



February 8, 2022

Morgan King, Climate Action Analyst  
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*via email:*      morgan.king@humboldt.edu

**RE:    Comments on Draft Cal Poly Humboldt Climate Action Plan 2.0**

Dear Mr. King:

The Coalition for Responsible Transportation Priorities (CRTP), the Environmental Protection Information Center (EPIC) and 350 Humboldt are local environmental organizations based in Arcata. While we are not affiliated with Cal Poly Humboldt, we know that the actions of the university have major impacts on Arcata and the entire North Coast. Therefore, we appreciate the opportunity to offer comments on the draft Cal Poly Humboldt Climate Action Plan 2.0 (“CAP 2.0”).

**Transportation Demand Management**

We support TRA Strategy 1.1 to develop and implement a Transportation Demand Management (TDM) plan overseen by an alternative transportation committee. Because this strategy deals with transportation between campus and off-campus locations, it inherently involves the interaction between Cal Poly Humboldt and the broader community. Therefore, we recommend including non-university affiliated representatives on the committee. In particular, CRTP expresses its interest in serving on such a committee.

**Parking Policies**

It has long been known that abundance of free parking is associated with automobile mode share, and recent research confirms the direction of causality: provision of abundant parking causes an increase in driving.<sup>1</sup> Therefore, rethinking Cal Poly Humboldt’s approach to parking policy is a critical strategy for reducing GHG emissions, and we strongly support TRA Strategy 1.2. We offer the following specific comments:

- The draft CAP 2.0 proposes rebranding “Parking and Commuter Services” to “Commuter and Parking Services” (TRA 1.2.A). We suggest simply using the name “Commuter Services”

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<sup>1</sup> McCahill, Christopher T., Norma Garrick, Carol Atkinson-Palombo, and Adam Polinski. 2016. Effects of parking provision on automobile use in cities: inferring causality. *Transportation Research Record* 2543(1): 159-165.

instead. Parking is only one of the ways to serve Cal Poly Humboldt commuters, and including it in the department's name—even if it's placed second—gives it undue emphasis.

- We strongly support disallowing parking passes for students living near campus. The proposed 1.5-mile buffer is reasonable, but requires some exceptions. For example, students with certain disabilities should be excepted, as should students who live within the buffer but in an area where walking, biking or riding the bus is either unsafe or impractical (for example, up Fickle Hill Road).
- We recommend extending the disallowance of parking passes for students living near campus to faculty and staff living near campus as well, with the exception of those whose work responsibilities require the use of a personal vehicle.
- We strongly support disallowing first-year students from bringing a vehicle to campus. We believe this will help arriving students learn how to get around the area without a personal vehicle, and produce dividends of lower GHG emissions through each student's tenure at Cal Poly Humboldt.
- We do not support TRA 1.2.F and TRA 1.2.G, regarding development of off-site parking. While this may ease space constraints on campus, it will do little to reduce GHG emissions, driving or vehicle ownership. Further, it will likely disrupt attempts to promote infill development in the surrounding community.
- We do not support TRA 1.2.H. Commuters who pledge to primarily use non-vehicular modes should have little need for parking passes.
- We strongly support TRA 1.2.I to increase carpool-only parking stalls. We encourage an increase in carshare-only parking stalls as well. A significant expansion of the carshare, bikeshare, and related programs at Cal Poly Humboldt is likely needed to ensure the success of efforts to reduce student vehicle ownership and use. Therefore, we state our strong support for TRA Strategy 1.4 as well.
- We recommend the addition of a measure to increase the cost of parking passes, and a commitment to using parking revenues to support public transit and other low-carbon alternatives.

### **Walkability and Bikeability**

We strongly support the CAP 2.0's focus on increasing safety and comfort of people walking and biking on and around campus, as contained in TRA Strategy 1.3. We note that this will require substantial coordination with other local jurisdictions and the broader community, and encourage Cal Poly Humboldt to take an ambitious but transparent and public-facing approach to these processes. We also offer a note of caution on TRA 1.3.C's suggestion of roundabouts as a way to reduce bicycle-car conflict. Roundabouts often introduce additional conflict points by requiring bicyclists to merge with cars and trucks, and are inconvenient for all pedestrians and impossible for sight-impaired pedestrians to navigate.

### **Public Transit**

We strongly support TRA Strategy 1.5 to improve public transit to and from campus. Cal Poly Humboldt has historically been at the forefront of supporting local transit systems through its JackPass program and is well positioned to continue this support. University students, faculty and staff provide the vast majority of riders for the Arcata and Mad River Transit System (AMRTS), and a substantial portion of riders of the other local and regional transit systems. In addition to the actions identified in the draft CAP 2.0, we suggest working with AMRTS and the Humboldt Transit Authority to identify and

develop additional funding for increased frequency and fare-free transit service throughout the region, which will increase ridership to and from campus as well as in the broader community.

### **Employee Commutes**

As noted above, in addition to the measures identified in TRA Strategy 1.6, we recommend extending the disallowance of parking passes for students living near campus to faculty and staff living near campus as well, with the exception of those whose work responsibilities require the use of a personal vehicle. We also recommend providing free bus passes to all employees and extending the offer of reduced-price bus passes to the families of employees. Finally, we recommend exploring the possibility of incentivizing active commuting through a health insurance discount program.

### **Carbon Offsets**

We oppose the sale of carbon offsets generated from current management practices in forests controlled by Cal Poly Humboldt, as suggested at CSO 1.1.A. Recognition and sale of offsets for carbon sequestered due to existing management practices fails the “additionality” test. That is, it does not increase the amount of carbon otherwise sequestered, but it does allow the purchaser to emit more greenhouse gases, and thus has a net negative impact. Rather, we support strategies such as CSO Objective 1.6, which incorporate the goal of increased carbon sequestration officially into campus planning and management.

We do not support the purchase of carbon offsets from the open market as a strategy for “neutralizing” emissions from transportation, as suggested in CSO Strategies 1.2 and 1.3. Carbon accounting is too complex, and carbon markets too opaque, to rely on purchased offsets to “eliminate” emissions.

### **Housing and Other Facilities**

RES Strategy 3 includes a measure to “Support campus and municipal efforts to develop affordable, equitable, transit-oriented housing in proximity to campus.” This is an important measure not only for increasing housing security, but for decreasing carbon emissions from transportation. Cal Poly Humboldt must commit to developing sufficient student housing either on campus or within easy walking distance of campus, and must ensure the availability of convenient low-carbon transportation options for more distant housing and other off-campus facilities (e.g., the Telonicher Marine Lab in Trinidad). If, due to the absence of feasible alternatives, students are effectively required to drive cars to off-campus facilities to complete their coursework or to go home, then efforts to reduce car driving and ownership will ultimately be unsuccessful.

### **Refrigerant Management**

The draft CAP 2.0 states at p.11: “Because Humboldt’s buildings require little to no active cooling, emissions from refrigerants (chemicals used in air conditioners, water chillers, freezers and refrigerators) leaked to the atmosphere have been determined to be *de minimis*.” Did Cal Poly Humboldt actually inventory all of the refrigerant/chiller/air conditioning use on campus, or is the *de minimis* “determination” merely an assumption?

The draft CAP 2.0 doesn’t mention it, but the issue with refrigerants is that on a pound for pound basis HFCs release emissions with 2,000 to 4,000 the global warming potential (GWP) of CO<sub>2</sub>. In general, the EPA estimates refrigeration equipment loses a quarter of its charge annually to leaks. Regardless of the

draft document's conclusion of *de minimis* impacts, we believe Cal Poly Humboldt's refrigerant use should be addressed in two contexts:

- a. Existing refrigeration in dormitories and cafeterias and the small market on campus should be assessed. If they have a refrigerant charge of 50 lbs or more they need to be reported to the California Air Resources Board (CARB) and are subject to regulation. There are also new CARB regulations governing the purchase of new or replacement refrigeration or chilling equipment. The university will have to meet those standards. It should consider replacing existing refrigeration equipment with very low GWP refrigerants, such as the new stand-alone units that operate on propane.
- b. If the university uses heat pumps, or plans to convert gas heating to heat pumps, there are new standards that apply to them. Every effort should be made to find equipment that runs on very low GWP refrigerants. Note that the EPA is required by the AIM Act of 2020 to eliminate 85% of manufacture and import of HFCs by 2035, and EPA has a timed schedule for doing so. So there are strong incentives for moving away from HFCs as they will be increasingly scarce and expensive.

The draft CAP 2.0 lists one of the “challenges” to implementing BEF Strategy 1.3 as follows: “Some heat pumps utilize hydrofluorocarbon refrigerants that can deplete ozone and contribute to global warming.” Actually, refrigerants that can deplete ozone have been banned for many years and are not hydrofluorocarbons. As noted above, heat pumps that use HFCs *are* going to be a significant problem as we convert to electric heating and cooling. There are some heat pumps available now that use very low GWP refrigerants – not HFCs. Here is a 2021 article that reviews the state of the art: Wu, Di, Bin Hu, and R. Z. Wang. "Vapor compression heat pumps with pure Low-GWP refrigerants." *Renewable and Sustainable Energy Reviews* 138 (2021): 110571. Some commercial models are available.

Thank you for your consideration of our comments.

Sincerely,

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