



Just Build

Land Use Regulation Matters

Type	Description
Use regulation	Controls the type of development that is permitted on a given property. Most often, use regulations discourage multifamily housing. ^a Use regulations may prohibit a property owner from building a home in favor of other types of development or in favor of no development at all. Urban growth boundaries provide an example of the latter.
Density regulation	Limits the height of a building, which has the effect of limiting the number of total housing units in a development. This occurs even in urban metropolises such as Washington, D.C., where property owners living on highly valuable swaths of land in the District are prohibited from building more than three-story townhomes. Density regulations may also impose minimum lot sizes, which limit the number of housing units in a geographic area.
Design regulation	Governs everything from the color of building materials to architectural features and landscaping. Design regulations often stray into the minutiae of development.
Preservation regulation	Limits updates or enlargements of existing development. The goal is usually to preserve historical or notable architectural characteristics. These occur at both the local and federal levels through the National Historic Preservation Act.
Process regulation	Subjects development to a discretionary approval process wherein planning officials scrutinize property owners' plans, usually for conformity to the zoning ordinance and adjacent development. This process delays the construction of new development and adds substantial uncertainty. Some cities also cap annual building permits.
Quality regulation	Limits the supply of older or defective housing, which raises the quality of housing stock overall. This may be disadvantageous to individuals looking for low-cost housing because it limits the supply of such properties.

^a Keith Ihlanfeldt, "Exclusionary Land-Use Regulations within Suburban Communities: A Review of the Evidence and Policy Prescriptions," *Urban Studies* 41, no. 2 (2004): 261–83.

Land Use Regulation Matters

- Common Examples:
 - Type of housing
 - Height / lot size
 - Home appearance
 - Variance approval process
 - Permitting process & timing
 - Development Fees & “Open Space” Requirements
 - Outside involvement/lobbying

Land Use Regulation Matters

□ Wharton Residential Land Use Regulatory Index (2019)

Table 7: Regulatory Change Index Net Change—Community Share, by Region

	Increasing Regulation Over Time (Net Change $\geq +1$)	No Change Over Time (Net Change = 0)	Decreasing Regulation Over Time (Net Change ≤ -1)
1. West Coast	63%	22%	15%
2. West Coast, Not Coastal	61%	11%	28%
3. East Coast	59%	21%	21%
4. Northeast, Not Coastal	53%	14%	34%
5. Sunbelt	52%	15%	33%
6. Midwest	41%	21%	38%
7. Rustbelt	39%	23%	38%
8. Mountain	33%	21%	46%

Notes: The number of community-level observations in each regional grouping are as follows: West Coast (46), West Coast-Not Coastal (18), East Coast (29), Northeast-Not Coastal (80), Sunbelt (142), Midwest (95), Rustbelt (66), and Mountain (24).

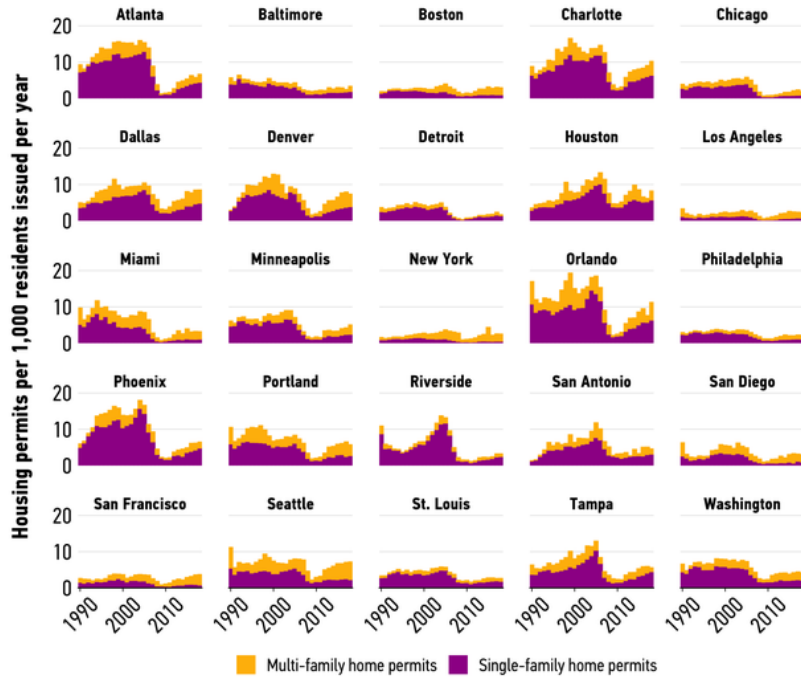
Table 8: Political/Legal Index Net Change—Community Share, By Region

	Increasing Political/Legal Involvement Over Time (Net Change $\geq +1$)	No Change Over Time (Net Change = 0)	Decreasing Political/Legal Involvement Over Time (Net Change ≤ -1)
1. West Coast	41%	17%	41%
2. West Coast-Not Coastal	50%	6%	44%
3. East Coast	28%	21%	52%
4. Northeast-Not Coastal	40%	11%	49%
5. Sunbelt	38%	13%	49%
6. Midwest	29%	17%	54%
7. Rustbelt	30%	12%	58%
8. Mountain	42%	17%	42%

Notes: The number of community-level observations in each regional grouping are as follows: West Coast (46), West Coast-Not Coastal (18), East Coast (29), Northeast-Not Coastal (80), Sunbelt (142), Midwest (95), Rustbelt (66), and Mountain (24).

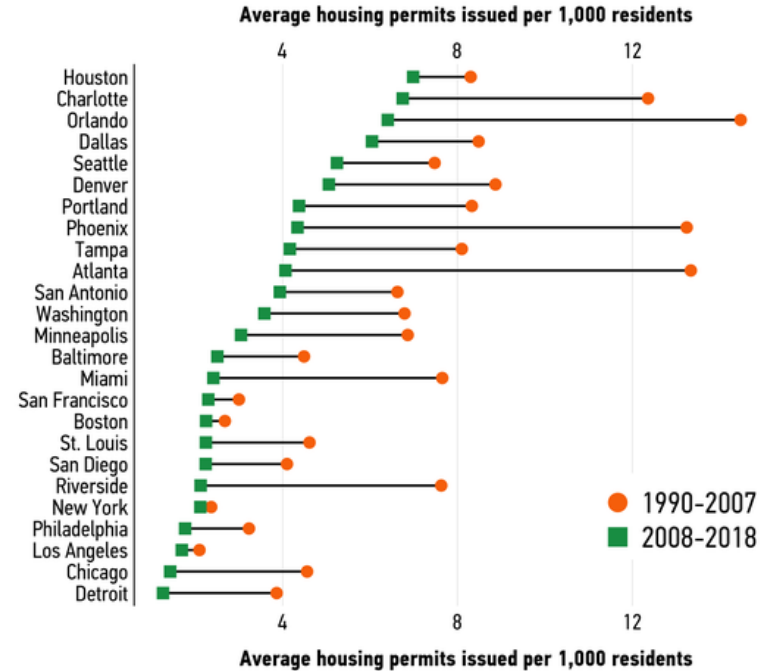
Land Use Regulation Matters

Housing permits per capita issued, 1990-2018



Source: Apartment List (David H. Montgomery / CityLab)

Every major U.S. metro is building less housing

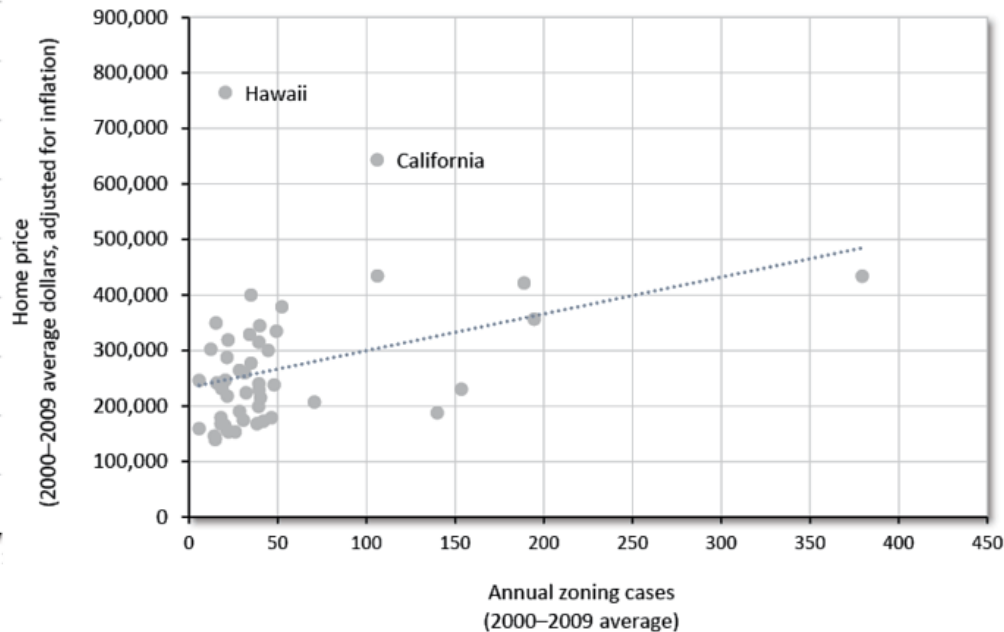
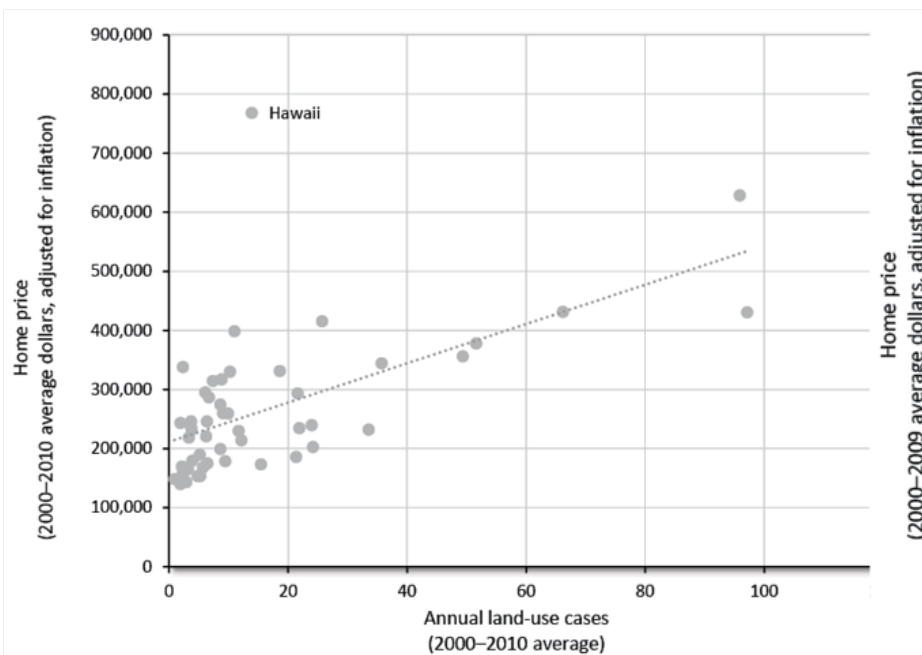


Source: Apartment List (David H. Montgomery / CityLab)



Land Use Regulation Matters

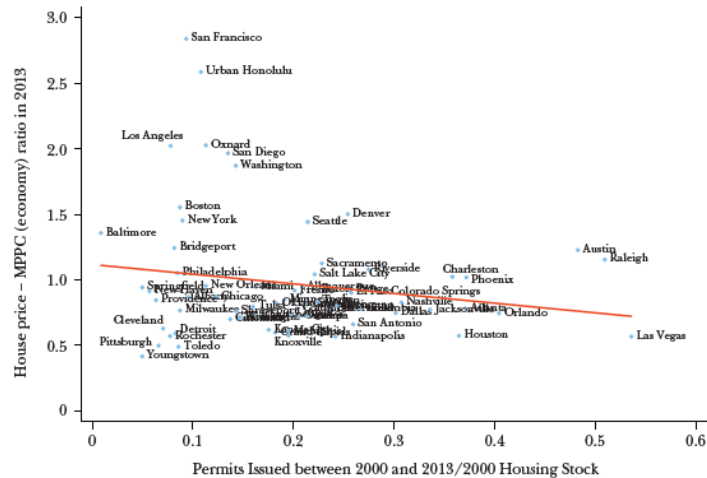
- “[R]ising land-use regulation is associated with rising real average home prices in 44 states and that rising zoning regulation is associated with rising real average home prices in 36 states” (Calder, 2017)



Land Use Regulation Matters

- “Overall, more expensive housing markets tend to be both more regulated and have more inelastic supply sides”; and “there is a strong correlation between homeowner income and the degree of regulation in a market.” (Glaeser, Gyourko 2018)

Figure 3
Price-to-Cost Ratios and Permitting Intensity, 2000–2013



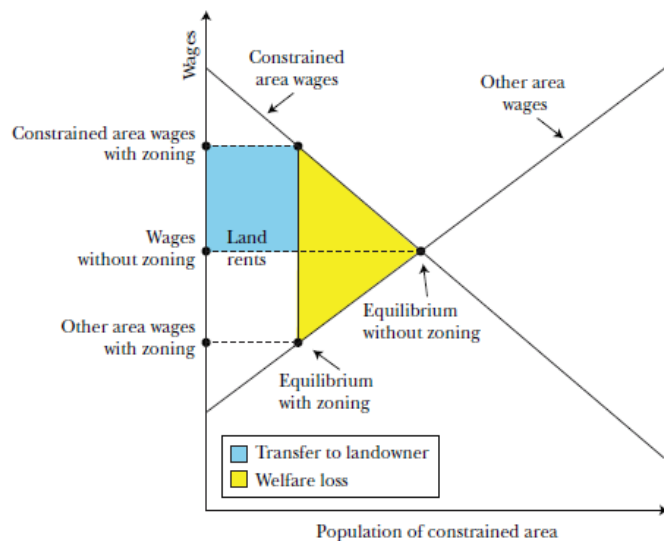
Source: Housing stock data are from the 2000 decennial census. Housing permit data were collected from the Department of Housing and Urban Development's State of the Cities Data System (SOCDS) at <http://www.huduser.gov/portal/datasets/socda/html>. Price-to-cost ratios were created using the data discussed above in Tables 1 and 2.

Note: MPPC is Minimum Profitable Production Cost.

Land Use Regulation Matters

- Implications for mobility, inequality, GDP growth: “changing the housing supply regulation in just three highly constrained markets—New York, San Francisco, and San Jose—to the median for the country results in a nearly 9 percent rise in aggregate GDP. This is achieved via massive shifts in employment location.” (Glaeser, Gyourko 2018)

Figure 4
Welfare Consequences of Restricting Development in a Productive Market



Land Use Regulation Matters

- Education: “School zoning and residential zoning regulation directly impact the type and price of homes associated with schools, and as a result can positively or negatively impact access to [educational] opportunity.... Residential zoning reform could be a powerful tool to make high quality schools and districts more accessible. In this study, cities with less restrictive residential zoning exhibit lower home prices and improved affordability at nearly every school quality level.” (Calder/JEC, 2019)
- Fiscal: “federal housing subsidies are concentrated in the most restrictively regulated states” (Calder, 2017)

But Construction Costs Matter Too

- “The majority of homes in this country are priced—even in the midst of a so-called housing affordability crisis—close to construction costs.” (Glaeser, Gyourko 2004)
- Still true for most places in 2013 (Glaeser, Gyourko 2018)

But Construction Costs Matter Too

□ HomeAdvisor Data:

House Construction Costs

Labor	30%-60%
Materials	30%-50%
Administrative/Design/Permits	10%-25%

House Building Cost Estimator & Budget Guide

Work	Percent of Job Cost	Typical Range
Land & Site Work	3%-8%	\$5,000-\$38,000
Framing	10%-20%	\$16,600-\$95,000
Exterior Work (roofing, doors)	15%-20%	\$25,000-\$95,000
Foundation	10%-15%	\$16,600-\$71,250
Major Systems (electric, HVAC)	10%-15%	\$16,600-\$71,250
Interior Finishes (drywall, floors)	25%-35%	\$41,500-\$166,250

Federal Policies Increasing Costs: Trade & Immigration

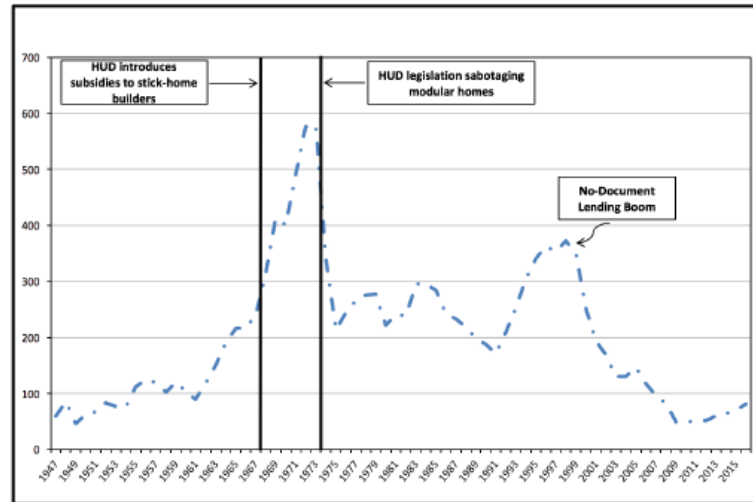
- Many restrictions on imports construction materials:
 - Section 232, Section 301, Safeguards, Antidumping & Countervailing Duty measures (AD/CVD)
 - Tied to significant US price increases
 - Costs born by consumers!
 - Duties can exceed 100%!
- More limited restrictions on related cross-border services (not including immigration)

Type of Material	Type of Measure	Target Country
Washing Machines	Tariff Rate Quota (Safeguard)	Global
Solar Panels	Tariff Rate Quota (Safeguard)	Global
Various Appliances and Building Materials	Tariffs (Section 301)	China
Shelving Units	Tariffs (AD/CVD)	China
Various Iron & Steel Pipe	Tariffs (AD/CVD)	Brazil, Canada, China, Germany, Greece, India, Italy, Japan, Korea, Malaysia, Mexico, Oman, Pakistan, Philippines, Romania, Taiwan, Thailand, Turkey, United Arab Emirates, Vietnam
Solar Panels	Tariffs (AD/CVD)	China, Taiwan
Steel Sinks	Tariffs (AD/CVD)	China
Cement	Tariffs (AD/CVD)	Japan
Plywood	Tariffs (AD/CVD)	China
Hand Tools	Tariffs (AD/CVD)	China
Kitchen Racks	Tariffs (AD/CVD)	China
Washing Machines	Tariffs (AD/CVD)	China, Mexico
Wood Flooring	Tariffs (AD/CVD)	China
Quartz	Tariffs (AD/CVD)	China
Softwood Lumber	Tariffs (AD/CVD)	Canada
Steel Nails	Tariffs (AD/CVD)	China, Korea, Malaysia, Oman, Taiwan, United Arab Emirates, Vietnam
Wooden Cabinets & Vanities	Tariffs (AD/CVD)	China
Ceramic Tile	Tariffs (AD/CVD)	China
Wood Mouldings & Millwork	Pending (AD/CVD)	Brazil, China
Quartz Countertops	Pending (AD/CVD)	India, Turkey
Mobile Cranes	Pending (Section 232)	Global
Various Steel Products	Tariffs & Quotas (Section 232)	Global, except Canada, Mexico, Australia
Various Aluminum Products	Tariffs & Quota (Section 232)	Global, except Canada, Mexico, Australia

Federal Policies Increasing Costs: HUD

- HUD policies (lobbied by home-builder “monopoly”) subsidized stick-built homes and “sabotaged” lower-cost factory (kits, modular, etc.) homes via various building codes (a “national zoning ordinance”) (Schmitz, Texeira, Wright 2018)

Shipments of Modular [1&2] Homes (Units, 000s)



NB: (1) These homes are not in the statistics on housing starts or building permits.
(2) Notice lending boom roughly a decade before the real estate lending boom.

*Data from the U.S. Census Bureau – Shipments of New Manufactured Homes, retrievable at <https://www.census.gov/data/hhous/time-series/cocw/shipments.html>. Data prior to 1959 for manufactured homes are available from the Historical Statistics of the United States, Millennial Edition, Part D, Series Dc637-652.

State/Local Policies Increasing Costs

□ Occupational Licensing:

Occupation	States Licensed	States Unlicensed
Construction Managers	33	18
Realtors	46	5
Brick and stone masons	26	25
Carpenters	25	26
Cement masons	24	27
Drywall installers	26	25
Electricians	31	20
Glaziers	26	25
Insulation workers	25	26
Plumbers	37	14
Sheet metal workers	25	26
HVAC mechanics and installers	36	15

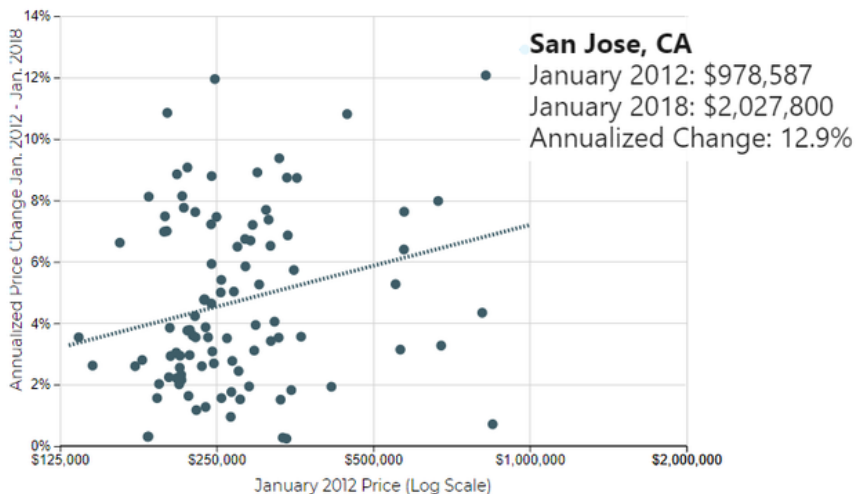
Kleiner, Soltas2019

- For residential home services, “more stringent licensing regulations are associated with less competition and higher prices but not with any improvement in customer satisfaction” (Farronato, Fradkin, Larsen, Brynjolfsson, 2019)

Other Policies Can Also Distort Prices

- Federal: Mortgage Interest Deduction (Cole/JEC, 2020)

Annualized Price Growth for Zillow Top Tier Homes by Metro Area, Jan 2012-Jan 2018



Source: Zillow ZHVI Top Tier Time Series, <https://www.zillow.com/research/data/>

Annualized Price Growth for Zillow Top Tier Homes by Metro Area, Jan 2018-Jan 2020



Source: Zillow, Author's Calculations

- Other Policies to Consider: Transit & transportation (infrastructure, congestion pricing, parking, public transit, etc.); Telecommunications; Schools; Entitlements; Energy; Environment

Should policy try predict or dictate where/how Americans want to live?

- Things change:
 - CNBC 2013: “Studies say some 77 percent of millennials want to live in urban areas”
 - CNBC 2019: “Millennials are fleeing big cities for the suburbs”
- COVID-19 *could* radically shift opinion (and utility) of telework, density, public transit, etc.
 - CNBC 2020: “After flocking downtown to woo millennials, offices might be moving back to the suburbs”; “Remote work will be a legacy of pandemic”
- Nobody knows what’s next

THANK YOU