR OFFICE USE ONLY

DATE RECEIVED: **03/15/2024**

DATE APPROVED: **03/18/2024**

FILE NUMBER: **#24-031**

APPLICATION FOR STATISTICAL CONSULTING

LAST NAME: **Beckman**

FIRST NAME: **Joe**

DEPARTMENT (full name): **Cybersecurity Technical Assistance Program (TAP/cyberTAP)**

CAMPUS MAILING ADDRESS: **State Farm Building (2550 Northwestern, Suite 1300)**

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EMAIL ADDRESS: **beckmanj@purdue.edu**

YOUR PRIMARY POSITION AT PURDUE: **Staff**

Other:

(if a student) MAJOR PROFESSOR LAST NAME: FIRST NAME:

PHONE NUMBER:

MAJOR PROFESSOR CAMPUS ADDRESS (BLDG & DEPT):

MAJOR PROFESSOR EMAIL:

HOW DID YOU FIND US: **I've used the consulting service before**

LIST STATISTICS COURSES TAKEN AND STATISTICAL COMPUTING EXPERIENCE: **STAT 501,502**

STAGE OF RESEARCH: **Presently collecting data**

IF DESIGN STAGE IS COMPLETE, WAS A STATISTICIAN CONSULTED FOR DESIGN? **No**

PREVIOUS CONSULTANT – INSTITUTION/DEPARTMENT:

ESTIMATED NUMBER OF CONSULTING HOURS NEEDED THIS SEMESTER: **<5 hours**

EXPECTED COMPLETION DATE OF PROJECT: **11/30/2026**

IMPORTANT DEADLINE OR DUE DATES RELATED TO YOUR PROJECT: **June 1, 2024 - Next Aggregate Results Report due to the Indiana Office of Technology**

THE RESULTS OF THIS RESEARCH WILL PROBABLY BE PUBLISHED AS:

Journal Article, Grant Proposal, Technical Report

IS THIS RESEARCH SUPPORTED BY A GRANT OR CONTRACT? **Yes**

If so, give grant/contract title: **Indiana Local Government Assessment Program. Granted to cyberTAP by the Indiana Office of Technology**

GIVE A BRIEF DESCRIPTION OF YOUR RESEARCH INCLUDING:

PURPOSE:

- 1) Provide data-driven analysis to the Indiana Office of Technology supporting recommendations for action by IOT to advance cybersecurity postures among Indiana's local governmental entities.
- 2) Work is guided survey of Indiana local governments of cybersecurity safeguard implementations. Ratings scale is qualitative - Not Implementing, Developing, Implementing, Optimizing.
- 3) We are evaluating several qualitative and quantitative factors attempting to determine what factors, if any, are predictive of strong cybersecurity postures as defined by total ratings score as framed in #2 above.
- 4) I am interested in having folks with more training in statistics than me review our work. My goal for this review is to validate and optimize our statistical methods of analysis.

DESCRIPTION OF VARIABLES TO BE MEASURED:

The attached .pdf is the most comprehensive and concise description of our study, goals, and methods.

RESEARCH QUESTIONS THAT YOU WANT TO ADDRESS USING STATISTICAL METHODS:

What factors, if any, are statistically significant in predicting cybersecurity posture as defined by Implementation Ratings score?

STATISTICAL ISSUES:

Are we using the best methods to answer this question?

ADDITIONAL INFORMATION YOU THINK WOULD BE HELPFUL:

The statistics involved so far are rather basic and are used to support recommendations to the Indiana Office of Technology regarding how it can best interact with Indiana local governments to move cybersecurity posture forward in that environment.

ATTACHMENTS:

Attachment in client folder