

# Parking Revolution: Housing Solution

How you can become a housing champion by helping revamp local parking mandates

Image: Steve Price

# Acknowledgements

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**TransForm** promotes walkable communities with excellent transportation choices to connect people of all incomes to opportunity, keep California affordable, and help solve our climate crisis.



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# 1 Introduction

The Bay Area’s housing crisis is daunting—the nine counties need to generate 441,000 homes by 2031 with 41% of those for people with low incomes.<sup>1</sup> Yet, in the last decade, we haven’t built at even half that rate.

**Without more housing, especially affordable homes with easy access to nearby amenities, the region’s problems of displacement, homelessness, and long commutes will get worse.**

One big constraint to new housing is that local governments often require an excess of parking. These mandates increase the cost of construction, raise costs for renters and buyers, reduce the space available for more homes or other amenities, and generate more driving and pollution.

Thankfully, we have a once-in-a-generation opportunity to solve this problem. Cities and counties across California have just completed “housing elements” – plans that outline how a local jurisdiction will provide homes to meet existing needs and projected growth.

TransForm engaged with 30 cities across the Bay Area and 18 of them have made commitments, as part of those plans, to reform destructive parking policies as one way to meet their housing goals (see the chart of cities on page 13). Many others across the region and state—from Los Angeles to Redding to Eureka—will also consider major parking reforms.

The timing couldn’t be better. The parking revolution that started in 2022, as outlined in chapter five, creates a pathway for cities that want to make major changes. In the Bay Area many cities have an additional inducement: without significant changes to parking rules in areas near transit they may lose out on regional transportation funds.

**Revolutionizing parking rules would topple a major barrier to building more homes more affordably, and in the places we want them most—walkable areas near transit.**

This report is a guide for how, and why, concerned residents, community advocates, and housing leaders should engage in their local parking study and advocate for ambitious solutions.

Together, we can create a region with healthy, affordable communities that help redress racial and social inequality, and reduce commutes and climate pollution.

<sup>1</sup> [ABAG RHNA Standards](#)

# 2 Why Focus on Parking?

Parking reform is one of the most critical changes we can make to solve the housing crisis. If we get it right, there will be cascading benefits for housing, equity, and our climate. That is because excess parking:

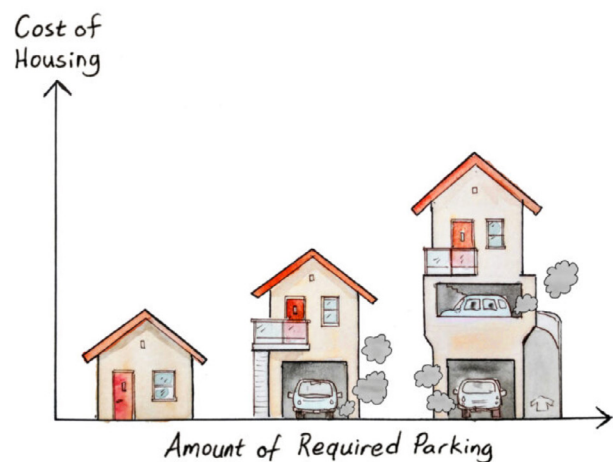
1. Is expensive to build
2. Takes up precious space
3. Increases rents and home sale prices
4. Generates higher vehicle ownership, traffic, and pollution
5. Reduces the use of more sustainable, affordable transportation options

## 1: Parking is Expensive to Build

**Each new parking space costs \$30,000-\$80,000.<sup>2</sup>** With the recent growth in construction costs, two underground spaces (the most expensive kind) may now cost up to \$200,000. Parking also adds ongoing costs for maintenance.

## 2: Parking Takes Up Precious Space

Large paved lots and parking garages dominate our landscape, taking up space that could be homes, grocery stores, daycare, or local retail. Excessive parking requirements dramatically reduce the number of homes that can be built on a site (assuming height and other restrictions) and can even make construction physically infeasible, especially on smaller sites.



*Image Courtesy of CA YIMBY*

## 3: Parking Leads to More Costly Homes

Requirements for excess parking increase the cost of homes for at least three reasons:

1. **Higher cost per unit:** The high cost of constructing excessive parking combined with fewer units on a given site directly adds to the cost of each home.
2. **Many projects don't get built:** With high parking requirements, many potential housing projects are not financially feasible. With fewer homes built, demand continues to outstrip supply at a regional scale, driving rents and home prices up for everyone.

<sup>2</sup> Donald Shoup, "Cutting the Cost of Parking Requirements"

**3. Projects cater to higher incomes:** To make construction financially feasible with even two parking spaces per unit, developers shy away from constructing housing for low- and middle-income residents and instead build for the higher end of the market. This is especially true in areas near transit where land costs are high.

#### **4: Parking Generates Higher Vehicle Ownership, Traffic, and Pollution**

When more parking is provided as part of housing it leads to more driving, less transit use, and less walking. Simply providing parking also increases vehicle ownership.<sup>3</sup> As UCLA Professor Donald Shoup has said, “free parking is a fertility drug for cars.”

#### **5: Parking Reduces Incentives for More Affordable Transportation**

With so much money spent constructing parking lots and garages, there is little or no incentive to encourage developers to offer amenities like transit passes or bike share that offer more climate-friendly ways to travel and can reduce vehicle ownership. As described in the next chapter, these incentives, known as Transportation Demand Management (TDM), generate tremendous community and environmental benefits.



*Photo: Evelyn Johnson*

<sup>3</sup> In an excellent study that closely replicated a randomized trial, buildings in San Francisco that were assigned by public lottery and had at least one parking space per unit have more than twice the car ownership rate of buildings that have no parking (38% vs. 81%), ["What Do Residential Lotteries Show Us About Transportation Choices?"](#)

# 3 Parking Strategies for Affordability and Climate

There are over a dozen important parking strategies that local governments can pursue. Many are outlined in ABAG's excellent [Parking Policy Playbook](#). At a minimum, cities and counties should pursue these five high-impact strategies.<sup>4</sup>

## Reduce or Eliminate Parking Minimums

Instead of requiring developers to build a set ratio of parking spaces based on outdated codes, reducing or eliminating minimum parking requirements allows developers to work with local stakeholders and parking consultants to consider the local context. Although most new buildings will still develop parking, eliminating or reducing parking minimums incentivizes developers to only provide "just enough" parking. Very low parking provision is especially appropriate in areas near public transit and services, for homes geared towards seniors and people with lower incomes. Developers can further reduce the need to build parking by pursuing many of the beneficial strategies outlined below, like shared parking, unbundled parking, and TDM.<sup>5</sup>

Some nonprofit leaders such as First Community Housing and Midpen are showing it's possible to maximize the number of homes by minimizing parking, especially when they are building near transit and services. A newly [approved affordable senior housing in San Jose](#) (pictured here) shows what is possible without parking requirements. Adjacent to frequent transit services, these 220 units, built behind a historic facade, are only feasible because no parking will be provided.<sup>6</sup> If just 0.5 spaces per unit, equal to 110 spots, were required, the small lot would have needed a deep and expensive underground garage that may have made the building infeasible. Eliminating minimum parking mandates allows developers to tailor projects to meet the needs of specific markets, whether that is providing many fewer spots near downtowns and public transit, or when building for the lower end of the income scale, as vehicle ownership levels are closely correlated with income.



<sup>4</sup> [Urban Land Institute, "Elimination of Parking Minimums"](#)

<sup>5</sup> [Urban Land Institute, Parking Policy Fact Sheet](#)

<sup>6</sup> [SF YIMBY, "19 North 2nd Street in San Jose"](#)

## Set Parking Maximums

Maximum parking requirements restrict the total number of spaces that can be constructed as part of a development project. Parking maximums can be complementary to reducing or eliminating parking minimums. It is particularly important to implement this strategy in areas near public transit and dense urban areas where excessive parking takes up valuable space and generates additional traffic, making streets less safe for pedestrians and cyclists. A new regional policy, described in the next chapter, is creating a window of opportunity to get maximum parking standards implemented in the Bay Area.

## Shared Parking

Shared parking allows existing parking spaces that are underused to be shared with another entity, whether that is another building on site or nearby. New developments that have a mix of uses can also employ shared parking since most parking spaces are used only part-time, with usage patterns that follow predictable daily, weekly, and annual cycles. For example, offices need more parking during weekdays, whereas restaurants and theaters need more parking during evenings and weekends. Parking can also be shared with the public, for events, etc. Parking shared between mutually beneficial uses can reduce on-site parking provision by 40% or more.

## Unbundled Parking

Unbundled parking separates parking costs from other charges, such as apartment rents or condominium prices. Unbundling reduces demand for parking and gives people who don't own a car (or a second car) a chance to save money and instead rely on more affordable transportation. This strategy is now much easier with new technologies, such as Parkade, that can seamlessly manage payments and make enforcement easier. Parkade also allows residents to rent their parking to each other or to guests, reducing spillover parking into the community and, in new buildings, allowing less to be built in the first place.

In San Francisco, the “unbundling” of parking from rent, combined with carshare availability, reduced vehicle ownership by 25%.<sup>7</sup> In Mountain View's North Bayshore Precise Plan, they estimated that unbundling would reduce driving by up to 13%.<sup>8</sup>

## Transportation Demand Management (TDM)

If developers have the flexibility to build less parking it becomes more financially feasible to include alternative transportation options, like free transit passes or car sharing. These investments, known as TDM, can be required by a jurisdiction, although some developers voluntarily put them in as amenities to attract residents or to reduce the demand for parking (and the associated costs). By reducing vehicle ownership and vehicle trips, TDM can reduce local traffic and increase pedestrian and bicycle safety. Some transit agencies, such as AC Transit, VTA, and Samtrans, offer greatly discounted rates when transit passes are provided to all residents in a building. Other TDMs include bike share subsidies, bicycle parking and fix-it stations, and transit departure time screens in lobbies.

<sup>7</sup> Analysis found that these combined policies significantly reduced household vehicle ownership rates. Apartments that had enacted these policies had an average vehicle ownership rate of 0.76 vehicles per unit compared to apartments without unbundled parking and car sharing that had a rate of 1.04 vehicles per unit (as per MTC/ABAG playbook).

<sup>8</sup> Ibid.





# 4 Year of the Parking Revolution

The year 2022 will be heralded as the beginning of California and the Bay Area's parking revolution. The state legislature eliminated minimum requirements near transit, the Bay Area passed a policy that provides financial incentives to dramatically improve parking policy near transit, and San Jose adopted one of the most forward-thinking policies in the country.

These policies, outlined below, form a critical context for parking reform in your community.

## **California Eliminates Parking Requirements Near Transit**

In a landmark victory, AB 2097 (Friedman) prohibits public agencies from imposing minimum parking requirements on residential, commercial, or other developments if the project is located within one-half mile of a major transit stop. This is a critical law and while it covers only a modest amount of the total developable land in the Bay Area and California, that land near transit is exactly where we should build the least parking and where it is usually most expensive to provide.

## **Bay Area Leads with Transit-Oriented Communities**

MTC and the Association of Bay Area Governments (ABAG) don't control the rules of development, but they are tasked with creating a successful transportation system and supporting walkable communities that can meet climate targets.

In September 2022, MTC passed a Transit-Oriented Communities (TOC) Policy to encourage communities in the half-mile radius of existing and planned transit stations to be "places where Bay Area residents of all abilities, income levels, and racial and ethnic backgrounds can live, work, and access services."<sup>9</sup>

Cities that comply with the TOC policy will be prioritized for funding from the next round of the One Bay Area Grant program which distributes about \$100 million per year to reduce climate emissions and support transit and more sustainable growth in cities. Furthermore, MTC won't allocate funding for transit extensions to a city that doesn't commit to compliance with the policy by 2026.

The TOC policy has four primary components:

1. Smarter parking management
2. Minimum densities for new development
3. Affordable housing production, preservation and protection, and stabilizing local businesses
4. Improved transit station access

<sup>9</sup> [MTC, "Transit Oriented Communities"](#)

The parking standards only apply to new development but importantly include maximum parking ratios for both residential and commercial development. The residential maximums range from 0.375 spaces per unit in the downtowns of San Francisco, Oakland, and San Jose, to 1.5 spaces per unit for the half mile around commuter rail or ferry terminals.

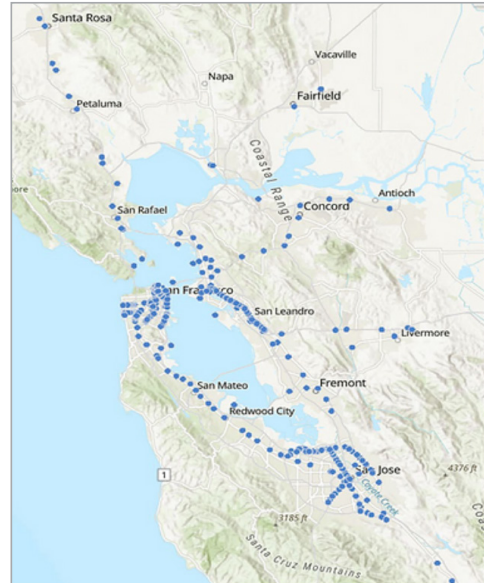
In addition to maximums, cities must allow unbundled parking and shared parking in these areas, and significant bicycle parking must be provided.<sup>10</sup>

## San Jose Sets the Pace

Cities throughout the Bay Area and across the nation are adopting innovative policies, as seen on this [map from the Parking Reform Network](#). The City of Alameda eliminated minimum requirements. Mountain View set caps on how much parking can be provided in the North Bayshore Plan to limit the number of car trips generated.

In December 2022, San Jose went further: They are now the biggest city in the country to entirely eliminate minimum parking requirements. Just as importantly, San Jose added requirements that new medium- and large-sized developments include a set of Transportation Demand Management (TDM) measures. These include transit passes for residents, on-site childcare, or providing car share in new development. New developments can achieve their TDM requirements by offering smart parking strategies such as unbundling parking from the rent or using shared parking rather than building new lots.

San Jose's policy—focused on reducing drive-alone trips, traffic congestion, and climate pollution—represents a gold standard that your jurisdiction may be able to emulate.<sup>11</sup>



Map of station areas that fall under the TOC Policy

<sup>10</sup> TOC Policy also requires the elimination of parking minimums. That may be superfluous since AB 2097 (Friedman) already eliminated these minimums near transit statewide. Since AB 2097 includes some exceptions, cities should still eliminate parking minimums near transit in their zoning code.

<sup>11</sup> [San Jose Parking and TDM Ordinance](#)

# 5 Now is the Time to Act

TransForm anticipates an explosion of local plans to reform parking over the next several years. We need your help: Even though dozens of jurisdictions have made commitments for studies and analysis, a planning process alone does not guarantee the elimination of burdensome parking requirements.

That's where you come in. Advocates will need to push their local governments to enact visionary policies to meet our affordable housing and climate goals. And recent state actions give cities more reason to comply with housing elements; if they don't comply, they will be ineligible for several state grant programs.<sup>12</sup> What's more, existing policies have real limitations. For example, MTC's TOC is a regional framework that is not mandatory, rather relying on funding incentives and small grants to encourage cities to comply.

## Find Your City to Get Involved

TransForm evaluated and commented on the parking and affordable housing components of thirty housing elements. Review the table on the next page for details on those cities, including whether they will study parking, what issues they may cover, and the proposed timeline. If your city isn't on the list, rest assured you can easily find the information. The state makes [housing elements easily accessible](#).<sup>13</sup>

**A large number of these cities are proposing to complete their parking reforms by 2023 or 2024. We need to act fast.**

### Once you have your city's housing element:

1. Read through the Housing Plan and see whether there is a proposal to study parking reform. Make note of the proposed timeline.
2. Contact city planning staff or your representative to make sure they are committing resources in their budget, and/or sufficient staff time, to complete this planning process effectively.
3. Get engaged in the process, using materials in this report. Email [housing@transformca.org](mailto:housing@transformca.org) if you need help getting started.
4. Ask your city's planning department or your local government representative about parking reform, especially if it's not listed in the housing element.
5. Check if your city has transit stations that fall into the [MTC's TOC Policy](#), either [with this map](#) or by viewing the full list by jurisdiction starting on [page 19 of MTC's TOC guidance document](#). If so, contact a city planner to ask when they will be making changes to comply with the policy.

<sup>12</sup> [HCD, "housing elements"](#)

<sup>13</sup> The CA Department of Housing and Community Development maintains the [database of housing elements](#) (make sure to look for the "final" version).

6. Read some great resources to jumpstart your advocacy.
  - a. [ABAG Parking Policy Playbook](#)
  - b. [San Jose's Parking and TDM Code](#)
  - c. [Parking Reform Network](#)
  - d. [Urban Land Institute's resource database on parking](#)
7. Use TransForm's [GreenTRIP Connect](#) tool to quantify the transportation, financial, and environmental benefits of smarter parking and TDM. The tool also projects the benefits of adding affordable housing. The appendix below includes links to GreenTRIP scenarios we created for each of 30 cities. Use these scenarios in your advocacy (and if you live elsewhere we can help you create one).

Parking policy presents a massive opportunity to advance affordable housing and walkable communities with accessible transportation for all. Together we can make sure the Bay Area and California prioritize housing for people over housing for motor vehicles.



# Appendix: City Plans and Timelines

TransForm evaluated and commented on the parking and affordable housing components of thirty housing elements. The table below includes a summary of proposed parking changes in each city we engaged with, including whether they will study parking, what issues they may cover, and the proposed timeline. For each city, we also picked a site mentioned in their housing element and ran it through our GreenTrip Connect model to demonstrate the benefits of good parking policy. You can use these scenarios to bolster your advocacy.

If your city isn't on the list, rest assured you can easily find the information. The state makes [housing elements easily accessible](#).<sup>14</sup>

City	Proposed Study/Program	Timeline	Link to Housing Element	GreenTRIP Scenario
Alameda (City)	No program proposed since prior to their housing element process, Alameda had already eliminated off-street parking minimums, required TDMs, and established parking maximums.	N/A	<a href="#">Alameda Housing Element</a>	<a href="#">Alameda Connect Scenario</a>
Antioch	Evaluate city's parking requirements and make potential changes to the zoning ordinance based on findings.	By 12/31/2024	<a href="#">Antioch Housing Element</a>	<a href="#">Antioch Connect Scenario</a>
Berkeley	No program proposed as prior to their housing element process, Berkeley had already eliminated or reduced parking minimums throughout most of the city and set maximums for locations near transit.	N/A	<a href="#">Berkeley Housing Element</a>	<a href="#">Berkeley Connect Scenario</a>
Brisbane	Study the impacts of reduced parking for TOD and buildings with TDM programs.	By 12/31/2026	<a href="#">Brisbane Housing Element</a>	<a href="#">Brisbane Connect Scenario</a>
Campbell	Reduce parking for smaller units, provide incentives for reduced parking, allow unbundling.	By spring 2023	<a href="#">Campbell Housing Element</a>	<a href="#">Campbell Connect Scenario</a>
Concord	Reduce parking standards for group housing and eliminate required guest parking.	By December 2024	<a href="#">Concord Housing Element</a>	<a href="#">Concord Connect Scenario</a>
Dublin	Reviewing affordable development constraints including parking requirements.	On a case-by-case basis; Review annually, 2023-2031	<a href="#">Dublin Housing Element</a>	<a href="#">Dublin Connect Scenario</a>
Fremont	Establish unbundling for AB 2097 and study parking requirements for SRO, small and affordable units.	Within 24 months of housing element adoption	<a href="#">Fremont Housing Element</a>	<a href="#">Fremont Connect Scenario</a>

<sup>14</sup> The CA Department of Housing and Community Development maintains the database of housing elements (make sure to look for the "final" version).

City	Proposed Study/Program	Timeline	Link to Housing Element	GreenTRIP Scenario
Hayward	Evaluate constraints to adaptive reuse <sup>15</sup> including minimum parking standards, potentially amend code based on findings.	Review by June 2024, amend within one year	<a href="#">Hayward Housing Element</a>	<a href="#">Hayward Connect Scenario</a>
Healdsburg	Review and update parking requirements for all residential districts.	By end of 2025	<a href="#">Healdsburg Housing Element</a>	<a href="#">Healdsburg Connect Scenario</a>
Lafayette	Review and update parking standards to reflect AB 2097.	By Q4 2024	<a href="#">Lafayette Housing Element</a>	<a href="#">Lafayette Connect Scenario</a>
Livermore	Remove parking as a constraint in the Development Code.	By December 2024	<a href="#">Livermore Housing Element</a>	<a href="#">Livermore Connect Scenario</a>
Menlo Park	Review and modify parking requirements for multi-family residential housing.	Within one year of housing element adoption	<a href="#">Menlo Park Housing Element</a>	<a href="#">Menlo Park Connect Scenario</a>
Mountain View	Eliminate parking minimums for TOD, affordable housing, and certain development districts. Study TDM programs.	Zoning updates by 12/31/2024 TDMs 12/31/2026	<a href="#">Mountain View Housing Element</a>	<a href="#">Mountain View Connect Scenario</a>
Oakland	Revise parking standards and eliminate parking minimums within ½ mile of transit	July 2023	<a href="#">Oakland Housing Element</a>	<a href="#">Oakland Connect Scenario</a>
Petaluma	Potentially update parking standards for various housing types. Reduce parking for larger rental units.	Program 25: 2024 Program 5: January 2023 Program 7: December 2024	<a href="#">Petaluma Housing Element</a>	<a href="#">Petaluma Connect Scenario</a>
Pleasanton	Establish lower parking rates for studios and one-bedroom units. Analyze parking as a constraint on development in the “RM” residential zone.	By December 2024	<a href="#">Pleasanton Housing Element</a>	<a href="#">Pleasanton Connect Scenario</a>
Redwood City	Evaluate parking for disability and affordable housing. Analyze new technologies to facilitate unbundling (e.g. Parkade, Parknav).	By December 2024	<a href="#">Redwood City Housing Element</a>	<a href="#">Redwood City Connect Scenario</a>
Richmond	Update zoning code for AB 2097 compliance.	December 2025	<a href="#">Richmond Housing Element</a>	<a href="#">Richmond Connect Scenario</a>
Rohnert Park	Provide new parking requirements based on <a href="#">Government Code 65915</a> .	June 2024	<a href="#">Rohnert Park Housing Element</a>	<a href="#">Rohnert Park Connect Scenario</a>
San Bruno	Reduce parking requirements for affordable units.	Within 5 years of housing element certification	<a href="#">San Bruno Housing Element</a>	<a href="#">San Bruno Connect Scenario</a>

<sup>15</sup> <https://www.planetizen.com/definition/adaptive-reuse>

City	Proposed Study/Program	Timeline	Link to Housing Element	GreenTRIP Scenario
San José	No program proposed. TransForm recommendations focused on affordable housing development since San Jose has excellent parking program as outlined in Chapter 4.	N/A	<a href="#">San Jose Housing Element</a>	<a href="#">San Jose Connect Scenario</a>
San Leandro	Continue to analyze minimum parking standards and consider a TDM ordinance.	By December 2024/ January 2025	<a href="#">San Leandro Housing Element</a>	<a href="#">San Leandro Connect Scenario</a>
San Mateo	Evaluate parking requirements for multifamily and mixed use developments.	2025-2026	<a href="#">San Mateo Housing Element</a>	<a href="#">San Mateo Connect Scenario</a>
San Ramon	Amend parking standards for single-family units with 5+ bedrooms. Reduce multifamily parking standards according to <a href="#">Government Code 65915</a> .	By the end of 2023	<a href="#">San Ramon Housing Element</a>	<a href="#">San Ramon Connect Scenario</a>
Santa Clara (City)	Analyze parking reforms for long-range plans and update parking requirements to include unbundling and reductions based on housing type.	Early 2023 Ongoing, on an annual basis	<a href="#">Santa Clara Housing Element</a>	<a href="#">Santa Clara Connect Scenario</a>
Santa Rosa	Consider zoning code modifications to reduce parking, eliminate minimums, institute parking maximums.	Present to City Council by 2025	<a href="#">Santa Rosa Housing Element</a>	<a href="#">Santa Rosa Connect Scenario</a>
Sunnyvale	Potentially update parking standards in the zoning code. Establish and publish transparent parking standards for mixed-use outside of specific development zones.	Policy H-4.4:2031 H22: 2025 H20: 2024	<a href="#">Sunnyvale Housing Element (May 2023 Draft)</a>	<a href="#">Sunnyvale Housing Element (May 2023 Draft)</a>
Unincorporated Marin	Update parking requirements to match <a href="#">Government Code 65915</a> . Eliminate requirements for supportive housing and TOD.	By December 2023	<a href="#">Marin County Housing Element</a>	<a href="#">Marin County Connect Scenario</a>
Vacaville	Amend parking requirements for studios. "Consider allowing developers the opportunity to provide creative solutions, where feasible, that could result in reductions in parking requirements."	By December 2025	<a href="#">Vacaville Housing Element</a>	<a href="#">Vacaville Connect Scenario</a>
Walnut Creek	Complete parking study and continue to implement reduced parking for affordable housing.	Ongoing and present study results by fall 2024	<a href="#">Walnut Creek Housing Element</a>	<a href="#">Walnut Creek Connect Scenarios</a>

Image: Steve Price



# TransForm



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