

THE TRUE COST OF SPRAWL

Bad Planning Harms People, Wildlife
and the Climate

CENTER FOR BIOLOGICAL DIVERSITY • MARCH 2024

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Bad Planning Harms People, Wildlife and the Climate

A report from the Center for Biological Diversity

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EXECUTIVE SUMMARY

Housing policies are inextricably connected to the health of our communities and environment. When we don't support quality affordable housing in existing cities due to restrictive zoning rules or other barriers, we end up with suburban sprawl that leaves communities with multihour commutes, damaged ecosystems and dirty air.

From 2001 to 2017, more than 24 million acres of natural areas were lost to development in the United States. This drastic conversion of open space to suburban sprawl correlated with an increase in commute times across the country, reaching an all-time high in 2019 with a national average daily commute of more than 55 minutes. The impact of increased commute times goes far beyond lost time for commuters. It paves over habitat and increases stress, depression, diabetes and other negative health outcomes in communities.

This report lays out the direct and indirect costs associated with poor land-use decisions. These harmful outcomes reveal the true cost of sprawl:

- **Habitat destruction destroys our natural heritage and contributes to the extinction crisis.**
- **Poor air quality threatens public health and makes it difficult to reach our climate goals.**
- **Development far from the city center increases wildfire risk and threatens water supplies.**
- **Public resources are redirected to fund new infrastructure that supports suburbs and exurbs, leaving existing communities with diminished services.**

Despite these troubling trends, local officials continue to approve sprawl development, citing the need for more housing and lower construction costs. Yet these developments rarely include sufficient affordable housing, particularly very low- and low-income housing.

More troublingly, U.S. sprawl development increases per capita infrastructure costs by 50%, pulling public funds away from existing neighborhoods, harming communities and wildlife, and endangering our collective future.

California should be moving away from these poorly planned projects, but more continue to be proposed. In Solano County, developers are proposing to turn 55,000 acres of agricultural land more than 60 miles away from the Bay Area's job centers into a new city with potentially thousands of new residents.

If we want housing to be affordable now and sustainable in the long term, it must be guided by policies that prioritize access to good jobs, schools, community input, public transportation and parks that provide the basic resources needed for healthy and resilient neighborhoods. To achieve these goals, policymakers need to invest public resources in preserving, improving and expanding access to existing communities, not approving new and destructive sprawl development.

We urge decision makers to build community resiliency and protect our natural ecosystems by taking the following steps:

- Permanently protect and restore remaining open space.
- Permanently protect all current affordable housing.
- Solidify legally binding anti-displacement policies.
- Upzone urban infill areas and require, at a minimum, 20% of all new units to be affordable in perpetuity.
- Ensure new development is built in areas free from toxic pollutants and other environmental hazards and not prone to flooding and wildfires.
- Increase investments in public transit infrastructure within existing communities.
- Build more climate-resilient, sustainable housing that includes rooftop solar, energy- and water-efficient appliances and drought-tolerant landscaping.



Santa Clara River, Credit: Andrew Harvey

INTRODUCTION

Suburban and exurban sprawl is generally characterized by low-density development that rigorously separates residential uses from other land uses and relies entirely or almost entirely on automobiles to connect them.¹

Sprawl development destroys native habitat, threatening many species' survival. It also greatly reduces nature's ability to store carbon, which worsens the climate crisis. Faraway development pulls people away from existing public resources, including schools, transportation and parks. This creates a cycle of divestment in existing communities to compensate for the investment in new roads, sewers and other infrastructure.

People endure long commutes and poor air quality as a result of more vehicles on the road. Communities are left more vulnerable to wildfire and flooding as many of these sprawl developments are built in known environmental hazard zones.



Sprawl development increases car dependency and worsens air pollution. Credit: Daniel Lobo

Despite sprawl's well-documented harms to native habitats and community health, local governments continue to approve sprawl at a surprising rate (See Figure 1). This has increased in recent years because of the rise in remote work following the pandemic.² Many claim that long commute times associated with exurban communities are no longer a concern as more people work from home.

While 20%-25% of work is estimated to be done remotely post-pandemic, compared to around 5% pre-pandemic, many of the negative impacts of sprawl development, such as increased wildfire risk and habitat destruction, still remain. Additionally, working in an office is not the only time people commute. If you live far away from the city, you're still often driving far for school, cultural events, extra-curriculars, grocery, medical appointments, errands and other necessities.

In California most major land-use decisions must go through environmental review under the California Environmental Quality Act (“CEQA”), which requires decision makers to disclose, evaluate and, when feasible, mitigate environmental harms from a new project. This allows for the public to better understand the risks associated with each new development and hold developers accountable when they do not adequately analyze and reduce or offset those potential harms.

The Center for Biologically Diversity has successfully challenged some of the worst proposed sprawl projects in court for failing to comply with the Act. These include [Otay Ranch Village 14](#) in San Diego as well as [Tejon](#) and [Northlake](#) in Los Angeles and [Guenoc Valley Luxury Resort](#) in Lake County. These projects threatened to aggravate the climate emergency and extinction crisis, increase wildfire risk, reduce limited water supplies, and worsen air pollution.

While community groups, nongovernmental organizations, and, in the case of Otay Ranch Village 14 and Guenoc Valley, the California attorney general can continue to fight these projects one at a time, the long-term solution lies in local policies that restrict new development in suburban and exurban areas and allow more affordable, equitable housing in existing communities.

Only then will developers be required to invest in projects that actually prioritize community and environmental health instead of being allowed to cash in on the low upfront costs of sprawl while taxpayers pay for everything else.

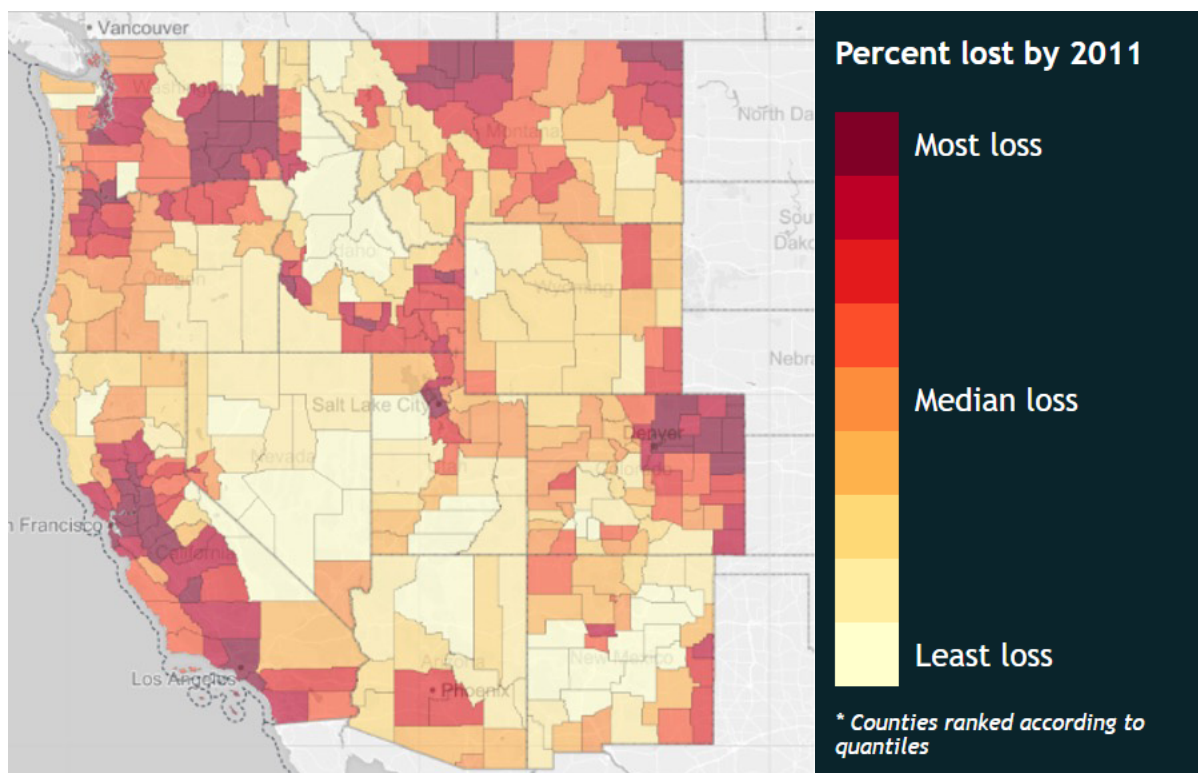


Figure 1. The degree of human modification in the western United States 2001-2011. Source: Conservation Science Partners, *The Disappearing West*³

WILDLIFE PUSHED TOWARD EXTINCTION

Because of the expansion and intensification of development, natural areas in the conterminous United States were steadily lost between 2001 and 2017. Over this 16-year period, the total amount of natural area converted for human use (housing, agriculture, transportation, energy production) was more than 24 million acres, roughly equivalent to nearly nine Grand Canyon National Parks (~2.8 million acres) or 49 Great Smoky Mountain National Parks (~520,000 acres). This equates to more than 1.5 million acres lost annually.⁴

From just 2001 to 2011, California converted more than 500,000 acres of habitat.⁵ Over the same period, Napa County lost 3,578 acres of natural area, San Diego County lost 27,252 acres of natural area, and Los Angeles County lost 33,508 acres of natural area.³

This loss in habitat destroys sensitive species and has the potential to degrade or diminish entire ecosystems.^{6,7,8} Sprawl development and associated infrastructure is also harmful in the following ways:

- **Roads** fragment habitat and cause direct mortality and genetic isolation of animals, which can drive wildlife species toward extinction. Many species, including mountain lions and desert tortoises, are often killed or injured attempting to cross roads.⁹ Other animals, like some songbirds and lizards, avoid crossing roads altogether. Roads also facilitate the spread of nonnative and invasive species, particularly plants and their seeds, which threaten the survival of native plants and animals.¹⁰ Roads also facilitate more development, compounding the problem.



Mountain lion P-64 traveling under a culvert. Credit: U.S. National Park Service.

- **Structures and human activities** result in habitat loss, degradation and fragmentation. The presence of people can cause species to shift their behaviors and movement patterns, which can lead to genetic isolation and an increased risk of local extinctions. This is evident with struggling puma populations in California experiencing an extinction vortex due to severe habitat fragmentation caused by roads and development.¹¹ Predation and disease from domestic pets can also harm native species and erode ecosystems.¹²
- **Fences** create another type of habitat fragmentation by reducing mobility and preventing species from accessing areas that they depend on for survival. Even worse, fences can ensnare the animals who try to cross, resulting in suffering, injury or death.¹³
- **Chemical pollution in the form of pesticides, herbicides and rodenticides** are also a threat. Runoff pollution from roads and agriculture harms fish and amphibians that require aquatic habitats to survive.^{14, 15, 16} Rodenticides poison or kill bobcats, mountain lions, coyotes, Pacific fishers, raptors and many others.^{17, 18}
- **Light and noise pollution** can reduce the health and reproductive rates of many birds and other wildlife.¹⁹

Fragmentation or obstruction of species' mobility results in greater mortality and potential extirpation. We need to protect remaining native habitats to ensure we allow species to safely move across the landscape.



Mountain lion P-22 was exposed to anti-coagulant rodenticides, commonly known as "rat poison." Credit: Santa Monica Mountains National Recreation Area



Dog poisoned by rodenticides. Credit: Anna Reams/Wildlife Care of Southern California

CHOKING ON FUMES

Greenhouse gases

Sprawl development increases the amount of truck and car trips, resulting in more climate-disrupting carbon pollution. A 2010 meta-analysis based on more than 50 surveys concluded that a region's local density, diversity and regional accessibility had a significant impact on travel behavior.²¹ Specifically, population centrality, job-housing balance, shape of the city, and roadway density influences annual household vehicle miles traveled, or VMT.²² Residents in sprawling regions tended to drive more frequently and for longer distances.

In addition to carbon pollution, increased daily vehicle trips result in emissions of NO_x, carbon dioxide (CO₂), and methane (CH₄), which can lead to premature mortality, compromised birth outcomes, heart disease and a host of respiratory illnesses.²³

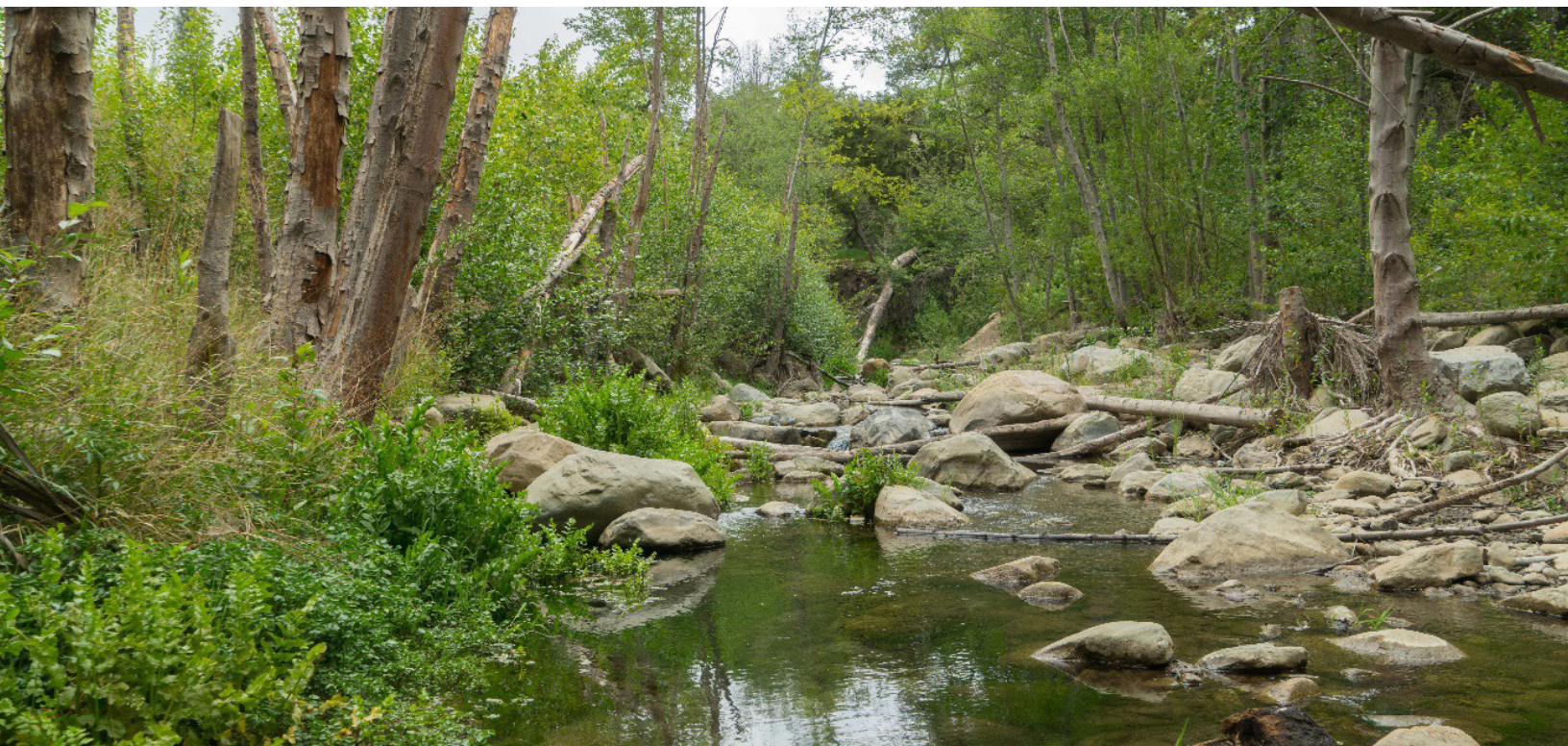
In 2021 the emissions associated with U.S. passenger vehicles totaled 370 million metric tons of carbon dioxide equivalent (CO₂e). California's annual average emissions associated with passenger vehicles between 2000 and 2020 was approximately 110 million metric tons of CO₂e.²⁵

Both federal and state governments have set emission reduction goals, yet local governments continue to undermine such efforts by approving more sprawl development. Land-use policies that incentivize infill affordable housing and efficient, reliable and accessible public transit should be essential to any successful climate resiliency plan.

Carbon storage and sequestration

To make room for sprawl, developers cut down mature trees, pave over grasslands, and destroy native wildlife habitat. This undermines nature's ability to store carbon. Terrestrial ecosystems — including forests, woodlands, shrublands, grasslands, riparian areas, wetlands and deserts — act as large carbon sinks, sequestering approximately 30% of anthropogenic emissions globally.²⁶ Protecting and restoring native habitats is a central component of any successful climate mitigation strategy.^{27, 28} California's Natural and Working Lands Climate Change Implementation Plan acknowledges this fact and includes natural carbon sequestration as a central strategy to reach the statewide goal of carbon neutrality by 2045.^{29, 30}

Sprawl development threatens this goal. Every time we pave over forests, woodlands, shrublands, grasslands and other open spaces to build more sprawl, we work against our climate-resiliency goals by releasing that area's stored carbon and losing its potential to sequester carbon.



Utom, also known as the Santa Clara River, is the largest Southern California watershed that is still in a relatively natural state. Credit: J.P. Rose

IN THE PATH OF FIRE

Almost all contemporary wildfires in California, 95% to 97%, are caused by human sources such as power lines, car sparks and electrical equipment.³¹ Increasing sprawl development in highly fire-prone wildlands also increases unintentional ignitions and puts more people in danger.³²

Wildfire is an important ecological process for many ecosystems. For millennia, Indigenous cultural burning and lightning strikes drove ecosystem-specific fire regimes. But the genocide of Native peoples and the criminalization of fire practices, along with 200 years of reckless land-use planning, have altered historical fire regimes.^{33, 34} This, in combination with climate change causing more extreme fire weather, longer fire seasons, and larger areas burned, has made wildfires more destructive to people and communities.³⁵

Since 2016 more than 200 people in California have been killed in wildfires, more than 50,000 structures have been burned down, hundreds of thousands have had to evacuate their homes and endure power outages, and millions have been exposed to unhealthy levels of smoke and air pollution.³⁶

Poor air quality from fine particulate matter (PM2.5) in wildfire smoke has both acute and long-term health effects. Hospital visits for respiratory symptoms (e.g., asthma, acute bronchitis, pneumonia or chronic obstructive pulmonary disease) have been shown to increase during and/or after wildfire events.³⁷



A proposed project site in Guenoc Valley, California, has burned three times in seven years. The Center successfully challenged this project because it failed to consider the threats to community safety and wildfire evacuation from bringing thousands of new residents and visitors to the highly fire-prone area. Credit: Drew Bird Photography

There is also evidence that increases in all-cause mortalities and hospital visits for cardiovascular symptoms (e.g., congestive heart failure, ischemic heart disease, and myocardial infarction) are also linked to wildfires.³⁵ Epidemiologists recently found that increased exposure to wildfire smoke may also be linked to higher rates of dementia.³⁸ And wildland firefighters are suffering disproportionately high rates of cancer and other serious diseases, likely due to extreme smoke exposure,³⁹ as well as mental health issues due to extended fire seasons and working extended shifts away from their families.⁴⁰

In addition to particulate matter from smoke, harmful and toxic substances from burning structures, like lead and zinc, are released in the air and can travel many miles to other communities.⁴¹ Such impacts disproportionately affect low-income and minority communities and vulnerable members of the population, like children, the elderly, and people with pre-existing health conditions.

The economic impacts of wildfires affect residents throughout the state. Wildfires in 2018 cost Californians an estimated \$148.5 billion in capital losses, health costs related to air pollution exposure, and indirect losses due to broader economic disruption cascading along regional and national supply chains.⁴² And the cost of emergency fire suppression continues to skyrocket year after year.

RUNNING OUT OF WATER

Sprawl development increases the area of impervious surface, decreases retention time for rainwater and diminishes rainwater's infiltration into the soil and the water table. It also leads to rapid erosion and structural degradation of streams and rivers that receive runoff in much greater volumes over shorter periods.⁴³ Changes in water availability and flow can affect the health of streams and rivers and associated riparian habitat. These areas are important for resilience to climate change because they provide connectivity that helps animals and plants adjust to shifts in resource availability and maintain a suitable climate space.⁴⁴

Sprawl development also requires more water compared to urban infill development. In denser housing, common areas are shared between multiple households, such that the water used for landscaping is much less per capita. Multifamily buildings also allow for a less extensive delivery and collection system, resulting in lower tap-in fees. This reduced delivery system is determined by the number of homes served per water and sewer lateral in one location.⁴⁵

To meet the water conservation needs of the present and future, development must be focused in existing communities to ensure public funds are used to maximize efficiency of existing water infrastructure.

Such infill development should prioritize preserving existing communities while also protecting habitats and connectivity areas, like riparian corridors, that are important for water quality and climate resilience.

PUBLIC INVESTMENT REDIRECTED

Existing communities have sewers, water systems, city streets, bridges, schools, transit systems, powerlines and other hard infrastructure, but sprawl development draws people away from these services, requiring new infrastructure to be constructed. Some infrastructure costs are temporarily avoided, through the use of wells and septic systems, or by reliance on undersized roads, but all of these systems have to eventually be upgraded at great public expense.⁴⁶

One recent analysis indicated that U.S. sprawl development increases annualized infrastructure costs from \$502 per capita in the smartest growth quintile cities up to \$750 in the most sprawled quintile cities — an increase of 50%.⁴⁷ Although some states, like California, have attempted to offset these costs by creating an additional tax (Mello Roos tax) that pays for local infrastructure, local, state and federal agencies still end up paying higher infrastructure costs per person when jurisdictions choose to invest in sprawl rather than infill housing.

Without policies that prioritize growth in existing communities, sprawl development continues as developers reap the benefits of cheaper upfront costs while burdening the public with long-term costs. This creates a cycle of divestment, as more people move away from existing communities and public resources are shifted to new suburban and exurban sprawl.

Urban areas then must grapple with the associated loss of tax revenue, which often leads urban jurisdictions to increase taxes to support the existing infrastructure across a smaller population. Local jurisdictions also often choose to defer necessary maintenance on roads, utilities and public transit as a cost-saving measure, but this also reduces the quality and reliability of these services. These negative repercussions of more sprawl put existing communities at a disadvantage and encourage additional exodus.⁴⁵

This is best documented by tracking the trends in public transit investment. Sprawl development causes the deterioration of public transport, leading to complete reliance on private vehicles.⁴⁸ High vehicle ownership rates directly limit urban population densities, eventually changing the types of residential development that are built. For example, one parcel might accommodate 50 townhouses if there are only 10 onsite parking spaces, but if each unit has two surface parking spaces, as many zoning codes require, the number of potential units declines to 30.⁴⁶



Figure 2. The left image displays the railway system that was in place in 1926. However, sprawl development that favored freeway expansion and single-occupancy vehicles completely eradicated this public transit system. Now, after billions of dollars of reinvestment, the Los Angeles Metro system (on the right) is still not as comprehensive as the 1926 system. Credit: [Jake Berman](#)

Sprawl development creates a vicious cycle of inefficient and inequitable public investment that significantly weakens existing services. Local governments need to shift toward more investment in existing communities and better account for the public cost when approving new sprawl development.

ENCOURAGING CAR DEPENDENCY

Air quality

Sprawl worsens air pollution by increasing vehicle miles travelled (VMT), which increases emissions of air pollutants such as nitrogen oxides (NO_x), volatile organic compounds (VOCs), carbon monoxide, heavy metals, carbon dioxide and respirable particulate matter (PM_{2.5}). Increased VMT also leads to more ozone (O₃) production through the photochemical reactions of NO_x and VOCs emitted by vehicles.⁴⁹ Short- and long-term exposure to several of these pollutants has been linked to premature mortality, compromised birth outcomes, heart disease and a host of respiratory illnesses.⁵⁰

Traffic and long commutes

Car-dependent development undermines community health. In 2019 the duration of the average commute in the United States increased to a new high of 55.2 minutes, and a record 9.8% of commuters reported daily commutes of at least two hours.⁵¹

These long commutes reduce time available to spend with family, friends, and community and reduce opportunities for healthy recreation. The increase in inactivity and isolation can also produce long-term health complications such as prediabetes, diabetes, obesity, asthma, isolation, stress and depression.^{52, 53}

There is another serious and more direct impact: Automobile crashes are the leading cause of death among young people (15 to 19 years old) in the United States.⁵⁴ An estimated 42,915 people died in car crashes in 2021 alone and 3.4 million people are injured each year, which costs an estimated \$473.2 billion annually as measured by wage and productivity losses, medical expenses, motor-vehicle damage, and employers' uninsured costs.^{55, 56, 57}

A sprawl project known as California Forever is currently proposed for a rural area of Solano County with limited access to public transportation. This project would create a new car-dependent city, putting tens of thousands of vehicles on the road bound for job centers of the Bay Area. For the sake of community health and well-being, growth should be focused in and near existing cities and public transit, not in faraway places that drastically increase commute times.

Accessibility

Most sprawl development is, in essence, a mandatory driving community. This makes such communities inaccessible to people who do not have a car or are unable to drive. In 2020 only 69.3% of U.S. residents had a driver's license.⁵⁸ While some of these individuals are not of driving age, there are approximately 28.5 million people of driving age in the United States who don't have a license and rely on alternative modes of transport.⁵⁶ There are 13.4 million Americans ages 18 to 64 and 11.2 million Americans age 65 and older who have self-reported travel-limiting disabilities.⁵⁹

There are also individuals who have a driver's license but don't own a car. A 2015 study from Pew Research Center found that 22% of American adults, or 70 million people, do not own a car.⁶⁰ If local governments continue to prioritize public investment in sprawl development, they will be worsening the accessibility issues that many U.S. residents deal with on a daily basis.

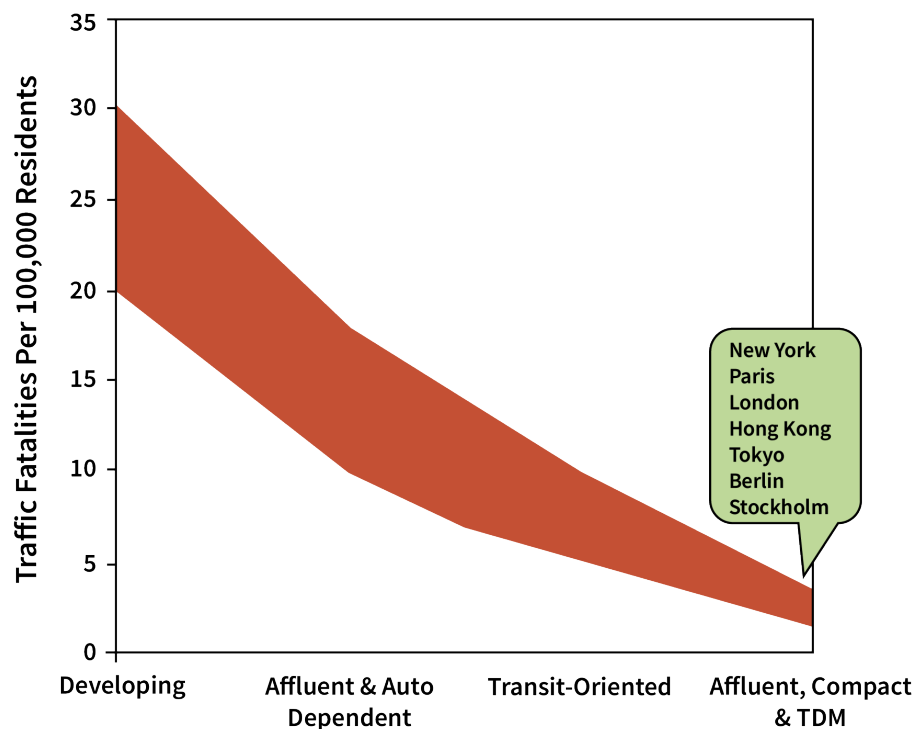


Figure 3. Traffic fatalities per 100,000 residents typically average 20-30 in developing country cities, 10-20 in affluent, automobile-dependent cities, 5-10 in affluent, compact cities, and 1.5-3 in affluent, compact cities with strong transportation demand management programs. Data source: New Climate Economy Report, 2015.

ANTI-SPRAWL SOLUTIONS

While it is easy to say the solution is “build up, not out,” there are important considerations to ensure equity is achieved. Protections for current and future residents must be in place before new development is built to prevent displacement. When local jurisdictions rush to approve projects too quickly, current residents can be at risk of being evicted and future residents can be at risk of environmental hazards that were not properly evaluated and mitigated.

It is also important to prioritize housing affordability in all future land-use decisions. Building more market-rate housing alone will not solve our housing crisis. We need greater public investment to ensure that every new development will provide opportunities for those with low incomes (see footnote).

This is especially important in high-income neighborhoods that often provide some of the best public resources but have historically remained exclusionary because of redlining and other discriminatory land-use decisions. With these considerations in mind, we urge public decision makers to take the following steps to curtail future sprawl development while incentivizing reinvestment in existing communities and protecting natural ecosystems.

1. PERMANENTLY PROTECT REMAINING OPEN SPACE.

Biodiversity is declining worldwide primarily because of habitat loss and fragmentation.⁶¹ Protecting and restoring functional intact habitat must be a high priority to ensure that viable populations of sensitive species are maintained.

Focusing on conserving a diverse array of ecosystems will help preserve the natural processes that keep our water, air and soil healthy for wildlife and people.⁶² We need to invest in preserving as much ecological diversity as possible for wildlife and people to have the best chance at adapting to climate change.

Open space also helps regulate surface temperatures and can be an essential safe space for communities to keep cool in extreme heat events.⁶³ Access to these spaces is also critical to communities' long-term health and well-being.⁶⁴

This reaffirms the need for continued preservation, restoration and increased access to open space to ensure all Californians experience the physical and mental health benefits of nature.

2. PERMANENTLY PROTECT ALL CURRENT AFFORDABLE HOUSING.

Many affordable units are only mandated to remain affordable for a set amount of time. This means they are susceptible to being converted to market-rate units after their term limits expire. Preserving existing affordable housing, including ensuring they meet high quality and safety standards as they age, is an essential part of solving the affordable housing crisis. This requires investment from government agencies to permanently protect current affordable units and enact policies to ensure that all new affordable units do not have term limits.

Unless we protect current affordable housing, future investments won't be additive but will merely replace affordable units lost to the housing market. This is an essential first step to provide security for those who rely on affordable housing, giving them the confidence that they will not be pushed out of their communities because of a sudden rise in rent.

3. SOLIDIFY LEGALLY BINDING ANTI-DISPLACEMENT POLICIES.

While there is an abundant need to produce more affordable housing, changes in land-use policy have the potential to harm existing communities. It is imperative that the first course of action is to legally protect current residents. This ensures that future public investment will serve existing community members, while creating opportunity for others to access these resources.

When rental units are taken off the market for redevelopment, policies should be in place that require property owners to provide tenant compensation before the change. Tenants should be given a "right of return" at the same rent as before, and rental assistance during redevelopment in the same neighborhood. Tenants should also have the option to negotiate a fair, voluntary buyout agreement in lieu of a right to return.

Housing is "affordable" if it costs no more than 30% of the monthly household income for rent and utilities. For housing to be considered "low-income," units must be affordable as set by 60% or less than the county median income (AMI).

4. UPZONE URBAN INFILL AREAS AND REQUIRE, AT A MINIMUM, 20% OF ALL NEW UNITS BE AFFORDABLE IN PERPETUITY.

Affordable housing is only equitable if low-income residents are provided housing opportunities with access to public resources. This requires cities and counties to reform current zoning laws that have reinforced the redlining of low-income communities of color.

Changing existing single-family zoning to denser zoning that includes duplexes or multifamily units would encourage higher density in existing communities. In Los Angeles around 74% of housing is zoned single-family residential, and rents are among the highest in the nation.⁶⁵

Shifting to more compact housing types significantly reduces residential land consumption. A mix of 80% single-family, 10% attached and 10% multifamily housing requires about twice as much land as an equal mix of housing types, and more than three times as much land as 10% single-family, 40% attached and 50% multifamily housing.⁴⁵ It's important to note that many existing single-family lots are very large (e.g., 8,000+ square feet) and could accommodate duplexes or be split into two separate smaller lots large enough for single-family houses and separate yards.

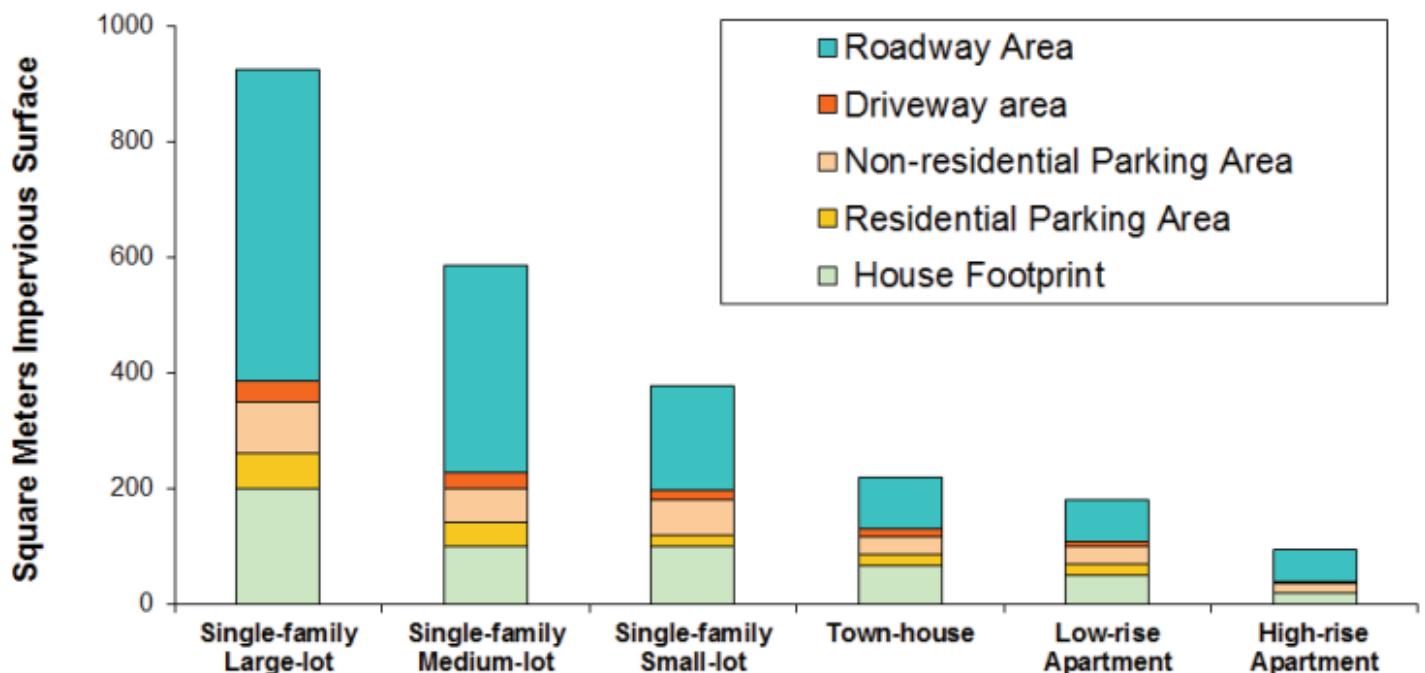


Figure 4. Impervious surface area of various housing types. Data source: New Climate Economy Report, 2015.

However, upzoning alone is not enough. We need to increase equitable affordable housing in communities that have remained exclusionary. This could be achieved by enacting a statewide inclusionary housing mandate of 15% at 50% of average median income or 20% at 60% of average median income for all new development of five units or more.

Finally, in-lieu fees, or fees that a developer pays into a fund to be spent on affordable housing elsewhere, should be eliminated, ensuring that all new developments with affordable housing requirements will be built onsite. In-lieu fees allow developers to pay their way out of affordable housing requirements leading to highly segregated neighborhoods and displacement of low-income residents to off-site affordable units. To ensure that low-income residents are provided affordable options in neighborhoods with the high public investment, we need to eliminate this option for developers.

5. ENSURE NEW DEVELOPMENT IS BUILT IN AN AREA THAT IS FREE FROM TOXIC POLLUTANTS AND OTHER ENVIRONMENTAL HAZARDS, AND NOT PRONE TO FLOODING AND WILDFIRES.

Affordable housing solutions should not include building in environmentally hazardous areas. Historic and present-day discrimination perpetuates inappropriate land-use patterns that have led to higher concentrations of toxic and polluting operations in and near low-income communities and communities of color.⁶⁶

In many instances, the California Environmental Quality Act requires developers to disclose a project's impacts and mitigate them to minimize the associated harms to the environment and surrounding communities.

Through CEQA, residents also have the opportunity to engage in this process to propose alternatives and challenge a project if the proposed mitigation measures are insufficient. CEQA is one of the few tools that communities have to be fight back against polluting developments, such as light and heavy industrial facilities, oil and gas operations, recycling and manufacturing facilities, and warehouses with heavy truck traffic. But recently the Act has come under attack, and efforts are underway to limit its scope.

Exempting projects from CEQA without adequate safeguards could allow homes to be built on toxic land or in wildfire and flooding zones without appropriate public participation, impact analysis and disclosure, and mitigation. To ensure that new development does not unduly expose new communities to toxics and environmental hazards, public decision makers must protect our existing environmental laws, especially CEQA.

6. INCREASE INVESTMENT IN PUBLIC TRANSIT WITHIN EXISTING COMMUNITIES.

Providing alternatives to single-occupancy vehicle travel is essential to building an efficient, sustainable and equitable transportation system. Unfortunately we have a long way to go if we are going to achieve this vision in the United States. In 2013 it was reported that of all the U.S. daily commutes to work, 76.4% are of people driving alone.⁶⁷ According to the Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2015, collective U.S. daily transportation constitutes about 27% of the total greenhouse gases released.⁶⁸

To change these trends, government agencies need to invest in alternative modes of transportation to make them not only cheaper but more efficient than driving. Best practices for transportation policy should include providing free public transit services for future residents and workers; implementing bus-only lanes; optimizing bus routes to minimize overlap and ensure coverage across the city in line with demand; and providing high-frequency, reliable services with regular bus stops for easy access.

Studies indicate that free public transit services typically results in ridership increase from 20% to 60% in a matter of just a few months.⁶⁹ Similarly bus lanes that reduce total transit door-to-door travel times by 5%-15% will “by themselves increase urban peak ridership 2%-9%.”⁷⁰

Lastly, ensuring accessibility and convenience is essential to increasing ridership. Providing more bus stops decreases the distance residents have to travel to access such services.⁵⁸

7. BUILD MORE CLIMATE-RESILIENT, SUSTAINABLE HOUSING THAT INCLUDES ROOFTOP SOLAR, ENERGY- AND WATER-EFFICIENT APPLIANCES, AND DROUGHT-TOLERANT LANDSCAPING.

Public health and well-being are threatened by a number of climate-related changes, including more extreme heat events, increased air pollution from wildfires, longer and more frequent droughts, and flooding from sea-level rise and high-intensity storms.

Climate-resilient housing solutions help communities adapt to these challenges while simultaneously helping to address the root causes of climate change. Such strategies include optimal orientation of buildings, green roofs and reflective surfaces to reduce temperatures in and around buildings; air-filtration systems that can protect residents from poor air quality; and rainwater harvesting and recharge systems that capture water on the roofs of buildings, which can store water during drought and reduce flood risk during heavy rains.⁷¹

New and existing buildings should be equipped with the most efficient appliances to reduce energy and water needs. Residential and commercial buildings should also have rooftop solar and battery storage systems to provide clean and reliable energy, bringing greater resilience during climate change events that often shut down regional power grid services.⁷²

As stated in the Center for Biological Diversity’s 2023 Rooftop-Solar Justice report:

The climate emergency demands a rapid and just transition to a fossil-free energy grid. This should include millions of rooftop and similar solar installations on homes, buildings and other available areas. As electric car and all-electric building growth maintain demand for electricity, distributed solar will be vital for a stronger and more affordable grid. It will reduce the need for utility infrastructure by bringing more pollution-free renewables online, while also improving resiliency and reliability and adding jobs and value to communities. These benefits are particularly relevant for environmental justice communities, which face both higher energy burdens and disproportionate harms from the fossil fuel economy.

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Investing in these measures will ensure communities are equipped with the necessary infrastructure to adapt to the changing climate. It is in our collective best interest to build sustainable, resilient homes that use the best available technologies to improve efficiency and provide people with the basic necessities of survival.

CONCLUSION

Sprawl may be cheap for its developers, but ultimately the public pays a hefty price for these land-use mistakes. When we put homes far from existing communities, we unnecessarily destroy native wildlife habitats and degrade natural resources. Sprawl puts communities at a greater risk of wildfires and directly harms our health and well-being. We need to prioritize solutions that address the climate, biodiversity and housing crises holistically instead of treating them as isolated problems. Now is the time to invest in sustainable and equitable land-use decisions that put community and environmental health before private profit.



Communities that prioritize the health of people and the environment are those with housing built near job and transportation centers. Powell/Mason Cable Car, San Francisco Municipal Railway. Credit: Jan Helebrant

¹ Peiser, Richard. "Decomposing urban sprawl." *The Town Planning Review* (2001): 275-298.

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