

STEM Council Scale-Up Program Participants' Postsecondary Trajectory

**A data gathering partnership between the
Iowa Governor's STEM Advisory Council and the
University of Iowa's Center for Evaluation and Assessment**

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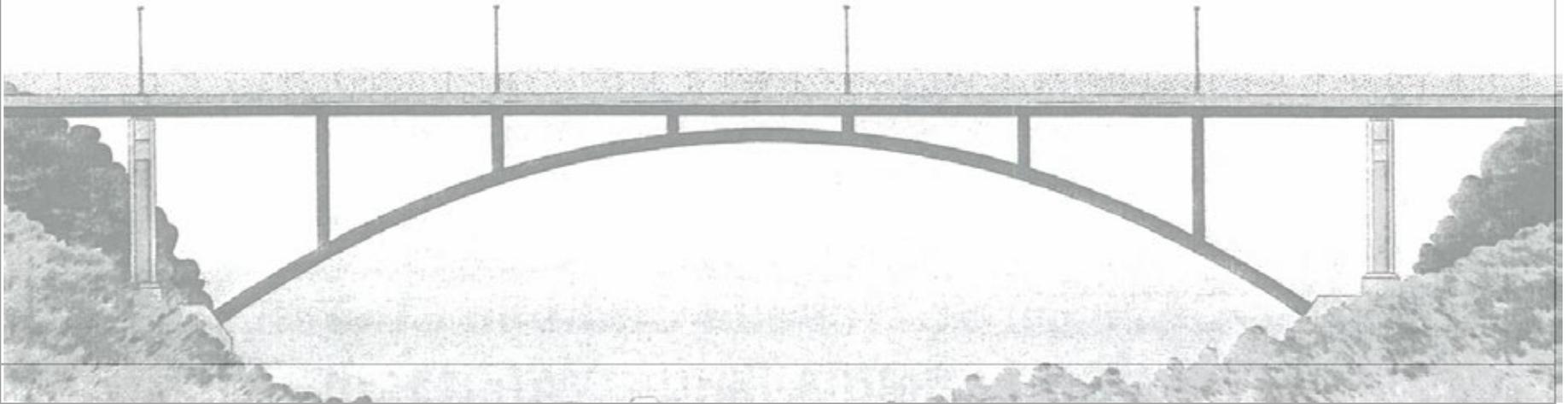
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Objectives

- 1. IRB approval for database creation of Iowa Scale-Up Program high school graduates**
- 2. Interview sample of Scale-Up high school graduates**
- 3. Review of state and national evidence**
- 4. Draft a survey instrument**

1a. IRB Approval

ü Determined **not** to be human subjects research by the University of Iowa Human Subjects Research/Institutional Review Board Office





2. Interviews



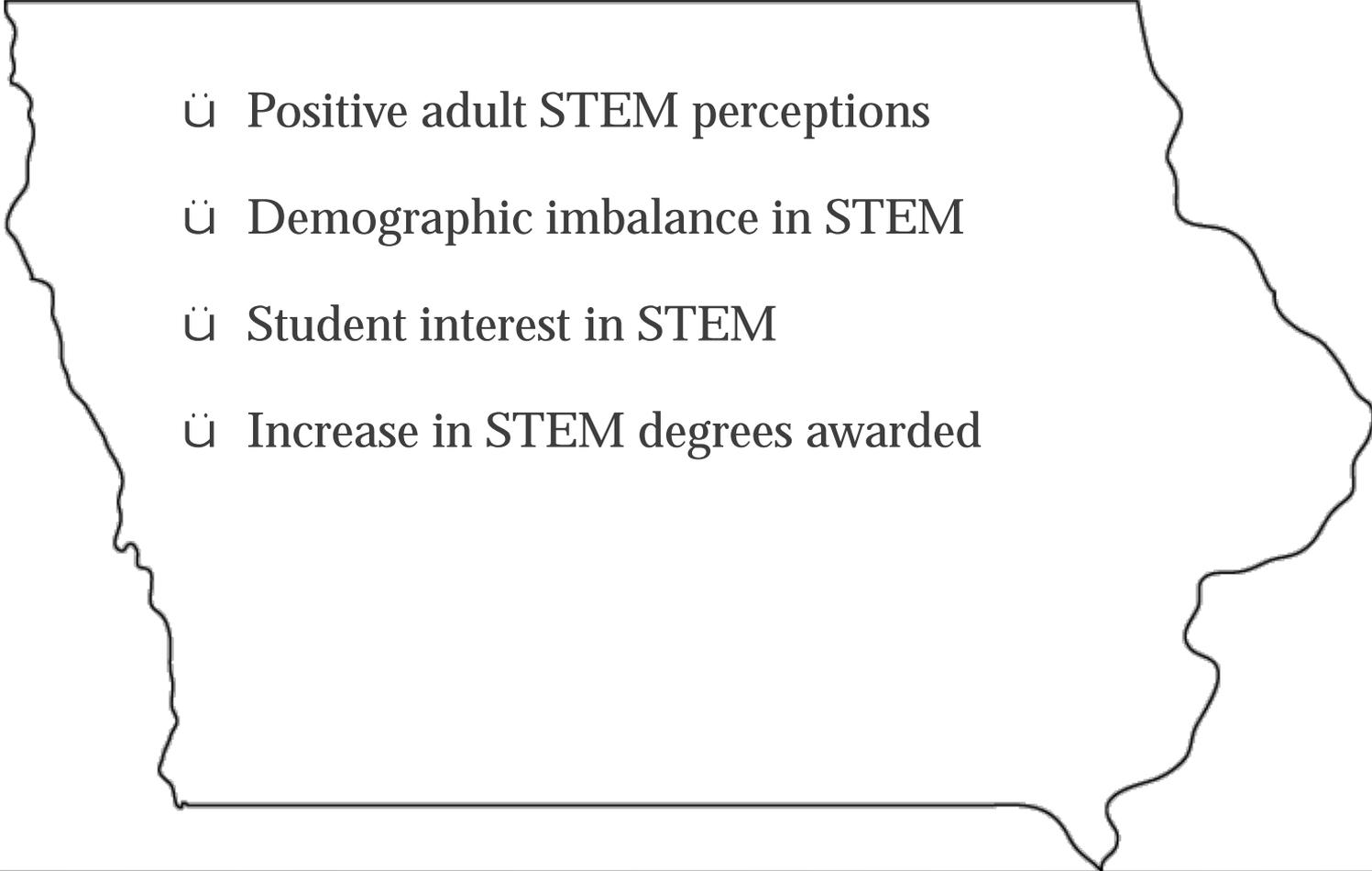
ü 3 interviews

- Audio recorded
- Transcribed
- Coded (Yin, 2015)
- Collaborative analysis

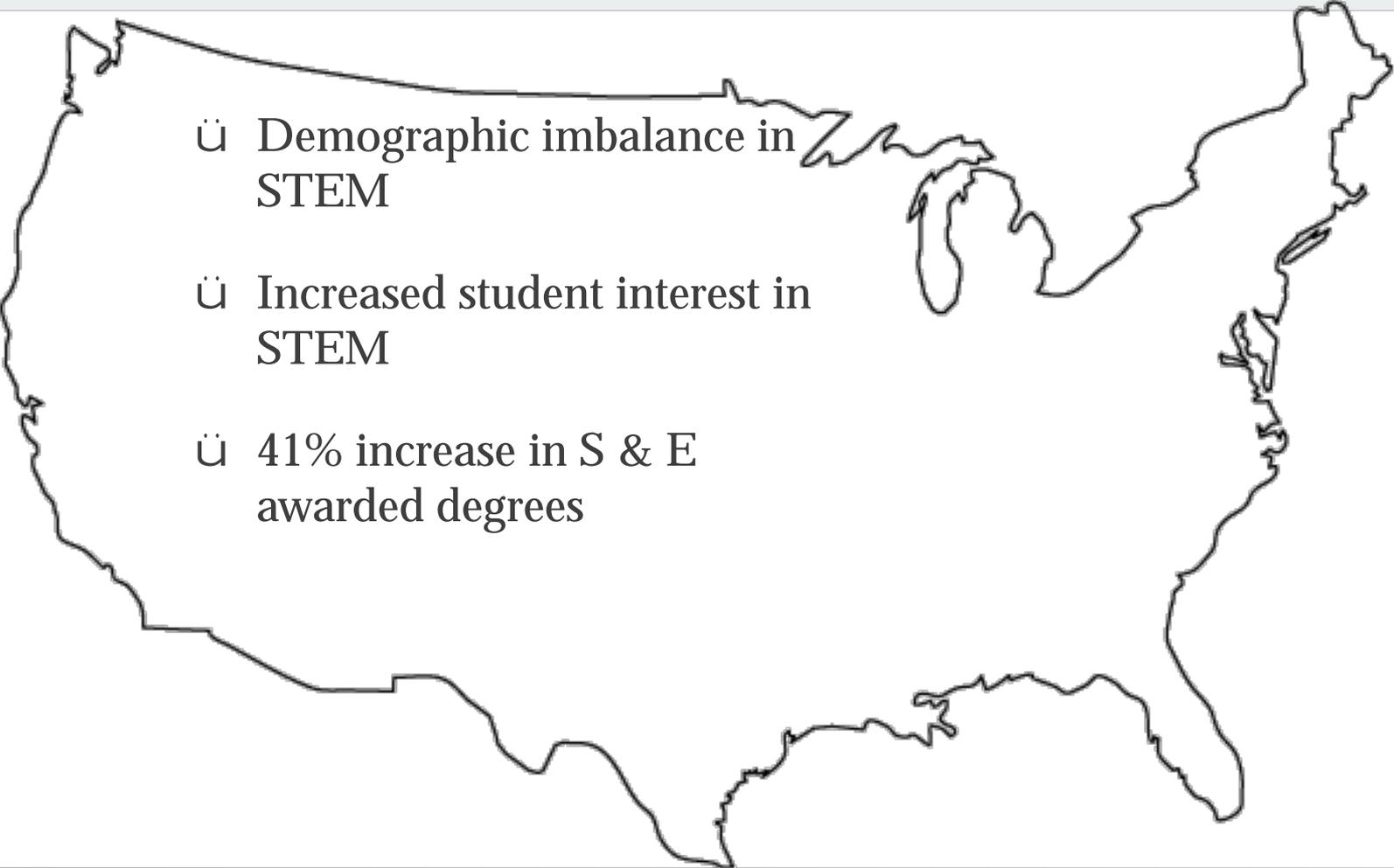
• Themes:

- External influence
- Personal interest
- Positive experience
- Scale-Up offered exposure
- Solidified decision to declare a STEM major
- Recommend others to enroll

3. Review of State and National Evidence

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- ü Positive adult STEM perceptions
 - ü Demographic imbalance in STEM
 - ü Student interest in STEM
 - ü Increase in STEM degrees awarded

3. Review of State and National Evidence

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- ü Demographic imbalance in STEM
 - ü Increased student interest in STEM
 - ü 41% increase in S & E awarded degrees

4. Draft Survey Instrument

ü Developed using:

ü Prior research / literature

ü Interview data analysis

- Intended to: provide evidence of Scale-Up participation impact on postsecondary decisions and trajectories
- Ready to pilot



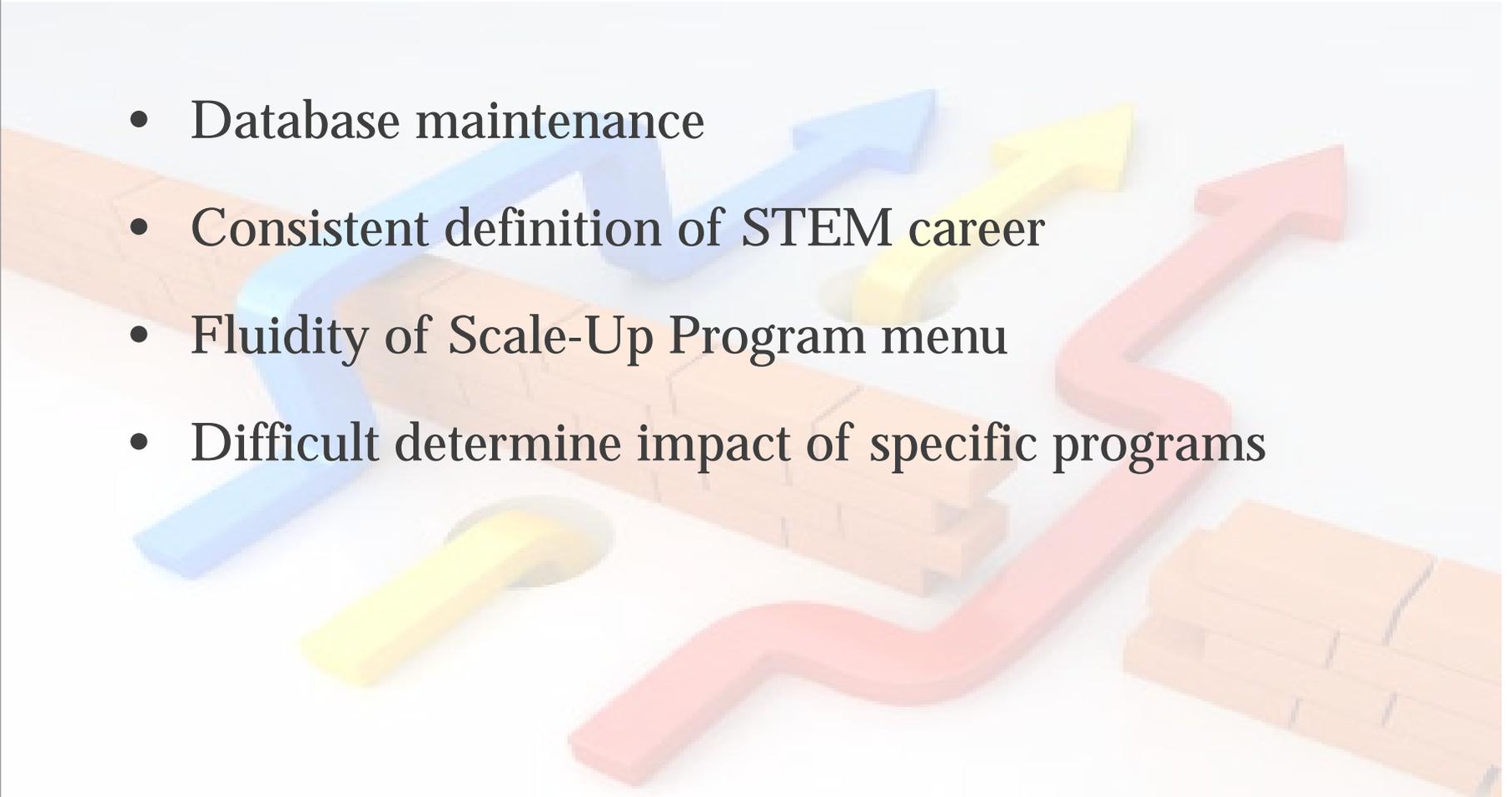
Potential Next Steps

- Pilot survey
- Analysis of pilot and make necessary adjustments to the tool
- Distribute survey to all (available) Iowa high school graduates who participated in a STEM Scale-Up program
- Analyze survey data quantitatively and qualitatively
- Report out findings to the Governor's STEM Advisory Council
- Systematic data collection design/framework

Anticipated Benefits

- Systematic data collection of student contact information
- Systematic data collection of Scale-Up influence through survey
- Evidence of and for STEM decision making by Scale-Up participants
- Evidence of meeting Governor's STEM Advisory Council's Targets regarding the Scale-Up Program

Anticipated Challenges

- Database maintenance
 - Consistent definition of STEM career
 - Fluidity of Scale-Up Program menu
 - Difficult determine impact of specific programs
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- The background of the slide features a light blue and white gradient. Overlaid on this are several 3D objects: a blue arrow pointing up and to the right, a yellow arrow pointing up and to the right, and a red arrow pointing up and to the right. There are also stacks of light brown wooden blocks, one on the left and one on the right, partially obscured by the arrows.

Questions / Discussion

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