Analytics of Campus Electric Vehicle Charging Using Survey and Charging Sessions Data

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Introduction

The following report aims to uncover Electric Vehicle (EV) adoption and charging station use at the University of Illinois Urbana-Champaign campus, leveraging two distinct data sources: (1) a survey distributed to campus students, staff, faculty, and alumni groups, and (2) ChargePoint charging station data for charging sessions conducted in the year 2024. The analysis of stated and revealed data will assist in planning for charging infrastructure expansion on campus and new recommendations or targeted mechanisms to accommodate the growth of EVs.

The survey collected demographic information and gathered EV ownership and charging infrastructure use on campus via revealed preferences. It also solicited stated preferences for EV charging from those who do not currently own such vehicle technology, aiming to uncover their future ownership intentions and anticipated charging infrastructure use. Our subsequent analysis of the ChargePoint data enables a better understanding of the University of Illinois Urbana-Champaign charging station use, while the survey informs projections of future EV travel and charging demand.

Passenger transportation electrification in the University of Illinois Urbana-Champaign campus is part of sustainability promotion efforts. EVs are a focus of the University's continuing efforts on reducing fossil fuel emissions from passenger vehicle use. Fossil-fueled vehicles rely exclusively on gasoline or diesel, whereas EVs are powered by electricity that is generated from diverse energy sources, such as natural gas, coal, nuclear, solar, and wind power (i.e., renewables). With the growth of EV sales and popularity, it becomes imperative to understand current and future EV travel and charging practices on our campus.

Campus chargers are crucial for lower-income EV drivers, renters, and apartment complex residents (like our campus students) who do not have reliable home charging access. As cheaper and used EVs become available, the share of underserved EV drivers by home charging infrastructure will rise; thus, understanding the needs of such population segments for charging contributes to more inclusive sustainable mobility planning. Campus can become a testing model on how we need to plan for EV charging to support daily mobility.

The study provides an in-depth look into how people are using EVs on campus, how frequently they are charging, and provides improvement suggestions based on a campus sample's feedback. As this analysis is based on survey and charging session data collected from the campus population including students, faculty, staff, alumni, it would help inform solutions specific to campus. Therefore, generalizations to other contexts and populations are not easy to make.

Data Collection

The campus EV charging survey was conducted from March to May 2025, yielding 295 valid responses (the target sample size was 250). The survey aimed to understand EV ownership and charging choices on the University of Illinois Urbana-Champaign campus, covering both EV owners and non-owners aged at least 18 years old. Including non-EV users ensured that potential future charging patterns could also be evaluated, which is critical for campus facilities and resources planning.

The administered survey asked demographic questions and then branched based on current EV ownership. If the respondent currently owned an EV, they were asked about on- and off-campus charging habits, awareness of charging etiquette, and preferences for regional charging locations and EV charging trends. If the respondent did not own an EV, they were asked about intentions to purchase such technology and expectations for campus charging. The estimated completion time was 15–20 minutes, and socio-demographic characteristics collected included age, gender, race, ethnicity, income, student, staff, faculty or alumni status, and educational attainment. This survey design would provide insights into EV ownership prospects, making sure that the team documents interest in EV sales growth and campus charging access. The survey was designed in compliance with University of Illinois Urbana-Champaign IRB guidelines.

All responses were first subjected to descriptive statistical analysis and graphical visualization. As noted in established survey methodology, "These types of fairly simple descriptive statistics constitute the majority of the official statistics published to describe the results of household surveys" (Chromy, 2002). Likewise, it has been emphasized that "Initial exploration of the data using simple descriptive summaries (means, standard deviations, etc.), graphical procedures (scatter plots, bar charts, box plots, etc.) and relevant data tabulations is very valuable and should form the first stage of the data analysis" (Chromy, 2002). In line with this principle, we adopted the approach that "Basic measures of central tendency (mean and median) and spread (SD and IQR) were used to evaluate this objective. Proportions were used to describe the number of participants or sessions that fell within the target HR% range, as well as to evaluate participant session completion" (Hutchison, Di Battista, & Loenhart, 2023). Together, these steps ensured that subsequent analyses were grounded in a clear overview of the dataset.

To maintain data quality, we applied cleaning procedures prior to analyses involving charging locations, times, and parking behaviors. Specifically, only responses from EV owners and users were retained, and for the question on "preferred charging station location," 22 responses without concrete sites (e.g., "popular areas" or "gathering spots") were excluded.

Finally, categorical survey variables were prepared using dummy coding, a standard practice that converts qualitative attributes into binary indicators (e.g., female = 1, male = 0), enabling consistency, interpretability, and ease of integration into regression-style analyses.

The survey was promoted through flyers across campus, email blasts, and campus virtual boards. The Institute of Sustainability, Energy, and Environment, the Department of Civil and Environmental Engineering, and the Grainger College of Engineering helped distribute the survey via their newsletters. Flyers were also posted in varied locations, including campus parking lots, and emails were sent through multiple student and alumni organization lists to reach a diverse audience.

Campus Charging Survey Data Analytics

The socio-demographic profile of the 295 valid respondents indicates a staff-heavy and highly educated sample, with 58% employed full-time and 70% holding at least a bachelor's degree. The mean age is 38 years, older than the typical undergraduate cohort, and household income averages over $100,000, suggesting above-median purchasing power. Undergraduates constitute only 22% of responses, confirming that students are underrepresented relative to their share of the campus population. This bias limits generalizability, yet it is directionally consistent with the commuter subpopulation most engaged in vehicle use and thus most relevant for charging demand. Situating the survey in this way frames subsequent analyses as reflecting the perspectives of frequent drivers, aligning with the study's objective of informing campus EV infrastructure planning and sustainable transportation goals.

Table 1: Descriptive statistics – Demographic characteristics (N=295)

Variable / Category	N	Mean	%	SD	Min	Max	Range
Age (years, midpoint)	295	38.1	—	14.8	21	67.5	46.5
Household income (per $1000)†	295	103.9	—	42.6	12.5	150	137.5
Binary indicators							
Female (=1)‡	295	0.53	52.5	0.50	0	1	1
Female	155		52.5				
Male / Other	134		45.4				
Non-binary	6		2.0				
Hispanic / Latino (=1)	295	0.05	5.4	0.23	0	1	1
Yes	16		5.4				
No	279		94.6				
Race (multi-select)§	295	—	—	—	—	—	—
White	212		71.9				
Asian	69		23.4				
Other	12		4.1				
Black/African	7		2.4				
Native Am./Pac.Isl.	5		1.7				
Highest educational attainment	295	—	—	—	—	—	—
Graduate	138		46.8				
Bachelor	70		23.7				
Some college	41		13.9				
HS equiv.	32		10.8				
Associate	7		2.4				
Other	6		2.0				
<HS	1		0.3				
Current employment status	295	—	—	—	—	—	—
Full-time	201		68.1				
Student	44		14.9				
Part-time	32		10.8				
Unemployed	10		3.4				
Retired	6		2.0				
Other	2		0.7				
UIUC affiliation§	295	—	—	—	—	—	—
Staff	170		—				
Undergraduate	65		—				
Faculty	40		—				
Graduate	25		—				
Alumni	25		—				

Notes. Continuous rows list mean, SD, min, max and range. Percentages use row-specific valid *N*. †Income recoded to bracket mid-points, divided by1000. ‡Female = 1; Male/Non-binary/Other = 0. §Multiple selections possible; percentages can exceed 100%.

Figure 1: Descriptive statistics of survey respondents (N=295).

Among the 295 respondents, 22% reported currently owning an EV, while over 44% of non-owners indicated plans to purchase one within the next five years. This highlights considerable potential for future adoption on campus. Current owners report an average driving range of approximately 230 miles, suggesting that existing EVs already meet most commuting needs. More than 90% of owners rely on battery EVs (BEVs), with plug-in hybrids (PHEVs) playing only a minor role, indicating a clear preference for fully electric platforms. In terms of brands, Tesla accounts for 41.5% of reported vehicles, followed by Chevrolet at 21.5%, showing a relatively concentrated market profile. Overall, while ownership remains modest, the strong purchase intentions and sufficient range performance underscore the likelihood of accelerating EV adoption in the campus community, reinforcing the importance of expanding charging infrastructure and shared management practices.

Table 2: EV-ownership characteristics (N=295)

Variable / Category	**N**	**Mean**	**%**	**SD**	**Min**	**Max**	**Range**
considering purchase EV in next 5 years	295	—	44.1	—	—	—	—
Yes	130		44.1				
No	165		55.9				
Driving range (miles)†	63	230.2	—	95.2	20	420	400
Binary indicators							
Owns EV (=1)	295	—	22.0	—	—	—	—
Owners	65		22.0				
Non-owners	230		78.0				
Power-train type (owners, N=65)	64	—	—	—	—	—	—
BEV	59		92.2				
PHEV / Hybrid	5		7.8				
EV brand (owners, N=65)‡	64	—	—	—	—	—	—
Tesla	27		42.2				
Chevrolet	14		21.9				
Other	6		9.4				
Nissan	3		4.7				
Chrysler	3		4.7				
Volkswagen	3		4.7				
Ford	3		4.7				
Hyundai	2		3.1				
Kia	1		1.6				
BMW	1		1.6				
Lucid	1		1.6				

†63 of 65 owners supplied a numeric range figure. ‡Percentages sum to 100% within the owner sub-sample.

Figure 2: Campus EV ownership characteristics (N=295).

Among the 65 EV owners, 46.2% rated their experience with existing campus charging infrastructure as negative, while only 18.5% reported positive impressions; notably, over one third had never used it at all. This suggests shortcomings in accessibility, convenience, or availability of chargers. On average, drivers began charging at a state-of-charge of just 37%, with a reported range-anxiety threshold of approximately 43 miles, indicating that charging is typically deferred until low battery levels. In terms of behavior, more than half of owners (55.4%) never charged on campus, instead relying primarily on home charging (92.3%), with campus charging accounting for only 9.2%. These findings reveal both limited uptake and negative perceptions of campus infrastructure, underscoring the need for improved capacity and management strategies to support commuter EV adoption.

Table 3: Campus-charging perceptions and frequency (N = 65)

Variable / Category	N	Mean	%	SD	Min	Max	Range
Experience with existing infrastructure	65	—	—	—	—	—	—
Negative	30		46.2				
Have not utilised	23		35.4				
Positive	12		18.5				
State-of-charge & range (owners)	65	—	—	—	—	—	—
Battery SoC at start (%)	65	37.3	—	20.3	1	81	80
Range-anxiety threshold (mi)	63	43.3	—	31.1	0	180	180
Frequency of charging on campus	65	—	—	—	—	—	—
Never	36		55.4				
Few times a year	15		23.1				
Few times a month	10		15.4				
Once a week	3		4.6				
Few times a week	1		1.5				
Weekly charging location (multi-select)[§] *(owners, N = 65)*	65	—	—	—	—	—	—
Home	60		92.3				
Public location	11		16.9				
Campus	6		9.2				
Other	3		4.6				

[§]Multiple selections possible; percentages can exceed 100 %.

Figure 3: Campus-charging perceptions and frequency (N=65).

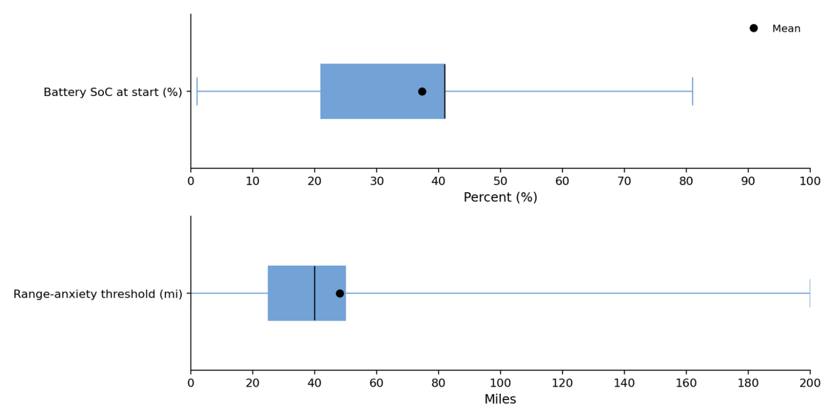

Figure 4: Battery state-of-charge at start and range-anxiety threshold among EV owners.

Among the 65 EV owners, the most common charging start times are at night (63.1%) and in the evening (41.5%), indicating that users predominantly recharge outside of working hours. average home charging sessions last 6.9 hours, while workplace and public charging sessions average 1.8 and 0.9 hours, respectively. The mean reported cost per campus charging session is $3, but the range spans from zero to $30, highlighting heterogeneity in usage patterns. Regarding parking behavior, 66.2% of respondents expressed willingness to move their vehicles after charging is complete, and another 30.8% indicated "maybe," with only 3.1% refusing. These findings suggest that well-designed incentives or notification systems could substantially improve charger turnover and the effective use of campus charging infrastructure.

Table 4: Charging session timing, duration and parking behaviour (owners, N=65)

Variable / Category	N	Mean	%	SD	Min	Max	Range
Usual start-time (multi-select)[§]	65	—	—	—	—	—	—
Night (after 9 PM)	41		63.1				
Evening (after 5–6 PM)	27		41.5				
Afternoon (after 12 PM)	11		16.9				
Morning (after 6–7 AM)	9		13.8				
Hours per home session	63	6.9	—	3.8	0	20	20
Hours per work session	59	1.8	—	2.7	0	12	12
Hours per public-space session	63	0.9	—	1.0	0	6	6
Average cost per campus session ($)	14	3.0	—	8.0	0	30	30
Willingness to move vehicle	65	—	—	—	—	—	—
Yes	43		66.2				
Maybe	20		30.8				
No	2		3.1				

[§]Multiple selections possible; percentages can exceed 100%.

Figure 5: Charging session timing, duration and parking behaviour (owners, N=65).

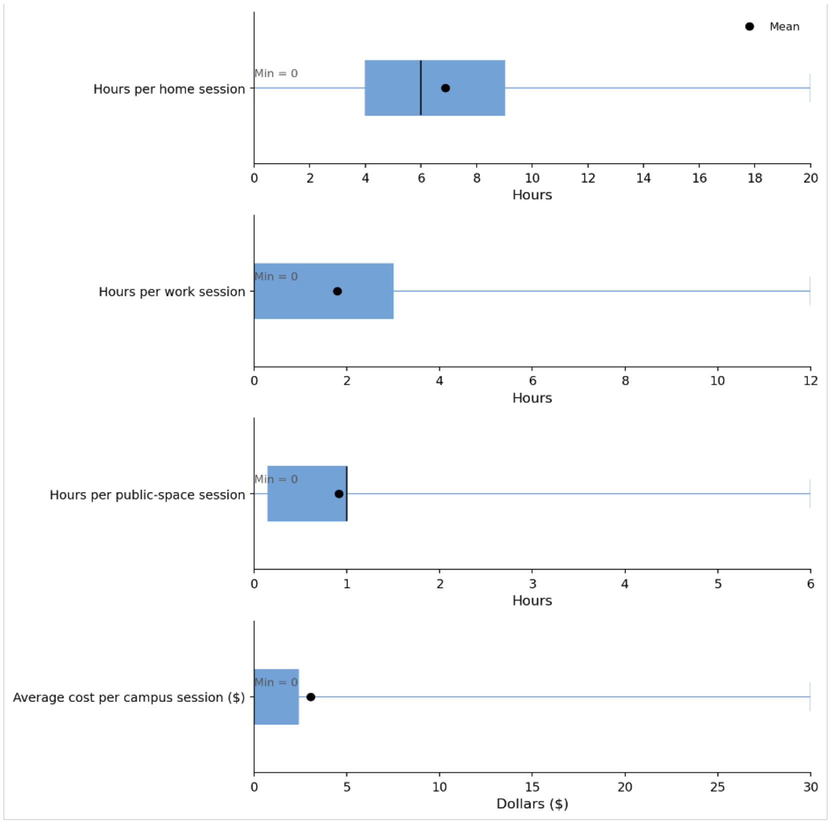

Figure 6: Distribution of charging session durations (home, work, public-space) and average cost per campus session.

Among the 295 respondents, 60.3% indicated they "sometimes" saw EV advertisements, 19.0% reported seeing them "often," while 13.9% reported no exposure and only 6.8% described it as "very often." This suggests that although EV messaging has reached a majority of the campus community, the intensity of exposure remains uneven. Regarding infrastructure, respondents reported encountering an average of 5.3 charging stations, with nearly two thirds (64.4%) reporting 0–5 stations, 23.7% reporting 5–10, and only a small fraction encountering more than 10. Overall, visibility of EV advertising appears higher than physical accessibility to community charging, underscoring infrastructure limitations as a potential barrier to broader EV adoption.

Table 5: Advertising exposure and community charging access (N=295)

Variable / Category	N	Mean	%	SD	Min	Max	Range
Frequency of seeing EV ads	295	—	—	—	—	—	—
Sometimes	178		60.3				
Often	56		19.0				
Not at all	41		13.9				
Very often	20		6.8				
Recharging stations encountered	295	5.3	—	4.3	2.5	20	17.5
0–5 (mid-pt2.5)	190		64.4				
5–10 (mid-pt7.5)	70		23.7				
10–20 (mid-pt15)	25		8.5				
20+ (set20)	10		3.4				

Figure 7: Advertising exposure and community charging access (N=295).

Among the 230 non-owners surveyed, the highest-ranked factors encouraging EV adoption were ubiquitous public charging infrastructure, lower sticker prices, and EV tax credits, each averaging around 4.0 on a 1–10 importance scale. Fuel-cost savings and point-of-sale rebates followed closely, with mean rankings near 4.8. In contrast, reliable charging-station networks and financial support for home charging were rated moderately important (means between 5.1 and 5.4). Environmental motivations such as emissions reduction, along with availability of more EV makes and models, received lower priority, with mean scores above 6.3. These findings suggest that for the campus community, direct economic incentives and infrastructure visibility remain the dominant levers to accelerate adoption, whereas environmental benefits and model variety are secondary considerations.

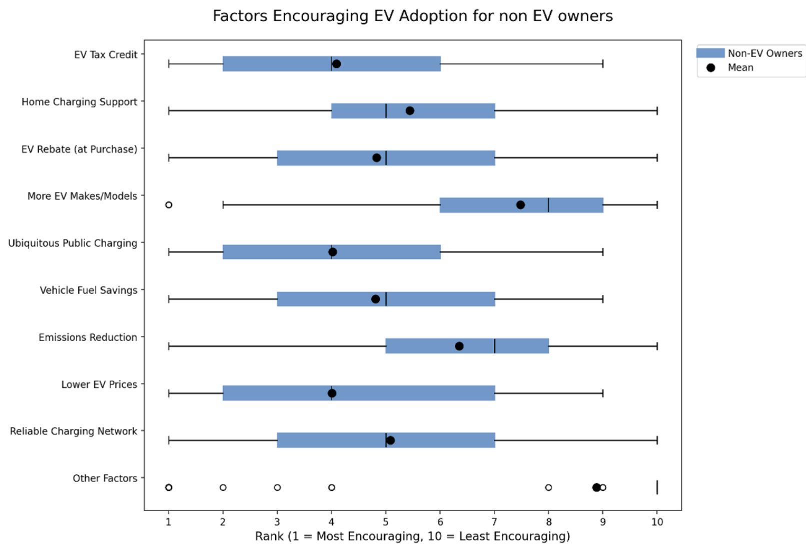

Figure 8: Factors encouraging EV adoption for non-EV owners. Ranks are based on a scale from 1 (most encouraging) to 10 (least encouraging).

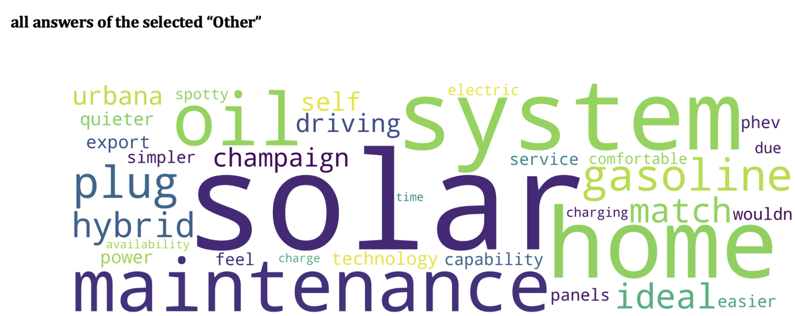

Figure 9: Word cloud of all answers under the selected "Other" category (non-EV owners).

Among the 65 EV owners, the leading motivations for adoption were environmental and economic: 86.2% cited vehicle emissions reduction and 81.5% pointed to fuel-cost savings. Policy incentives also played a notable role, with 50.8% referencing EV tax credits. A smaller share highlighted the importance of model variety (32.3%) and charging-station availability (27.7%). Factors such as purchase price, public charging availability, and financial support for home charging were mentioned by only around one fifth of respondents. Overall, these findings indicate that current EV owners were primarily driven by the direct economic and environmental benefits of EVs, while infrastructure and rebate mechanisms, though relevant, were less central once adoption occurred.

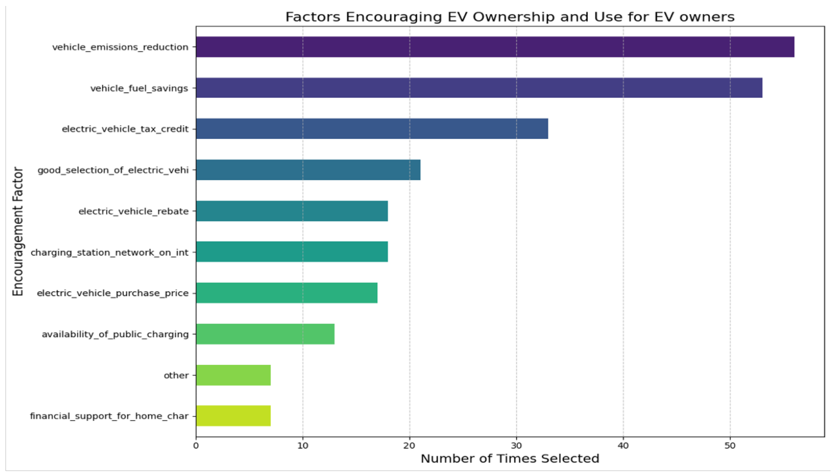

Figure 10: Factors encouraging EV ownership and use for EV owners.

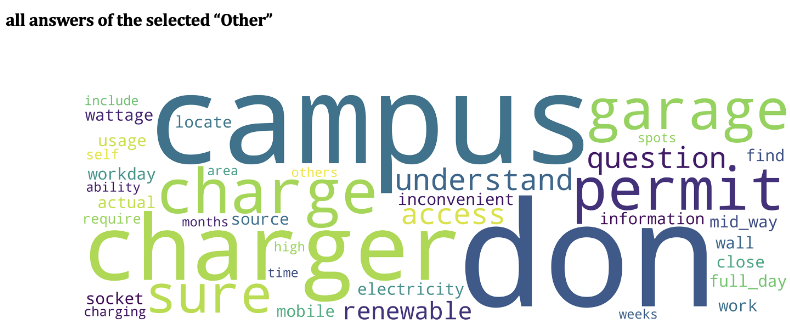

Figure 11: Word cloud of all responses categorized as “Other” regarding EV ownership and charging.

For the 65 EV owners surveyed, the most important determinants of charging convenience were the number of chargers (mean rank 2.0) and their location (2.5). Pricing (2.9) and accessibility (3.4) were rated as moderately important, while “other” factors ranked lowest (4.2). These results suggest that users are primarily concerned with the physical availability and spatial distribution of chargers rather than cost or interface-related issues. Accordingly, campus planning for EV infrastructure should prioritize expanding the number of chargers and optimizing their placement to meet commuter expectations.

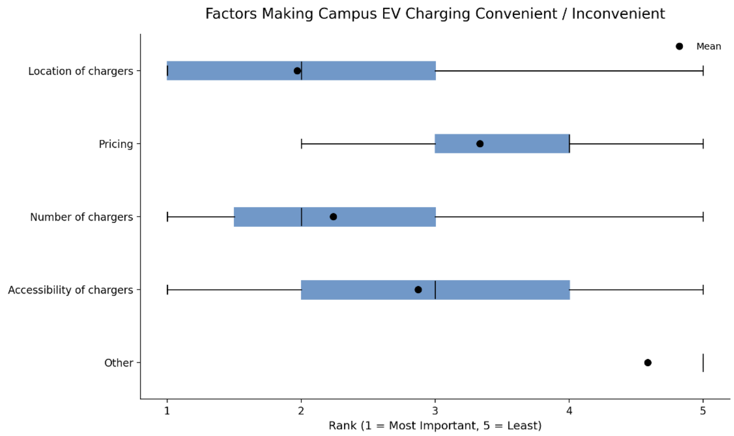

Figure 12: Factors making campus EV charging convenient / inconvenient (owners, N=65).

Spatial distribution of campus charging stations

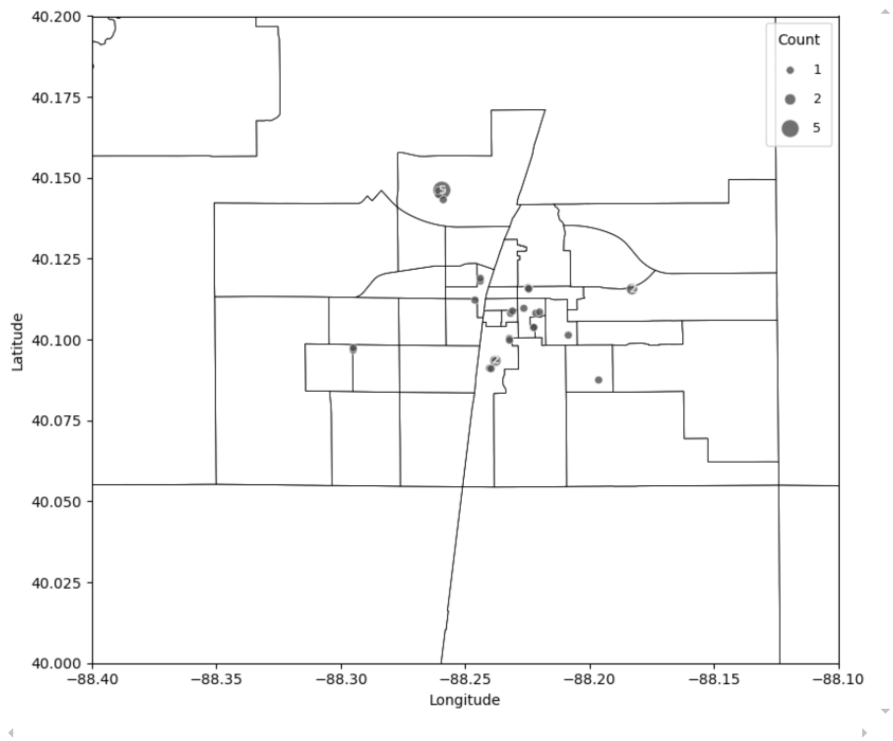

Figure 13: Clustered distribution of self-reported campus charging locations. Bubble sizes denote the number of features; legend shows count bins.

The campus survey (N=295) revealed a commuter-oriented sample, skewed toward staff and graduate affiliates, older and higher-income groups who are also the most frequent drivers. Among respondents, 22% were already EV owners and another 44% of non-owners planned to purchase one within five years, indicating both a solid adoption base and substantial growth potential. Current owners reported an average driving range of about 230 miles, with market concentration in Tesla and Chevrolet.

However, charging experience emerged as a major bottleneck. Nearly half of owners rated campus charging infrastructure negatively, and more than half had never used it, relying primarily on home charging. Charging was concentrated at night, with home sessions lasting longer, while workplace and public charging sessions were much shorter. Nevertheless, most owners expressed willingness to relocate vehicles after charging, suggesting that improved management could enhance charger turnover.

Potential adopters prioritized widespread public charging, lower purchase costs, and tax incentives, whereas current owners were mainly driven by emissions reduction and fuel savings. Overall, the number and location of chargers mattered more for user satisfaction than pricing or interface-related factors. These results indicate that sustaining EV adoption momentum on campus will require greater investment and innovation in charging infrastructure—particularly in availability, placement, and user experience.

Campus Charging Session Data Analytics

The campus charging data analytics enable us to gain deeper on the EV charging infrastructure use, including charging location and frequency, as well as the energy demand. Using ChargePoint Data from Level 2 campus charging stations, we provide insights on EV charging session duration and energy consumption per session and discuss the patterns observed.

The data was collected from ChargePoint virtual dashboard for the majority of the charging stations that are present on campus, consisting of variables like charging time, session ID, and EV supply equipment port. We focused on the year 2024 for our data review. This is because 2024 exhibits the highest charger use on campus up to now, while it has more variation across chargers and higher overall charging energy consumption. Total charging sessions per station by month in the year 2024, along with the different locations, highlight the spatial pattern of charger usage, leading us to pick Parking Deck B4 and Parking Lot E-15 for subsequent charging session analytics.

The charging station map for the University of Illinois Urbana-Champaign is presented in Figure 14, which highlights the number of charging events at each parking facility on campus. Our dataset is a spatio-temporal one. Note that out of the whole set of charging stations on campus, just 6 charging stations with 20 charging ports recorded 2963 charging sessions. Popular charging ports on campus that are used heavily include Parking Deck B4 and Parking lot E-15 where the largest number of charging sessions was recorded.

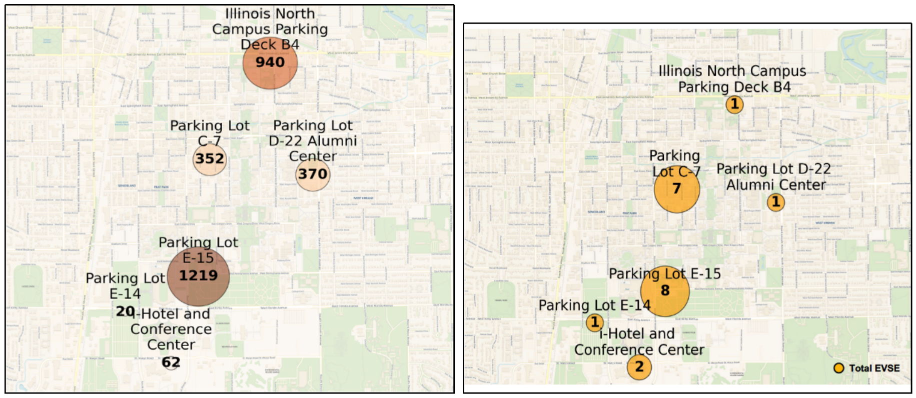

Figure 14: Left panel: Number of charging events that occurred on each EV charging infrastructure parking lot location on the University of Illinois Urbana-Champaign campus in 2024; Right panel: Number of EV supply equipment (EVSE) at each parking lot on campus.

The average charging session length is 3.22 hours for the charging stations on Parking Deck B4 and 2.53 hours for those on Parking Lot E-15. Note that the average charging session length by month does not vary significantly, except for a consistent dip in all charging stations around the month of May, as highlighted in Figure 15.

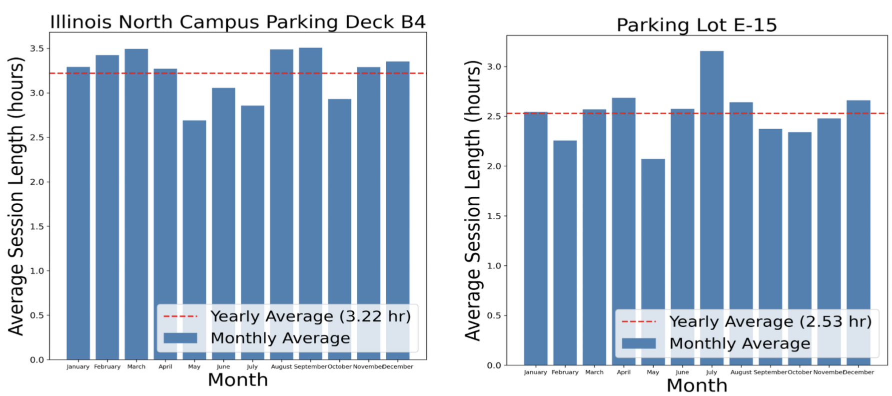

Figure 15: Average charging session duration on Parking Deck B4 and Parking Lot E-15 per month on the University of Illinois Urbana-Champaign campus for the year 2024.

November 2024 has the highest total energy consumption, probably due to multiple weekend visitors and potentially alumni attractions, as showcased in Figure

16. The Fall semester had a higher charging infrastructure use than the spring one because of weather restrictions and the highest traffic weekends, such as welcome week and homecoming. Spring sees a consistently high average usage. Summer break and winter break have the lowest usage due to low campus population and workload during breaks.

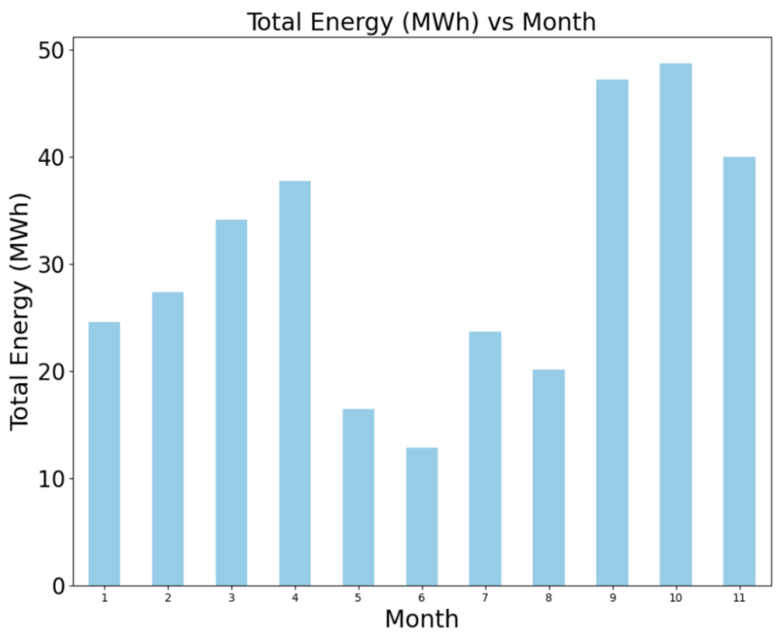

Figure 16: Monthly total energy use leveraging all campus charging destinations for the year 2024.

Charging energy consumption patterns differences between Spring and Fall semesters and per day in the B4 and E-15 parking locations are showcased in Figure 17. There are no significant differences per semester in terms of average total energy consumption but for Parking Deck B4, Monday and Sunday have the highest total energy consumed, and Thursday has the lowest. Parking Lot E-15 has relatively the same energy consumption throughout the week. Interestingly, both locations do not exhibit significant demand drop over the weekend, as it was expected given that classes and other working activities do not necessarily take place then. It is likely that visitor, alumni, and researchers demand for EV charging results in weekend charging sessions.

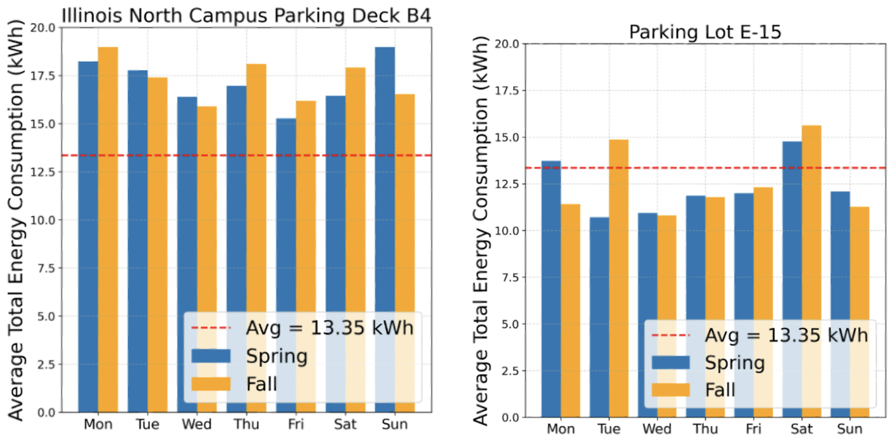

Figure 17: Average total energy consumption per day, accounting for differences between Fall and Spring semesters in the University of Illinois Parking Deck B4 and Parking Lot E-15.

In Figure 18, the power profile per time-of-day of each lot hints at differences in peak magnitudes between a typical weekday and a typical weekend. In B4, demand peaks are experienced between 9AM-11AM on both a typical weekday and weekend, which is expected given the usage of this campus parking lot by all faculty, staff, and students. Parking Lot E-15 attracts a greater diversity of users (visitors, alumni, etc.), presenting consistent power needs in the evenings of a typical weekday (4PM-11PM), but exhibits similar patterns of usage with B4 over the weekends.

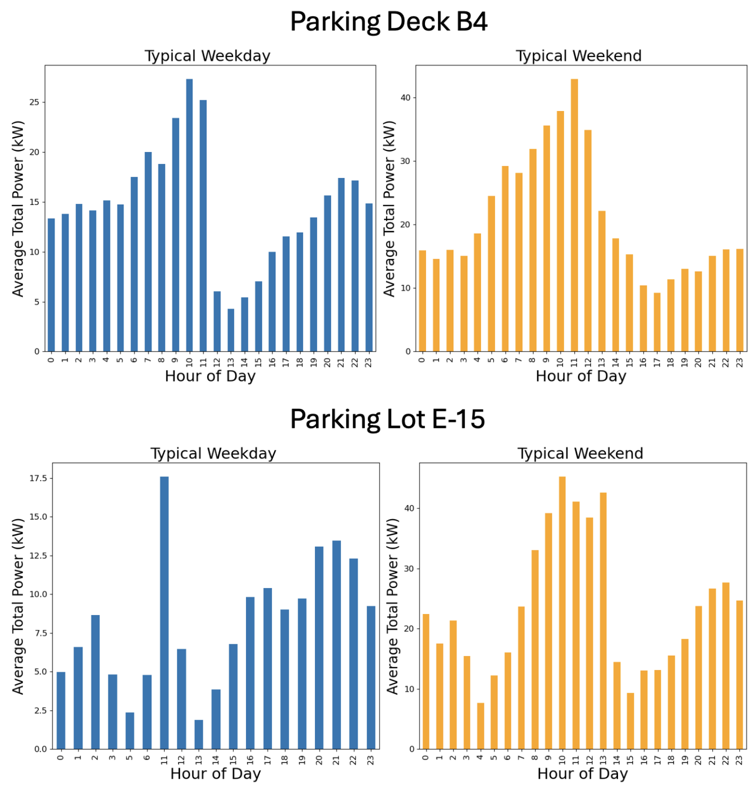

Figure 18: Time-of-day power profiles of charging stations at Parking Deck B4 and Parking Lot E-15 during a typical weekday and a typical weekend.

The histograms in Figure 19 present the energy consumption per session in the year 2024 along with the mean and median for Parking Deck B4 and Lot E-15. Both the average and the median energy use in kWh per charging session are higher in B4 than E-15, which could be tied to the fact that B4, as a main campus lot, attracts workers and students to park for a greater number of hours compared to E-15 that also serves visitors demand.

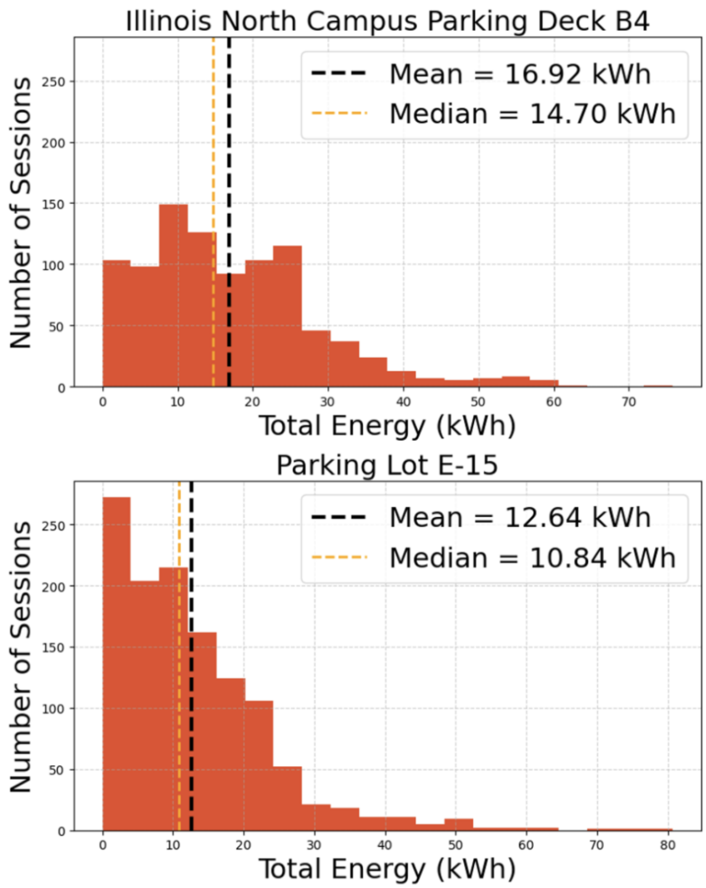

Figure 19: Histogram of total session energy consumption in Parking Deck B4 and Parking Lot E-15.

Based on the ChargePoint charging session data analytics for the year 2024, all chargers have varied usage, based on location, time of day, day, and month. Our survey provides more details on EV charging user needs and charging patterns.

Conclusions

This analysis of EV adoption and charging infrastructure use at the University of Illinois Urbana-Champaign campus, drawing upon both survey data and ChargePoint charging session logs, has yielded research insights and practical recommendations for campus charging planning.

The survey data revealed a personal vehicle commuter-oriented demographic among respondents, predominantly staff and graduate affiliates with higher education and income levels. This demographic profile is highly relevant for understanding campus EV usage patterns. We uncovered strong potential for future EV adoption, with 22% of respondents already owning EVs and an additional 44% of non-owners planning a purchase within five years. Current EV owners demonstrated a clear preference for battery EVs and reported adequate driving ranges for their commuting needs, primarily with Tesla and Chevrolet models dominating the campus market share.

The research revealed critical bottlenecks in the campus charging experience. Nearly half of existing EV owners expressed negative perceptions of the campus charging infrastructure, and a majority relied on home charging rather than campus facilities. Charging behaviors indicated a prevalence of nighttime charging sessions at home, which were significantly longer than those at workplace or public stations. Despite these challenges, a substantial willingness among owners to move their vehicles after charging suggests an opportunity for improved charger management and turnover strategies.

The study identified the primary drivers for both current EV ownership and future adoption intentions. For non-owners, economic incentives such as lower purchase prices, tax credits, and ubiquitous public charging infrastructure were paramount. Environmental benefits and fuel-cost savings were also significant motivators for current owners. This underscores the importance of financial incentives and visible charging access in accelerating EV integration. Charger availability and strategic location were prioritized over cost and general accessibility by current EV owners, indicating a practical need for physical infrastructure expansion and its optimal placement.

The ChargePoint data provided granular insights into actual charging patterns. Analysis of charging events across different parking locations (e.g., Parking Deck B4 and Parking Lot E-15) revealed variations in usage based on location, time of day, day of the week, and month. While average charging session lengths varied by location, a consistent dip in usage was observed around May. Seasonal variations showed higher infrastructure use during the Fall semester, attributed to weather and high-traffic weekends, with summer and winter breaks exhibiting the lowest usage. The data also indicated that weekend charging demand remained surprisingly robust, likely driven by visitors, alumni, and researchers, challenging initial assumptions about reduced weekend activity.

Recommendations for Campus EV Charging

The findings offer several practical insights for the University of Illinois Urbana-Champaign campus. To facilitate broader EV adoption and enhance user satisfaction, the university should prioritize the expansion of its charging infrastructure, focusing on increasing the number of charging stations and optimizing their strategic placement. Implementing smart charging management systems, potentially incorporating notification systems for charge completion and incentives for vehicle relocation, could significantly improve charger use efficiency.

Addressing any negative perceptions of campus charging requires a multi-faceted approach, including improving accessibility, reliability, and user-friendliness of the stations. Given the strong influence of economic factors on EV adoption intentions, the university could explore partnerships or programs that highlight available tax credits, rebates, or potential fuel-cost savings to prospective EV owners within the campus community. Tailored communication strategies that emphasize the practical benefits and convenience of campus charging, alongside broader EV advocacy, could also help shift perceptions.

In conclusion, this research provides a basis for informed decision-making regarding EV infrastructure development and policy at the University of Illinois Urbana-Champaign. By leveraging both stated preferences and revealed behaviors, the study offers actionable insights to support the campus's sustainability goals and accommodate the growing demand for electric mobility. Continued monitoring of charging patterns and user feedback will be crucial for adaptive planning and ensuring a seamless transition to an electric transportation ecosystem.

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