**iCAP Team Recommendation**

Name of iCAP Team: Resilience Team

iCAP Team chair(s): Stacy Gloss and Scott Tess Date submitted to iWG:

Recommendation title: Sustainability Economic Analysis

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*For internal use only*: Date reviewed by iCAP Working Group:

**Specific actions/policy recommendation:**

Provide undergraduate research support for reporting on sustainability concepts including cost-benefit analysis, lifecycle costs, and finance considerations for Sustainability-related projects of interest to the local urbanized areas of Urbana, Champaign, and Savoy.

Topic examples include Green Infrastructure or Energy Conservation / Renewable Energy projects that municipalities are interested in undertaking. This research should help identify useful case studies and provide reporting on the economics of “green” capital projects of interest. Information showing that Green Infrastructure projects and/or Renewable Energy projects are fiscally sound, financially viable, and can demonstrate a return on investment have a greater chance for adoption over the easier “status quo” or lowest-bidder projects.

ISEE will provide some oversight and work to identify potential resources to partner with communities to answer sustainability questions with regard to “green” and “sustainable” community investments – where cost-benefit analysis and life cycle analysis reporting would be beneficial. ISEE recommended that Eric Green’s ENVS 492 undergraduate course is an appropriate class to partner with.

This recommendation also seeks assistance from iSEE to help identify future funding for the development, implementation, and outreach of this plan.

Additionally, the Education iCAP Team will assist in identifying online and on-campus degree programs with capstone courses that may align with the project scope. The Resilience iCAP Team leaders will continue to work with community partners to identify areas of prioritized need to be shared with a growing network of faculty and programs who in turn, are interested in providing real-world research-based opportunities to their students.

Through ENVS 492 and potential online and on-campus capstone programs, students will work with communities to conduct research and outreach, and to disseminate applicable reports and findings.

**Suggested unit/department to address implementation: ISEE**

ISEE will request Eric Green’s ENVS 492 to work on this project. Illinois Extension Specialist, Lisa Merrifield may assist in an advisory capacity, as well as provide information and data where able. Champaign, Urbana, and Savoy representatives from departments such as urban planning, public works, sustainability and community development would be engaged through the Resilience Committee participation and other means.

The Education iCAP Team is also willing to look into the online and on-campus masters/graduate programs with capstone classes among various departments that require research experience or projects for students.

**Rationale for recommendation:**

Some communities are interested in investing in projects such as green infrastructure or renewable energy. While the technologies are still viewed as “new,” adoption is slow. Communities participating on the Resilience Advisory Commission have indicated that they would benefit from information about project lifecycle costs and benefits of renewable energy infrastructure or stormwater-related green infrastructure.

**Connection to iCAP goals:**

This recommendation is connected to several Resilience Objectives including:

* Objective 8.2 Coordinated Rainwater Management: Coordinate rainwater management plans for the entire urbanized areas of Champaign, Urbana, Savoy, and the university.”
* Objective 8.1 Urban Biodiversity Master Plan: Develop a coordinated urban biodiversity master plan by FY24 to make the Champaign, Urbana, Savoy, and campus metro area a model for biodiversity.” The Master Plan was not intended to provide financial arguments for best practices; however, the project is learning that the plan will be strengthened by applied research that demonstrates project costs and environmental accounting (such as assigning dollar value to social & environmental benefits) over the lifecycle of the project.
* Objective 8.4. Local Sustainability Issues: Take leadership in addressing the most pressing sustainability challenges in our local communities through collaboration with local governments and related community groups.

**Perceived challenges:**

* Volume of requests that could come from being asked to address all possible challenges that municipalities face. Will limit to a couple of priorities.
* Limited resources of faculty to advise.
* Funding
* Matching time-sensitive community needs with academic calendar
* Maintaining relationships and partnerships for projects on the academic schedule and that match priorities of faculty members.
* Finding faculty/staff members who are willing to supervise the student work

**Anticipated timeline of implementation:**

We anticipate to begin planning for ENVS 492 class projects in the Fall 2024 or other accepted start date.

The Resilience iCAP Team and Education iCAP Team will begin to determine the appropriate departments and online and in-person masters/graduate programs for this research in the Spring 2023 semester.

**Anticipated budget (identify if cost is up-front or continuous):**

The amount of funding that will be asked from iSEE/other unit will be determined.

**Individual comments are required from each iCAP member (one or two sentences):**

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| Team Member Name | Team Member’s Comments |
| Scott Tess | The Sustainability Economics Intern will be valuable to the City of Urbana for determining costs and benefits for certain sustainability projects and programs. Uncertainty is a significant barrier to action. But resources are often unavailable to perform economic analysis of a range of potential actions. Economic analysis can bolster determination to undertake sustainability projects and programs. |
| Lacey Rains Lowe/Nihole Millage | Champaign staff supports this recommendation. |
| Lisa Merrifield | Economic and financial uncertainty is a key barrier to implementing environmentally preferable management practices in communities. I support this effort and look forward to seeing the students findings. |
| Katie Simpson | Savoy staff support this initiative. |
| Warren Lavey | Approve with recommendation for review by economics faculty before disseminating reports and findings. |
| Stacy Gloss | I support. I also look forward to having this recommendation pave the way for building a campus-community partnership that provides student opportunities and staff/faculty advisors a way to provide support, research and resources to our help solve local sustainability challenges. |
| Constance Brown | I support this Recommendation. Dissemination of information in ways that are easily accessible, useful and valued by community stakeholders is extremely importation for effective acceptance and adoption. |
| Cheryl Bicknell | I support this recommendation. |
| Jennifer Fraterrigo | I support this recommendation. |
| Helen Anil | I support this recommendation. |
| Gabriella Zervakis | I support this recommendation. |
| Linda Derhak | I support this recommendation. |
| Asli Topuzlu | I support this recommendation. |

**Further explanation and background (can be supplied in an attachment):**

**Comments from consultation group (if any; these can be anonymous):**