

POLICY BRIEF

MINIMUM PARKING REQUIREMENTS

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EXECUTIVE SUMMARY

Minimum parking requirements force communities to build more parking than they want or need.

Minimum parking requirements greatly reduce housing affordability.

- Based on typical affordable housing development costs, requiring one parking space per unit increases total affordable housing development costs by 12.5%.
- Requiring two parking spaces increases affordable housing costs by 25%.

Minimum parking requirements cause urban sprawl and make communities less walkable. They also increase car use and carbon emissions.

Because minimum parking requirements make driving less expensive and housing more expensive, cities get more driving and less housing.

State and county governments should remove or reduce minimum parking requirements.

WHAT ARE MINIMUM PARKING REQUIREMENTS?

A minimum parking requirement is a rule that specifies the minimum number of off-street parking spaces a development must provide.

Each county (Honolulu, Hawai'i, Maui, Kaua'i) sets its own minimum parking requirement.

Minimum parking requirements were adopted in the 1950s to ensure that drivers always had a place to park.

But the rationale for minimum parking requirements has been subject to debate and criticism in recent years.

Critics of parking minimums advocate for more flexible and context-specific approaches to parking that consider all other modes of transportation, such as public transit, walking, and cycling, as well as the unique characteristics of different neighborhoods and developments.

WHY ARE MINIMUM PARKING REQUIREMENTS AN ISSUE?

- With a minimum parking requirement, the government forces homeowners and business owners to subsidize car ownership. It's similar to requiring that homeowners and business owners provide free gasoline for customers.
- Minimum parking requirements greatly reduce housing affordability. Based on typical affordable housing development costs, requiring one parking space per unit increases affordable housing development costs by 12.5%. Requiring two parking spaces increases affordable housing costs by 25%.¹
- Minimum parking requirements have the largest impact on smaller units in dense, affordable developments. Minimum parking requirements increase the land needed per residential unit, which reduces density (units per acre). This means more parking, less housing.
- Minimum parking requirements can prevent homeowners from adding a rental unit to their property. This is because additional parking is usually required for these dwellings.
- Minimum parking requirements often prevent affordable housing from "penciling out." Minimum parking requirements force developers to reduce the number of affordable units to accommodate more parking. If the project isn't profitable, developers don't build.
- Developers pass the cost of building and maintaining parking along to buyers or renters. The cost of parking is "bundled" with rent or housing prices. This has the greatest impact on those with lower incomes, who spend a higher portion of their income on rent. Worse, low income households tend to own fewer vehicles. This means that low

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BECAUSE MINIMUM PARKING REQUIREMENTS MAKE DRIVING LESS EXPENSIVE AND HOUSING MORE EXPENSIVE, CITIES GET MORE DRIVING AND LESS HOUSING.”

¹<https://www.vtppi.org/park-hou.pdf>

income households end up subsidizing parking for those with higher incomes.

- Minimum parking requirements also contribute to poor urban design. Land that could be used for more efficient uses is instead used for parking. This creates urban sprawl and automobile dependency. Minimum parking requirements impede efforts at more sustainable forms of development like transit-oriented development. Because parking requirements make driving less expensive and housing more expensive, cities get more driving and less housing.
- Minimum parking requirements cause destinations to be farther apart. This decreases the appeal and practicality of walking, cycling,

and public transit. Curb cuts for parking lots make walking on the sidewalk less convenient and more dangerous.

- Minimum parking requirements also have detrimental effects on the environment. By ensuring that people will always be able to find parking despite the cost to society, minimum parking requirements help promote excessive car use. This is important because cars emit greenhouse gasses and other pollutants into the air.
- Parking lots and structures also have negative effects on the environment and human health. Parking lots and structures exacerbate the heat island effect. And they prevent natural stormwater runoff.

PARKING IS EXPENSIVE, ESPECIALLY IN URBAN HONOLULU

In 2020, Ulupono Initiative released a study, “The Costs of Parking in Hawai‘i”. The study examined the costs of building parking on O‘ahu, Maui, Kaua‘i, and Hawai‘i.

In urban Honolulu, the study looked at the cost of multi-level podium parking for high-rise residential or mixed-use development. In other areas of O‘ahu and on Maui, Kaua‘i, and Hawai‘i, the study looked at the cost of on-grade parking for low-rise or mid-rise residential development.

Below are the costs for building parking for residential developments on each island. Given three years of inflation, building parking is even more expensive today.

Parking Facility Type		Podium	On-grade parking: residential			
		Urban Honolulu	Other O‘ahu	Maui	Kaua‘i	Hawai‘i Island
Cost per stall	Construction	\$42,000	\$3,100	\$3,600	\$3,800	\$3,400
	Land	\$0**	\$19,400	\$11,600	\$3,200	\$800
	Total	\$42,000	\$22,500	\$15,200	\$7,000	\$4,200
Typical Gross Floor Area* (sq. ft.) per stall		330	360	360	360	360
Cost per sq. ft. of Gross Floor Area		\$127	\$63	\$42	\$19	\$12

*Gross Floor Area includes not only the parking spaces but also the associated facilities and areas, like access aisles or landscaping.
 **No land cost is assumed for podium parking because the land is also used for other uses.
 Source: Ulupono Initiative²

² <https://ulupono.com/media/ivcfs2pu/the-cost-of-parking-in-hawaii-report-2020-08.pdf>

According to affordable housing developer Derek Lock of HNL Development, “Building parking on Oahu and especially in Honolulu’s urban core is very expensive. The low returns on having to build parking in a development are magnified due to the fact that we live in the place that has some of the highest land values and construction costs in the world. Also, very restrictive land regulation and zoning code standards can extend parking development timelines and costs.”

After initial construction, the annual carrying cost for a parking spot in urban Honolulu is estimated at \$4,900 or \$410 per month. This is a substantial cost for working-class households.

Carrying costs include the cost of maintenance in addition to the ongoing costs of space ownership such as legal costs or cleaning. Carrying costs do not include the massive loss of tax revenue and value production that comes from wasting land on parking rather than a more productive use.

MINIMUM PARKING REQUIREMENTS ARE “ONE SIZE FITS ALL”

Parking minimums are often criticized for being pseudoscientific. This is in large part due to the way that parking minimums were created. According to Donald Shoup, author of *The High Cost of Free Parking*, “transportation engineers survey the peak parking demand

at a few suburban sites with free parking but no transit service.”³ Policymakers accept the data from these studies as dogma when setting parking minimums.

In dense, urban areas with good public transit, there is often less demand for parking. According to Todd Litman of the Victoria Transport Policy Institute, “Several recent studies indicate that households in compact, multi-modal areas (often called Smart Growth or Transit-Oriented Developments) own about half as many vehicles and generate about half as many trips as conventional models predict.”

Despite these differences in parking demand, parking minimums, with few exceptions, require the same amount of parking across the board, often based on the parking demand in non-representative locations.

MINIMUM PARKING REQUIREMENTS INCREASE THE SIZE OF UNITS AND DEVELOPMENTS

Developers often bundle the costs of parking in rent or housing prices. While wealthy homeowners can afford these inflated prices, working-class households cannot. Many working-class households do not even own cars.

According to Todd Litman of the Victoria Transport Policy Institute, “Current parking practices are comparable to about a 10-15% tax on development, and much

more for lower-priced housing in areas with high land costs.”⁴ Note: Hawai‘i has some of the highest land costs in the nation, with the average undeveloped lot costing three times the national average.⁵

Parking minimums drastically reduce the density of housing. Because proportionately more parking must be provided for smaller units, this effect is greater for smaller units. According to the Victoria Transport Policy Institute, “increasing parking requirements from one to two spaces per unit reduces the maximum potential density for two story, 500 square foot bachelor apartments from 88 to 64 units per acre, representing a 37% decline, but only causes a 13% reduction in maximum density for 2,000

ACCORDING TO TODD LITMAN OF THE VICTORIA TRANSPORT POLICY INSTITUTE, “CURRENT PARKING PRACTICES ARE COMPARABLE TO ABOUT A 10-15% TAX ON DEVELOPMENT, AND MUCH MORE FOR LOWER-PRICED HOUSING IN AREAS WITH HIGH LAND COSTS.”

³ <https://www.vtpi.org/park-hou.pdf>

⁴ <https://www.vtpi.org/park-hou.pdf>

⁵ <https://www.gobankingrates.com/investing/real-estate/most-expensive-states-to-buy-an-acre-of-land/>

square foot townhouses.”⁶ As a result of this phenomenon, developers decide to build developments with larger, luxury units rather than smaller, affordable ones.

Additionally, minimum parking requirements place an extra burden on smaller projects, including missing middle housing, single stair construction, and accessory dwelling units. The average cost per parking spot decreases as the size of a lot increases. And small parcels may not accommodate much parking. Thus, minimum parking requirements favor large developments and discourage small-scale development.

MINIMUM PARKING REQUIREMENTS KILL WALKABLE CITIES

By assuming that everyone will drive and need to park, minimum parking requirements have become a self-fulfilling prophecy.

Minimum parking requirements encourage car and personal vehicle usage because the more parking we have, the more cities spread out—with streets and urban layouts tailored toward car users over pedestrians.

Thus, people need to drive to reach their destinations.

Minimum parking requirements often do not align with the needs of every type of neighborhood or community. For example, urban and town cores rely more on public transportation or walkability, making residents less likely to own

cars and decreasing the demand for parking. Minimum parking requirements mean these communities must build parking spaces they do not want or need.

Times have changed. For example, we’ve invested more in public transit and bikeways, but we have not fully updated our planning standards to encourage people to take advantage of this new infrastructure.

Off-street parking lots interrupt sidewalks and pedestrian paths, making pedestrian paths less accessible and more dangerous. Streets are designed more for vehicles rather than pedestrians. Given the way streets and parking lots are tailored to car users, most people are discouraged from walking as a means of transportation.

This car-centric development is especially harmful for the disabled and elderly, who are not always able to afford or operate cars.

Minimum parking requirements put more cars on the road and establish Hawai‘i as a “driving state.” Urban Honolulu and the neighbor island town cores should encourage public transit or biking or walking to destinations. Unfortunately, when the focus is on accommodating cars, other forms of transportation become a lower priority.

PARKING LOTS DAMAGE THE ENVIRONMENT

According to the Hawaii State Department of Health, transportation accounts for about 49% of total

greenhouse gas emissions in Hawai‘i.⁷ In addition, replacing parking lots with green spaces like parks can improve local water quality and facilitate stormwater management by absorbing and filtering rainwater. Removing minimum parking requirements will not single-handedly solve these environmental issues, but it is a step in the right direction.

SOLUTIONS

More than 1,400 cities in North America have reformed minimum parking requirements. This often includes removing or reducing minimum parking requirements for downtown areas or transit-oriented development.

San Francisco, Seattle, Tokyo, and Vancouver— these are just a few of the cities that have already removed or reduced minimum parking requirements.⁸ Removing minimum parking requirements in these cities has allowed for less parking and more affordable housing construction.

Reducing or removing minimum parking requirements is a low-risk, high-reward policy move that leads to more affordable housing, more walkable communities, and fewer greenhouse gas emissions. It gives freedom to communities to choose what kind of development pattern they want.

Research shows that parking reform is best targeted to areas with good public transit or high density. Residents in these ar-

⁶ <https://parkingreform.org/resources/mandates-map/>

⁷ https://health.hawaii.gov/cab/files/2023/05/2005-2018-2019-Inventory_Final-Report_rev2.pdf

⁸ <https://parkingreform.org/resources/mandates-map/>

Current County Minimum Parking Requirements	
Honolulu County	<ul style="list-style-type: none"> • Ordinance 20-41 (Bill 2) <ul style="list-style-type: none"> • No off-street parking is required within a half mile of a rail station. • No off-street parking is required in the Primary Urban Center Development Plan area or Ewa Development Plan area, except in residential, agricultural, and preservation zoning districts. • Ordinance 19-8 (Bill 7) <ul style="list-style-type: none"> • Allows exemptions from parking minimums and other building regulations for some affordable housing. • Residential: 1 per 1,000 sq. ft.
Kaua'i County	<p><u>Countywide</u></p> <ul style="list-style-type: none"> • Requires two off-street spaces per dwelling unit for all developments <ul style="list-style-type: none"> • Additional space required per guest house • For elderly housing, one space per three units <p><u>Special Planning Areas</u></p> <ul style="list-style-type: none"> • South Kaua'i: <ul style="list-style-type: none"> • All Allowed Lodging Uses: 1 per 2 rooms min. • All Other Allowed Uses: 1 space per 1500 sq. ft. min. • West Kaua'i: <ul style="list-style-type: none"> • All Allowed Residential Uses: 1 space per 1500 gross sq. ft. min. • All Other Allowed Uses: 2 spaces per 1000 gross sq. ft. min. • Rice Street Neighborhood Design District and Kūhiō Highway Neighborhood Mixed Use-Commercial Emphasis Design District Overlay: <ul style="list-style-type: none"> • For single-family detached dwellings: two (2) spaces per unit. • For multiple-family and single-family attached dwellings: one and one-half (1.5) spaces per unit. • For senior living and group care home facilities: one (1) space per three (3) units. • Akahi, 'Elua and 'Umi Streets Neighborhood Design District: <ul style="list-style-type: none"> • Two (2) spaces per single-family dwelling unit. • For multiple-family and single-family attached dwellings: one and one-half (1.5) spaces per unit. • One (1) space for granny flats and additional dwelling units with two (2) bedrooms or less.
Maui County	<ul style="list-style-type: none"> • Dwelling units, such as apartments, farm dwellings, farm labor dwellings, multi family dwellings, and single-family dwellings require a minimum number of parking spaces based on the floor area of each unit in square feet: <ul style="list-style-type: none"> • Under 3000 - 2 spaces • 3000-3999 sq. ft. - 3 spaces • 4000-4999 sq. ft. - 4 spaces • 5000-5999 sq. ft. - 5 spaces • 6000-6999 sq. ft. - 6 spaces • 7000-7999 sq. ft. - 7 spaces • 8000+ sq. ft. - 8 spaces

Hawai'i County	<p><u>General Requirements:</u></p> <ul style="list-style-type: none"> • Multiple-family dwellings: <ul style="list-style-type: none"> • 1.25 spaces per unit • Single-family/Double-family dwellings or Duplexes: <ul style="list-style-type: none"> • 2 spaces per unit • Single-family/Double-family dwellings or Duplexes occupied for less than 180 days: <ul style="list-style-type: none"> • 1 space per rented bedroom or 1 space per unit if rooms are rented out individually. If rented as a whole, 2 spaces are required <p><u>Downtown Hilo Commercial District (CDH) Requirements:</u></p> <ul style="list-style-type: none"> • For multiple-family, single-family, double-family or duplexes: <ul style="list-style-type: none"> • 1 space per unit if property is maintaining a unit density higher than 1,000 sq. ft. of land area per rentable/dwelling unit
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eas are less likely to own cars, so there is less demand for parking. Lower income residents and renters are also less likely to own cars, so parking reform can be targeted at affordable and workforce housing in Honolulu’s urban core, in the neighbor island town cores, and near public transit.

In 2020, Honolulu County passed Ordinance 20-41 which removed minimum parking requirements within half a mile of rail transit stations and within transit-oriented development districts. The ordinance also removed minimum parking requirements in the Primary Urban Center Development Plan and Ewa Development Plan areas. Ordinance 20-41, which removed parking minimums in the densest and most transit accessible areas, is a good model for the neighbor islands to follow.

Taking parking reform to the extreme, several cities in Europe now have parking maximums. Hamburg, Zurich, and Budapest

have even instituted caps on the total parking supply in the city center. In Zurich, for every off-street parking space created in the city center, an on-street parking space must be removed.⁹ As a result, these cities are renowned for their walkability and livability.

Copenhagen serves as another notable example. The city has successfully removed minimum parking requirements while prioritizing cycling and public transportation. Copenhagen boasts an extensive network of cycling infrastructure and smartly integrates parking facilities with public transit stations. By actively promoting and improving the accessibility of active transportation and public transit options, Copenhagen effectively reduces the demand for parking spaces.

Another solution, unbundling, allows those with fewer vehicles to save money when purchasing or renting a home. With unbundling, the cost to use parking is separate from

the cost to purchase or rent a home.

Unbundling helps those with lower incomes and fewer cars who currently subsidize the car use of those with higher incomes and more cars. Unbundling can be implemented in a variety of ways, giving residents and developers flexibility. Unbundling is best implemented alongside the removal of minimum parking requirements.

There is nothing to lose and everything to gain from removing parking minimums. The worst case scenario of removing minimum parking requirements is developers continue to build the same number of spaces. This is unlikely as the evidence suggests otherwise. A recent case study found that developers built 21% fewer spaces in the two years after Buffalo, New York repealed minimum parking requirements.¹⁰

We urge the state and counties to take swift action and **remove or reduce minimum parking requirements.** ➡

⁹ https://health.hawaii.gov/cab/files/2023/05/2005-2018-2019-Inventory_Final-Report_rev2.pdf

¹⁰ <https://parkingreform.org/resources/mandates-map/>

RECOMMENDED RESOURCES

- Vox's 6-minute primer on minimum parking requirements is a great introduction to the issue: https://youtu.be/Akm7ik-H_7U
- Strong Town's 15-minute review of Fayetteville's elimination of minimum parking requirements shows how parking minimums work in real life: <https://youtu.be/vUhOFUQDLQk>
- Climate Town's cheeky, 30-minute take on minimum parking requirements is highly-informative and good for a chuckle: <https://youtu.be/OUNXFHpUhu8>
- Does a 30-page report on the impact of minimum parking requirements on housing affordability complete with graphs and data sound like a good time? Then look no further than this report from Todd Litman of the Victoria Transport Policy Institute: <https://www.vtpi.org/park-hou.pdf>
- Want to know what happened in Buffalo, NY after they eliminated their minimum parking requirements? Read this journal article! <https://www.tandfonline.com/doi/full/10.1080/01944363.2020.1864225>
- Are you a Europhile? Then you'll want to know all about how Europe is dealing with minimum parking requirements! https://itdpdotorg.wpengine.com/wp-content/uploads/2014/07/Europes_Parking_U-Turn_ITDP.pdf
- Do you consider yourself more of an Anglophile? Then you can read about what happened when London removed parking minimums: https://escholarship.org/content/qt2x462184/qt2x462184_noSplash_a1704c867d989aad78165528857da100.pdf?t=qhqf3u
- Do you want to learn more about how the Ulupono Initiative determined the costs of building parking in Hawaii? Then you can read their study here: <https://ulupono.com/media/ivcfs2pu/the-cost-of-parking-in-hawaii-report-2020-08.pdf>
- Want to learn more about the steps that Honolulu has already taken to reform parking minimums with Ordinance 20-41? Then you can read this factsheet or view the whole text of the bill here: <https://hnlldoc.ehawaii.gov/hnlldoc/document-download?id=9207>