The Distributional Cost of Residential Parking in Cambridge

TO: Cambridge City Council

FROM: Kavish Gandhi, Vince Young, J.D., Lucien Wallace[1]

DATE: May 27, 2026

SUBJECT: The Distributional Cost of Residential Parking in Cambridge

1 - Introduction

Cities across Massachusetts currently treat on-street permit parking as a nominally priced public good, but doing so has negative fiscal and equity consequences. When permit fees are set below the true cost of providing and managing on-street parking, they are an implicit subsidy to permit holders. The burden of this parking subsidy is borne by residents who do not own vehicles, residents who utilize off-street parking, and the city itself. Not only does this mispricing privilege a subset of residents, it also diverts limited public resources away from other integral city services because the cost of maintaining parking spots, administering permit programs, and enforcing regulations far exceeds the revenue collected. Furthermore, it does not account for the negative externalities or other unquantifiable costs caused by perpetuating car-centric modes of travel or by conceding large swaths of valuable public property for private parking.

Cambridge, Massachusetts ("the City") operates a residential on-street parking permit program that allows residents to park in designated "permit-only" areas for an annual fee. As of 2026, the cost of a resident parking permit is $25 per year, with exemptions for seniors and residents with disabilities. From 2020-2023, there were 67,926 permits per year issued, with 39,281 of them paid for.

Cambridge is currently considering a proposal to increase the annual permit fee to $75 with a discounted option of $25 for low-income residents. This change would represent the first substantial adjustment in over a decade. The parking permit fees were raised in 2011 from $8 to $20, and to its current price of $25 in 2013. The fee change is proposed to better align revenues with the costs of administering the program, as the city's parking permit program has been running at a deficit of at least $2 million per year.[2] The deficit will continue to increase at a compounding rate given continued inflation. Assuming a 3% inflation rate,[3] if the permit price is not increased for another 13 years (the length of time between now and the most recent price increase), the city deficit in administering the program will balloon to $2.94 million per year.

We submit this memorandum in support of the City's proposed increase to the parking permit fee. We argue that when permit fees do not adequately reflect the cost of administering the program, it effectively transfers resources from non-permit holders to permit holders. This disproportionately

burdens the low-income, renting, and car-free households of Cambridge, who bear the cost of subsidizing permit holders.

The memorandum begins by introducing what other cities across the nation have done to minimize the gap between program costs and revenue. In section 3, it considers the legality of parking permit fee increases in Massachusetts, including the one considered by the City. The memorandum argues in section 4 that *despite* the City's proposed fee increase, there are additional costs borne by the City and the general public that are still not captured by the fee adjustment. Section 5 provides evidence for the proposition that adopting the proposed fee promotes equitable transportation for Cambridge residents by reducing the subsidy transfer from non-permit holders to permit holders. The final section 6 proposes a slight tweak in the fee design to further fairness and efficiency.

2 - Permit Parking Fees Across the Nation

Cambridge is not alone in recognizing that underpriced parking and the costs associated with maintaining residential parking programs have contributed to local fiscal challenges. Other cities across the nation have addressed the issue by raising parking permit prices (Table 1).

In 2024, San Francisco increased its residential parking permit from $170 to $215 to help shore up a significant budget deficit for its transit agency SFMTA.[4,5,6] Philadelphia raised its permits from $35 to $75 in 2024 to manage residential parking demand and to fund street maintenance and services.[7] To combat inflation, the most recent 2024 update to Philadelphia's program also allows the city's Department of Streets to raise permit prices every 3 years by the corresponding increase to the Consumer Price Index over the same time period.[8] Washington D.C. operates a tiered parking permit pricing system for the number of cars registered per household ($55, $80, $115, $175) and has increased its permit fees in 2025 and 2021 to keep up with rising program and inflationary costs, and to prevent transit-related service cuts.[9,10]

City	Permit fee cost/year	Exceptions	Other program features
Cambridge, MA	$25	Free for car owners over 65 years of age or for residents with disabled placards/plates	1 free visitors' permit with purchase of parking permit
Somerville, MA	$40	Free for car owners over 65 years of age or for residents with disabled placards/plates	
Boston, MA	$0		
San Francisco, CA	$215*		*In select neighborhoods[11]
Philadelphia, PA	$75	Free for low-income individuals on the first vehicle	Permits limited to 3 vehicles per household Department of Streets may raise prices every 3 years by no more than the percentage increase in the Consumer Price Index[12]
Washington, D.C.	$55 (1st car), $80 (2nd), $115 (3rd), $175 (4th+)		$35 for Senior Citizens
Portland, OR	$50-$135*		*In select neighborhoods[13]

Table 1. Sample of on street parking permit programs.

3 - Legal Background

DISCLAIMER: This legal summary is for general informational purposes only and does not constitute legal advice.

In Massachusetts, municipalities typically enjoy broad authority under their home rule powers to impose fees not otherwise inconsistent with state law.[14] "However, those fees must meet the three-prong established under Emerson College to determine whether it is an allowable fee or an unauthorized tax: (1) Is the charge for a particularized service?; (2) Is the charge designed to compensate the government for its costs in providing the service and not to raise revenue generally?; and (3) Is receipt of the service and payment of the charge voluntary?"[15]

In *Emerson College*, the court decided whether the city of Boston could validly charge a fee for "augmented fire services", or a fee charged to property owners whose buildings required additional firefighting resources to protect. While the court found that the charge for augmented fire services resembled a user fee likely satisfying prong (2), it held that the charge failed prong (1) because the

benefit was not "sufficiently particularized as to justify" imposing the cost on the users or beneficiaries, of the services, rather than the general public.[16] The court held that extinguishing a fire in any particular building provides a generalized benefit to all owners of nearby buildings and their occupants (by preventing the spread of the fire), and not just the building owner responsible for paying the augmented fire service fee.[17]

In applying the Emerson College Test to the City's residential parking permit program, the Acting City Solicitor for Cambridge speculates that the current fees charged for the residential parking permits are likely legal.[18] The Solicitor reasons that "fees are charged in exchange for a particular governmental service, residential parking registration and stickers, for the use of City property… for parking, which only benefits the party paying for the service and is not shared by others." Second, the "fee is paid by choice; residents have the option of not utilizing the service if they so desire." And finally, "the fee currently charged is not collected to generally raise revenue but to compensate the City for providing the service and managing the expenses related to it."[19]

The proposed fee increase likely passes the Emerson College Test while leaving potential capacity for an even higher fee to more fully recover the City's expenditure in administering the program. In a presentation given April 28, 2026, at the Cambridge Transportation and Public Utilities Committee, the Department of Transportation estimated the current cost of administering the program at $2.74M per year. If all permits are purchased at the full proposed cost of $75 per permit, the program essentially breaks even. However, because the proposed change includes a discounted option of $25, the increased fee is unlikely to generate enough revenue to cover program costs. At 80% full cost permits/20% discounted permits purchased, keeping discounted permits at 1/3rd the cost of full cost permits, the city could charge up to ~$88 and $29 per permit and still "pass" the second prong of the Emerson College Test requiring city fees to approximate city cost of providing the service. At 50% full cost/50% discounted, the maximum allowable fee rises to $114 and $38 respectively.

4 - Externalities and Opportunity Costs

As discussed above, to pass the Emerson College Test, the City may only charge fees for expenses directly related to the administration of the parking program. However, there are several cost categories that *cannot* be incorporated into the fee but still flow from the administration of the program. These costs can be categorized into two major types: externalities, and opportunity costs.

Externalities include a variety of costs that are incurred by the general population who are otherwise uninvolved with the transaction. Many important externalities of cheap parking are difficult to quantify and attribute to single vehicles but are still caused by the prevalence of and dependency on cars in the aggregate. It has been shown that providing cheap parking induces car ownership,[20] and that fairly pricing parking can reduce car use.[21] This means that the negative externalities from car use can be partially attributed to policies that supply artificially cheap parking. These externalities include increases in traffic congestion, harmful CO_2 and particulate

matter emissions, and the risk of injury from automobile crashes.[22] It is also worth mentioning that many of these externalities, aside from CO_2 emissions, are not solved by the increased adoption of automated or electric vehicles, since these vehicles still generate particulate emissions through tire friction,[23] and still contribute to increased congestion and automobile-related injuries. Even though the cost of these externalities is significant, these costs cannot be included in permit fee calculations because the costs are not related to the City's expenditures in administering the permit program.

Opportunity costs include the missed opportunities for different land uses for the physical space currently occupied by the parking spots.[24] The simplest alternative would be to use these residential spaces as higher-priced metered parking. The opportunity cost in this case would be the total difference in revenue between the residential permit program versus metered parking. Another alternative would be to use the space taken up by residential parking spots to enhance pedestrian and bicycle infrastructure, such as the proposed Cambridge Street and Broadway Safety Improvements.[25,26] While it would be difficult to calculate the monetary value of such improvements, its contribution to increased street safety is undeniably beneficial to the City, its visitors, and its residents.

Thus, even with the City's proposed adjustment to the residential parking fee, it still does not cover the substantial social and fiscal costs of providing and administering these parking spots. Nevertheless, the proposal is a meaningful step towards ensuring that residential parking costs are more accurately and fairly accounted for.

5 - Who Subsidizes Whom?

Adopting the proposed higher parking fee promotes equitable transportation for Cambridge residents. Cambridge has the highest rate of pedestrian commuters to work among all U.S. cities with populations over 50,000. [27] Despite this, it devotes substantial public resources to subsidizing parking. Roughly one in three households does not own a car (33.2%), yet every household, car-owning or not, pays into the general fund that covers the cost of running the residential parking permit program.[28] In order to calculate the effective subsidy this entails, we estimate the direct cost per permit at $100, slightly higher than the proposed fee of $75 but in line with the city estimation and including a small portion of the additional opportunity costs and externalities. The $75 gap between cost and current fee is the implicit subsidy, flowing from all taxpayers to car owners.

This section makes four claims:

1. **The subsidy is large and meaningful.** Citywide the $75 gap produces a *$0.95M annual transfer* from car-free to car-owning households.

2. **The subsidy maps onto demographics and geography.** Renters are net payers; owners are net receivers. Tracts near MBTA T stations are net payers; tracts farther from transit are net receivers.

3. **The pattern holds within neighborhoods.** Comparing renters and owners in the same census tract, renters are roughly *4x more likely* to be car-free.

4. **The subsidy is regressive.** Lower-income households are dramatically less likely to own cars, so the subsidy flows up the income ladder.

(1) The size of the subsidy. In concrete terms, each non-car-owning household pays roughly $58 per year through its tax bill for a program it does not use. Car-owning households, meanwhile, receive a *net benefit* of approximately $29 per year after accounting for their own tax contribution. Across Cambridge, this amounts to a $0.95M ($950,000) *annual transfer* from the roughly 16,400 households without cars to the 33,000 households with them (Figure 1). The methodology here is based on Cambridge open data on permits and accounting for a $75 gap for normal residential permits and $100 gap for senior permits.

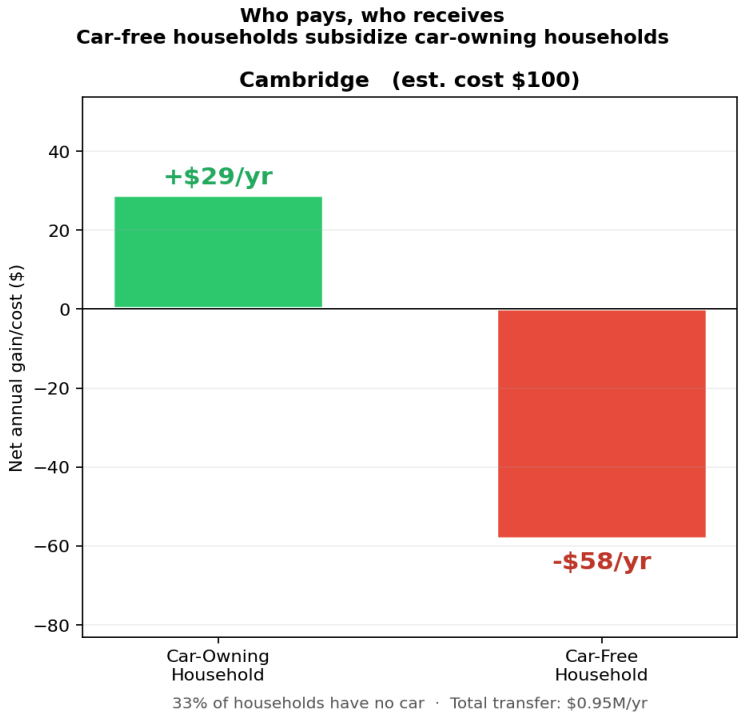


Figure 1. Car-free residents subsidize car-owning residents.

This is a meaningful subsidy by city-budget standards. Figure 2 places the $0.95M annual transfer in context against other Cambridge FY24 line items. It is larger than the City's annual spending on the mayor's office, comparable to the budget for veteran's services and snow/ice removal, and on

the same order of magnitude as the Arts Council's and Election Commission's annual budgets. Eliminating the subsidy would free resources at a scale comparable to programs the City actively chooses to fund.

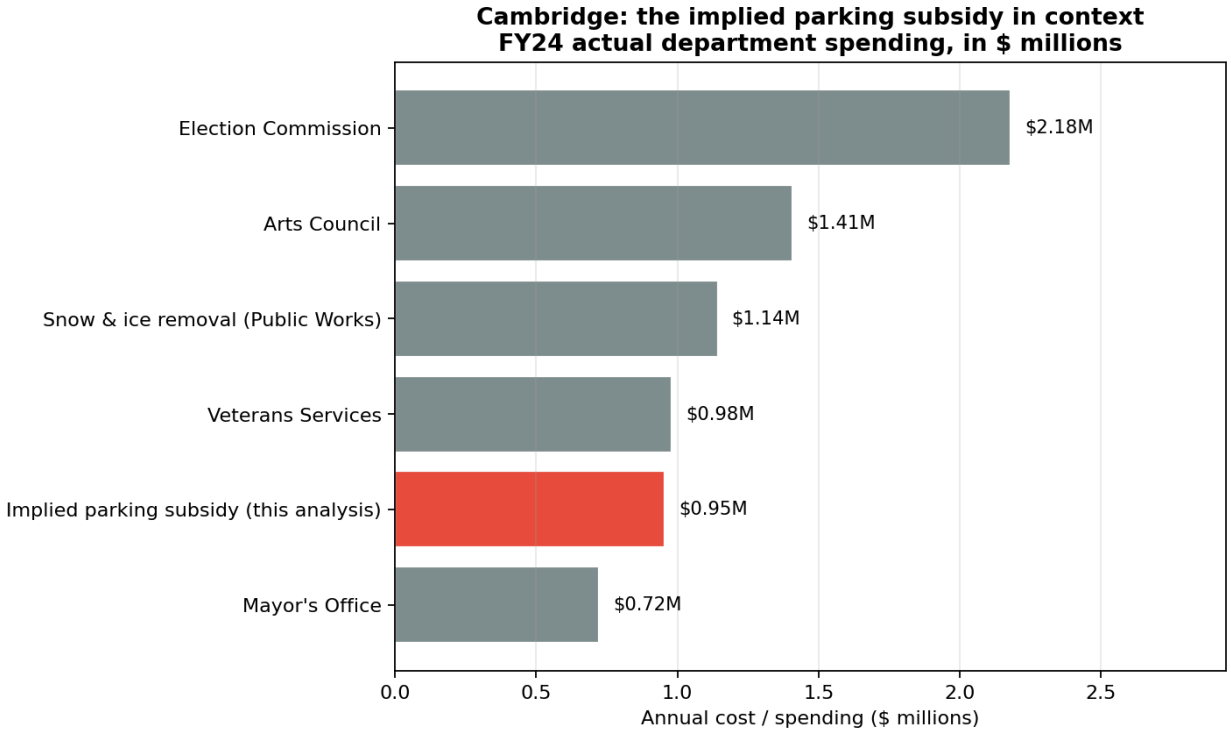


Figure 2. Implied parking subsidy compared to select Cambridge FY24 budget line items. Source: City of Cambridge FY24 actual budget from Cambridge FY26 budget book.

(2) Who bears the cost is not random, but inequitable. Households without cars differ systematically from those with them. *Non-car-owning households are disproportionately renters*: roughly two-thirds of Cambridge households rent, but renters are substantially overrepresented among the car-free (Figure 4). They are also *lower-income* and *concentrated near transit*: tracts within walking distance of an MBTA rapid-transit station are largely net payers into the subsidy, while tracts farther from transit are net receivers (Figure 3).

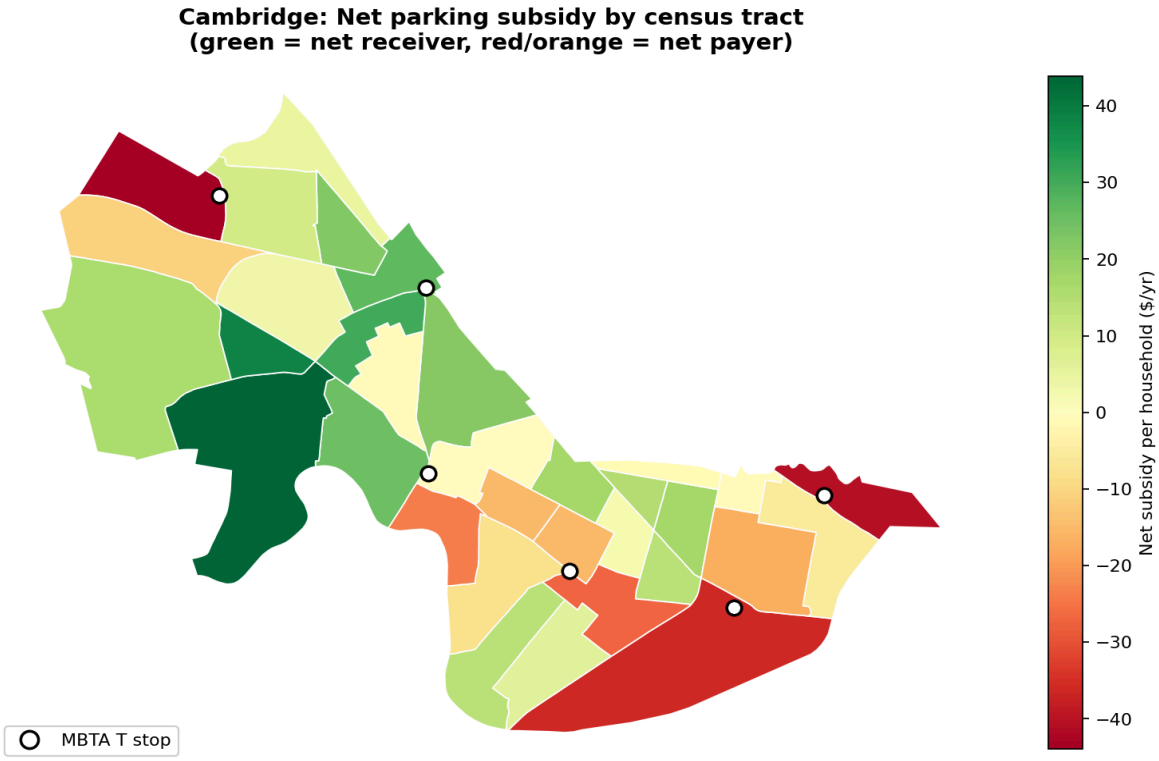


Figure 3. Net parking subsidy per household by census tract in Cambridge. Green tracts are net receivers of the subsidy; red/orange tracts are net payers. Net payer tracts are closer to MBTA stops. ACS 2020-2024 5-year.

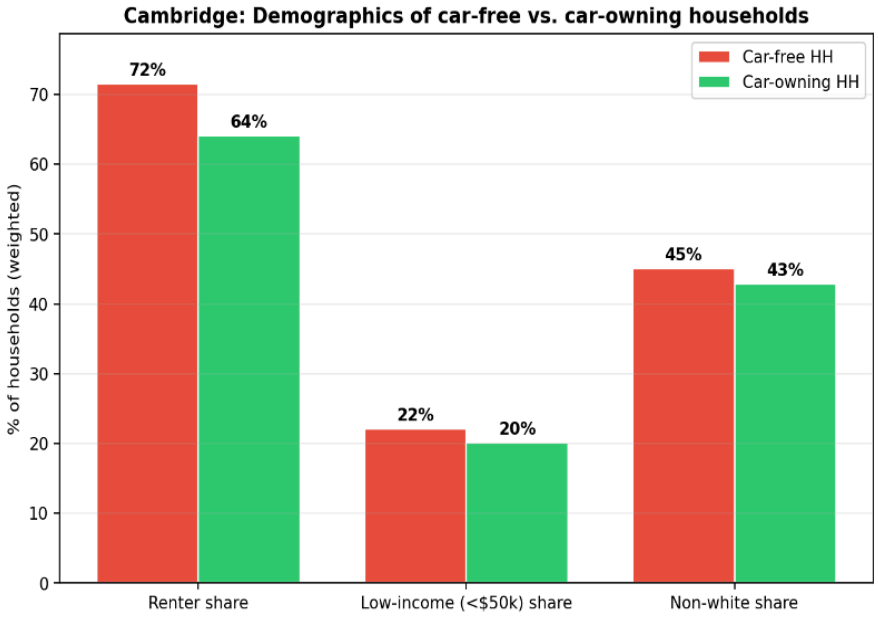


Figure 4: Demographics of vehicle-owning vs. non-vehicle-owning households in Cambridge (ACS 2020-2024 5-Year Estimates)

(3) The pattern holds within individual neighborhoods, not just across them. Census table B25044 reports vehicle ownership separately for owners and renters within each tract. In the median Cambridge tract, 44% of renter households have no car compared to just 12% of owner households, a 32 percentage-point gap. This is not only true of the median; *100% of Cambridge census tracts* show higher vehicle ownership among homeowners than renters (Figure 5).

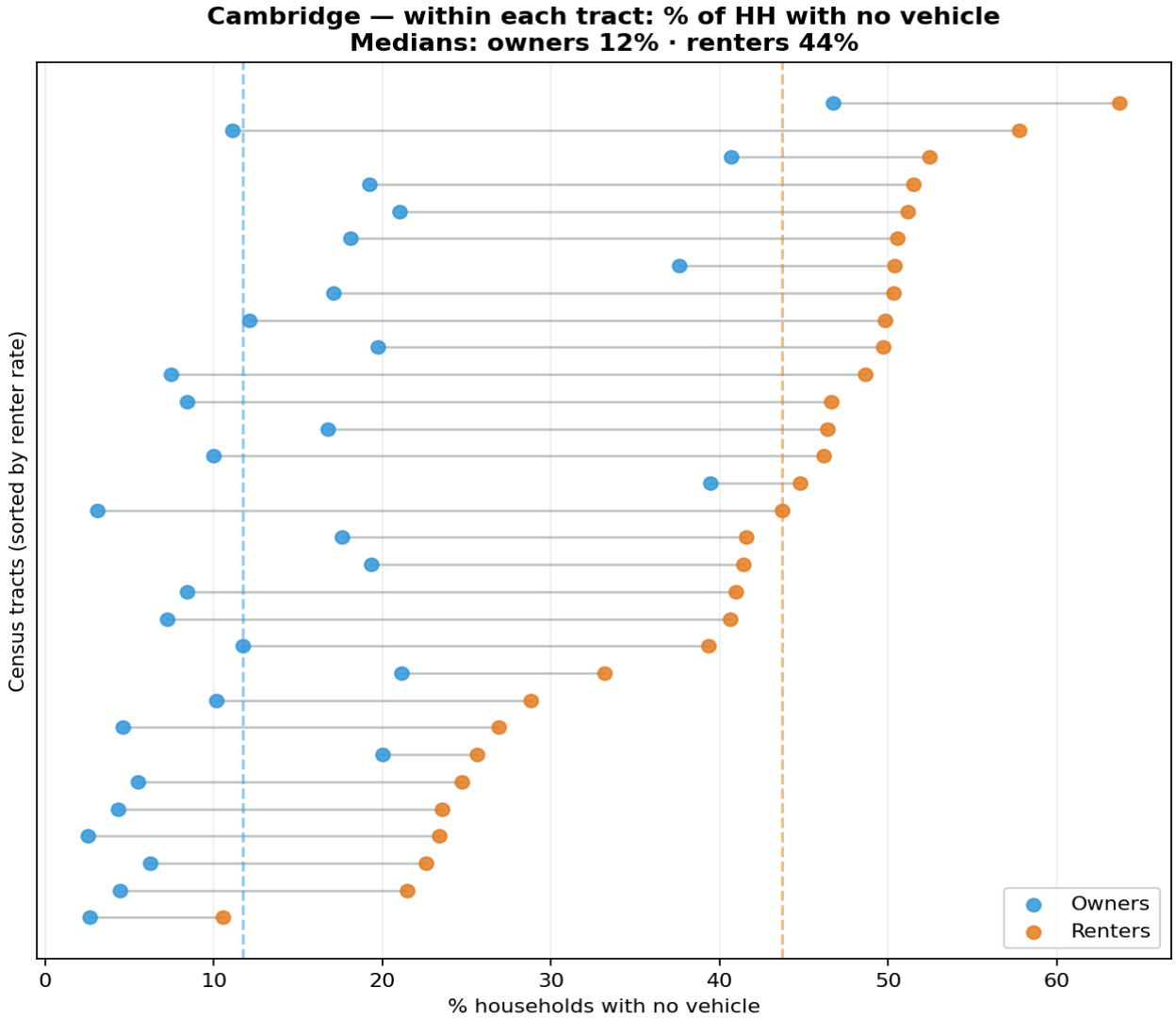


Figure 5: Within each Cambridge census tract, the no-vehicle rate for renters (orange) versus owners (blue) (ACS 2020-2024 5-Year Estimates)

(4) The pattern holds across income. While no Census product cross-tabulates income with vehicle ownership at the tract level, household-level microdata (ACS 2019-2023 PUMS) allows us to investigate this. Among households in the Boston / Cambridge / Somerville PUMAs, *35.9% of those earning under $25,000 have no vehicle, compared to just 1.3% of those earning over $150,000*, a 28-fold difference (Figure 6).

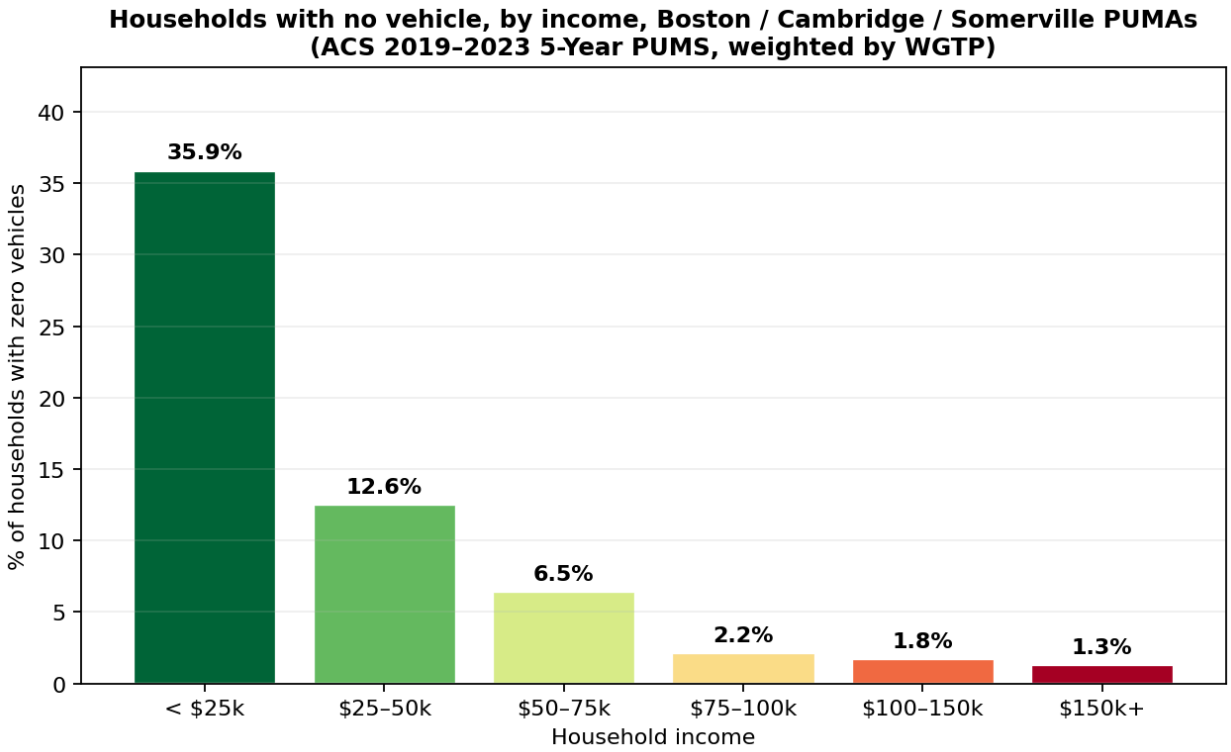


Figure 6. Percentage of households with zero vehicles by income bracket, Boston + Cambridge/Somerville PUMAs. ACS 2019-2023 5-Year PUMS, weighted by household weight (WGTP).

Even restricting the analysis to homeowners removes no ambiguity. One common objection is that renters do not "really" pay property taxes. But among homeowners alone, who unambiguously pay property taxes, the pattern persists. In Cambridge, 14% of homeowners have no car. These car-free homeowners pay property taxes and receive nothing from the permit program.

Further, **renters do in fact bear property tax burdens.** Broad economic consensus and empirical evidence support the view that landlords pass property tax costs through to tenants via higher rents. We can see this concretely in the Boston MSA, where rents are directly correlated with home values (Figure 7).

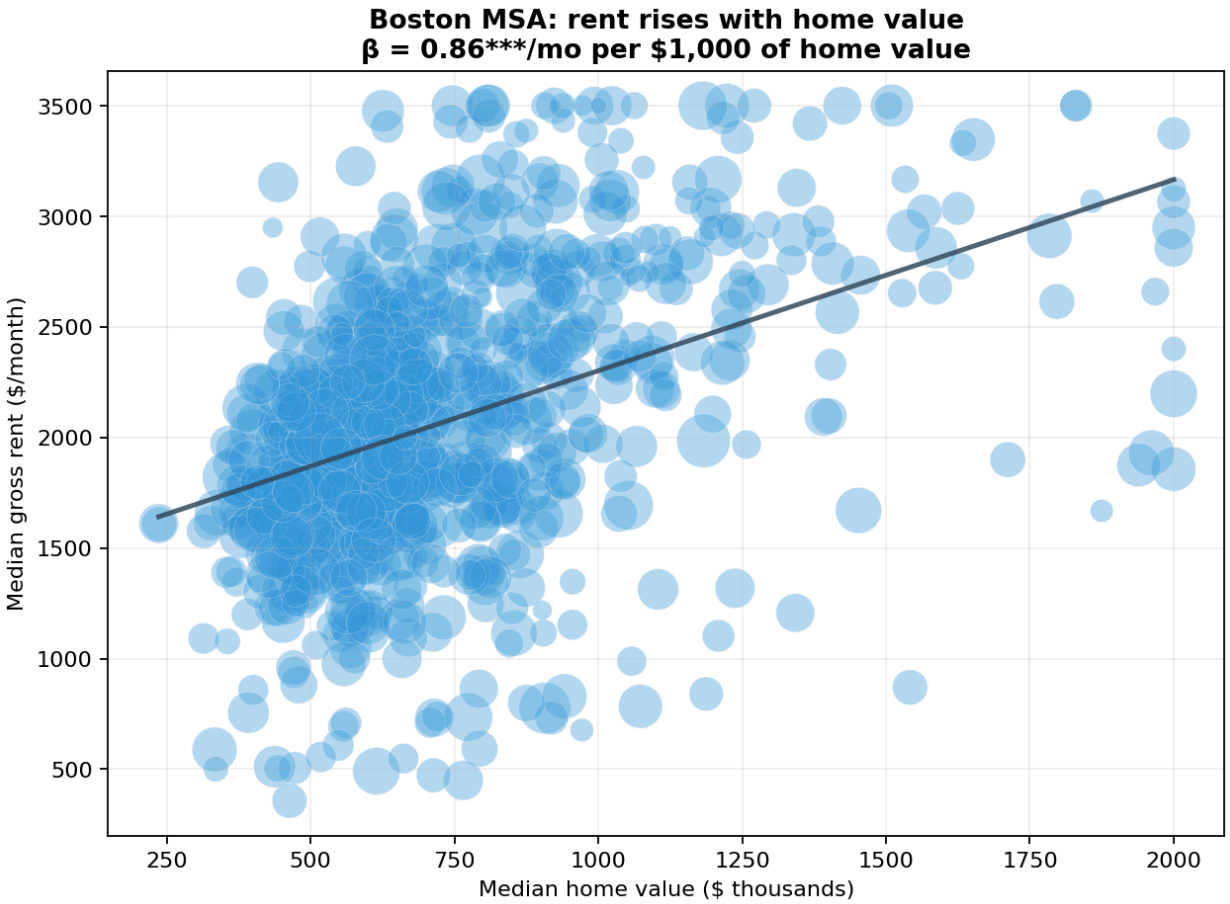


Figure 7: Rents vs property values in the Boston MSA. WLS weighted by tract population. (ACS 2020-2024 5-Year Estimates)

6 - Suggested Fee Structure to Further Promote Equity

Section 5 establishes that the implicit subsidy from a fee that fails to cover the administrative costs of the program flows up the income ladder. A natural concern about raising the fee, however, is that it imposes new costs on all car-owning households, including lower-income households who depend on a vehicle for irregular hours, childcare, or jobs without easy transit access. We take this concern seriously and propose a simple low-burden design that addresses it directly.

A self-attested opt-out for low-income residents. Rather than building a means-tested discount with paperwork and verification, or implementing a proposed opt-in fee reduction that might not reach full coverage, the City could allow any resident to *opt down to $25* (or alternately, opt out of paying the fee) by self-attestation of low-income status at the time of permit renewal.

This design has three useful properties:

1. **It mitigates equity concerns.** Households for whom $75 is a real burden can easily opt to a lower cost (or to zero, depending on design). Means-testing is replaced by self-selection, the same mechanism the federal government uses for IRA contribution limits, among other insurance carve-outs.

2. **It has a near-zero administrative burden.** There is no application, no eligibility determination, and no income verification for the Traffic, Parking and Transportation Department to manage.

3. **It preserves most of the revenue and the price signal.** Because the enforcement threat is real (even if nominal), most car-owning households who do not qualify for low-income status will pay the full amount. Given that car-owning households are on average, wealthier, the City can expect to collect more of the projected revenue while eliminating any regressive results.

7 - Conclusion

Cambridge's residential parking permit program operates at a substantial deficit. The City's own analysis estimates the annual cost of administering the program at roughly $2.74M against approximately $795K in fee revenue. The proposed increase from $25 to $75 closes most of this gap while comfortably satisfying the Emerson College Test. This is not a novel or untested approach. Other cities across the nation have significantly increased their permit parking fees to address budgetary shortfalls.

The case for raising the fee is also distributional. At a simplified $100 per-permit actual cost, the City's direct estimate plus a small allowance for opportunity costs and externalities, and the current $25 fee, each non-car-owning household subsidizes the program by about $58 per year while receiving nothing in return, producing a citywide transfer of $0.95M annually from car-free to car-owning households. The transfer is not distributed evenly: tracts near MBTA stations, which are denser, more renter-heavy, and lower-income, are net payers, while more car-dependent tracts farther from transit are net receivers. The pattern holds within neighborhoods and across the income spectrum; at the lowest incomes, more than one in three households owns no vehicle.

The proposed $75 fee moves the program meaningfully toward cost recovery while shrinking this regressive transfer. To address the residual concern that a flat fee burdens lower-income car-owning households who may genuinely depend on a vehicle, we recommend pairing the increase with a self-attested low-income opt-out.

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1. All authors are MCP candidates at the MIT Department Urban Studies and Planning↩
2. https://wbznewsradio.iheart.com/content/cambridge-to-increase-residential-parking-permit-fee/↩
3. The 10 year average is 3.2%. https://www.usinflationcalculator.com/inflation/current-inflation-rates/↩
4. https://www.sfmta.com/permits/residential-parking-permits-rpp↩

5. https://thefrisc.com/sfmta-muni-cutting-service-cash-parking-fees/↩
6. https://www.sfchronicle.com/sf/article/s-f-parking-permit-more-money-18615266.php↩
7. https://www.phillyvoice.com/philadelphia-parking-authority-residential-permits-pricing-change/↩
8. https://codelibrary.amlegal.com/codes/philadelphia/latest/philadelphia_pa/0-0-0-286076↩
9. https://www.wusa9.com/article/news/local/dc-department-of-motor-vehicles-parking-fee-increase-june-1-2021/65-7f1c0ce2-87b2-4171-8f6c-3244053cf4a4↩
10. https://www.planetizen.com/node/49567?amp↩
11. https://www.sfmta.com/permits/residential-parking-permits-rpp↩
12. https://codelibrary.amlegal.com/codes/philadelphia/latest/philadelphia_pa/0-0-0-286076↩
13. https://www.portland.gov/transportation/parking/annual-zone-parking-permits↩
14. *See Silva v. Attleboro*, 354 Mass. 165 (2009); *Emerson College v. Boston*, 391 Mass. 415 (1984)↩
15. https://www.mass.gov/info-details/ask-dls-fees-and-charges↩
16. *Id.* at *425-426.↩
17. *See id.*↩
18. http://rwinters.com/council/030424M7.pdf↩
19. *Id.*↩
20. https://www.oregon.gov/lcd/CL/Documents/ParkingCarsDriving.pdf↩
21. https://ww2.arb.ca.gov/sites/default/files/2025-09/Parking%20Pricing%20-%202025%20Policy%20Brief.pdf↩
22. https://www.sciencedirect.com/science/article/pii/S2214629623001123?via%3Dihub↩
23. https://www.sciencedirect.com/science/article/pii/S004896972204058X↩
24. https://archive.strongtowns.org/journal/2018/11/20/the-many-costs-of-too-much-parking↩
25. https://www.cambridgema.gov/streetsandtransportation/projectsandprograms/cambridge↩
26. https://www.cambridgema.gov/streetsandtransportation/projectsandprograms/broadway↩
27. 21.3%; U.S. Census Bureau, ACS 2023 1-Year Estimates↩
28. Additional costs beyond what permit revenues cover.↩