**SWATeam Recommendation**

Name of SWATeam: Transportation

SWATeam Chair: Julie Cidell Date Submitted to iSEE: April 3, 2020

**Specific Actions/Policy Recommended (a few sentences):**

The Transportation goal on “reducing single-occupancy vehicle usage” is promising in terms of addressing a number of sustainability objectives such as reducing traffic, congestion, energy consumption, and pollution. One of the possible avenues toward this goal is a campus faculty/staff ride-sharing program for those with steady work hours who are looking for a cost-effective way to commute. This recommendation will

1. conduct a survey to examine the key factors influencing commuters’ decision to participate, policy and incentive mechanisms that properly address the interests of the commuters and other stakeholders (e.g., Parking, F&S);
2. develop a model to support the design and operation of the system (such as pricing, service frequency), and
3. long-term, implement a pilot program on campus.

**Rationale for Recommendation (a few sentences):**

By developing a crowdsourced commuting service, travelers can aggregate their similar travel demand via online information platforms (such as smartphone apps), so as to substantially reduce their travel cost while maintaining a high level of ride experience. To the campus, vehicular traffic, fuel consumption, air pollutions, as well as the needs for parking resources, can be reduced when more people “subscribe to” shared ride service instead of using private cars. To individual travelers, the service could also be attractive because it is more cost-effective and environmentally friendly than private cars, and more efficient, comfortable, convenient and reliable than conventional bus transit systems.

**Connection to iCAP Goals (a few sentences):**

According to the 2015 Illinois Climate Action Plan (iCAP), commuting traffic contributes to about 20% of the total transportation emissions. iCAP 2015 has clearly set a goal of reducing transportation emissions by reducing single-occupancy vehicle trips “from 65% to 55% by FY20, 50% by FY25, and 45% by FY30.” Citing the fact that only 13% of the university commute trips are currently shared, iCAP 2015 states that “the campus could increase ride sharing by implementing van pooling for commuters living in nearby towns, with low-emission vehicles.”

This proposed project will directly address the abovementioned iCAP objective. Successful implementation of the proposed system will impact sustainable campus and community development by reducing commute traffic between the UIUC campus and residential areas during rush hours. The success of the project would provide strong evidence that the UIUC campus fulfills its environmental responsibility and has been a leader in promoting and implementing sustainable transportation.

**Perceived Challenges (a few sentences):**

To attract faculty/staff/students to switch from private cars to ridesharing, the proposed system needs to find a fine balance between cost-effectiveness and service quality. This project will develop a holistic approach to jointly determine passenger-to-driver matchings, routes, timetables, and trip fares based on relatively restrictive travel requests.

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

College of Engineering, Facilities and Services (F&S), and Parking.

**Anticipated level of budget and/or policy impact (low, medium, high):**

This initial study may take a faculty member and a graduate student, or an outside consultant, 1 year to complete.

The implementation of such a program would take more than a year to complete.

**Individual comments are required from each SWATeam member (can be brief, if member fully agrees):**

|  |  |
| --- | --- |
| Team Member Name | Team Member’s Comments |
| Yanfeng Ouyang  | I believe the proposed study will help significantly reduce campus transportation emissions.  |
| Julie Cidell | A successful ridesharing program could go a long way towards reducing on-campus transportation emissions, and the survey is a necessary first step. |
| Sarthak Prasad  | I fully support this recommendation. We have been thinking about a Commuter Program to incentivize those faculty/staff who choose a more sustainable transportation option. A successful implementation of this recommendation will result in data and design to support the future Commuter Program. |
| Lindsay Braun | I support this recommendation as an important first step in understanding demand for a university-based ridesharing program, which could have a substantial impact on drive-alone commuting and associated emissions. |
| Paul Slezak | Unavailable for comment.  |
| Zhuo Chen | I support this survey; a popular and affordable carpool can reduce Co2 emissions. |
| Marie Hubbard | I support the recommendation. The sooner, the better. Additionally, many students would love the opportunity to participate in a commuter program where they will either be rewarded for doing what they already do or incentivized to feel like their choices are making a difference. |
| Trevor Gresham | I support this recommendation. Input from riders will be valuable in making future decisions concerning the success of the program. |

**Comments from Consultation Group (if any; these can be anonymous):**

**Explanation and Background (can be supplied in an attachment):**