**New iCAP 2025 Objectives**

**Team Name: Transportation**

**Date: May 1, 2024**

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| **Proposed Objective:** **Increase the Pavement Condition Index (PCI) for university owned roads so the average PCI score is at least 65 by FY25 and at least 70 by FY35** |
| **Please explain the rationale for this objective. How does it advance the iCAP goals of achieving carbon neutrality and building climate resilience?** |
| * Optimizing road surfaces should be taken just as seriously as optimizing the efficiency of the vehicles that drive on them. Smooth pavements also encourage the use of bicycles and provide a more pleasing aesthetic for the campus.
* Road conditions deteriorate overtime, so it is challenging to maintain a high PCI
 |
| **Who has authority to implement the proposed objective?** |
| * F&S
 |
| **What will be the role of the iCAP team to advance the proposed objective?** |
| * The iCAP Transportation team will aid in identifying university-owned throughfares critically in need of repair. The iCAP transportation team can leverage its interdisciplinary connections to gauge community needs around UIUC campus and recommend high priority areas for repair.
 |
| **How will the success of this objective be measured?** Please include any metrics you anticipate measuring, and how often they should be updated. |
| * The key metric for this objective is PC. This metric provides a standardized process to quantify road quality. For example: Are there numerous potholes, cracks, or bumps? Do vehicles slip easily? PCI ratings occupy a scale of 0-100; a score of 0–10 results in a “Failed” status, while a score of 86–100 merits “Good” pavement condition.
 |
| **What are the required milestones to achieve the proposed objective? Please include the target timeline to reach each milestone.** |
| * A target PCI of 65 by 2025
* A target PCI of 70 by 2035
 |
| **What are potential sources of funding to achieve the proposed objective?**  |
| * Campus funding
* F&S
 |
| **What are the most important barriers/challenges you anticipate?** |
| * This was also part of iCAP 2020 and there was mention of advancing use of permeable surfacing materials, and biobinders. There is no clear record of a plan or action regarding the use of more sustainable materials.
* Review the barriers/hurdles to adoption for the 2020 objective (budgeting)
	+ Take new approaches in this proposal rather using the same tactic and encountering the same barrier. IOW so we can learn from past failures and be more effective.
 |
| **What support will you require from the iCAP Working Group?** |
| * Community outreach pinpoints high priority areas with frequent traffic (pedestrian and automotive) and low PCI ratings
* Discuss potential supplementary funding opportunities to improve safety of roads and bike paths across campus
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| **Proposed Objective:** **Establish programs to increase safe electric bicycle/scooter/skateboard usage and charging on UIUC campus.** |
| **Please explain the rationale for this objective. How does it advance the iCAP goals of achieving carbon neutrality and building climate resilience?** |
| * This objective aims to embrace the growing trend of electric bicycles as an alternative to conventional cars for campus commuters
* The iCAP Transportation Team will work to improve safe electric bicycle charging infrastructure on campus in key locations
* By embracing electric bicycles as an alternative to conventional transportation, the university can further its goal of carbon neutrality and promote climate resilience
 |
| **Who has authority to implement the proposed objective?** |
| * Ultimately, F&S will be contracted to install the infrastructure
 |
| **What will be the role of the iCAP team to advance the proposed objective?** |
| * The iCAP Transportation Team will identify key locations where designated electric bicycle charging stations are needed
* Funding will be obtained by the Transportation Team through the SSC or other public funding sources
* Establish a standard battery that must be required for electric bikes- “only UL listed batteries are permitted at charging stations”
 |
| **How will the success of this objective be measured?** Please include any metrics you anticipate measuring, and how often they should be updated. |
| * Success of this objective will be measured by the number of bicycle charging stations installed around campus each year
* Additionally, community usage data can be collected by power meters at the charging stations to better understand electric bicycle charging needs
 |
| **What are the required milestones to achieve the proposed objective? Please include the target timeline to reach each milestone.** |
| * Form a task force to come up with a solution to manage E-bike charging and operations on campus by FY25
* Draft proposed electric bike charging station design – Fall semester 2026
* Obtain approval from all involved governing boards and committees – early spring 2027
* Obtain quote from F&S for proposed charging station – end of spring 2027
* Apply for funding through SSC or public grant – Fall semester 2027
* Beginning installation of charging station – Spring 2028
* Gather usage data for the first 6 months of charging station and evaluate project success/future needs
 |
| **What are potential sources of funding to achieve the proposed objective?**  |
| * We intend to seek SSC funding and research public sustainability grants that may align with our goal of improving electric bike infrastructure on campus
 |
| **What are the most important barriers/challenges you anticipate?** |
| * Funding will certainly be a major challenge to this objective. However, it may be advantageous to consider implementing this objective alongside the 2024 Bike Plan in an effort to gain expedited approval, reduce costs, and simplify installation.
 |
| **What support will you require from the iCAP Working Group?** |
| * The iCAP Working Group can provide recommendations based on the campus’s electric bike charging needs and considerations. Additionally, the iCAP working group may consider allocating some amount of funding dedicated to advancing electric bike charging infrastructure on campus to improve safety and promote carbon-neutral modes of transportation.
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| **Proposed Objective:** Contact and assign “Fleet Administrators” for 50% of the fleet by FY26, 80% by FY28, and 100% by FY30. Establish a written replacement plan two years after the “Fleet Administrator” is assigned. |
| **Please explain the rationale for this objective. How does it advance the iCAP goals of achieving carbon neutrality and building climate resilience?** |
| * The Transportation Team identified what departments have a “fleet” but needs to contact and assign “Fleet Administrators” who will create the written replacement plan
* A written replacement plan will facilitate communication between the decentralized fleet management across campus and F&S
* The replacement plans will encourage regular contact with F&S and ensure that departments are replacing their vehicles with EVs and hybrids to reach carbon neutrality goals
 |
| **Who has authority to implement the proposed objective?** |
| * F&S
* Campus Fleets
* Transportation iCAP Team
 |
| **What will be the role of the iCAP team to advance the proposed objective?** |
| * iCAP Team will contact departments and identify “Fleet Administrators”
* iCAP Team will answer questions from departments and review written replacement plans
 |
| **How will the success of this objective be measured?** Please include any metrics you anticipate measuring, and how often they should be updated. |
| * The iCAP Team has already identified what departments need to be contacted
* Use the existing Excel sheet to track which departments have been contacted, who the “Fleet Administrator” is, and what the status of their replacement plan is
 |
| **What are the required milestones to achieve the proposed objective? Please include the target timeline to reach each milestone.** |
| * Contact 50% the departments with a fleet – Fall 2024
* Work with departments to select a “Fleet Administrator” - Spring 2025
* Contact the remaining 50% the departments with a fleet – Fall 2025
* Work with remaining departments to select a “Fleet Administrator” - Spring 2026
* Establish a written replacement plan at least two years after the “Fleet Administrator” is assigned for each department
 |
| **What are potential sources of funding to achieve the proposed objective?**  |
| * Staff hours, no additional funding required
 |
| **What are the most important barriers/challenges you anticipate?** |
| * Contacting departments will be challenging
* Nobody likes new rules/regulations
* Delay in responses from departments
* Confusion over what the role of the “Fleet Administrator” is
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| **What support will you require from the iCAP Working Group?** |
| * Support in upholding the legitimacy of this objective and responding to push-back
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| **Proposed Objective:** **As growth allows, install 10-15 more EV chargers by FY 30 and 30 more EV chargers by FY 35.**  |
| **Please explain the rationale for this objective. How does it advance the iCAP goals of achieving carbon neutrality and building climate resilience?** |
| * One way to reduce individual carbon footprint is by using EVs
* The UIUC recognizes the increasing number of EVs and is committed to improving EV charging infrastructure on campus
* EV charging infrastructure on campus will reduce structural barriers to EV adoption and encourage more people to ride an EV to campus
* EVs can build climate resilience
 |
| **Who has authority to implement the proposed objective?** |
| * Parking Department
 |
| **What will be the role of the iCAP team to advance the proposed objective?** |
| * Recommending lots for EV chargers while considering lot infrastructure and electrical grid
* Identifying barriers to adoption
* Calculating future demand for EVs
* Suggesting what Level of chargers to install and where
* Research funding opportunities
 |
| **How will the success of this objective be measured?** Please include any metrics you anticipate measuring, and how often they should be updated. |
| * Monitor the number of EV chargers installed and access points made accessible each year
 |
| **What are the required milestones to achieve the proposed objective? Please include the target timeline to reach each milestone.** |
| * Identify the future demand for EVs on campus- Fall 2024
* As demand allows, purchase more chargers and them online ASAP
 |
| **What are potential sources of funding to achieve the proposed objective?**  |
| * Parking Department
* Campus funds
* Government grants
* Donations
 |
| **What are the most important barriers/challenges you anticipate?** |
| * Funding
* Can’t predict EV demand, changing market and local demand
* EV users don’t charge their car on campus
* Only open to permit holders and not the public who don’t have access to a lot
* Reduces spots for gas vehicles in lots
* Unsure of what lots to recommend, of future EV demand, and ability of existing electrical infrastructure to support charging
* Changing/advancing technology
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| **What support will you require from the iCAP Working Group?** |
| * Recommending lots to install chargers
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| **Proposed Objective:** Reduce driving on campus and report the percentage of staff trips made using single-occupancy vehicles from 55% to 45% by FY28 and 40% by FY32. |
| **Please explain the rationale for this objective. How does it advance the iCAP goals of achieving carbon neutrality and building climate resilience?** |
| * Will reduce carbon emissions from transportation sector on campus
* Reduce road congestion and improve local air quality
* Reduce road usage and road construction
 |
| **Who has authority to implement the proposed objective?** |
| * Transportation iCAP Team
* F&S
* iSEE
 |
| **What will be the role of the iCAP team to advance the proposed objective?** |
| * Create incentives for reducing driving on campus
* Identify areas that need improved conditions for biking and walking to around campus
* Look at what other Universities are doing to reduce on-campus driving and staff single-occupancy vehicles
* Establish a van pool?
	+ Consider a University partnership with a Carpool service like Ride amigos
	+ Have a reduced rate for carpools and specific parking spots
 |
| **How will the success of this objective be measured?** Please include any metrics you anticipate measuring, and how often they should be updated. |
| * The percentage of staff driving along is assessed in surveys conducted every four years
* On-campus driving can be assessed by comparing data from traffic counters that can be installed for a few days at a time across multiple seasons/years to analyze driving patterns
 |
| **What are the required milestones to achieve the proposed objective? Please include the target timeline to reach each milestone.** |
| * Reduce driving on campus and report the percentage of staff trips made using single-occupancy vehicles from 55% to 45% by FY28
* Reduce driving on campus and report the percentage of staff trips made using single-occupancy vehicles from 45% to 40% by FY32
 |
| **What are potential sources of funding to achieve the proposed objective?**  |
| * No funding needed, only staff hours
 |
| **What are the most important barriers/challenges you anticipate?** |
| * Car-centric campus and mindset
* No incentive to switch from SOV to carpool or an active mode of transportation
* Distance between place of work, home, and campus resources/facilities/restaurants is too high
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| **What support will you require from the iCAP Working Group?** |
| * Support recommendation of a University partnership with a carpool service
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| **Proposed Objective:** Develop a Commuter Program (Bus, Bike, and Hike) for faculty and staff. Register 100 people by FY28 and 200 people by FY30. |
| **Please explain the rationale for this objective. How does it advance the iCAP goals of achieving carbon neutrality and building climate resilience?** |
| * Reduce driving to campus and transportation sector emissions
* Improve community well-being
 |
| **Who has authority to implement the proposed objective?** |
| * Parking Department
* Transportation iCAP Team
 |
| **What will be the role of the iCAP team to advance the proposed objective?** |
| * Create incentives for biking, taking public transit, or walking to work
* Develop educational campaigns
* Collaborate with Resilience iCAP Team and neighboring towns (Urbana) to improve their bike/public transportation infrastructure
	+ Create an organizational structure to address connectivity/green transportation issues
* Look at what other Universities are doing to encourage non-car transportation
* Communicate with MTD to increase route frequency
 |
| **How will the success of this objective be measured?** Please include any metrics you anticipate measuring, and how often they should be updated. |
| * Use permit numbers to track how many people are relinquishing their parking pass
* Within permit holders- assess how many of them choose green transportation in-place of their car
* Register 100 people for a commuter program by 2028 and 200 people by 2030.
 |
| **What are the required milestones to achieve the proposed objective? Please include the target timeline to reach each milestone.** |
| * Research what other universities/local municipalities are doing to promote a commuter program (bus, bike, hike) - fall 2024
* Develop pilot program with incentives and educational campaign- spring 2025
* Implement pilot program- fall 2025
* Assess effectiveness of pilot program and make changes moving forward – spring 2026
* Encourage departments, staff, and faculty to join commuter program- fall 2026
 |
| **What are potential sources of funding to achieve the proposed objective?**  |
| * In-house staff hours
* Campus support
* Outside vendors
* Parking
* F&S
 |
| **What are the most important barriers/challenges you anticipate?** |
| * Need better incentives
	+ Those with parking permits are not incentivized to relinquish their parking passes
	+ Reward current “green commuters” but no incentive to get people to switch
* Campus bike infrastructure is good, but neighboring towns are not. Connectivity issues and lack of infrastructure in nearby towns discourages riders
* Bike registration fee
* Access to emergency ride home
 |
| **What support will you require from the iCAP Working Group?** |
| * Support with implementing incentives and educational campaign
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| **Proposed Objective:** **Implement the 2024 Campus Bike Plan.** |
| **Please explain the rationale for this objective. How does it advance the iCAP goals of achieving carbon neutrality and building climate resilience?** |
| * Promotes sustainable transportation and less reliance on cars
* Lower travel carbon emissions
* Reduced traffic congestion
* Promote community resilience and engagement
* Promotes healthier lifestyles
 |
| **Who has authority to implement the proposed objective?** |
| * F&S
 |
| **What will be the role of the iCAP team to advance the proposed objective?** |
| * Ask the University for more funds to support the 2024 Campus Bike Plan
* Motivate stakeholders to complete unfinished tasks on the 2014 Campus Bike Plan
* Identify areas that need bike infrastructure improvements or bike shelters
 |
| **How will the success of this objective be measured?** Please include any metrics you anticipate measuring, and how often they should be updated. |
| * Annually assess progress made on the 2024 Campus Bike Plan and stick to its objectives and address high priority areas first
* In 2034, assess the projects that were completed and reevaluate where additional infrastructure improvements are needed
 |
| **What are the required milestones to achieve the proposed objective? Please include the target timeline to reach each milestone.** |
| * Work towards incomplete objectives in the 2014 Campus Bike Plan
* Implement half of the 2024 Campus Bike Plan by FY29
* Complete the 2024 Campus Bike Plan by FY34
 |
| **What are potential sources of funding to achieve the proposed objective?**  |
| * Bicycle infrastructure and programing fee (bike fee)
* Campus funds
* SSC
* F&S
 |
| **What are the most important barriers/challenges you anticipate?** |
| * Cost!
* Collaboration with stakeholders
 |
| **What support will you require from the iCAP Working Group?** |
| * Support for funding
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| **Proposed Objective:** **Reduce net air travel emissions from FY14 baseline by 50% by FY26 and 100% by FY30** |
| **Please explain the rationale for this objective. How does it advance the iCAP goals of achieving carbon neutrality and building climate resilience?** |
| * Reducing greenhouse gas emissions and lowering carbon footprint
 |
| **Who has authority to implement the proposed objective?** |
| * iSEE
* Colleges/Departments
 |
| **What will be the role of the iCAP team to advance the proposed objective?** |
| * Help conduct a survey to determine how much net air travel emissions have been reduced
* Analyze results from the survey
* Propose solutions to reduce net air travel emissions
	+ Expand the ACES Study Abroad Carbon Offset Program to other colleges
 |
| **How will the success of this objective be measured?** Please include any metrics you anticipate measuring, and how often they should be updated. |
| * Update metrics for the percent reduction from air travel emission baseline
 |
| **What are the required milestones to achieve the proposed objective? Please include the target timeline to reach each milestone.** |
| * Conduct a survey to determine how much net air travel emissions have been reduced – Fall 2024
* Analyze results from the survey- Spring 2024
* Reduce net air travel emissions from FY14 baseline by: 50% by FY26 and 100% by FY30
 |
| **What are potential sources of funding to achieve the proposed objective?**  |
| * iSEE
* Campus funds
* Colleges/Departments
 |
| **What are the most important barriers/challenges you anticipate?** |
| * Unsure if this objective is met because the last updated percent reduction of net air travel emissions was conducted in FY20
	+ Need updated data
* Updated data from FY22 shows the CO2 levels from air travel, but these numbers are very low due to COVID
 |
| **What support will you require from the iCAP Working Group?** |
| * Support to collect new data
 |