

CHAPTER 3: MOBILITY

Introduction

The Housing and Transportation Nexus

A flourishing city is built upon two pillars. The first is secure, affordable housing for all its residents. The second is efficient, accessible, safe, and clean transportation networks that connect people and neighborhoods across the urban landscape.

California's cities are far from that ideal. For nearly a century, the state has consistently prioritized infrastructure for cars over safe and affordable mobility for people: demolishing entire neighborhoods to make room for freeways, under-funding public transit, and engineering street designs that encourage unsafe driving at the expense of public health and human life.

The result has been a human and environmental disaster. Once-thriving communities of color have been carved up by pollution-spewing freeways and depopulated. Traffic collisions [kill thousands of Californians annually](#) — a grim toll that has only worsened in recent years. Car smog chokes the air of California, leaving its cities with [some of the worst air quality in the United States](#).

The long-term climate impacts are less visible but no less insidious. Thanks in large part to California's car-oriented land use policies, transportation is [the biggest source of climate pollution in the state](#). In fact, [recent research](#) has made clear that California has no viable path to meeting its climate goals unless we significantly reduce driving — even assuming widespread electric vehicle adoption.

Yet, in spite of the hundreds of billions of dollars invested in California's car-dependent infrastructure — and the additional financial, economic, and health toll of air pollution and traffic violence — residents of California's big cities still lose countless hours to traffic congestion each year. Los Angeles is notorious for its bumper-to-bumper traffic, but other major metropolitan areas haven't been spared: the major roadways of the Bay Area, for example, are similarly jammed with cars. So much cost for so little gain.

There is a better way. We can re-envision our transportation system to prioritize mobility for people and goods, rather than privileging only cars. By redesigning our roads to favor safety over speed, we can make our cities hospitable to non-drivers: children, pedestrians, bike commuters, and others. We can curb pollution and make California live up to its reputation as a global leader in environmental sustainability. We can build bus and rail networks that make California cities easily navigable, even without a car. And by making it safer and easier to get around without driving, we can relieve congestion for the cars that remain on the road.

Below, we lay out our vision for an approach to transportation that achieves all these goals.

Recommendations

Abolish off-street parking requirements

Off-street parking requirements [degrade our urban design](#), [drive up the cost of housing](#), serve as de facto limits on housing density, encourage [car ownership](#) and [driving](#), [discourage walking](#), and [increase](#) the amount of [embodied carbon](#) in new buildings.

With [AB 2097 \(2022\)](#), the state abolished parking minimums for most multifamily apartment buildings located near public transit. While that was a critical step in the right direction, the state can, and must, go further. The state should either put strict limits on local governments' ability to require off-street parking in new developments or, better yet, repeal off-street parking requirements statewide.

Automate traffic enforcement

American traffic enforcement is [sporadic at best](#), often reinforces [racial disparities in policing](#), and does not promote widespread compliance with traffic safety laws. In fact, traffic enforcement has all but ground to a halt in most major cities since the height of the COVID-19 pandemic, which in turn has led to a spike in traffic violence.

California should follow other states and countries in removing police discretion from traffic enforcement. Camera- and microphone-based automated traffic enforcement, like that allowed by [AB 645 \(2023\)](#), can align traffic enforcement with road safety goals by [reducing speeding and crashes](#) while eliminating [officer bias](#) in traffic enforcement.

AB 645 established a pilot program in several California cities. The next step the legislature should take is bringing automated traffic enforcement statewide.

Build a modern high-speed rail system to connect California's major urban areas

California should build a world-class network of electrified high speed passenger rail connections between its dense urban centers. While we eagerly await the completion of the Los Angeles to San Francisco high-speed rail route currently in development, the state should not stop there. The state's high-speed rail network should extend to San Diego, Sacramento, Riverside, and Las Vegas.

California voters approved the bond to build high speed rail between Los Angeles and San Francisco in 2008. In the years since then, the project has been mired in CEQA lawsuits and suffered from further delay as a result of outsourced land acquisition.

These delays exemplify the self-imposed dysfunction that bedevils California's major infrastructure projects, notably excessive and time-consuming environmental review and the [over-reliance on consultants at the expense of state capacity](#).

We must address these problems. Completing California's high speed rail network will require additional funding, streamlined environmental review to avoid the California Environmental Quality Act lawsuits that delayed the initial Los Angeles to San Francisco route, and the development of state capacity for land acquisition and construction.

Design roads for safety, not speed

American traffic engineering uses cars, rather than people, as the base unit of transportation and as such is singularly preoccupied with ensuring maximum vehicle speed and throughput. Pedestrian and cyclist safety are an afterthought at best, and urban quality of life does not receive any thought at all. This must change.

The federal Manual on Uniform Traffic Control Devices, which sets the standard for road design nationwide, creates numerous [hurdles](#) to installing traffic-calming and [pedestrian-safety](#) measures but encourages [ever-increasing vehicle speeds](#). It should be [reformed and rewritten](#) to prioritize safety, promote active transportation and public transit, promulgate best practices for bikeways, and encourage pedestrian safety and convenience. If federal reform efforts are unsuccessful, California should revise its own road design manual.

Further, rather than requiring years of outreach processes before reconfiguring a street, California agencies should implement safety-oriented redesigns, including hard protective measures like bollards, as a complement to routine repaving and maintenance.

Given the car-centric institutional culture of state and local departments of transportation, it may be necessary to adopt statewide objective standards for road designs specifying curb height, turn radii, sidewalk depth, bike lane width and protection, and so on.

Fund incremental improvements in transit

California's major metro areas [under-fund public transit](#) relative to comparable North American cities, and America under-funds transit relative to our peer nations. What funding we have goes largely to flashy capital projects like new train lines and [excessively lavish stations](#) instead of incremental improvements.

Cities and the state should invest in expanding transit operations to increase ridership and make public transit truly competitive with driving. State level operations funding should be conditioned on governance reforms that will create seamless, cohesive, easy to use regional transportation systems out of the fragmented systems we have now.

Investing funds into increasing ridership will lead to more fare revenue, which can then be used to further improve operations, creating a virtuous cycle.

Make active mobility, like walking, rolling, and biking, safer by funding and building safe streets

California should use international best practices to design [safe streets](#) that encourage active forms of mobility, such as walking, rolling (on mobility devices), and biking by providing networks of separated, meaningfully protected lanes for vulnerable road users.

While we are encouraged by Caltrans' [adoption of complete streets policies](#), institutional culture in local departments of transportation will likely remain an impediment to implementing best practices on locally-controlled roads. Objective standards are necessary.

These objective standards should emphasize the importance of mobility infrastructure networks. A few blocks of painted bike lane, for example, do little good for bicyclist safety if they exist in isolation. Instead, a city's walkways and other active mobility infrastructure should be interconnected as much as possible and protected from motorists with concrete and steel. Further, the state should increase funding for its existing, competitive Active Transportation Program and Recreational Trails Program.

Mandate better coordination between transit agencies

Public transportation in California's major metropolitan areas is run by many different agencies—[27 in the Bay Area alone](#)—with insufficient coordination across cities, counties, and regions. This creates transit “systems” that are difficult to navigate and inconvenient to use.

Local transportation agencies should report to a [Network Management Authority](#) with the mandate and resources to integrate and expand all forms of public transportation in each region (or statewide) into a cohesive, easy-to-use network with integrated fares, standardized wayfinding, and seamless transfers between various modes.

Prioritize transit riders' dignity, comfort, and safety

Policymakers often treat public transit as the transportation mode of last resort for people who cannot afford cars. In much of California, the experience of riding transit reflects policymakers' disregard for riders' comfort and dignity.

To ensure transit riders' comfort and dignity, the state should fund rider improvements like shelters, lighting, and [seating at bus stops](#). Funding should be contingent on major cities reforming the process of permitting [bus shelters](#) to make it less [arduous](#).

Further, we must make transit safe for riders, particularly women and other people with marginalized identities, by designing stations to discourage bad behavior (for example, by ensuring that all stations are well lit) and by staffing them with personnel who are trained to intervene in a crisis.

The state should offer grants to fund these improvements. To access this funding, local transit agencies would need to follow state guidance ensuring that these amenities are rolled out equitably and to the stations where people will benefit the most.

Lastly, the state should fund transit improvements to reduce the amount of time passengers spend waiting for the next bus or rail connection. The less we strand transit riders at stations for long periods of time, the better off they'll be.

Remove urban freeways

America is unique among peer nations for having limited-access highways that go into and through our major city centers, in addition to running between cities.

The shameful history of these freeways' construction and their ongoing ill effects on nearby residents are well known: the state cut large gashes through [Black and Latino neighborhoods](#) to build them, and freeways continue to subject nearby residents to [noise, air, and particulate pollution](#). Further, it is now clear that subsequent freeway widenings [have not even relieved traffic congestion](#).

The state should remove urban freeways, beginning with redundant roadways like Route 101 in Los Angeles' Boyle Heights, Interstate 980 in Oakland, and [280 on San Francisco's east side](#). The removal process should continue until every major urban freeway has been replaced with surface-running multimodal boulevards with active transportation infrastructure and transit.

Under this recommendation, grade-separated highways would continue to exist between cities and perhaps as ring roads through suburbs, but they would not go into and through city centers.

Stop expanding highways

We have known for decades that widening highways and city streets does not durably ease congestion. Instead, utilization on newly widened highways [tends to rise](#) until congestion is at least as bad as it was before the additional lanes were added. Unfortunately, this has not stopped California policymakers from widening freeways (and even [seizing people's homes to do so](#)).

We should immediately stop expanding highways, except where necessary for fire evacuation routes, and instead manage demand for existing roadways through pricing. See our transformative recommendations in this chapter for more regarding congestion pricing.

Subsidize e-micromobility, including scooters and e-bikes

California is set to begin offering [rebates for e-bike purchases](#) through the California Air Resources Board. Instead of offering rebates, the state should provide these subsidies at point of sale, so that consumers don't need to pay full price upfront and then wade through bureaucratic red tape in order to recoup some of the cost.

In addition to subsidizing e-bike purchases, the state should offer assistance to individuals who want to buy scooters and other smaller electric vehicles. Funding for these subsidies should match or exceed funding for electric car subsidies.

The state should also offer a “cash for clunkers” style program, where households wishing to replace a car can easily trade it in for an electric cargo bike or equivalent e-micromobility option.

Tax vehicles by weight

Americans’ cars are getting bigger and heavier thanks to the widespread adoption of SUVs and the extraordinarily heavy batteries needed to power large, long-range electric vehicles. (For example, [the electric Ford F-150 is up to 3,000 pounds heavier](#) than its gasoline counterpart.) This change has profound implications for road safety and for our transportation infrastructure more broadly.

Large vehicles are [profoundly dangerous to other road users](#). Compared to sedans, SUVs and so-called “light trucks” are [50 percent deadlier for pedestrians](#)—and [four times as dangerous for young children](#)—thanks to their [high hoods](#). Those high hoods also create [large front blind spots](#), which are especially hazardous to children. According to the chair of the National Transportation Safety Board, [the danger of fatal collisions is likely to increase](#) with the introduction of fast-accelerating electric trucks and SUVs.

Heavy vehicles also put a great deal of stress on roads. Because road wear and tear [increases exponentially by vehicle weight](#), a 9,000 pound Hummer [EV puts 21 times more wear on roads than a typical 4,000 pound car](#), or 365,500 times as much wear as a very heavy cyclist. This wear and tear [generates significant particulate pollution](#), which [causes a variety of ill health effects](#), such as aggravated asthma, decreased lung function, and heart attacks.

Historically, heavy vehicles paid higher taxes because they used more gasoline; fuel consumption served as a proxy for both vehicle weight and total miles traveled. However, the shift to very heavy electric vehicles necessitates a change in strategy. In addition to taxing fuel consumption, we should tax vehicle weight by imposing weight-specific sales taxes and by charging heavier vehicles higher annual registration fees.

Such taxes will incentivize consumers to buy and drive smaller, safer vehicles that do less damage to our roads and generate less particulate pollution. Additionally, the money collected could be invested in other road improvement measures that would make getting around even safer for pedestrians and other non-drivers. (See other recommendations in this chapter for more details.)

Use pricing to manage curb parking

In places where the demand for curb parking overwhelms its supply, cities should [price the curb](#) and use the revenue to fund [parking benefit districts](#), which improve streetscapes and provide other neighborhood amenities. The specific methods of pricing the curb will vary by location—one neighborhood might have resident parking permits, another block might have metered parking, and so on—but the goal should be to ensure one or two open spots on every block at all times. The state should encourage the creation of parking benefit districts through incentives.

Use pricing to manage roadway performance

We have known for decades that adding additional lanes to major roads does not reduce congestion in the long run. But [pricing](#) does.

In contrast to most existing tolls, which are set at flat rates to meet revenue targets, dynamic highway pricing would set road prices just high enough to meet speed targets that maintain maximum throughput, which is achieved at around 50 miles per hour. Similarly, downtown congestion pricing would be set just high enough to maintain manageable traffic volumes and prevent gridlock.

By pricing the road, we can [finally end](#) the daily nightmare of both freeway and surface-street congestion.

Additionally, because people will pay to use the road with money instead of their time, congestion pricing will raise considerable sums that can be put toward public transit operations and capital improvements to benefit those who choose not to drive. This creates a win-win: drivers will benefit from uncongested roadways, while non-drivers will enjoy improved transit service (and less traffic slowing down their buses).

Use targeted, data-driven, equity-focused approaches to road safety

Our car-centric transportation system disproportionately harms residents of low-income Black and Latino neighborhoods, who are subjected to high levels of [air pollution](#), [noise pollution](#), [traffic violence](#), and [neighborhood destruction](#) in service of wealthy drivers' convenience.

California collects [robust data on transportation injuries](#). Cities and the state should use that data to target road safety interventions, irrespective of whether the Manual on Uniform Traffic Control Devices warrant thresholds for specific interventions (e.g., crosswalks, traffic signals, or stop signs) have been met.