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Via Electronic Submittal: https://www.arb.ca.gov/lispub/comm/bclist.php

Clerks' Office
California Air Resources Board
1001 I Street
Sacramento, California 95814

RE: Civil Rights, Equity, and Electric Vehicle Mandates (ACT II)

Dear Madame or Sir:

As you know, we are honored to represent The 200, a civil rights advocacy organization focused on restoring homeownership opportunities in California to close the racial wealth gap. Anti-housing and anti-homeownership policy decisions that your agency has chosen to adopt beginning with the 2017 Scoping Plan have contributed to decreased home production and increased the cost of housing, energy and transportation, even before the current inflationary surge. While many elected leaders and state agencies have focused on repairing the housing crisis and reducing the inter-generational wealth gap, in our lawsuit against the 2017 Scoping Plan your agency has expressly defended its racially discriminatory housing policies as lawful under the California and United States Constitution. This aggressively racist litigation defense strategy is just one manifestation of CARB's ongoing policy bias of creating racially disparate steep new financial burdens and job losses on working families - including solidly middle income union households - while showering wealthy political donors who work (if at all) in the keyboard economy with generous subsidies for cars and solar arrays, and making grandiose, ineffective, and underfunded commitments to assist the millions in our communities who live in poverty and hundreds of thousands who are unhoused.

The 200 does not and has never dismissed the importance of climate change, or the mission of California to serve as a climate change leaders. CARB's decreed climate change policies, and specifically those policies that increase the cost and delay or reduce the availability of housing, that increase the cost of transportation fuels and intentionally worsen highway congestion to lengthen commute times, and further increase electricity costs, have caused and will cause unconstitutional and unlawful disparate impacts to California's minority populations, which now comprise a plurality of the state's population. These impacts also disproportionately affect

younger Californians including millennials (the majority of whom are minorities), as well as workers without college degrees.

With climate change repeatedly described as a "catastrophe" that could destroy civilizations, perhaps it is necessary for CARB to plunge more of California's minority residents into poverty and homelessness. If so—if climate change requires that the state ignore civil rights, federal and state clean air, fair housing, transportation and consumer protection mandates, and ignore the administrative law checks and balances that require a thorough environmental and economic assessment of regulatory proposals—then this is a conclusion that may only be implemented by the Legislature, to the extent it can do so consistent with the California and federal Constitutions.

Impacts on Low-Income Communities

A. CARB Fails To Adequately Consider And Mitigate Cost Burdens For Low-Income Communities.

As multiple sources of authority mandate, CARB must do more to consider and mitigate the impacts its proposed regulations will have on low-income communities.[1] While CARB does provide some mitigation measures intended to benefit these communities, the agency indicates that in order for these communities to not be harmed by the transportation transition, "statewide actions need to include significant increases in funding for targeted incentives and infrastructure development, as well as more directed equity actions from private industry."[2]

However, it is far from clear that the Legislature will enact the permanent sources of funding needed to create a just transition for low-income communities. More specifically with regard to increased public transportation infrastructure, the exact costs and timelines of when this infrastructure will be constructed is also uncertain, as is the effectiveness of these investments in fixed route public transit and multi-modal (pedestrian and bike path) options given that even pre-COVID, and even with the infusion of many billions of dollars in public transit, public transit ridership was steadily declining - with the steepest ridership declines in Southern California for example attributable to lower income commuters from our communities.[3] The reasons for lost ridership are well understood, although remain unacknowledged by CARB and its public transit allies. For example, commute durations expand dramatically for the vast majority of jobs that are not located in central core areas like downtown Los Angeles and San Francisco, and workers who must endure long bus commutes instead of far shorter car commutes mean time stolen from their families and other critical needs. Reliable service, especially for multi-transfer bus commuters, is also notoriously terrible as even Sacramento's own transit agency testified to CARB when explaining that its internship program for enthusiastic low-income minority youths was resulting in high levels of absenteeism and tardies based on bus dependency - problems that were fixed when employee carpools were established to pick up these young people so they could get to work

[1] *See* California Government Code § 11346.3; Executive Order N-79-20(4) (stating CARB must ensure that its ZEV regulations "serve all communities and in particular low-income and disadvantaged communities.").
[2] ISOR, at 24.
[3] *See* UCLA Transit Ridership Trends in SCAG Region, presentation May 2017, attached.

on time. California's essential workers and other workforce members must be able to get to work on time, every day, or risk losing not just a paycheck but also their job and their housing.

Thus, until such additional funding measures have been enacted, and the actual effectiveness of public transportation systems as equitable transit solutions using metrics that measure commute durations and on-time arrivals has been verified with at least one pilot program in every region of the state, this new ACT II vehicular mandate that will drive further transportation cost increases and erode critical transportation mobility with exceptionally harsh, and racist, impacts to our low-income hard-working families. As explained in more detail below, these impacts include higher electricity prices, lack of accessible charging stations, lack of available gas stations for families who cannot afford to transition vehicles, and increased fuel costs due to imports.

First, residential electricity prices in California are almost double the national average and are predicted to continue to rise.[4] This will affect the affordability of vehicle charging and could make electric vehicles impractical, even with rebates and expanded charging infrastructure. Notably, these same communities are also less likely to have rooftop solar installations, which can significantly reduce the cost of electricity for homeowners.

Low-income and disadvantaged communities spend a disproportionate amount of their income on essential utilities, including electricity. The CPUC's 2019 Annual Affordability Report indicates that "13 percent of households in the state are located in areas where low-income households pay more than 15 percent of their disposable income on electricity service."[5] In addition, certain areas, including Los Angeles, Chico, parts of the San Joaquin Valley, and parts of the San Francisco Bay Area, spend significantly higher amounts, "indicating that low-income households in these areas spend a very large percentage of their non-disposable income on electricity."[6]

ACC II will accelerate electrification of the transportation sector, requiring significant infrastructure buildout to both support increased electricity demand and to facilitate deployment of ZEVs. The CPUC estimates that meeting additional demand alone will require an investment of $49 billion in resource buildout, impacting electricity rates.[7] CEC Staff Analysis indicates that both commercial and residential electricity prices will continue to rise, reaching over $8/gasoline gallon equivalent ("GGE") by 2026 for the residential sector and nearly $7/GGE for the commercial sector.[8] Comparatively, natural gas will remain around $3/diesel gallon equivalent

[4] In February 2022, the average residential electricity rate in California was $0.2559 per kilowatt-hour, versus a national average of $0.1383. US Energy Information Administration (EIA) *Electric Power Monthly* (February 2022), https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_5_6_a

[5] CPUC, 2019 ANNUAL AFFORDABILITY REPORT 11 (Apr. 2021), https://www.cpuc.ca.gov/-/media/cpuc-website/industries-and-topics/reports/2019-annual-affordability-report.pdf.

[6] *Id.*

[7] CPUC, Order Instituting Rulemaking to Continue Electric Integrated Resource Planning and Related Procurement Processes, Decision No. 22-02-004 (Feb. 10, 2022), https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M451/K412/451412947.PDF.

[8] CEC, *Presentation - Transportation Energy Demand Forecast*, 21-IEPR-03 (Dec. 14, 2021), https://www.energy.ca.gov/event/workshop/2020-12/session-1-transportation-energy-demand-forecast-update-commissioner-workshop.

through 2030.[9] In its Environmental and Social Justice Action Plan, the CPUC "acknowledges that increased rates place a large burden on ESJ communities," noting that "as California transitions to a cleaner grid, the risk of a smaller number of households, likely lower income households who cannot afford to upgrade their existing household appliances to energy efficient and/or all electric, becoming increasingly financially responsible for maintaining legacy infrastructure."[10] Before CARB finalizes ACC II, the state must have comprehensive measures in place to protect low-income communities from carrying the primary burdens of climate change measures. Otherwise, at the expense of low-income communities, the ultimate beneficiaries of ACC II will be out-of-state power providers and the electric utilities themselves. To reduce the disparate impacts of costs on those who can least afford it, the rule must not unfairly advantage technologies, which are realistically accessible only for wealthier and more urban populations, at the expense of rural and lower-income consumers, who must subsidize those costs in the form of higher prices paid to fuel their vehicles and longer commutes.

Second, CARB has failed to fully consider and mitigate the significantly limited access to charging stations for low-income communities, many of whom will need access to public charging stations, since they may not have space or the permission necessary to install an electric vehicle charger in their home or apartment. Without an adequate supply of public charging stations, rebates for low-income communities to purchase EVs will not be sufficient.

Building sufficient chargers to support ACC II's ZEV targets will require substantial additional investments. The CEC's AB 2127 Report projects that nearly 1.2 million public and shared private chargers will be needed to support the roughly 8 million ZEVs anticipated by 2030.[11] However, infrastructure buildout has already fallen behind to meet the 2025 target of 250,000 chargers:

[9] *Id.*
[10] CPUC, *Draft Environmental & Social Justice Action Plan Version 2.0*, at 21 (Mar. 25, 2022), https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M465/K846/465846599.pdf.
[11] CEC, *Assembly Bill 2127 Electric Vehicle Charging Infrastructure Assessment Analyzing Charging Needs to Support ZEVs in 2030*, 19-AB-2127 at ii (Jul. 14, 2021), https://www.energy.ca.gov/programs-and-topics/programs/electric-vehicle-charging-infrastructure-assessment-ab-2127.

Progress Toward 250,000 Chargers by 2025[12]

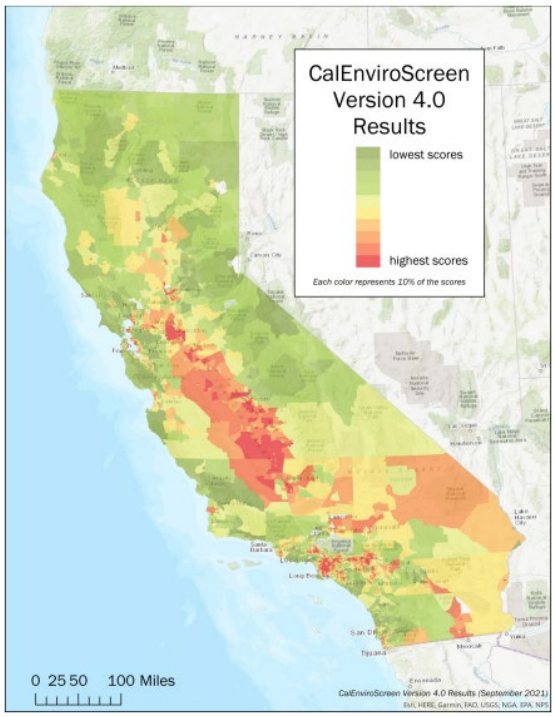
	Level 2 Chargers	DC Fast Chargers
Existing Chargers (Estimated)*	66,770	6,008
Anticipated Chargers for Which Funding Has Been Allocated (including anticipated funding from Clean Transportation Program)**	118,950	3,607
Total	185,720	9,615
2025 Goal (Executive Order B-48-18)	*240,000*	*10,000*
Gap From Goal	54,280	385

Apart from this general charger availability deficit, low-income and disadvantaged communities do not enjoy the same access to ZEV infrastructure, exacerbating economic burdens for these vulnerable groups. The CEC's 2020 *SB 1000 Report on Equitable Distribution of Charging Infrastructure* found that public chargers are unevenly distributed across state air districts— the Report noted that relatively more chargers appear in census tracts with low population density and that low-income communities on average have the fewest public Level 2 and total chargers per capita.[13] This problem of inequitable access is clearly visible in comparing existing electric vehicle charger density to CalEnviroScreen 4.0 percentile scores:

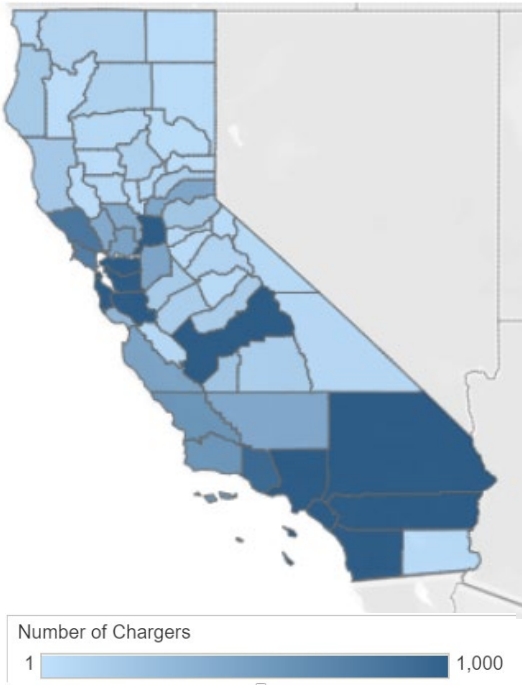
[12] CEC, *2021–2023 Investment Plan Update for the Clean Transportation Program* (Dec. 17, 2021), https://www.energy.ca.gov/publications/2021/2021-2023-investment-plan-update-clean-transportation-program#:~:text=This%202021%E2%80%932023%20investment%20plan%20establishes%20funding%20allocations%20based%20on,by%20the%20COVID%2D19%20pandemic.

[13] SB 1000 REPORT ON EQUITABLE DISTRIBUTION OF CHARGING INFRASTRUCTURE (Dec 2020).

CalEnviroScreen 4.0 Percentile[14]



Charging Infrastructure Distribution[15]



Indeed, many individuals, and in particular low-income populations, who are unable to charge vehicles in their homes—for example, those residing in apartment complexes or multi-family units or in homes that otherwise have street-only parking—will have to rely on DC fast chargers at an increasingly disproportionate rate. But as demonstrated above, it is precisely these populations that will also have disproportionate travel distances to and from public DC Fast Charging Stations, which are also more expensive and time consuming to the consumer and degrade EV batteries at an increased rate.

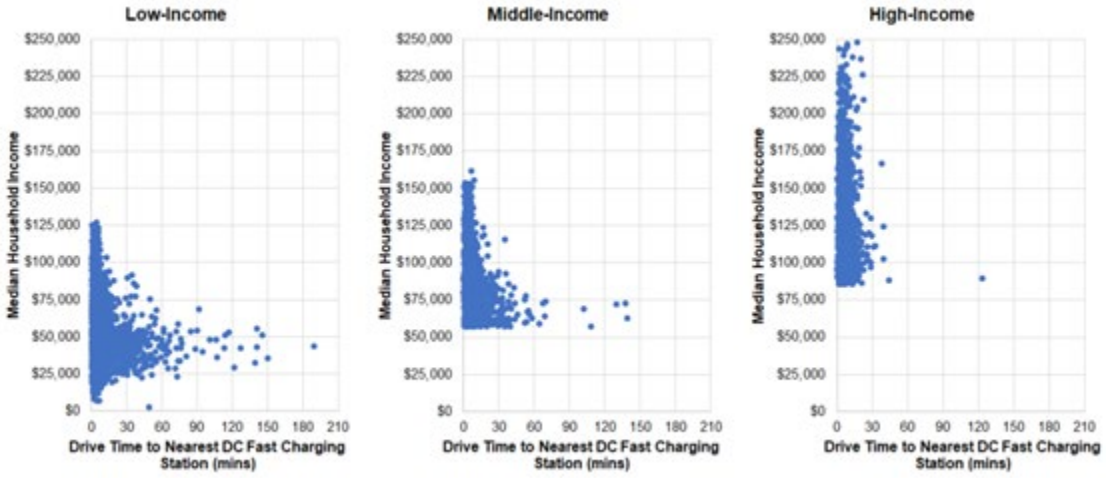
Of the almost 80,000 public and shared private electric vehicle chargers installed in California, 90 percent are Level 2 chargers.[16] A driver of a 2021 Nissan Leaf would need over 6 hours to gain 120 miles of charge at a Level 2 public charging station, at a cost between $15.78 and $29.54

[14] CALENVIROSCREEN 4.0 (Oct. 2021), https://oehha.ca.gov/media/downloads/calenviroscreen/report/calenviroscreen40reportf2021.pdf.
[15] Total number of public and shared private electric vehicles chargers – Level 1, Level 2 and DC Fast Chargers. CEC, Electric Vehicle Chargers in California, https://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics/electric-vehicle.
[16] https://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics/electric-vehicle

($0.13 and $0.25/mi, respectively), depending on time of use and location within California.[17, 18] At a gasoline price of $6 per gallon, the same driver would spend fewer than 5 minutes and $0.18/mi fueling a 2021 Toyota Corolla.[19] Despite popular sentiment that electric vehicles are less expensive to own and drive than their internal combustion engine counterparts, this is clearly not the case for drivers that lack access to home charging infrastructure. Even if public charging stations were readily available within disadvantaged communities, the cost and time burdens render electric vehicle ownership entirely impractical for communities that rely on Level 2 public chargers.

Uneven access to ZEV charging infrastructure means that low-income and disadvantaged communities have some of the longest drive times from community centers to the nearest public DC Fast Charging Station:[20]

Community Drive Times to DC Fast Charging Stations by Income Level



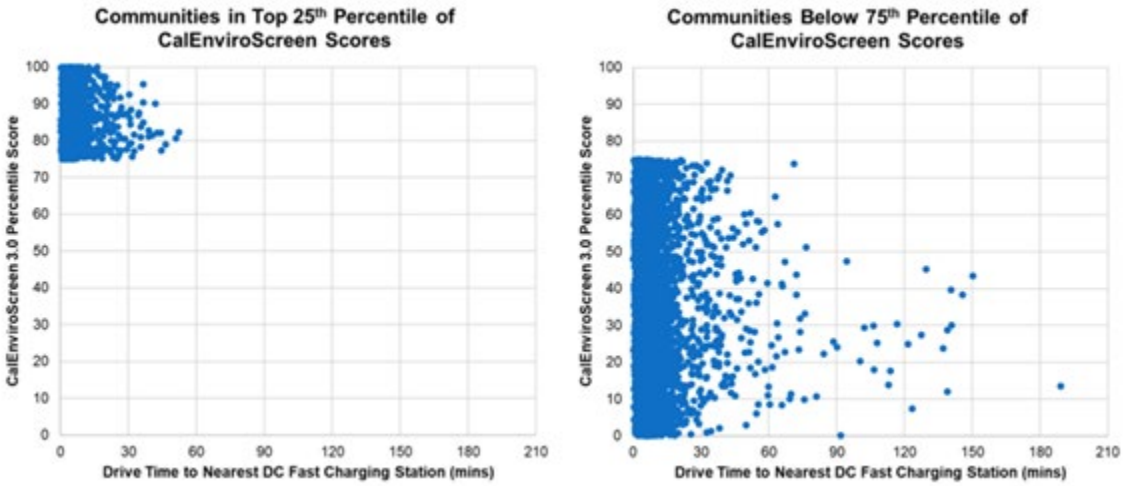
Community Drive Times to DC Fast Charging Stations by CalEnviroScreen 3.0 Percentile Scores

[17] 2021 Nissan Leaf with a 62 kWh battery pack and 0.31 kWh/mi power consumption, charging at a maximum rate of 6.6 kW from 20 percent to 80 percent of battery charge, with a 93 percent charge efficiency, per https://ecocostsavings.com/electric-car-kwh-per-mile-list/ and https://evocharge.com/resources/vehicle-charger-specs/

[18] Based on charging rates that vary from $0.29 to $0.66/kWh, depending on time of use and area of California, plus a $1.99 session fee and $3.00 reservation fee, per https://www.evgo.com/pricing/

[19] 2021 Toyota Corolla with a combined fuel economy of 33 miles per gallon, per https://www.fueleconomy.gov/feg/bymodel/2021_Toyota_Corolla.shtml

[20] CEC, *2021–2023 Investment Plan Update for the Clean Transportation Program* (Dec. 17, 2021), https://www.energy.ca.gov/publications/2021/2021-2023-investment-plan-update-clean-transportation-program#:~:text=This%202021%E2%80%932023%20investment%20plan%20establishes%20funding%20allocations%20based%20on,by%20the%20COVID%2D19%20pandemic.



Longer drive times may also create challenges for businesses located near or within these communities, potentially forcing them to relocate to areas with higher charger densities and leaving less economic opportunity in the low-income communities left behind. CARB is required, pursuant to HSC § 43018.5(c)(2)(E), to consider "[t]he ability of the state to maintain and attract businesses in communities with the most significant exposure to air contaminants, localized air contaminants, or both, including, but not limited to, communities with minority populations or low-income populations, or both." CARB has failed to comply with this statutory mandate, as it has not considered how low-income communities in particular would be affected by this lost business.

To help protect low-income communities from unaffordable mitigation measures, the legislature was clear in their direction to CARB when they passed AB 398[21] with a two-thirds vote in both the Senate and the Assembly, that achieving carbon reductions should be done in a cost-effective manner. CARB is required to consider emissions reduction strategies that will "achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions in furtherance of achieving the statewide greenhouse gas emissions limit."[22] Similarly, for all rulemakings, CARB is required to consider a reasonable range of alternatives, including "alternatives that are proposed as less burdensome and equally effective in achieving the purposes of the regulation in a manner that ensures full compliance with the authorizing statute or other law being implemented or made specific by the proposed regulation."[23] California Environmental Quality Act (CEQA) Guidelines also specify that CARB must consider a reasonable range of alternatives, which "shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects."[24] CARB is further required under AB 32 to "evaluate the total potential costs and total potential economic and noneconomic benefits of the plan for reducing greenhouse gases to California's

[21] AB 328. Available at: AB 398 - California Assembly (20172018) - Open States.
[22] CA Health & Safety Code § 38562(a).
[23] CA Government Code § 11346.2(b)(4)(A).
[24] 2022 CEQA Statutes & Guidelines § 15126.6(c).

economy, environment, and public health" and "update its plan for achieving the maximum technologically feasible and cost-effective reductions of greenhouse gas emissions".[25] Rather than living up to these statutory mandates, the ACC II program allows millions of dollars in legacy technology and infrastructure to go to waste while seeking to eliminate affordable alternatives that offer substantial opportunities for more cost-effective GHG emission reductions that work in the current vehicle fleet.

CARB has entirely failed to account for substantial economic impacts to individuals in general and to vulnerable communities in particular stemming from accelerated electrification. CARB's failure to do so is a violation of the foregoing authorities and additionally demonstrates that its assessment is arbitrary and capricious.

Third, electrical grid reliability issues are on-going in California. The state faces an increased risk of outages this summer from extreme heat, wildfires and drought. With increasing reliance on solar and wind generation, California also faces reliability hazards due to power inverters that serve solar and wind farms not being able to "ride-through" short-term disturbances, as occurred in California on four separate occasions between June and August 2021.[26] For individuals and communities that lack back-up power resources, a loss of electricity in an all-electric-vehicle world means a loss of personal mobility and an inability to get to and from work or school, secure food or obtain medical attention.

Fourth, as electric vehicles increase, this will result in a significant reduction in the demand for vehicle fuels that gas stations sell, causing many to shut down. This will result in fewer gas fueling stations for owners of traditional vehicles, who are more likely to be low-income,[27] and will cause such vehicle owners to drive farther in order to find fuel. Boston Consulting Group has estimated that if electric vehicles take off rapidly, this could render as much as 80% of the fuel retail market unprofitable by 2035.[28] If demand for gasoline completely disappeared, many of the more than 100,000 gas stations through the nation would be at risk of going out of business.[29] Importantly, these gas stations will not be able to compete by simply installing electric vehicle charging stations, as such stations can be installed in the parking lots of practically any business.[30] Concerningly,

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[25] Division 25.5. California Global Warming Solutions Act of 2006, Chapter 2 Section 38561(d) and 38561(h).
[26] Behr, Peter and Plautz, Jason, *Grid monitor warns of U.S. blackouts in 'sobering report'* , E&E News (May 19, 2022) and North American Electric Reliability Corporation *2022 Summary Reliability Assessment* (May 2022)
[27] Many low-income families cannot afford electric vehicles. As a memo from Capitol Matrix Consulting notes, "Today, the incremental cost for a ZEV compared to an ICE vehicle with similar features, capabilities, and range is well over $10,000 for small vehicles, and well over $20,000 for high-end sedans, SUVs, and pickup trucks." Capitol Matrix Consulting, *Impact of the Advanced Clean Cars II (Internal Combustion Engine Ban) Regulation on California Businesses*, 3 (May 17, 2022). Likewise, Stillwater Associates notes that low-income families "purchase far fewer new cars because it is less expensive to repair used cars when needed," and that "[a]s new cars become more expensive, [low-income families] will be priced out of the market." Stillwater Associates LLC, *Possible Market Implications of California's Efforts to Ban Internal Combustion Engines (ICE)*, 31 (Feb. 9, 2022).
[28] Mirko Rubeis et al., *Is There A Future For Service Stations?*, BOSTON CONSULTING GROUP (July 12, 2019), https://www.bcg.com/publications/2019/service-stations-future.
[29] *See* NACS, *U.S. Convenience Store Count*, https://www.convenience.org/Research/FactSheets/IndustryStoreCount (Jan. 19, 2022).
[30] *See* Rebecca Heilweil, *The death of the gas station*, VOX (Apr. 13, 2022), https://www.vox.com/recode/23023671/ev-charging-network-gas-station-fast-charger

Stillwater Associates predicts that the ACC II proposed regulation will reduce gasoline sales by 66% by 2035, and by 90% by 2050; likewise, diesel sales could fall by 34% by 2035, and by 60% by 2050.[31] Low-income rural areas will be particularly negatively impacted, as these areas are places where people already are more likely to drive longer distances in general, and these places also likely to already have fewer gas stations when compared to urban areas. Aware of the significant ongoing demand for petroleum products, ACC II's attempt to phase out critical refining production is irresponsible and threatens to leave millions of Californians without transportation fuel.

Fifth, this rule will result in the loss of high-wage industry jobs, which could further increase the number of low-income households in California. A 2019 report found that the oil and gas industry supports nearly 366,000 jobs in California and paid workers $26 billion in wages.[32] Additionally, in rural areas like Modoc County, the oil and gas industry contributed $2.5 million in labor income to the local economy.[33] Although Executive Order N-79-20 called for the Governor's Office of Planning and Research to partner with the Labor and Workforce Development Agency to design and deliver a Just Transition Roadmap by July 2021, it does not appear that such a roadmap exists yet.[34]

Finally, to help protect low-income communities from unaffordable mitigation measures, the legislature was clear in their direction to CARB when they passed AB 398[35] with a two-thirds vote in both the Senate and the Assembly, that achieving carbon reductions should be done in a cost-effective manner. CARB is required to consider emissions reduction strategies that will "achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions in furtherance of achieving the statewide greenhouse gas emissions limit."[36] Similarly, for all rulemakings, CARB is required to consider a reasonable range of alternatives, including "alternatives that are proposed as less burdensome and equally effective in achieving the purposes of the regulation in a manner that ensures full compliance with the authorizing statute or other law being implemented or made specific by the proposed regulation."[37] California Environmental Quality Act (CEQA) Guidelines also specify that CARB must consider a reasonable range of alternatives, which "shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects."[38] California is required under AB 32 to "evaluate the total potential costs and total potential economic and noneconomic benefits of the plan for reducing greenhouse gases to California's economy, environment, and public health" and "update its plan for achieving the maximum

[31] Stillwater Associates LLC, *Possible Market Implications of California's Efforts to Ban Internal Combustion Engines (ICE)*, at 1.
[32] Los Angeles County Economic Development Corporation, *Oils and Gas in California: The Industry, Its Economic Contribution and User Industries at Risk in 2017*, 84 (July 2019).
[33] *Id.* at 50.
[34] *See* Governor's Office of Planning and Research, *California's Just Transition Roadmap*, https://opr.ca.gov/economic-development/just-transition/roadmap.html#what-is (May 23, 2022).
[35] AB 328. Available at: AB 398 - California Assembly (20172018) - Open States.
[36] CA Health & Safety Code § 38562(a).
[37] CA Government Code § 11346.2(b)(4)(A).
[38] 2022 CEQA Statutes & Guidelines § 15126.6(c).

technologically feasible and cost-effective reductions of greenhouse gas emissions".[39] Rather than living up to the statutory mandate, ACC II allows millions of dollars in legacy technology and infrastructure to go to waste while seeking to eliminate affordable alternatives that offer substantial opportunities for more cost-effective greenhouse gas emission reductions that work in the current vehicle fleet. In order to truly *prioritize* low-income communities—instead of just merely "considering" them—CARB should refrain from finalizing its proposed regulation until the state has enacted the protections these communities need and deserve.

B. CARB Must Perform a More In-Depth Assessment of the Consistency of its ACC II ZEV Measures with State Emission Reduction Goals.

As with economic impacts and technological feasibility, CARB is required to evaluate its proposed regulations for consistency with state air quality standards and GHG emission reduction goals. CARB must take expeditious action to address both ambient air quality standards and short-lived climate pollutants *in California*—here, CARB has failed to comply with this mandate by allowing out-of-state emissions reductions to fulfill state compliance obligations.

Specifically, the HSC requires CARB to consider the following:

- HSC § 39602.5(a)— ambient air quality standards ("The state board shall adopt rules and regulations pursuant to Section 43013 that, in conjunction with other measures adopted by the state board… will achieve ambient air quality standards… in all areas of the state by the applicable attainment date, and to maintain these standards thereafter");

- HSC § 43000.5(d)— reductions in vehicle emissions and smoke to achieve attainment goals ("The state board should take immediate action to implement both short- and long-range programs of across-the-board reductions in vehicle emissions and smoke, … which can be relied upon by the districts in the preparation of their attainment plans or plan revisions");

- HSC § 43013(2)(h)— nitrogen oxide emissions ("It is the intent of the Legislature that the state board act *as expeditiously as is feasible* to reduce nitrogen oxide emissions from diesel vehicles, marine vessels, and other categories of vehicular and mobile sources which significantly contribute to air pollution problems") (emphasis added);

- HSC § 43018(a)—maximum degree of emission reduction ("The state board shall endeavor to achieve the *maximum degree of emission reduction* possible from vehicular and other mobile sources in order to *accomplish the attainment of the state standards at the earliest practicable date*") (emphasis added);

- HSC § 38560—GHG emissions reductions ("The state board shall adopt rules and regulations in an open public process to achieve the maximum technologically feasible

[39] Division 25.5. California Global Warming Solutions Act of 2006, Chapter 2 Section 38561(d) and 38561(h).

and cost-effective greenhouse gas emission reductions from sources or categories of sources");

- HSC § 39730.5—short-lived climate pollutants (requiring CARB to achieve "a reduction in the *statewide* emissions of methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030") (emphasis added).

California has not attained national air quality standards statewide. According to EPA's Green Book database, 19 areas in California are currently out of attainment for one or more criteria pollutants.[40] Of these nonattainment areas, currently eight are listed as "serious" and two are listed as "extreme" for at least one standard, the two highest possible listings.[41] The California legislature has determined that securing attainment in all areas of the state requires CARB to take steps to achieve "substantial reductions in new vehicle emissions and substantial improvements in the durability of vehicle emissions systems."[42]

In addition, the California legislature has set ambitious targets for GHG emissions reductions in the state. Under SB-32, CARB must "ensure that statewide greenhouse gas emissions are reduced to 40% below the 1990 level by 2030."[43] Further, under SB1383, CARB must also address short-lived climate pollutants, achieving "a reduction in methane by 40%, hydrofluorocarbon gases by 40%, and anthropogenic black carbon by 50% below 2013 levels by 2030."[44] In meeting these targets, CARB is required to maximize emissions reductions and achieve these targets as soon as possible.[45]

CARB's ACC II Program undermines achievement of these California-centric emissions reduction goals by allowing vehicle manufacturers to comply with in-state ZEV sales mandates by pooling ZEV and PHEV values from different states. CARB's proposal requires manufacturers to meet an increasing percentage of new vehicle sales in California as ZEVs and PHEVs, where compliance is measured by assigning vehicle "values" for each vehicle produced that meets certain minimum technical requirements.[46] However, the proposal also includes a purported "flexibility" mechanism, "allowing all manufacturers to transfer or 'pool' excess ZEVs and PHEVs earned in California or individual Section 177 States to meet a shortfall in any given model year (or a deficit carried forward from a previous model year) elsewhere."[47] Manufacturers can meet up to 25% of their annual compliance obligations in model year 2026 by relying on pooling, with this percentage declining by 5% for subsequent model years.[48] In the ISOR, CARB explains that "allowing manufacturers to use pooled ZEV and PHEV values would help them manage year to year

[40] EPA, *Criteria Pollutant Nonattainment Summary Report* (Apr. 30, 2022), https://www3.epa.gov/airquality/greenbook/ancl3.html.
[41] *See id.*
[42] HSC § 43000.5(b).
[43] Senate Bill No. 32 (Sep. 8, 2016).
[44] Senate Bill No. 1383 (Sep. 19, 2016).
[45] *See, e.g.*, HSC §§ 38560, 43018(a).
[46] ISOR at 43.
[47] ISOR at 45.
[48] ISOR at 46.

fluctuations in annual vehicle volumes especially across different states and still allow for full compliance," emphasizing that, under this approach, "market demand for ZEVs will increase and costs will tend to decline faster than they otherwise would."[49]

However, CARB's proposed pooling approach is utterly inconsistent with its obligations to maximize in-state emissions reductions and undermines the purported efficacy of its ZEV regulations. CARB has repeatedly emphasized that its ZEV sales mandate is essential for meeting in-state emissions reductions goals— "Transitioning to zero-emission technology for every on- and off-road mobile sector is essential for meeting near- and long-term emission reduction goals mandated by statute, with regard to both ambient air quality and climate requirements."[50] The pooling program sacrifices in-state emissions reductions from ZEV sales and interferes with state attainment goals by allowing manufacturers to meet a substantial portion of their compliance obligations out of state.[51] Many of the Section 177 states where pooling would be available are located across the country, where increased ZEV sales would have no impact on California's air quality.[52] Out of state sales do nothing to further California ambient air quality standards or short-lived climate pollutant reduction strategies.

Sincerely,

HOLLAND & KNIGHT LLP

Jennifer L. Hernandez

JLH/mm

Cc: Robert Apodaca

[49] ISOR at 45.
[50] ISOR at 36.
[51] The percentage of compliance obligations that can be met by pooling has significantly *increased* from CARB's initial proposal in the SRIA, which capped pooling credits at 15%. *See* SRIA at 14.
[52] 13 states have currently adopted California's ZEV regulation, including Colorado, Connecticut, Maine, Maryland, Massachusetts, Minnesota, Nevada, New Jersey, New York, Oregon, Rhode Island, Vermont, and Virginia. *See* SRIA at 14.

Transit Ridership Trends in the SCAG Region

7 December 2017

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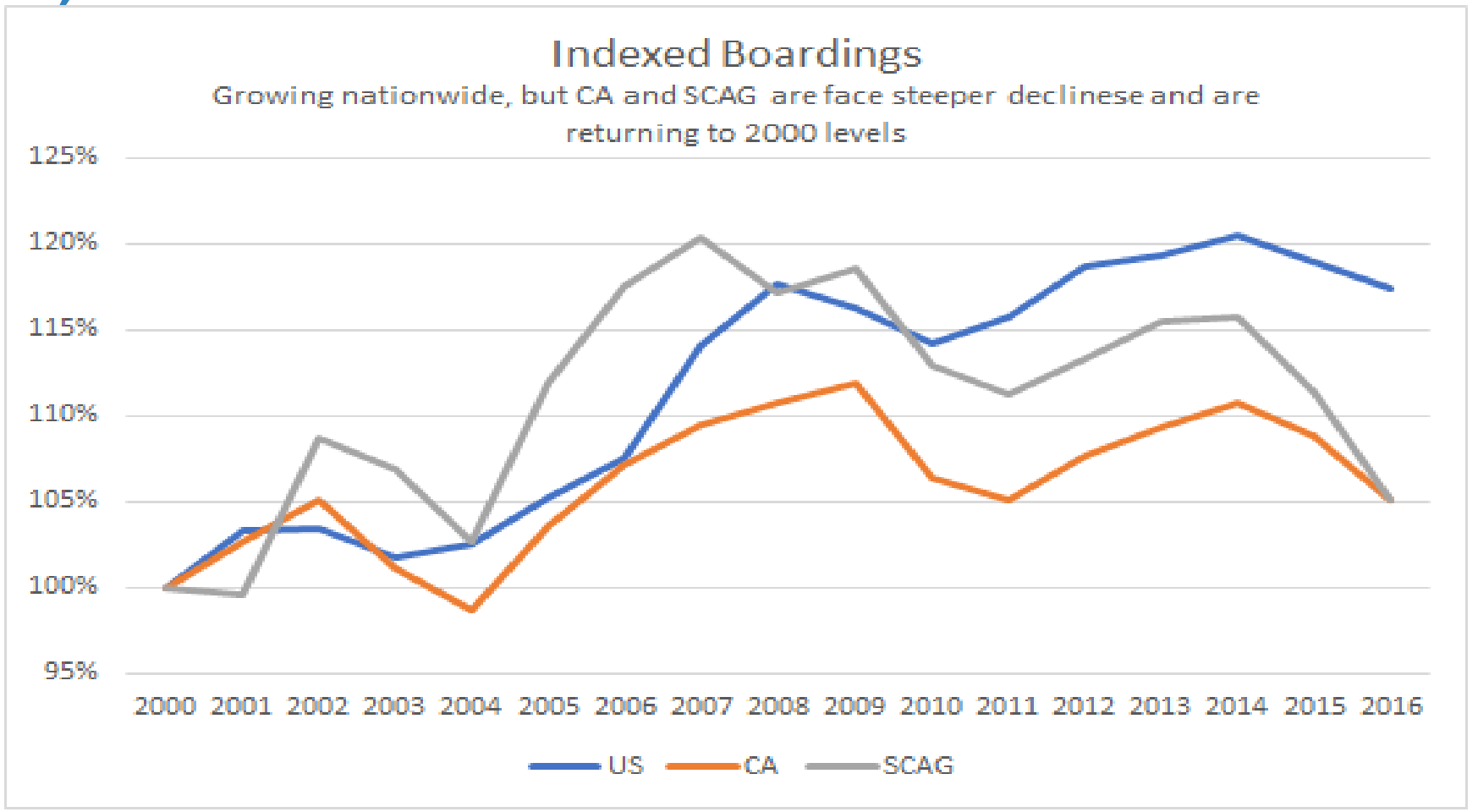
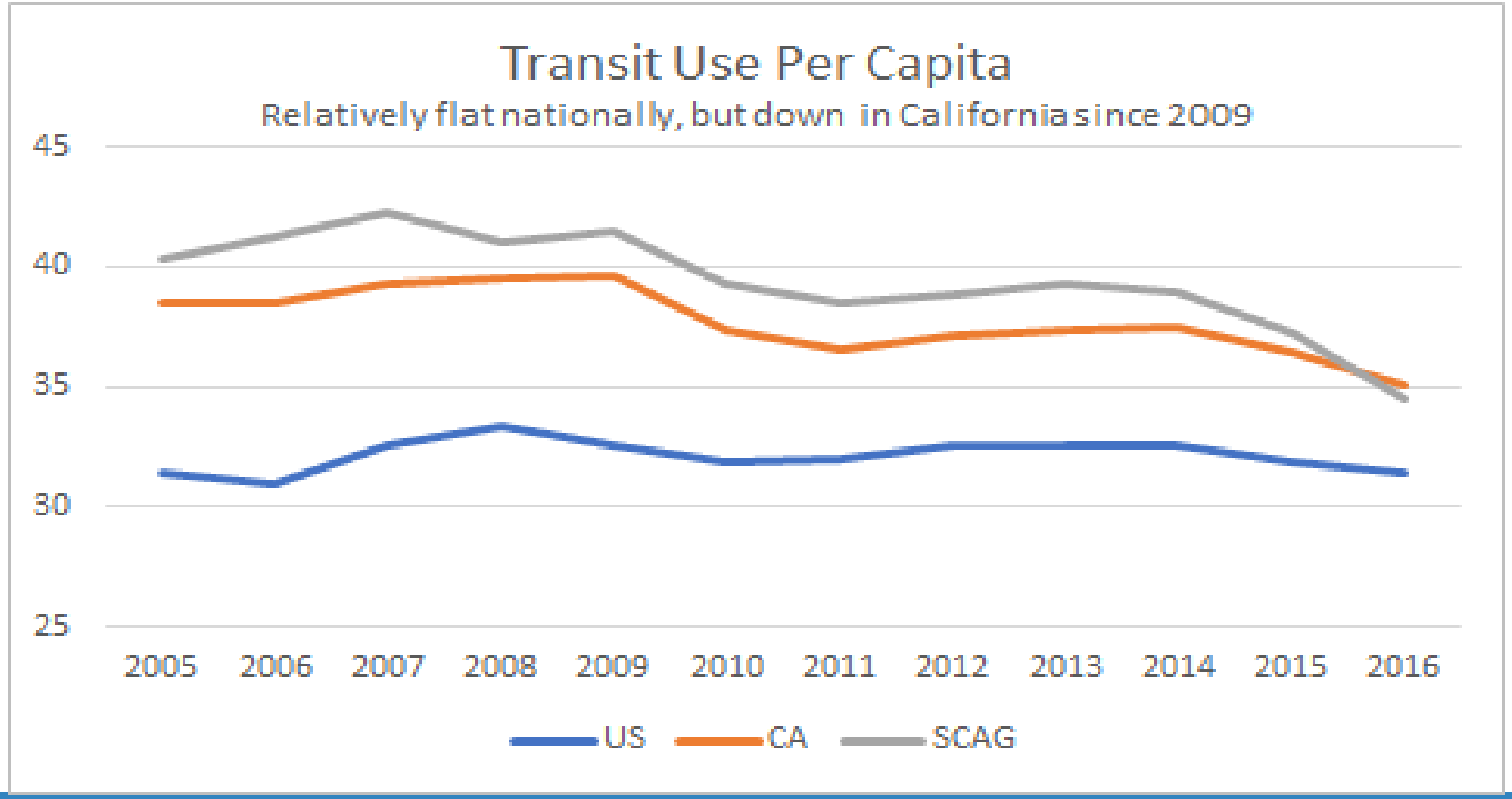
Overview

- Transit patronage trends
- Concentration and asymmetry of service and use
- Possible causes of recent ridership declines
- Some implications for the future

Patronage: *Up since 2000, down since 2007, down a lot since 2014*



Trips per resident: *Mostly down since 2007*



Concentration and asymmetry

- *A few people make most of the trips*
- *A few neighborhoods generate most of the trips*
- *A few operators carry most of the passengers*

A few people make most of the trips

- 2% of SCAG residents ride very frequently
  - ~45 trips/month
- 20% ride occasionally
  - ~12 trips/month
- 78% ride transit very little or not at all
  - < 1 trip/month

A few neighborhoods generate most of the trips

- 60% of region's transit commuters lived in census tracts that comprise <1% of the region's land area

A few operators carry most of the passengers

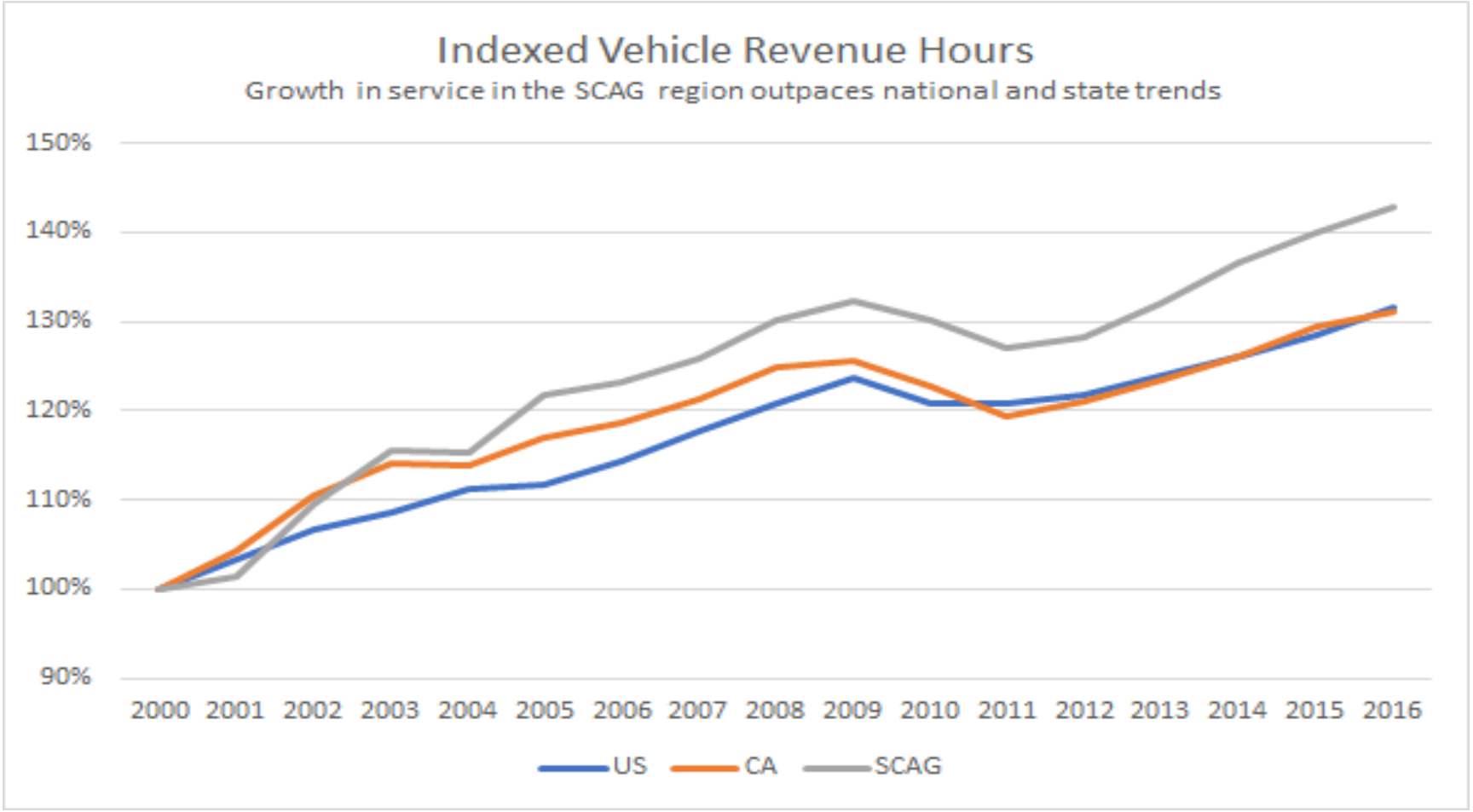
- Fewer than 10% of the region's transit operators carry about 80% of the region's passengers

Concentrated use means concentrated ridership losses

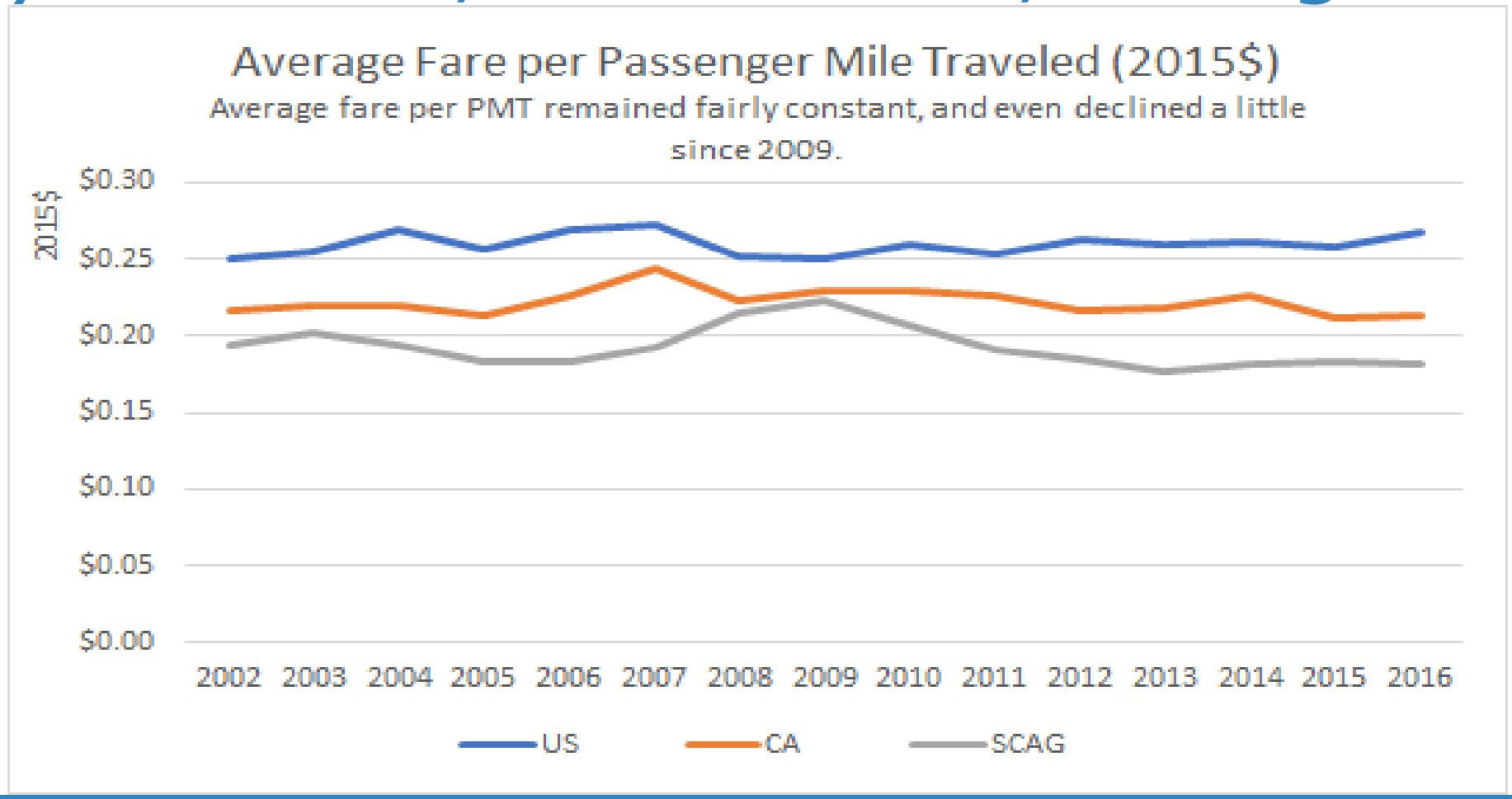
- LA Metro, OCTA, LA DOT, and SM Big Blue accounted for 88 percent of the ***state's*** ridership losses between 2010 and 2016
  - LA Metro alone for 72%

- Half of California's total lost ridership is accounted for by 17 LA Metro *routes* (14 bus and 3 rail lines) and one OCTA route
  - 12 LA Metro routes accounted for 38% of state losses

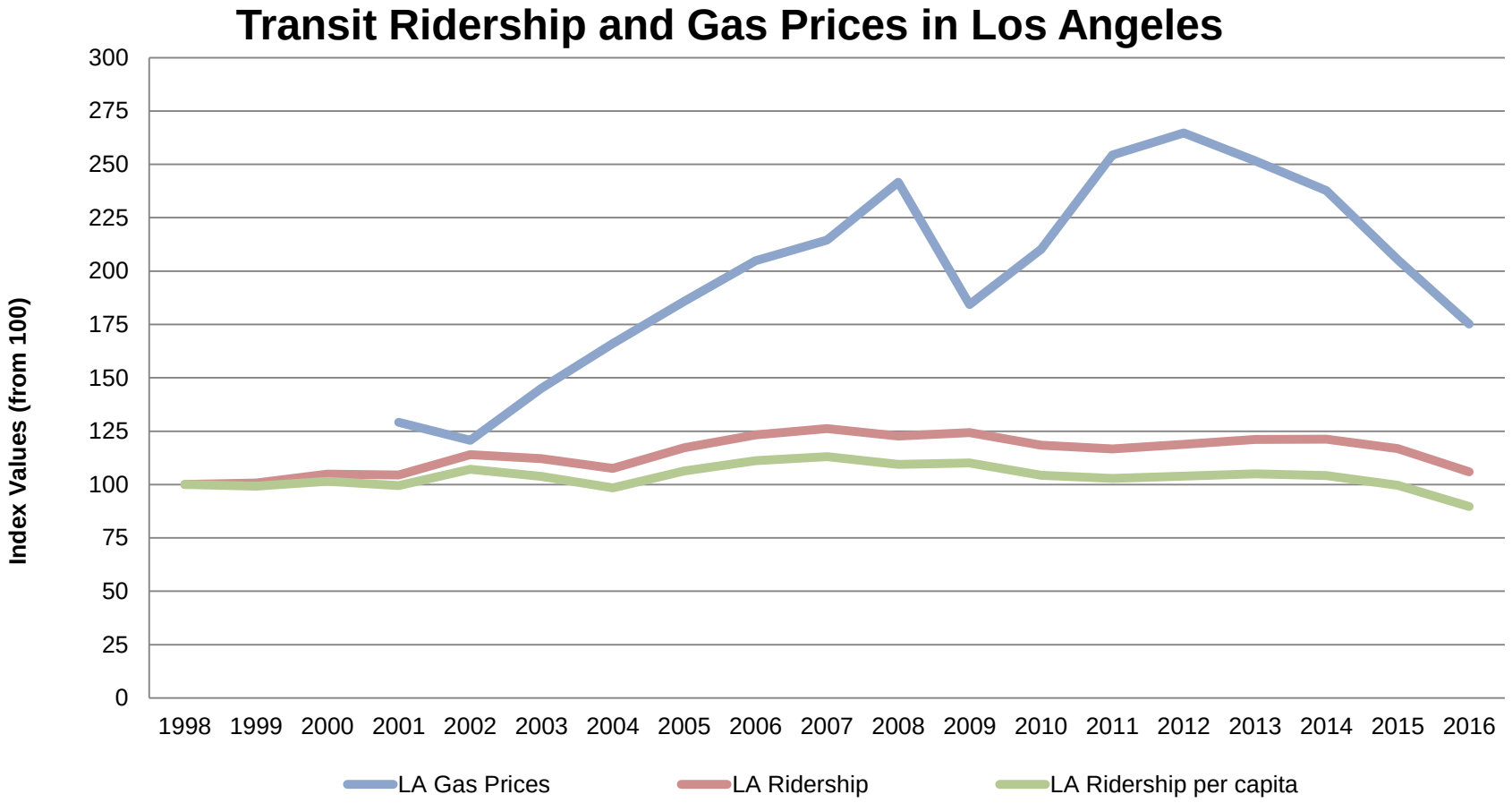
Changes in transit service and fares have mostly followed, and not led, falling ridership



Changes in transit service and fares have mostly followed, and not led, falling ridership



Fuel prices and TNCs have likely played contributing, but not leading roles



Fuel prices and TNCs have likely played contributing, but not leading roles

- Lyft and Uber are growing
  - Could both add and subtract transit riders
  - Detailed use data not publicly available

- Significant TNC use since 2012
  - Per capita transit use down since 2007

Fuel prices and TNCs have likely played contributing, but not leading roles

- Research
  - Most TNC users not core transit users
  - Most TNC trips not core transit trips

- Another form of auto access
  - Continued TNC growth could make a bigger dent on transit use

Smoking gun: *Private vehicle access has increased substantially in the 2000s*

- 1990s…
  - SCAG region added 1.8 million people and 456,000 household vehicles
  - 0.25 vehicles/new resident

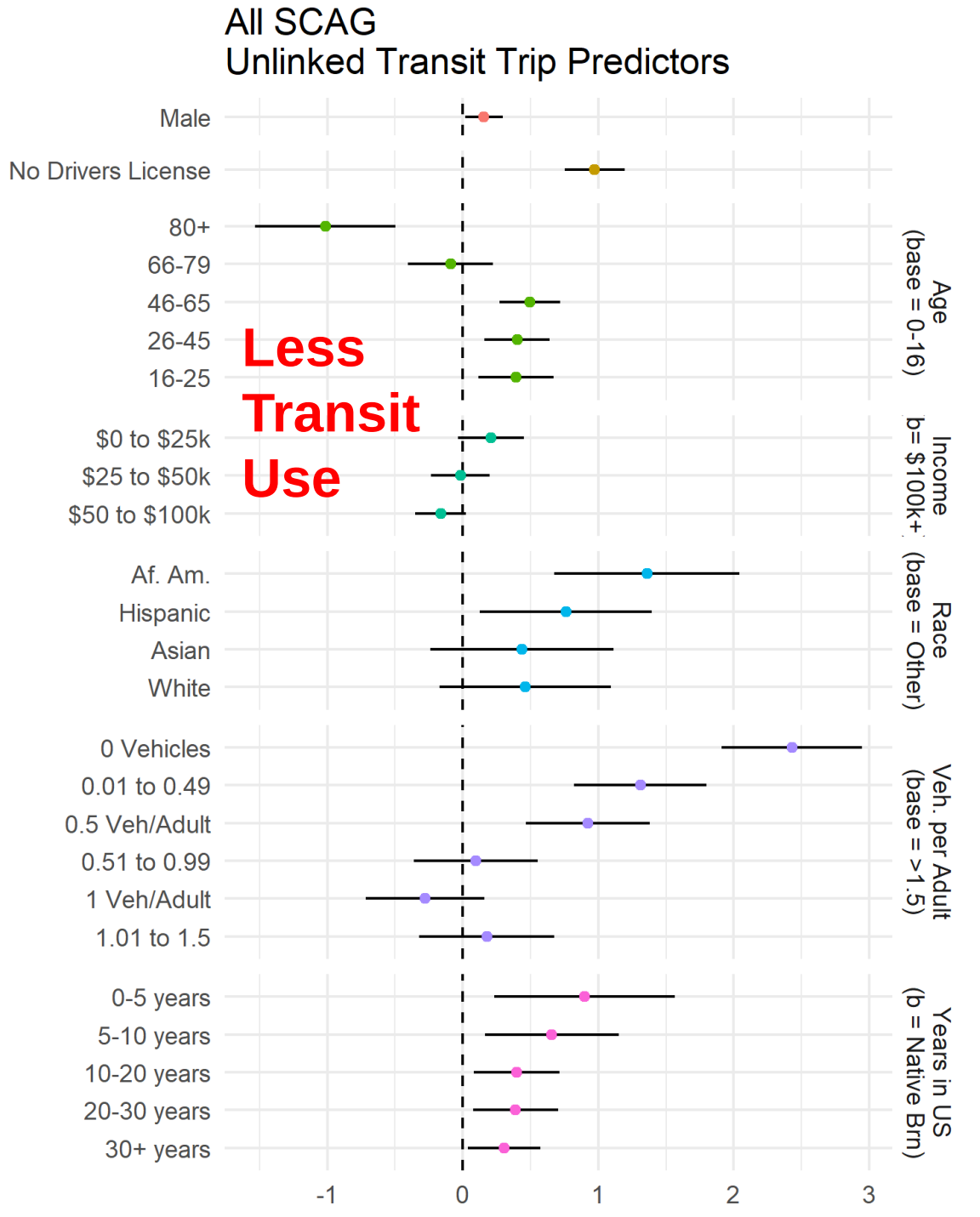
- 2000 to 2015…
  - Region added 2.3 million people and ***2.1 million*** household vehicles
  - 0.95 vehicles/new resident

Smoking gun: *Private vehicle access has increased substantially in the 2000s*

- SCAG households during the 2000s added vehicles are nearly 4X the rate of the 1990s

- Back of the envelope
  - SCAG residents spent more on these 2.1 million additional vehicles than LA Metro and Metrolink spent on all rail and BRT over the same period

What explains transit use?



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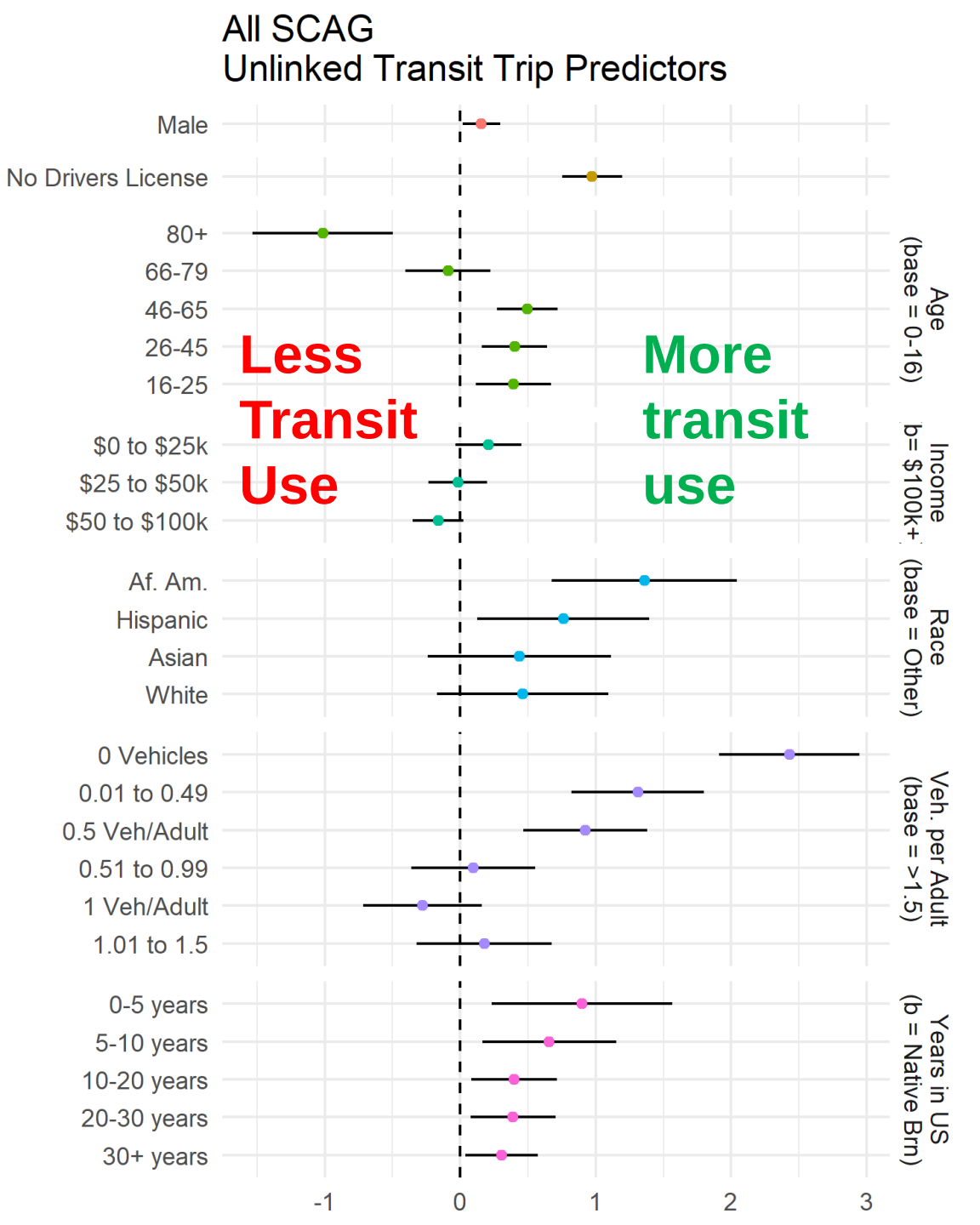
What explains transit use?



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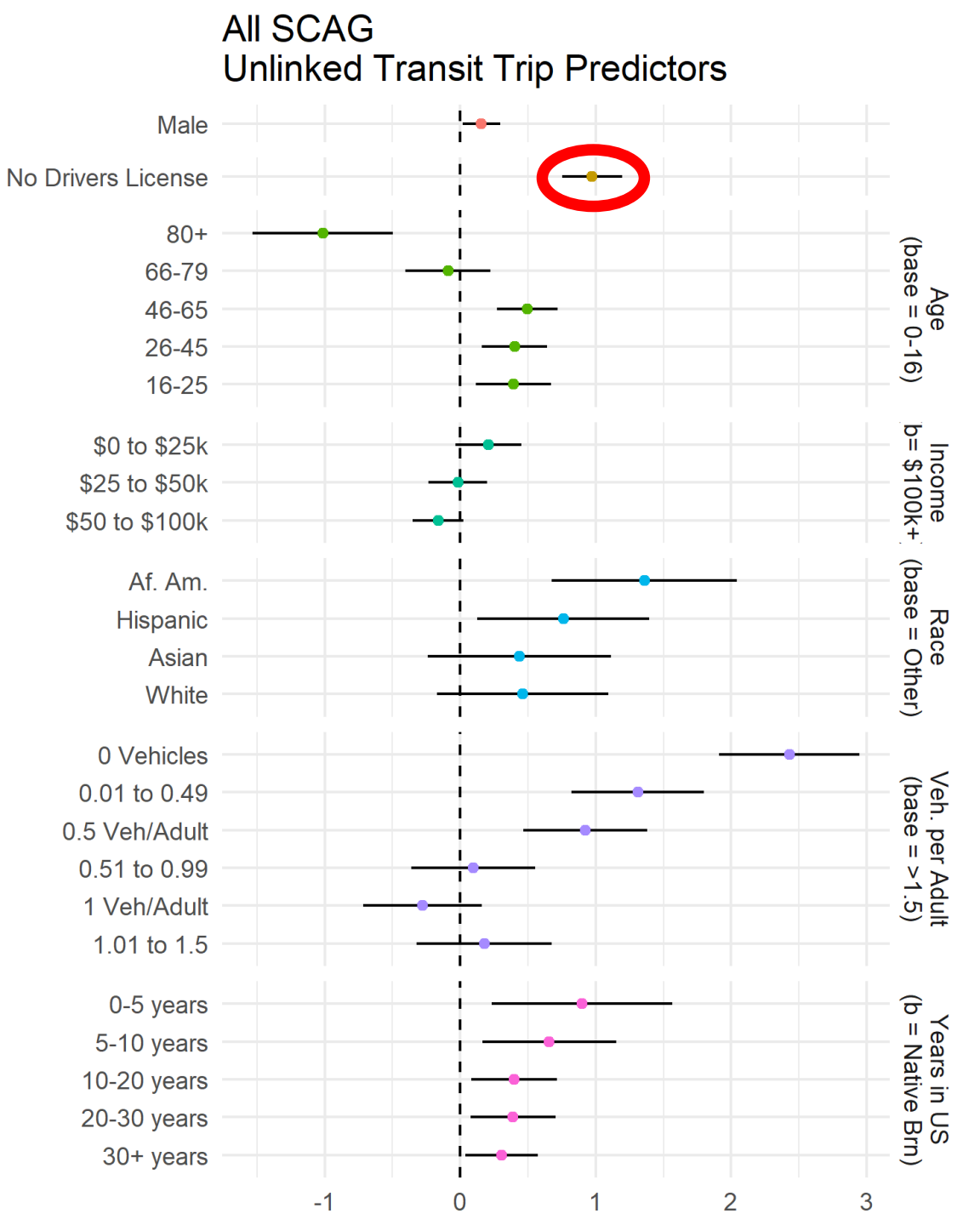
What explains transit use?

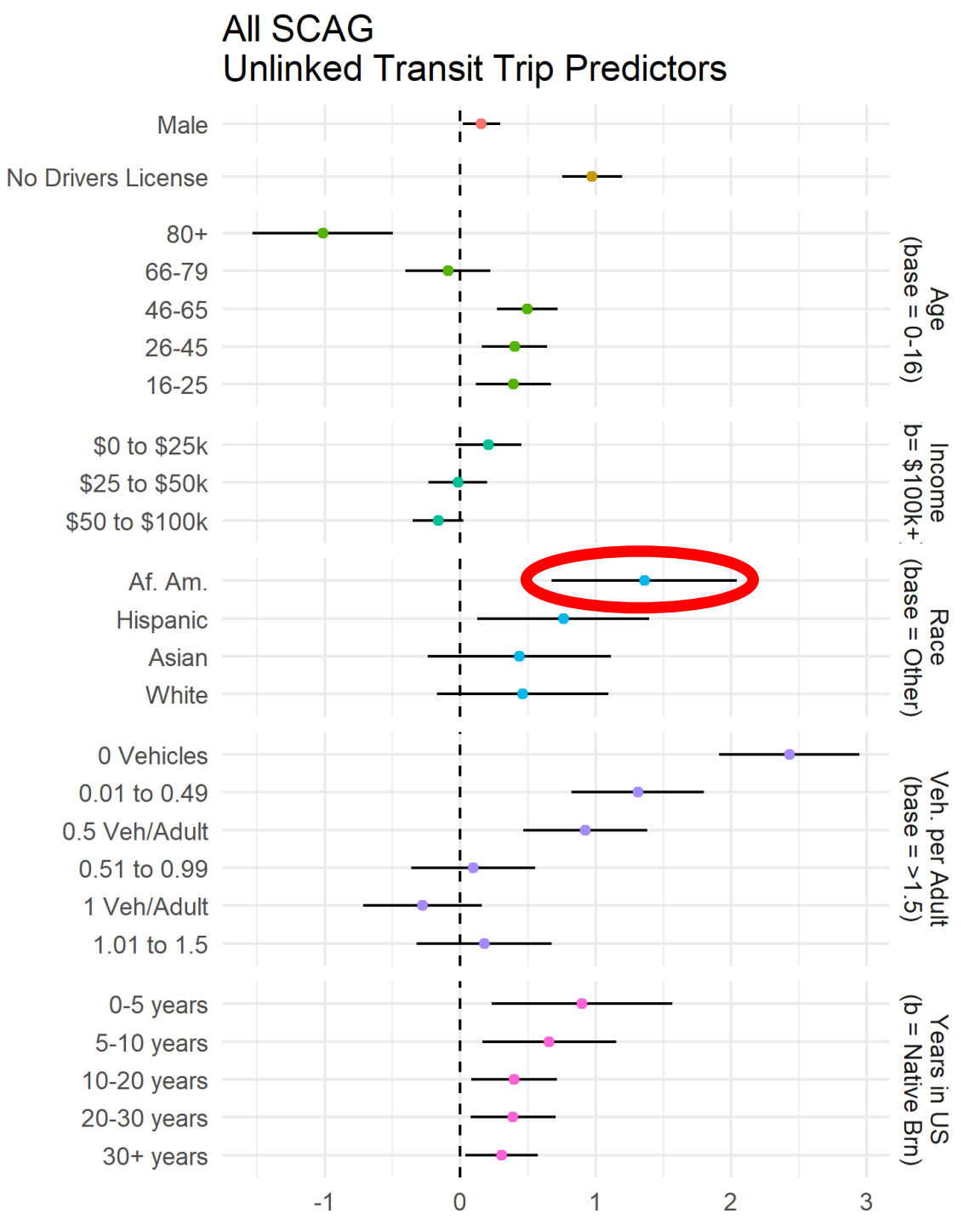
- No driver's license



UCLA

What explains transit use?

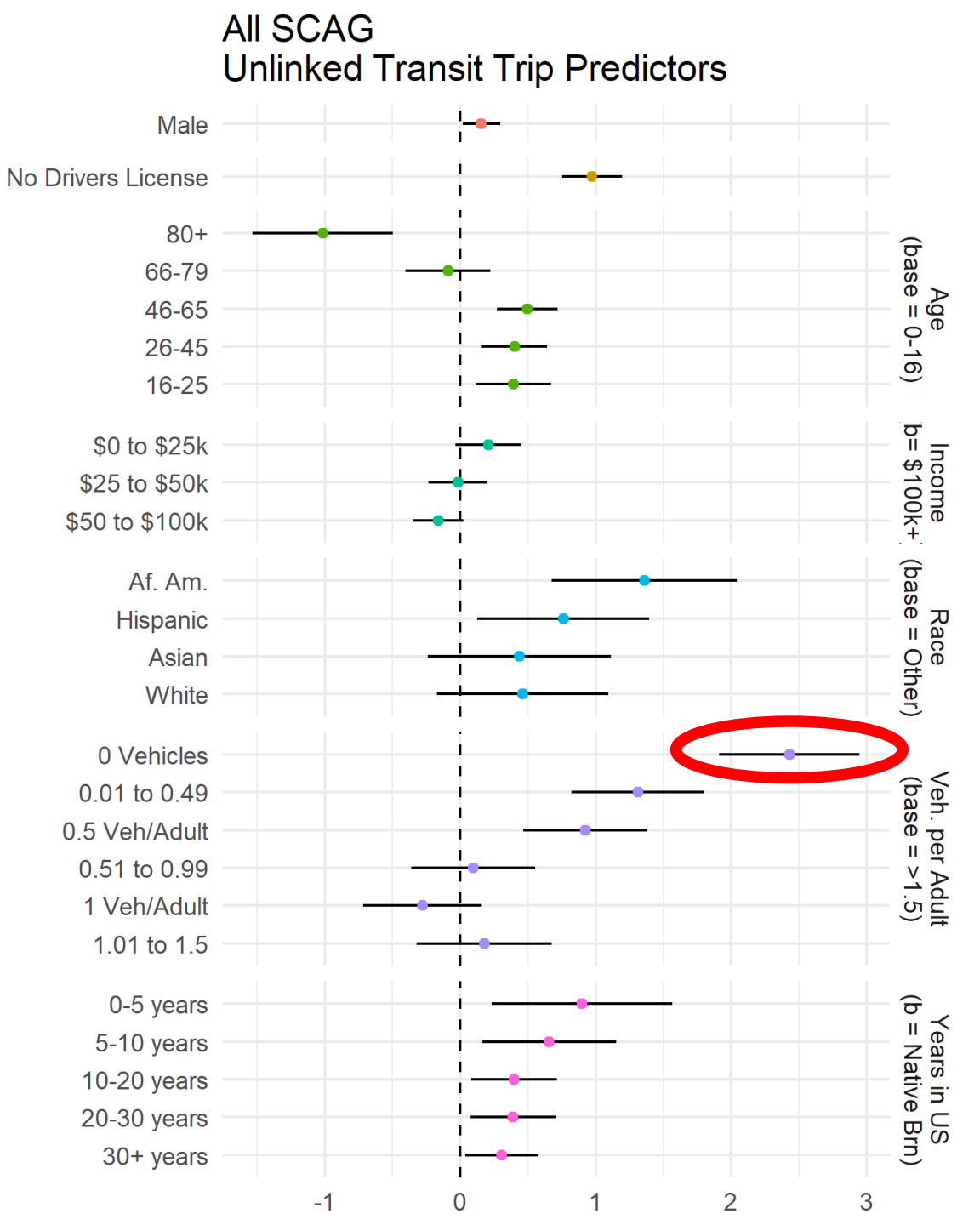
- No driver's license
- African-American



UCLA

What explains transit use?

- No driver's license
- African-American
- 0 vehicle household



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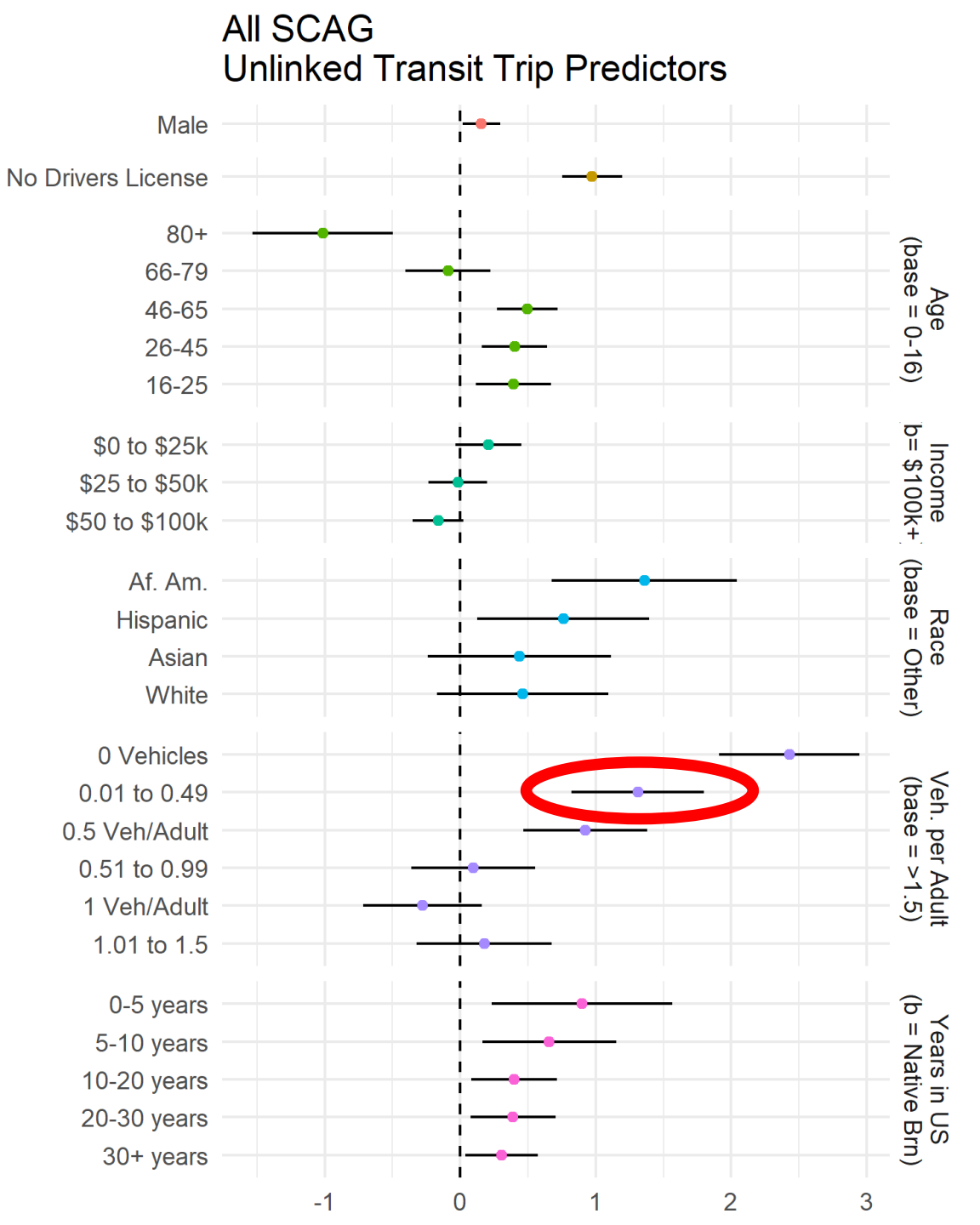
What explains transit use?

- No driver's license
- African-American
- 0 vehicle household
- Few vehicle household



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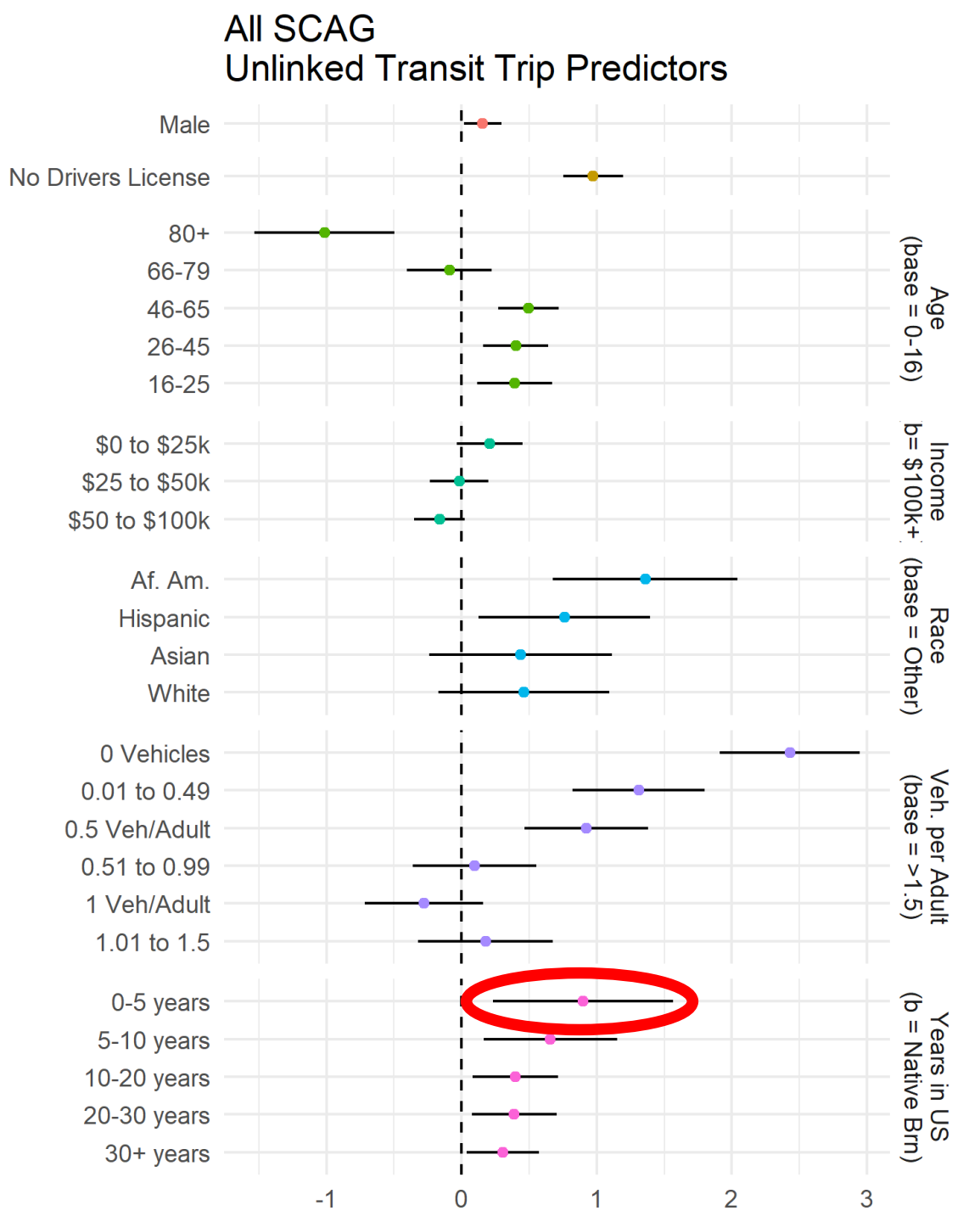
What explains transit use?

- No driver's license
- African-American
- 0-vehicle household
- Few-vehicle household
- Recent immigrants



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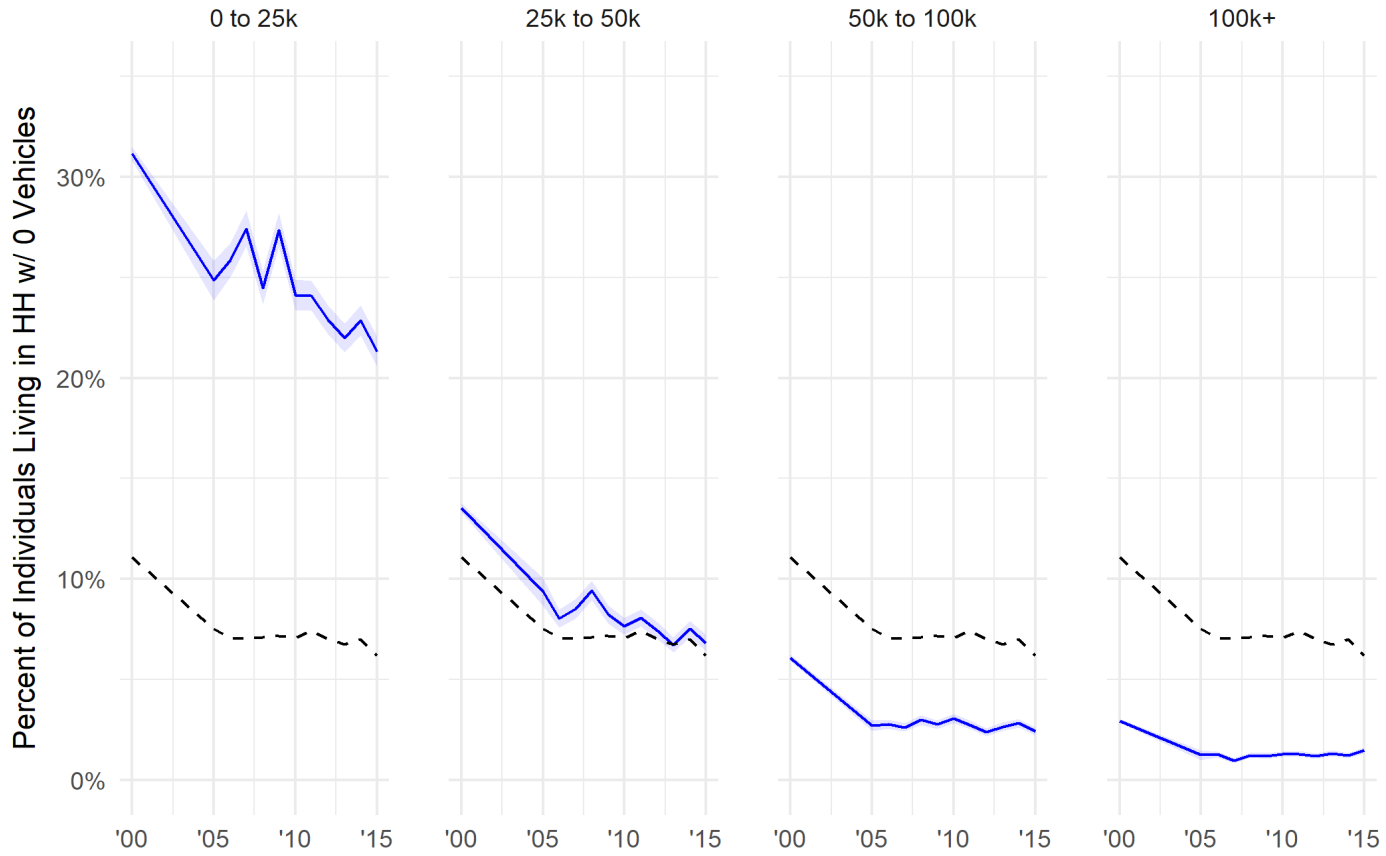
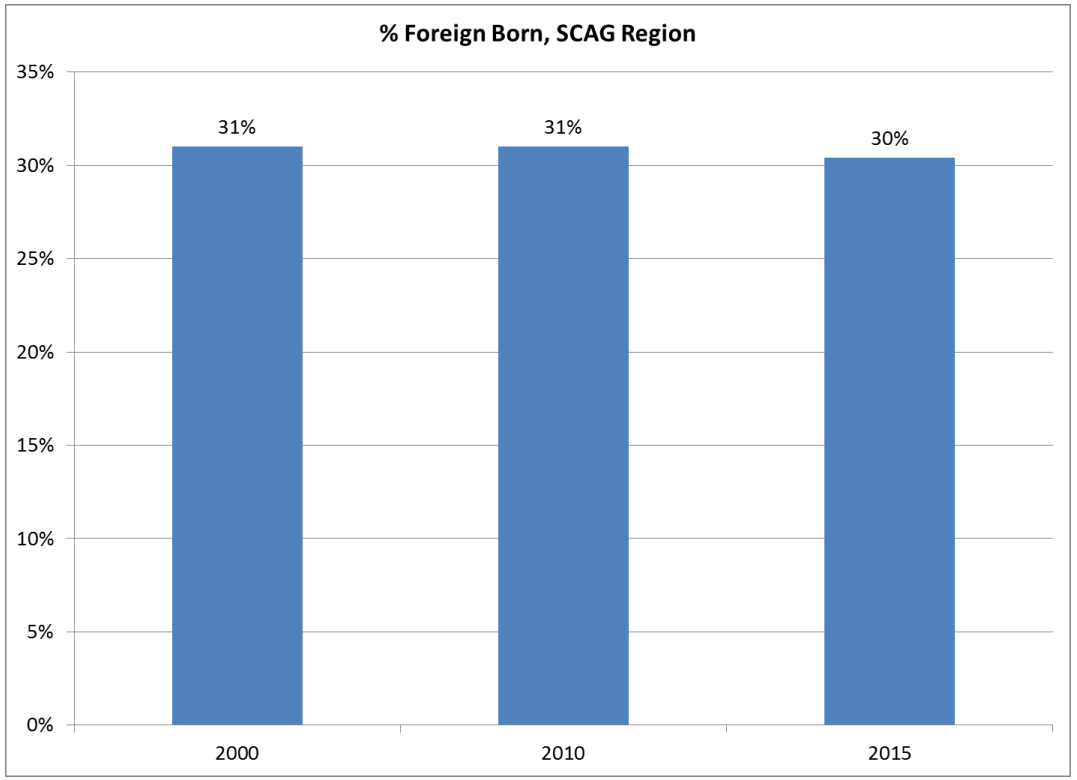
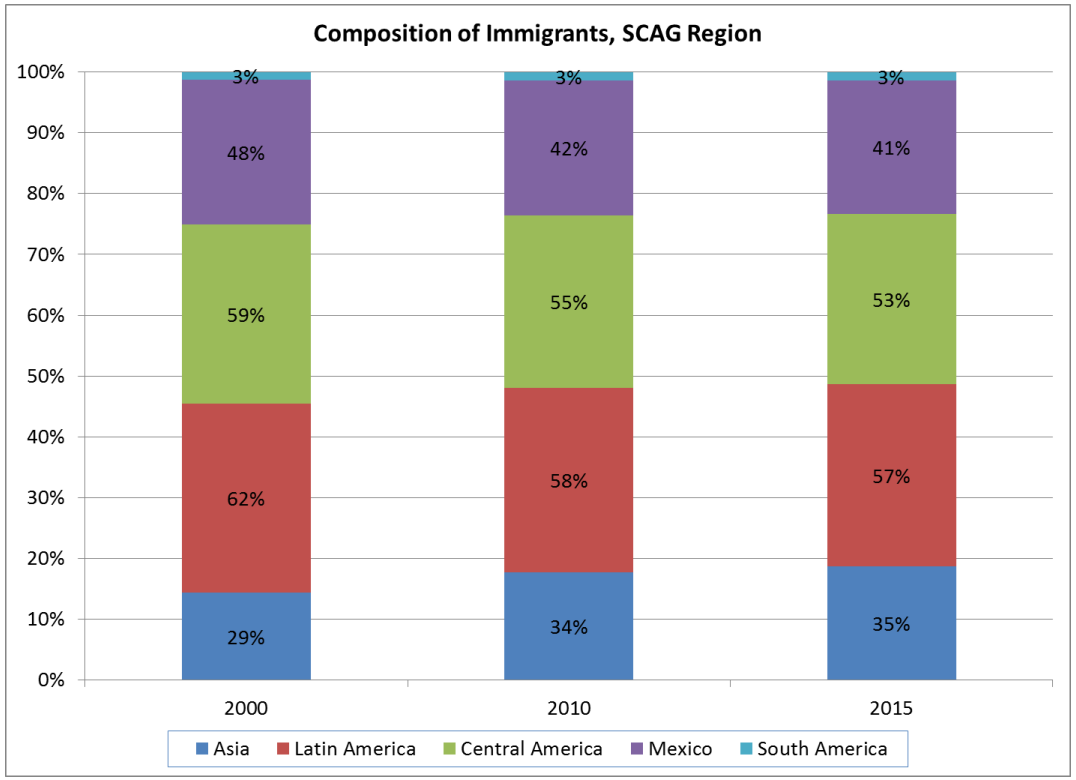
Zero-vehicle households way down, especially in low-income households

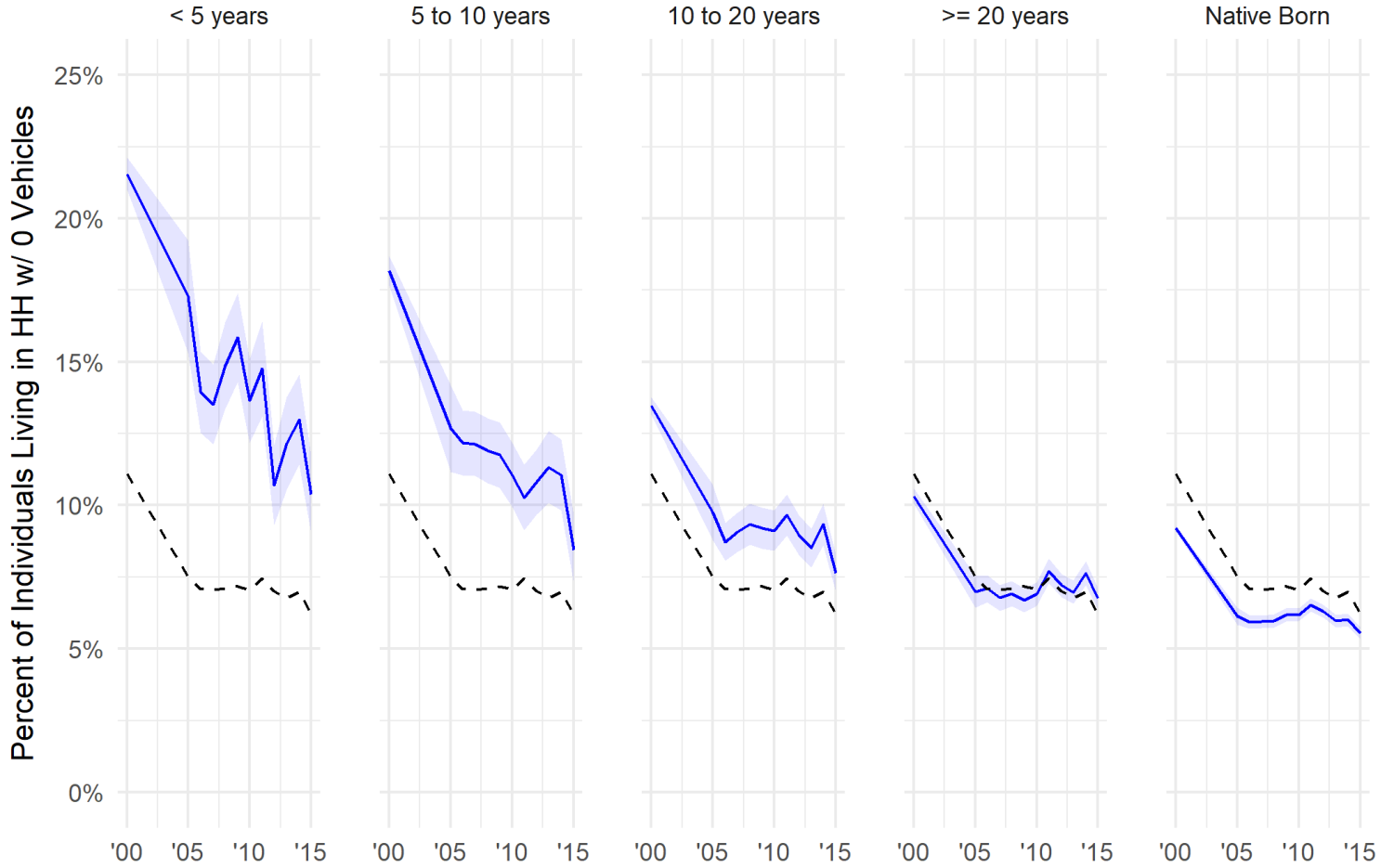


Immigrants – % stable but changing composition of immigrants in SCAG Region

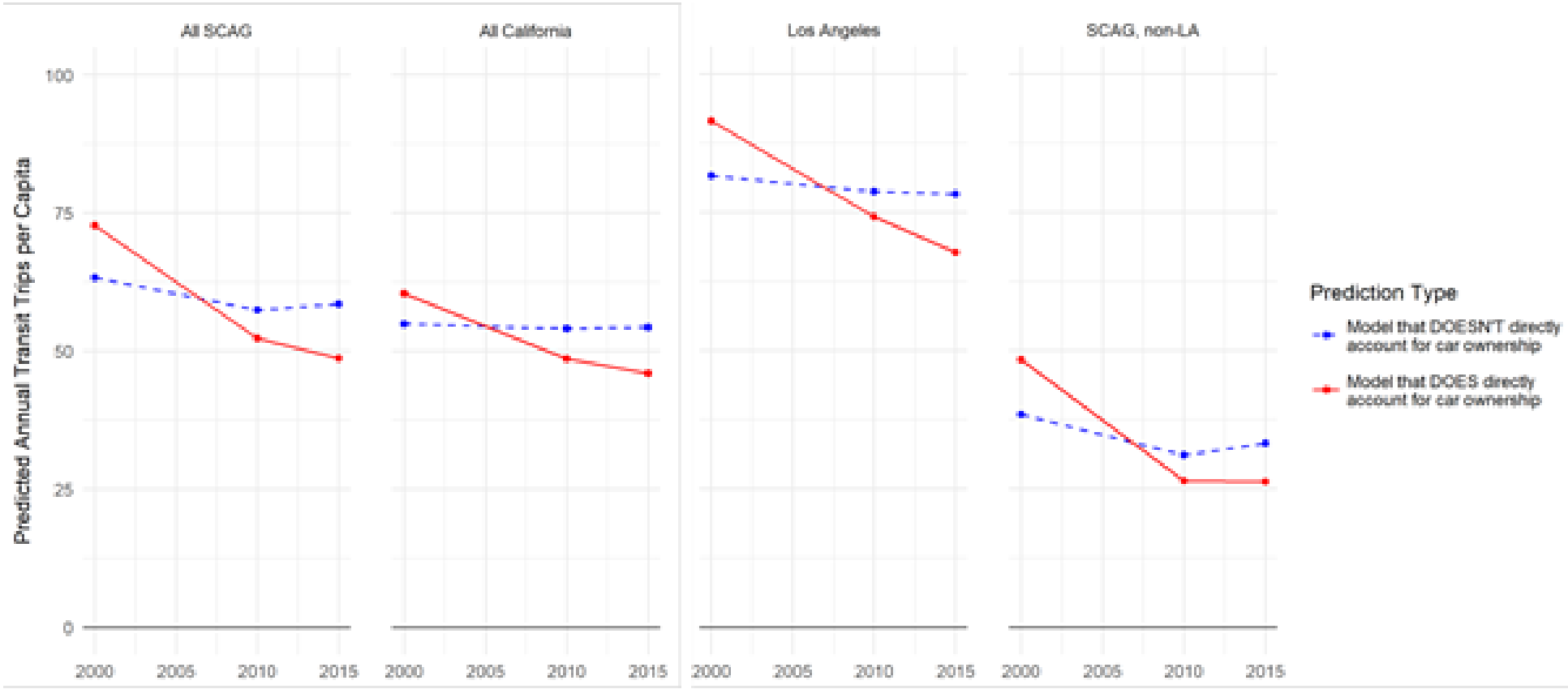




Zero-vehicle households way down among recent immigrants



Increased vehicle access has likely had a very large effect on transit use



Conclusions

- The regional pool of transit users is changing
  - Fewer heavy-use “transit dependents” over time
  - More “choice riders” with access to cars
  - This situation is unlikely to reverse anytime soon

- Some trends are more variable
  - Fuel prices likely to rise again at some point

No easy answers

- Replenish the pool of very frequent transit users
  - Such as with a large increase in low-wage immigrants to the region

- Broaden the base of occasional transit users
  - If every 4th non-rider added 1 transit trip every two weeks, ridership would be up region-wide
  - This would likely require more aggressive management of private travel

Thank you

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