**iCAP Transportation Progress Report**

**October 2014**

**Transportation Subcommittee Members:**

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**University of Illinois American College and University President's Climate Commitment (ACUPCC) Transportation Emission Status 2007-2014:**

**1. Status of ACUPCC Emissions 2008-2014**

In Table One below ACUPCC emission calculations for Fleet, Commuting, Air Transportation, and Total Transportation emissions for the Urbana-Champaign campus are presented.

Based on 2014 data, total ACUPCC emissions have increased by 30 percent since the 2008 baseline. The increase is due to a 52 percent increase in air travel emissions relative to 2008. Emissions for fleet and commuting are estimated to be down by 3 and 6 percent respectively. Although the most significant challenge for transportation emissions is clearly air travel, 2014 data also show disappointing findings for Fleet emissions as well for Commuting.

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| **ACUPCC Emissions** |
| **Fiscal Year** |  |  **Fleet**  |  **% change from FY08**  |  |  **Commuting**  |  **% change from FY08**  |  |  **Air Travel**  |  **% change from FY08**  |  |  **Transportation**  |  **% change from FY08**  |
|  |  **MT eCO2**  |  |  **MT eCO2**  |  |  **MT eCO2**  |  |  **MT eCO2**  |
| 2008 |   |  5,688  | n/a |   |  11,580  | n/a |   |  27,453  | n/a |   |  44,722  | n/a |
| 2009 |   |  5,599  | -2% |   |  11,945  | 3% |   |  21,992  | -20% |   |  39,536  | -12% |
| 2010 |   |  4,633  | -19% |   |  11,945  | 3% |   |  25,299  | -8% |   |  41,877  | -6% |
| 2011 |   |  4,948  | -13% |   |  10,236  | -12% |   |  24,033  | -12% |   |  39,217  | -12% |
| 2012 |   |  5,347  | -6% |   |  10,266  | -11% |   |  28,337  | 3% |   |  43,950  | -2% |
| 2013 |   |  5,147  | -10% |   |  10,566  | -9% |   |  32,381  | 18% |   |  48,094  | 8% |
| 2014 |  | 5,503 | -3% |  | 10,868 | -6% |  | 41,835 | 52% |  | 58,206 | 30% |

**Table One
ACUPCC Emissions 2008-2014
2. Status of iCAP Transportation Targets**

**Current Targets:**

**Reduce carbon emissions related to transportation (including air travel, com- muting, and fleet vehicles) from fiscal year 2008 baseline.**

**a) 30 percent by 2015**

**b) 40 percent by 2020**

**c) 50 percent by 2025.**

**Comments regarding feasibility of targets:**

* The campus decision to commit to achieving carbon neutrality as soon as possible is an ambitious and laudable goal.
* The transportation targets are based on a reduction in the absolute annual values of estimated carbon emissions (relative to a 2008 baseline) and do not take into consideration growth of the university, either with respect to the number of students and employees, or the number of vehicles.
* The transportation targets are not well connected with specific objectives and strategies to achieve them.
* Many members of the university community remain unaware of the iCAP targets.
* Currently it is not clear who on campus has the primary responsibility for coordination of efforts to implement the campus iCAP targets and strategies.

**Possible alternative proposals:**

* Establishing the targets in each of the three areas of transportation will help make more effective objectives and strategies. The new targets can also specify what amounts of carbon reduction can be achieved by the campus communities and how much should be supplemented by emissions offsets.
* To establish new targets, it is recommended that the campus initiate a comprehensive study, develop more specific objectives in various areas, and institutionalize regular data collection.
* If the campus is to make progress towards achieving the goals it is important that more information is provided to the campus community about (1) the iCAP plan, (2) the process used for estimating carbon emissions and determining targets, (3) the strategies that have been proposed to achieve the targets, and (4) the level of commitment it will require from all members of the campus community in order to achieve these targets.

**3. Status of iCAP Transportation Strategies**

**Strategy 1:**

 **Reduce GHG emissions from commuting and University fleet vehicles through commuting incentives, new fleet vehicle acquisitions and infrastructure changes**

 **Comments regarding feasibility of targets:**

* Provide incentives for more fuel efficient vehicles such as designated parking spaces close to buildings, preferential consideration for parking spaces in lots with waiting lists, etc.
* Support and provide incentives for employees who rideshare.
* Investigate the feasibility of using Compress Natural Gas for University fleet vehicles.
* Increase the use of biodiesel blends in University fleet vehicles
* Require and activate anti-idling equipment for all new class 6 and above trucks purchased by the University.
* Provide opportunities for employees to purchase less than full-time parking privileges at a reduced cost. This will enable employees to take advantage of healthy commuting and ridesharing options when time, weather and other circumstances permit.

**Strategy 2**

**Immediately begin to implement the Campus Bicycle Master Plan and improve bicycling infrastructure. Work with cities to improve bicycle feeder routes to campus. Provide campus investment and supplement with revenue from GHG emissions charge on cars.**

**Comments regarding feasibility of strategy 2:**

* The University of Illinois developed a [2013 Campus Bike Plan](https://icap.sustainability.illinois.edu/files/project/37/May_2013_Draft_Campus_Bike_Plan.pdf) that has not yet been implemented.
* The Plan suggests using the Five E’s approach to improving bicycling to-and-from and on-campus. They are:
	+ Engineering – This includes bikeway improvements, bike parking areas, and bike fix-it stations.
	+ Education – This includes dissemination of bike-related informational resources of various types, and bike-related classes.
	+ Encouragement – This includes the primary mode-shift efforts for transitioning people on campus from single-occupancy vehicles to active modes of transportation, such as Bike Month and building a culture for good cycling behavior, through programs like the Campus Bicycle Center.
	+ Enforcement – This includes bicycle registration programs, and enforcement of both the Illinois Rules of the Road and the forthcoming UI Bike Code.
	+ Evaluation and Planning – This includes tracking progress toward be a Bicycle Friendly University, such as counting bikes through the Every Bikes Count census events, gathering public input through the online bicycle feedback form, and prioritizing bike-related needs for campus.

**Possible alternative proposals:**

* It is unclear that an alternative set of strategies to those identified in the Campus Bike Plan is needed. Rather, there is an urgent need to begin implementation of the Bike Plan.
* Invest in building a more bicycle friendly culture on campus. The return on dollars invested will be felt in many areas, most of all a reduction in Fleet CO2 emissions.

**Strategy 3**
 **Create and subsidize a bike sharing program by 2012.**

 **Comments regarding feasibility of strategy 3:**

* Bike sharing is one option the campus can pursue to achieve its goals to reduce transportation emissions and increase the use of active transportation.
* Additional steps must be taken before large-scale bike sharing can be successfully implemented for student or public use.

i. The campus bicycle infrastructure such as bikeways and parking must be improved.

ii. Education programs should be made available to employees to ensure that cyclists, pedestrians, and vehicle drivers can all function safely together on campus.

**Possible alternative proposals:**

* Small-scale departmental Bike Share Programs can help reduce fleet and commuter emisions. These can allow faculty and Staff to commute around campus during their workday without their car.
* Units like F&S and CITES have fleets of inefficient vehicles that move about campus each and every day. While not all of these vehicles can be replaced many could be parked during good weather. Bicycles with cargo trailers could be used to move individuals and small tools and equipment, thereby reducing Fleet carbon emissions.. Incentives could be provided for units and individuals who make use of these transportation alternatives.

Revisit the feasibility of a campus-wide bicycle share after significant progress has been made on the implementation of the 2013 Campus Bike Plan.

**Strategy 4**

**Enact a system for purchasing local emissions offsets from air travel impacts**

**Comments regarding feasibility of strategy 4:**

* Whenever possible emission offsets purchased should be applied to on campus projects that advance the iCAP mission.
* The university should currently report airline travel emissions estimates per department.
* The university should report **per capita** airline travel emissions estimates in addition to a total estimate for the campus.

**Possible alternative proposals:**

* Track and report on annual air travel for each department as well as calculate a figure that is adjusted for FTE.
* Develop a program to provide incentives for departments that reduce their air travel/FTE.
* Provide improved facilities and services in support of participation in online conferencing and other virtual meeting technology.
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**Strategy 5**

**Hire a full time Sustainable Transportation Director. This person would be responsible for leading iCAP transportation strategies and coordinating future efforts with campus and the greater Champaign-Urbana community.**

**Comments regarding feasibility of strategy 5:**

* It will be a challenge to identify funding for the position and the accompanying budget.

**Possible alternative proposals:**

* Employ part-time sustainable transportation coordinator
* Employ Campus Bicycle Coordinator responsible for implementation of the Campus Bike Plan
* Restructure current administration to give existing personnel the bandwidth and responsibility to enact aforementioned changes
* Hire consultants or other contract assistance to develop an implementation strategy/model that minimizes existing workload.