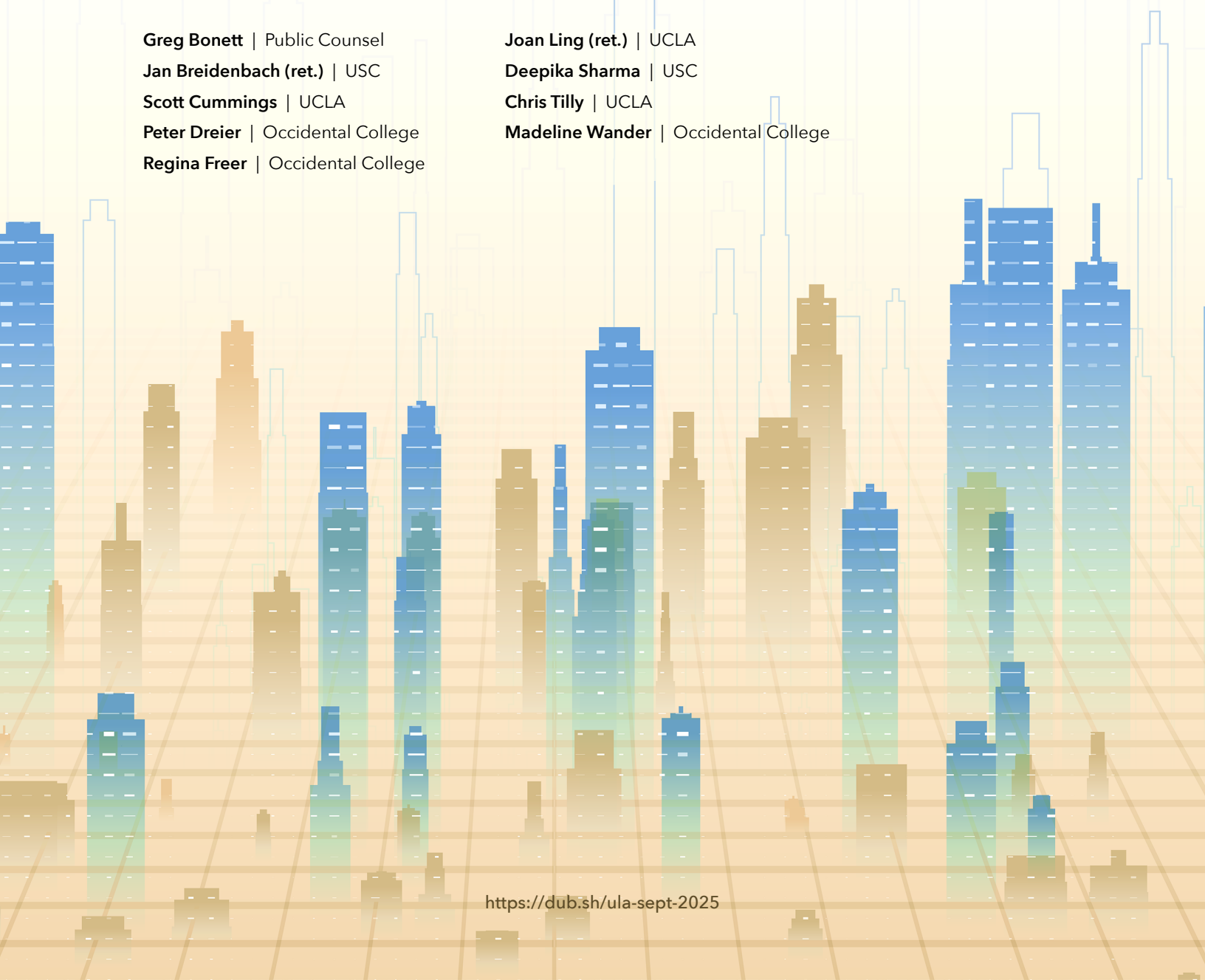
September 2025

Major Research Flaws Undermine Authors' Bold Claims

Unpacking the Debate on Measure ULA

Greg Bonett | Public Counsel
Jan Breidenbach (ret.) | USC
Scott Cummings | UCLA
Peter Dreier | Occidental College
Regina Freer | Occidental College
Joan Ling (ret.) | UCLA
Deepika Sharma | USC
Chris Tilly | UCLA
Madeline Wander | Occidental College



https://dub.sh/ula-sept-2025

Acknowledgements

We would like to thank Maya Abood, Elsa Tung, Joseph Silva, Anna Ferrarie, and Hannah Cornfield for their critical contributions to this paper.

Authors

Greg Bonett, Public Counsel, Community Development Project

Jan Breidenbach (ret.), USC Sol Price School of Public Policy

Scott Cummings, UCLA School of Law

Peter Dreier, Occidental College, Urban & Environmental Policy Department

Regina Freer, Occidental College, Politics Department

Joan Ling (ret.), UCLA, Urban Planning Department | Ziman Center for Real Estate

Deepika Sharma, USC Gould School of Law

Chris Tilly, UCLA, Urban Planning Department

Madeline Wander, Occidental College, Urban & Environmental Policy Department

Permalink

https://dub.sh/ula-sept-2025

Contents

Key Takeaways

In April 2025, the UCLA Lewis Center for Regional Policy Studies released two reports about Measure ULA.[1] This paper primarily responds to the report authored by Ward and Phillips, *Taxing Tomorrow: Measure ULA's Impact on Multifamily Housing Production and Potential Reforms*.

- **ULA Working as Intended:** Since its voter approval in November 2022 and implementation in April 2023, Measure ULA has raised more than $830 million in revenue and has helped to create affordable housing and jobs and keep tenants housed, as intended.
- **Reports Not Rigorously Peer-Reviewed:** Both reports by the UCLA Lewis Center make bold claims around Measure ULA causing certain market behavior, but neither report, nor any portion of their findings, has been published in a peer-reviewed academic journal, which would better ensure quality, accuracy, and validity.
- **Flawed Methodology, Data, and Conclusions:** The methodological flaws and limited, imprecise, and misused data found in the Ward and Phillips report raise significant questions about the report's claim of a "robust causal linkage" between Measure ULA and multifamily housing production.
- **Unduly Short and Abnormal Time Frames:** In their effort to release findings quickly, Ward and Phillips examine unduly short pre- and especially post-ULA time periods that are marked by some of the most unusual real estate market dynamics in recent history (e.g. global pandemic, extremely low interest rates, and record-high home prices in the "pre" period; and high interest rates, capitalization rates, construction costs, and insurance costs in the "post" period), making them a poor basis for predictions about the future. The "post" period analyzed is one full year shorter than the "pre" period, indicating premature conclusions at best.
- **Weak Indirect Indicator of Development Activity:** Because of the unduly short time frames analyzed, the Ward-Phillips report uses sales of multifamily-zoned parcels as a proxy for development activity, a weak and imprecise indicator. In reality, many parcel sales do not lead to multifamily housing development, and not all development projects are precipitated by a sale; some are developed by long-term owners. Over a longer time frame, a proxy is not necessary because direct data will be available in the form of building permits.
- **Method's Strict Assumptions Are Not Satisfied:** The report's "difference-in-differences" (DiD) model fails to meet the strict requirements for that method, including the "no spillover" test, which requires no spillovers between the treatment group (City of LA) and the control group ("rest of LA County," in this case only 10 jurisdictions out of 88 that differ significantly from the City of LA in terms of market and regulatory conditions). In fact, recent scholarship, including a re-analysis of published studies, suggests that the DiD technique is often misapplied and can result in misleading conclusions.

---

[1] Jason Ward and Shane Phillips, *Taxing Tomorrow: Measure ULA's Impact on Multifamily Housing Production and Potential Reforms* (UCLA Lewis Center for Regional Policy Studies, 2025), retrieved from https://escholarship.org/uc/item/7jg7m22v; Michael Manville and Mott Smith, *The Unintended Consequences of Measure ULA* (UCLA Lewis Center for Regional Policy Studies, 2025), retrieved from https://escholarship.org/uc/item/9z17p49t.

- **Analysis Misuses Permit Data and Fails to Control for Confounding Variables:** The Ward-Phillips report uses the reduced average *size* of projects permitted on parcels sold in the 10 months after Measure ULA's implementation to estimate the impact on housing production, without accounting for the increased ***frequency*** of projects, ignoring the fact that the report's dataset includes more projects per quarter ***after*** ULA went into effect. By not accounting for the increased frequency of permitted projects and the total number of units permitted across all projects, the report dramatically overestimates the impact of ULA. The report's analysis of building permit data also does not control for any potentially confounding variables that could impact permit trends.

- **Small Sample, Large Margin of Error:** The report's central claim that Measure ULA is reducing multifamily housing production is based on a regression analysis with a large margin of error and a small sample size of only 27 projects. With this small sample size, the model's estimates can easily be influenced by a few abnormally large or abnormally small projects, and reliable conclusions cannot be drawn from this data.

- **Likely Bias from Excluding ED1 Projects:** The report excludes all projects that use the streamlining authorized by the Mayor's Executive Directive 1 (ED1), aimed at speeding affordable housing development. By excluding all ED1 projects, the authors artificially reduce the number of units and permits counted in the post-ULA period (e.g. some projects that received ED1 streamlining would likely have moved forward without ED1 but were excluded from the analysis nonetheless). Over 28,000 units of housing were approved under ED1 between December 2022 and June 2025.

- **Overestimated Market Production, Underestimated ULA Production of Affordable Housing:** The Ward and Phillips report uses inaccurate and unsupported assumptions about affordable housing production, claiming without evidence that 80% of all units in larger, non-publicly-subsidized (privately-financed) multifamily projects are in mixed-income projects, thereby potentially overestimating the prevalence of mixed-income housing and the market production of affordable housing. At the same time, the report underestimates the affordable housing production made possible by ULA funds by assuming that ULA must fund 60% of total affordable development costs. Typically, City funds are capped at 20-30% of total project costs, which would mean $29 million of ULA funds would produce at least 116 units, about 65% more than the report estimates.

- **What a Rigorous Analysis Should Look Like:**
    - A longer time frame of data analysis on both sides of Measure ULA's implementation date, with building permit data as the best indicator of development activity
    - Comparisons of the City of Los Angeles to jurisdictions and geographies (even submarkets) with similar housing conditions, including developability and market strength
    - Statistical best practices and modeling, including robustness analysis testing assumptions
    - Accurate assumptions for affordable housing production
    - Transparency about the limitations of the research and conclusions, especially around claiming causal linkages between a policy intervention and market behavior

Executive Summary

Since it passed with strong voter support in November 2022 and went into effect in April 2023, Measure ULA has worked as intended to help address the housing crisis in Los Angeles. Its transfer tax on property sales over $5 million has generated over $450 million over the past year alone[2] and more than $830 million in total.

Thanks to those funds, Measure ULA has helped tens of thousands of Angelenos through rental assistance, development of new affordable housing, creation of new construction jobs, education on tenants' rights, and innovative new programs to make housing in LA fair for all.

Despite these successes, in April 2025, the UCLA Lewis Center for Regional Policy Studies released two reports claiming that the Measure ULA tax is hurting the Los Angeles real estate market. Rigorous, thorough evaluation of public policies is critical and necessary, but **the Lewis Center reports fail to deliver on either rigor or quality of evaluation**. Instead, they rely on questionable methodology, limited data, and flawed analysis to draw broad, premature conclusions and call for massive changes to Measure ULA. This paper focuses on the report authored by Ward and Phillips — *Taxing Tomorrow: Measure ULA's Impact on Multifamily Housing Production and Potential Reforms*.

Ward and Phillips' report claims that Measure ULA is causing a reduction of multifamily housing production in Los Angeles, and even deed-restricted affordable housing production. The report then recommends new tax exemptions for certain types of properties from the ULA tax without detailing how the exemptions would spur favored economic activity.

This paper identifies a number of flaws in Ward and Phillips' methodology, data, controls, and assumptions, which combine to raise significant questions about the conclusions of the report.

Ward and Phillips use two primary statistical methods in their report: a "difference-in-differences" (DiD) analysis to examine transactions (i.e. sales) of multifamily-zoned parcels and then a regression analysis to examine new multifamily housing production. Across both methods, one of our fundamental concerns is that **the authors examine unduly short pre- and especially post-ULA time periods that are marked by some of the most unusual real estate market dynamics in recent history**, making them a poor basis for predictions about the future. The inappropriately short periods analyzed lead to a variety of data limitations, including the use of a weak proxy for development activity (sales of multifamily-zoned parcels) and **a small**

[2] Measure ULA revenue receipts from August 2024 through July 2025, as reported by the Los Angeles Housing Department.

sample size of only 27 projects in the problematic regression analysis that underpins the authors' central claim that ULA is causing less multifamily housing production.

Beyond the issue of too-short time frames, this paper goes into detail about the additional flaws of Ward and Phillips' analysis in terms of statistical best practices, geographic comparisons, and assumptions for affordable housing production. For example, the DiD analysis uses **a small, unsuitable control group of only 10 LA County jurisdictions** and also fails the strict assumptions for the DiD method. In fact, recent scholarship, including a re-analysis of published studies that used DiD, suggests that the DiD method is often misapplied and can result in misleading conclusions.

Moreover, the regression analysis misuses building permit data and dramatically overestimates the impact of ULA because it focuses on the ***size*** of individual projects while ignoring the increased ***frequency*** of multifamily projects in the post-ULA period as seen in the report's dataset, thereby obscuring the total number of units permitted across all projects. The report also fails to compare housing development trends in Los Angeles with trends in comparable areas outside of the city that are not subject to Measure ULA and **excludes all Executive Directive 1 (ED1) projects from analysis**, thereby artificially reducing the number of units and permits counted in the post-ULA period.

Finally, with assumptions not backed by evidence, the report potentially overestimates the market production of affordable housing and underestimates the ULA-funded production of affordable housing. **According to typical city leveraging, ULA funds would produce about 65% more affordable housing than the Ward-Phillips report estimates**.

While the post-ULA period has been influenced by factors affecting the real estate industry nationwide, including high interest rates, inflationary construction costs, and rising insurance costs, the City of Los Angeles has spent this period developing the new Citywide Housing Incentive Program (CHIP), which passed as part of the City's rezoning plan in February 2025. CHIP contains significant new incentives for development and, in the first 6 months of the program, has already resulted in applications for 17,029 units. This suggests that many developers had been waiting until after the new development incentives were in place before beginning their projects.

In short, **Ward and Phillips' conclusions are both premature and poorly supported**. The public and policy makers deserve more time and more data to seriously evaluate the impacts of Measure ULA and to weigh its accomplishments in terms of improving the lives, housing, and jobs of tens of thousands of people. We welcome serious research and thoughtful reflection about Measure ULA and its impacts, founded upon robust data and rigorous analysis.

We hope the following paper is seen as a careful addition to the public conversation about Measure ULA and its role in addressing Los Angeles' housing crisis.

Overview

Measure ULA is Addressing the Housing Crisis

In November 2022, Los Angeles voters strongly supported Measure ULA, a tax on the sale of the most expensive properties in the city – those over $5 million. These properties constitute a tiny fraction of all sales but they generate significant revenue to help LA address its severe housing crisis. Since Measure ULA went into effect on April 1, 2023, it has generated a total of more than $830 million in revenue. These are funds that, by law, help vulnerable tenants stay in their apartments and help construct affordable housing built by workers who earn middle-class incomes. Measure ULA is the City's largest source of funding for affordable housing. This is particularly important in light of the Trump administration's threats to drastically cut federal housing funds.

Measure ULA is building homes, protecting tenants, creating jobs, and expanding homeownership. Over the past two years ULA has:

- ✓ kept over 10,000 Angelenos in their homes through rental assistance
- ✓ spurred development of 795 affordable homes
- ✓ accelerated the creation of about 10,000 construction jobs[3]
- ✓ reached and educated over 120,000 Angelenos on their rights as tenants, helping to prevent "self evictions"

ULA has already helped thousands, and it's just getting started. It has the potential to help tens of thousands more people each year and support innovative new programs to make housing in LA fair for all of us:

- ✓ A comprehensive Right to Counsel will give tenants facing eviction a fair chance in court.
- ✓ ULA provides 100% of the enforcement dollars for LA's Tenant Anti-Harassment Ordinance to stop landlords from forcing out tenants in order to raise rent.
- ✓ Income support for seniors and people with disabilities has helped about 500 households pay back rent, with a program targeting households impacted by the wildfires next and then a permanent ongoing program to follow.
- ✓ ULA will help launch new housing and ownership models, including social housing. In a city where opportunities to rent or own have shrunk, this will allow for community ownership, a mix of income levels, and permanent affordability.

---

[3] Estimated according to the standard accounting practice used by the City of Los Angeles Bureau of Contract Administration.

Flaws in Reports by UCLA Lewis Center

In April 2025, the UCLA Lewis Center for Regional Policy Studies released two reports claiming that the Measure ULA tax is hurting Los Angeles' real estate market. **Neither report nor any portion of their findings has been published in a peer-reviewed academic journal.** Nevertheless, the real estate industry has been touting these reports in its efforts to weaken or even repeal Measure ULA, having failed to persuade voters during the campaign, and judges in subsequent lawsuits.

Rigorous research that fairly evaluates public policies to see if they are working, how they are working, and if they can be improved is critical and necessary. **But the Lewis Center reports fail to deliver on rigor and quality of evaluation**, instead drawing broad, premature conclusions based on questionable methodological choices, misused data, and assumptions that raise too many questions to be useful at this stage of ULA implementation. This paper focuses on the report authored by Ward and Phillips titled *Taxing Tomorrow: Measure ULA's Impact on Multifamily Housing Production and Potential Reforms*.

The central claim of Ward and Phillips' report is that Measure ULA is causing a reduction of multifamily housing production in Los Angeles. The authors then claim that reduced multifamily housing production means reduced deed-restricted affordable housing production. Since Measure ULA is a tax on the sales (transactions) of expensive real estate – not a tax on construction – in order to establish the so-called "robust causal linkage" between Measure ULA and housing production, the report jumps through a number of methodological hoops that ultimately result in dubious conclusions. The report then recommends new tax exemptions for certain types of properties from the ULA tax.

In this paper, we lay out several flaws of Ward and Phillips' research design and methodology – a series of statistical techniques that contain problematic controls, data, and assumptions. These methodological flaws raise significant questions about the conclusions of the report.

These methodological flaws raise significant questions about the conclusions of the report.

The first half of the Ward-Phillips report relies on a statistical "difference-in-differences" (DiD) model to argue that Measure ULA has caused a reduction in transactions of multifamily-zoned parcels selling for more than $5 million in the City of LA far and above the "rest of LA County" (transactions of multifamily-zoned parcels is used, inappropriately, as a proxy for development activity). The primary problem of the DiD analysis is the limited data from improperly short time periods. Both the pre-ULA and post-

ULA time periods are marked by some of the most unusual real estate market dynamics in recent history. A proper analysis to form reliable predictions about future trends should use longer time periods, particularly in the post-ULA period, which is one full year shorter than the pre-ULA period in the Ward-Phillips analysis (indicating premature conclusions). With longer timeframes of analysis on both sides of ULA's effective date, using a proxy for development activity is not necessary because better data will be available in the form of building permits, a direct indicator of development activity.

Both the pre-ULA and post-ULA time periods are marked by some of the **most unusual real estate market dynamics** in recent history.

The DiD analysis contains additional problems that limit the strength of its conclusions: **a small, inappropriate control group** (only 10 jurisdictions out of 88 represent the "rest of LA County") that bears little comparison to the City of LA in terms of market and regulatory conditions; a tiny sample size of transactions from the small control group; and the failure to meet the required assumptions for a valid DiD analysis, including the "no spillover" test that requires no spillovers between the treatment group (City of LA) and the control group ("rest of LA County").

In the second half of the report, the authors take their flawed DiD analysis and make an analytical leap from parcel transactions to housing production. Ward and Phillips' conclusion that ULA has reduced multifamily housing production is based on several methodological and analytical flaws and limitations. The authors use a statistical technique called regression analysis to estimate the impact of ULA on new multifamily construction. Their analysis examines the size of projects permitted on parcels with multifamily zoning that sold either shortly before or shortly after Measure ULA went into effect. The report claims that projects permitted on parcels sold in the 10 months after Measure ULA went into effect were, on average, smaller than projects permitted on parcels sold in the years leading up to Measure ULA. The report then uses the results of this regression to extrapolate a flawed estimate that ULA has reduced housing production by 1,910 units per year.[4] The report's regression analysis has the following specific flaws:

- **The regression analysis estimates only the change in the average size of projects, not a change in the number of units permitted each month, which ignores the data showing more projects per quarter after Measure ULA went into effect** (i.e. greater frequency of smaller projects in the post-ULA period in the authors' dataset). The

[4] Ward and Phillips, 34.

report appears to use the reduced average size of projects to estimate ULA's impact on housing production without accounting for the increased ***frequency*** of projects, causing the report to dramatically overestimate ULA's impact on housing production. For instance, it may be that developers are buying smaller sites at less than ULA's $5 million threshold to avoid sellers passing the cost of the tax to them, but if at the same time they are increasing the number of projects and the total number of units, it does not follow that ULA has depressed multifamily housing production.

- **The report's housing production estimates are based on a small sample size of only 27 projects and a large margin of error.**
- The report does not compare building permit trends in the City of LA with any other jurisdiction not subject to Measure ULA, nor does it control for any potentially confounding variables that could impact permit trends. **In reality, housing production has fallen across California and nationwide in the wake of increased interest rates, insurance rates, capitalization rates, and construction costs — all coinciding with the time period of Measure ULA's implementation.** These factors, not Measure ULA, may be the primary drivers of the trend towards smaller multifamily project sizes.
- **The report completely excludes all projects that use the Mayor's Executive Directive 1 (ED1)**, artificially reducing the number of projects in the post-ULA period of analysis (e.g. some projects that received ED1 streamlining would likely have moved forward without ED1 but were excluded nonetheless).

The report's defective methodologies and faulty analyses cast serious doubt on its central claim that Measure ULA is causing a negative impact on multifamily housing production and that the report accurately estimates that impact.

To add insult to injury, the report uses poor and inaccurate assumptions about affordable housing production, thereby ***overestimating*** market-produced mixed-income housing in LA (claiming 80% of unsubsidized multifamily units are in mixed-income projects, with no sources or analysis) while ***underestimating*** the affordable housing production made possible by ULA funds. The report claims that only 70 units of affordable housing would be possible from $29 million of ULA funds by assuming ULA must fund 60% of total affordable development costs. However, ULA guidelines show that the Alternative Models program contributes less than 40% to total development costs, and the Affordable Multifamily Program contributes less than 21%. This means the report is underestimating the production capacity of ULA revenue from newer multifamily developments. In reality, typical leveraging would mean $29 million of ULA funds would produce at least 116 units, about 65% more than the Ward-Phillips report estimates.

In summary, Ward and Phillips' conclusions, based on methodological and analytical failings, are extremely premature. It is simply too early to judge the effectiveness of a policy that went into effect only two years ago (April 2023) and that arrived at a time when so many other volatile factors were at play, including high interest rates, increased construction costs, deportation of construction workers, and now tariffs that will likely raise the price of lumber and other building materials, among other factors. In this situation, with Measure ULA being only one of many factors, it is incredibly difficult to isolate the impact of ULA on the construction of new multifamily housing or the sale of the most expensive properties.

The public and policy makers deserve more time and more data to seriously evaluate the impacts of Measure ULA and to weigh its accomplishments in terms of improving the lives, housing, and jobs of tens of thousands of people against the real estate industry's claims that Measure ULA is having unintended consequences.

In fact, the signs we have so far indicate strong confidence in the Los Angeles real estate market. Following an extreme drop in transactions in the lead-up to and immediate aftermath of ULA's implementation (due to the "rush-to-sell" right before ULA's effective date, followed by real estate agents' and lawyers' advice not to sell right after ULA's effective date), transactions subject to the ULA tax and the resulting revenue have been steadily increasing (a dip in Q1 2025 numbers coincided with the Los Angeles wildfires that destroyed thousands of homes in January 2025).

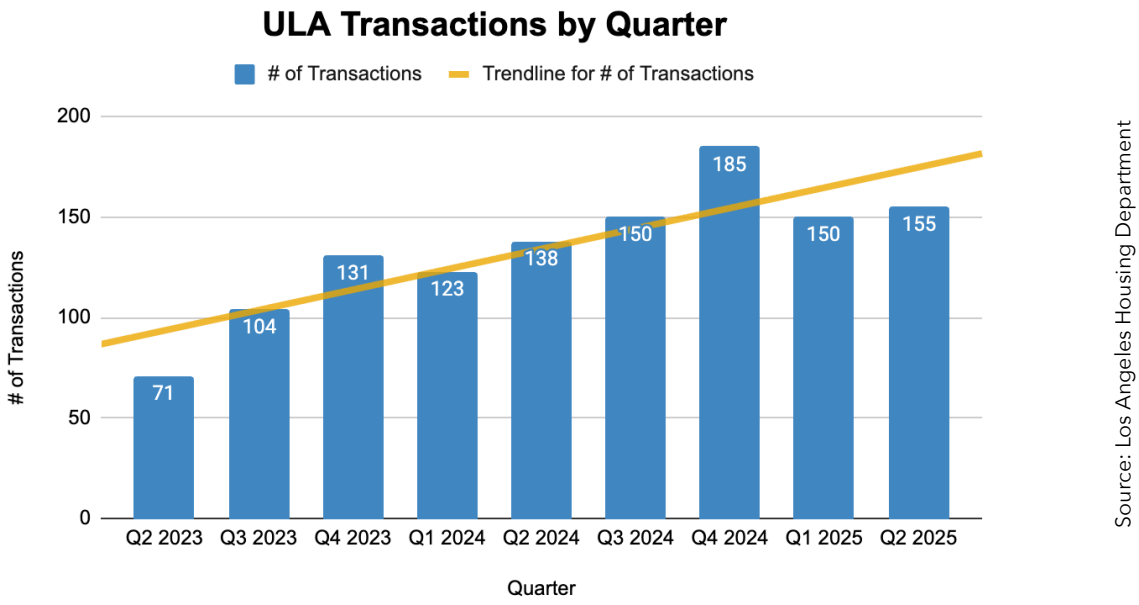


Figure 1a: Transactions subject to the ULA tax and the resulting revenue have been steadily increasing.

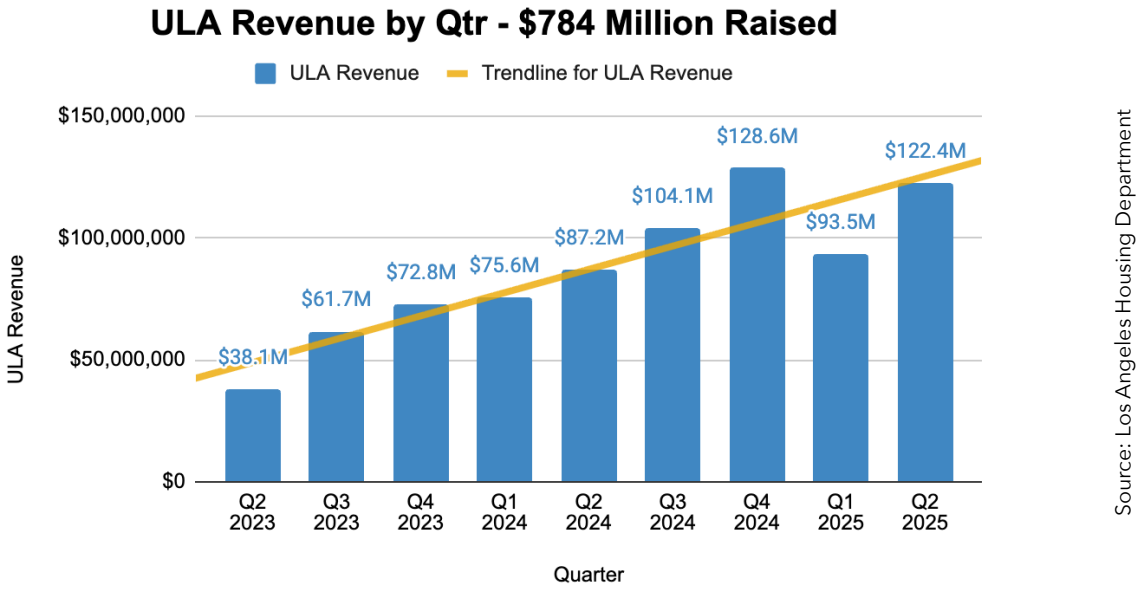


Figure 1b: As with transactions, ULA revenues have been steadily increasing, aside from a dip coinciding with the wildfires in January 2025.

At the same time, **the LA City Planning Department has reported that the number of housing units that have received entitlements has increased 52% from 2022 to 2024**.[5] Furthermore, the City's new Citywide Housing Incentive Program (CHIP) – passed as part of the City's rezoning plan in February 2025 – has already resulted in **applications for 17,029 units in under 6 months of the program**, suggesting that many developers had been waiting until after the new development incentives were in place before beginning their projects.[6]

We welcome serious research and thoughtful reflection about Measure ULA and its impacts. We hope this analysis is seen as a careful addition to the public conversation about addressing Los Angeles's housing crisis. We look forward to the report authors' continued contributions to these policy debates.

[5] Los Angeles City Planning Department, "Housing Element Annual Progress Report 2024," presentation to Los Angeles City Council Housing and Homelessness Committee, June 18, 2025. https://clkrep.lacity.org/onlinedocs/2022/22-0403-S3_MISC_6-17-25.pdf

[6] Los Angeles City Planning Department, presentation to Los Angeles City Council Planning and Land Use Management Committee, August 26, 2025.

Flawed Analysis of Real Estate Transactions

Relying on a series of statistical techniques, the authors claim that transactions of multifamily-zoned parcels selling for more than $5 million declined more in Los Angeles than in other jurisdictions. The first half of the report relies on a statistical "difference-in-differences" (DiD) model to argue that Measure ULA has reduced multifamily transactions over $5 million in LA City far and above the "rest of LA County." As we explain below, this analysis is flawed.

Unduly Short Time Periods, Abnormal Real Estate Conditions

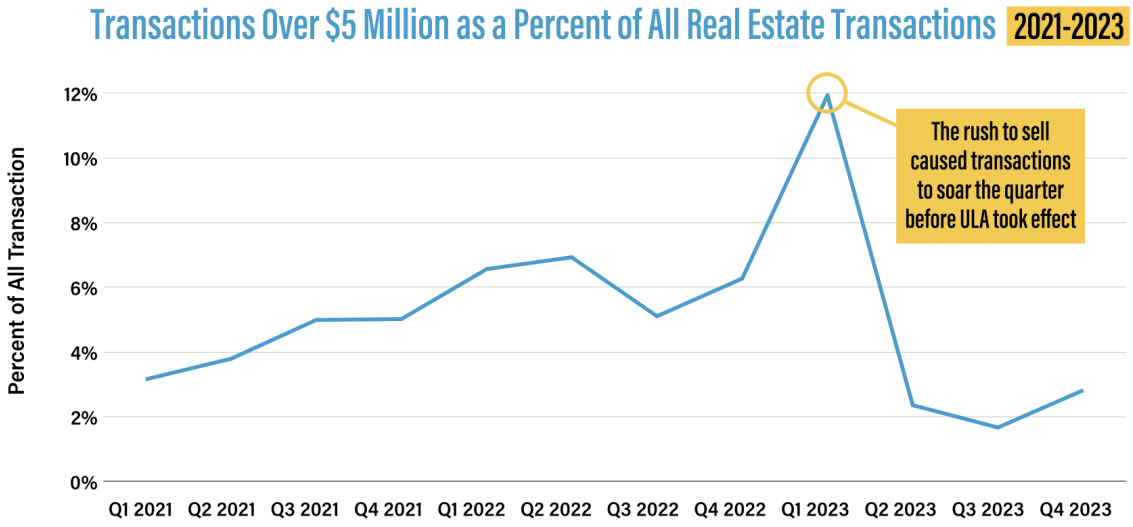
Both the pre-ULA and post-ULA time periods used in the Ward-Phillips analysis were marked by abnormal real estate market dynamics and are inappropriate for projecting future trends. A proper analysis should use longer time periods, particularly in the post-ULA period, which is one full year shorter than the pre-ULA period in this analysis. The pre-ULA period was one of the most unusual periods in recent real estate history, influenced by COVID-19 restrictions, rapidly increasing home prices, and extremely low interest rates that spurred development. The "pre" period also saw a significant increase in $5+ million property sales in the City of LA (Figure A below, from Dreier et al. 2024)[7] by property owners who sought to avoid the tax. Ward and Phillips attempt to control for this sell-off by excluding from their analysis sales during the one month before ULA went into effect (March 2023) and one month after it went into effect (April 2023). However, excluding only two months likely underplays the impact of the reduced inventory of multifamily properties. Anticipating ULA, some property owners sold their properties before they otherwise intended to do so, thus removing properties from the post-ULA inventory. The post-ULA period also has been influenced by high interest rates, inflationary construction costs, and rising insurance costs. Both pre-ULA and post-ULA periods were highly unusual for reasons having nothing to do with Measure ULA. To form reliable predictions about future trends, more data is required in both the pre-ULA and post-ULA time periods.

---

[7] Peter Dreier et al., *Measuring LA's Mansion Tax: An Evaluation of Measure ULA's First Year* (Occidental College, 2024), retrieved from https://www.oxy.edu/about-oxy/community-engagement/uepi/publications/ula-report.

FIGURE A

Source: Los Angeles County Assessor's data accessed through PropertyRadar



Source: Dreier et al. 2024

Upward Trend in $5M+ Sales in City of LA Ignored

As Figure 4 in the Ward-Phillips report shows, all $5+ million transactions in *both* the City of LA and "Elsewhere in LA County" dropped significantly after April 2023 (indicating significant transaction declines across the whole region, not just City of LA), but the "City of LA" trend line is sloped more sharply upward than the "Elsewhere in LA County" line.[8] The authors ignore this indication of the City of LA's faster growth in $5+ million transactions after April 2023 and the possibility of convergence with "Elsewhere in LA County" over a longer time horizon. This further illustrates that this analysis is premature. More data is needed in both the "pre-ULA" (to include periods before the COVID-19 pandemic) and "post-ULA" periods (to include periods with less abnormal real estate conditions) before it is possible to make any accurate assessment of ULA's impact.

Weak Indirect Indicator of Development Activity

The DiD analysis uses the sale of multifamily parcels as a proxy for development activity, but it is a weak indicator of development activity at best. Over a longer time period of analysis, which we recommend, a proxy is not necessary because better data will be available in the years to come in the form of building permits, a direct indicator of development activity. In

[8] Ward and Phillips, 15.

their effort to release findings quickly, the authors examine improperly short pre- and especially post-ULA time periods and therefore use an inappropriate proxy that misses developers who have land-banked properties for development as well as partnerships between long-term land owners and developers. The researchers claim that nearly all development relies on property acquisition, but they do not substantiate that claim with any data or evidence. Moreover, many transactions do not lead to multifamily housing development.

Small, Inappropriate Control Group

The DiD analysis uses a comparison (control) group with selected properties from only 10 jurisdictions: unincorporated Los Angeles County, Burbank, Glendale, Inglewood, Lancaster, Long Beach, Pasadena, Pomona, Santa Clarita, and Whittier. This unreasonably small control group raises concerns for the reliability of the results presented in the report. Furthermore, the authors do not provide any justification for why the specific jurisdictions were chosen. Many of these jurisdictions have significantly different market and regulatory conditions from the City of Los Angeles, including conditional use requirements, special zoning restrictions, planning approval processes, and different real estate submarket conditions.

To accurately evaluate Measure ULA's impact, the researchers would need to assume that there were no other factors that affected the City of LA differently than the cities in the rest of the county (i.e. they must assume that the "treatment" and "control" groups were impacted the same by factors like high interest rates, construction costs, rezoning processes, etc.). But the City of LA is unique in its geographic and population size and its diversity of real estate submarkets within its borders. The researchers failed to show that using smaller cities in LA County was an appropriate comparison group to the much larger and diverse City of LA. A better way would be to compare the City of LA or its submarkets to jurisdictions or geographies with similar conditions, including developability (e.g. zoning and land use regulations) and market strength (e.g. median rents). Comparison geographies need to be carefully analyzed over an adequate time period and under a variety of market conditions to confirm that the geographies are truly comparable.

Small Sample Size of Transactions and Unknown Characteristics of Comparison Parcels

The analysis does not include a representative set of control jurisdictions and the number of sales of $5+ million multifamily-zoned parcels in the control jurisdictions is relatively small. For example, in the "rest of LA County" comparison (control) group, the pre-ULA average number of quarterly sales was just 7.6 and the post-ULA average was 5. This is very low

compared to the pre- and post-ULA average quarterly sales in LA City (79 and 23 respectively). Selecting larger jurisdictions by population or a combination of jurisdictions with similar market conditions may produce more reliable results, but, as discussed above, **ultimately a "difference-in-differences" method may not be appropriate for this analysis if comparable control jurisdictions cannot be identified.** Moreover, there is no information regarding where the comparison parcel sales are located. As a result, the report fails to demonstrate whether they are in equivalent, weaker, or stronger submarkets compared to LA City's. Thus, the DiD analysis may be comparing apples and oranges leading to unreliable conclusions.

Difference-in-Differences Analysis Fails the "No Spillover" Test

As discussed above, the study uses what's called a "difference-in-differences" (DiD) analysis to compare housing trends in the City of LA with a handful of other cities in LA County. This approach can be a powerful tool to study the impacts of a policy. But the catch is that it requires researchers to satisfy very strict assumptions, and it is hard to find real-world cases that satisfy those assumptions. In fact, recent scholarship, including a re-analysis of published studies that used DiD, suggests that the technique is often misapplied and can result in misleading conclusions.[9]

> [DiD] is often misapplied and can result in misleading conclusions.

The Ward-Phillips report does not satisfy the minimal assumptions required by DiD. For example, the method requires there be no "spillovers" between the treatment group (in this case, the City of LA) and the control group (other jurisdictions in LA County). This means that there were no buyers who bought in a different LA County jurisdiction instead of in the City of LA because of the Measure ULA tax. If that happened, the sales in the other LA County jurisdiction would be artificially inflated in the analysis and thereby overstate the impact of Measure ULA. **The authors acknowledge that spillover purchases may lead them to overestimate the impact of Measure ULA.**[10] At a minimum, a difference-in-differences analysis that cannot rule out spillover sales should include a robustness analysis to determine the sensitivity of the analysis conclusions to potential spillovers (e.g. by testing what number of spillover sales would undermine the statistical significance or policy significance of their conclusion).

---

[9] Ariella Kahn-Lang and Kevin Lang, "The Promise and Pitfalls of Differences-in-Differences: Reflections on *16 and Pregnant* and Other Applications," *Journal of Business & Economic Statistics*, 38:3 (2019): 613-620, https://doi.org/10.1080/07350015.2018.1546591; and Albert Chiu et al., "Causal Panel Analysis under Parallel Trends: Lessons from a Large Reanalysis Study," *American Political Science Review*, (forthcoming), accessed from https://arxiv.org/pdf/2309.15983.

[10] Ward and Phillips, 20-21.

Leap from Transactions to Production: Problematic Methodology, Assumptions, Analysis

The report by Ward and Phillips claims:

- To establish a "robust causal linkage between Measure ULA and housing development" and purports to provide "empirical evidence that the transfer tax is reducing multifamily production."
- The ULA tax disincentivizes developers from building new housing.
- Measure ULA is reducing multifamily housing production by "1,910 units per year."
- Measure ULA has led to 168 fewer affordable units per year.

These claims do not hold up to scrutiny. As we explain below, each claim is based on weak evidence or flawed methodology.

Flaws and Limitations of Regression Analysis

The report's conclusion that ULA has reduced housing production is based on several methodological flaws and limitations. The authors use a statistical technique called regression analysis to estimate the impact of ULA on new multifamily construction.[11] The analysis examines the size of projects permitted on parcels with multifamily zoning that sold either shortly before or shortly after Measure ULA went into effect. The report claims that projects permitted on parcels sold in the 10 months after Measure ULA went into effect were, on average, smaller than projects permitted on parcels sold in the years leading up to Measure ULA. **However, the regression analysis as presented estimates only the change in the average size of projects, not a change in the number of units permitted each month**. The report then uses the results of this regression to extrapolate a flawed estimate that ULA has reduced housing production by 1,910 units per year.[12] Furthermore, the regression relies on a small sample of projects leading to a large margin of error, fails to control for *any* potentially confounding variables, and excludes all Executive Directive 1 projects, which artificially reduces the number of units counted in the post-ULA period.

[11] See Figure 9 and Table A.3 of Ward and Phillips, p. 33 and 52.

[12] Ward and Phillips, 34.

Misused Data

The report bases its estimate that Measure ULA reduced multifamily production on a regression that only analyzed the *size* of individual projects, not the total number of units permitted across all projects, and extrapolated from that misleading data to claim that Measure ULA has reduced multifamily production. In the small data set analyzed, projects permitted on land that sold after Measure ULA went into effect do indeed appear to be somewhat smaller than projects permitted on land sold before Measure ULA went into effect.[13] **But there also appear to be more projects per quarter after Measure ULA went into effect.** The report uses the reduced average size of projects to estimate the impact on housing production without accounting for the increased frequency of projects. By not accounting for the increased frequency of permitted projects in its dataset on land that sold after Measure ULA took effect, the report dramatically overestimates the impact of Measure ULA. For instance, it may be that developers are buying smaller sites at less than ULA's $5 million threshold to avoid sellers passing the cost of the tax to them, but if at the same time they are increasing the number of projects and the total number of units, it cannot be argued that ULA has depressed multifamily housing production.

By not accounting for the increased frequency of permitted projects in its dataset on land that sold after Measure ULA took effect, the report dramatically overestimates the impact of Measure ULA.

Small Sample, Large Margin of Error

The report's central claim that Measure ULA is reducing multifamily production by 1,910 units per year is based on a regression analysis with **a large margin of error and a small sample size of only 27 projects.**[14] In fact, the report includes four separate regression models to test if multifamily housing projects on land sold after ULA went into effect were smaller than projects on sites sold before ULA went into effect (using project size cutoffs of 10 units, 15 units, 20 units, and 30 units). The margin of error for these estimates is so large that two of

[13] As discussed in the subsequent section, the trend towards smaller projects may be explained but other factors unrelated to Measure ULA. For example, larger projects require steel and specialized labor, making high rise construction less feasible in the current market because of increased material and labor costs.

[14] See Figure 9 and Table A.3 of Ward and Phillips, p. 33 and 52. The regression estimate used to (incorrectly) extrapolate a reduction in multifamily housing production of 1,910 units per year is based on *N* of 27.

these models could not rule out the possibility that projects on sites sold after Measure ULA were larger than projects on sites sold before the tax went into effect.[15]

With a sample size of only 27 projects, the model's estimates could easily be influenced by a small number of abnormally large or abnormally small projects. The sample size is too small and the margin of error is too large to draw any reliable conclusions from this data.[16]

Lack of Development Comparisons and Controls for Confounding Variables

As discussed above, the report reaches its conclusion that Measure ULA reduced multifamily construction by comparing the size of projects on multifamily zoned land that sold in the years before Measure ULA went into effect with the size of projects on land sold in the months after. The report does not compare housing development trends in Los Angeles with trends in comparable areas outside of the city that are not subject to Measure ULA.[17] In reality, housing production has fallen across California and nationwide in the wake of increased interest rates, insurance rates, capitalization rates, and construction costs — all coinciding with the time period when Measure ULA was introduced. **These factors, not Measure ULA, were likely the primary drivers of the trend toward smaller multifamily project sizes.** The report's analysis of permitting data does not control for these factors in any way. The report's bold conclusion that it shows a causal relationship between Measure ULA and construction impacts is unfounded.

---

[15] For example, the authors estimate that the average size of projects with at least 10 units could have increased by as much as 28% or decreased by as much as 78% after Measure ULA went into effect (see Table A.3, p. 52). The authors acknowledge that this estimate is statistically imprecise and instead focus on a narrower subset of projects (those with at least 20 units) with a smaller, though still substantial, margin of error.

[16] Furthermore, the analysis only includes transactions that received a building permit within one year of the sale of parcels. The authors use this limitation to better compare pre- and post-ULA activity, but the limitation significantly reduces the number of projects included in the model. Most housing development, especially larger and more expensive projects, takes far more than one year between purchasing a property and obtaining a building permit. As a result, the study utilizes a very small and limited sample of data points that are unlikely to be representative of overall real development patterns.

[17] The report does compare property sales in the City of Los Angeles with sales in a sample of other jurisdictions in Los Angeles County. As discussed above, this comparison is inadequate to control for potentially confounding variables, and no such comparison is included in the report's analysis of building permits.

Likely Bias from Excluding ED1 Projects

In December 2022, Mayor Bass issued Executive Directive 1 (ED1).[18] ED1 expedited the processing of 100% affordable housing projects, including privately- and publicly-financed projects. In response to this policy change, for-profit developers pivoted and shifted their capital, potentially from other projects they might have built, toward ED1 projects (privately-financed). Developers also used ED1 to expedite projects that were already planned. Between December 2022 and June 2025, ED1 applications for over 28,000 units of housing were approved (including both privately- and publicly-financed projects).[19]

> By excluding all ED1 projects [28,000 units], the authors artificially reduced the number of units and permits counted in the post-ULA period.

Measure ULA and ED1 have been in effect for nearly the same time period, complicating the authors' analysis of Measure ULA. To address this complication, the authors excluded *all* ED1 projects from the dataset, without including the outcomes under alternative approaches that retained some or all ED1 projects. By excluding all ED1 projects, the authors artificially reduced the number of units and permits counted in the post-ULA period (e.g. some projects that received ED1 streamlining would likely have moved forward without ED1 but were excluded from the analysis nonetheless).

Faulty Assumptions about Affordable Housing Production

Among the report's numerous flaws, the authors also overestimate mixed-income housing in Los Angeles while underestimating the affordable housing production made possible by ULA funds. The authors argue that a decline in market-rate multifamily production would amount to a decline of deed-restricted affordable housing in mixed-income projects, required by the City's density bonus law. They claim that this decline of deed-restricted affordable units within mostly market-rate development would exceed the number of affordable units produced by ULA. However, both claims use faulty assumptions. For example, Ward and Phillips assume that 80% of all units in larger, non-publicly-subsidized (privately-financed) multifamily projects are in mixed-income projects but do not substantiate this assumption. Phillips' earlier

---

[18] Los Angeles Mayor Karen Bass, "Executive Directive No. 1," December 16, 2022, https://mayor.lacity.gov/sites/g/files/wph2066/files/2023-03/ED%201%20-%20Expedition%20of%20Permits%20and%20Clearances%20for%20Temporary%20Shelters%20and%20Affordable%20Housing%20Types.pdf.

[19] "Executive Directive 1 (ED 1): Resources," Los Angeles City Planning Department, https://planning.lacity.gov/project-review/executive-directive-1#resources.

estimate based on 2021–2022 data suggests only 50–65% of unsubsidized multifamily units were in mixed-income projects.[20] The authors make the leap to 80% citing the appeal of density bonuses but **without data or other evidence**. The authors may have overestimated both the prevalence of mixed-income projects in LA and the number of affordable units they produce.

Furthermore, the authors claim that only 70 units of affordable housing would be possible from $29 million of ULA funds, assuming an extremely high ULA subsidy per unit produced. The authors assume ULA must fund 60% of total affordable development costs to calculate how many units can be built. **Typically, City funds are capped at 20-30% of total project costs, which would mean $29 million of ULA funds would produce at least 116 units, about 65% more than the Ward-Phillips report estimates.**

[20] Shane Phillips and Maya Ofek, *How Will the Measure ULA Transfer Tax Initiative Impact Housing Production in Los Angeles?* (UCLA Lewis Center for Regional Policy Studies, 2022), retrieved from https://escholarship.org/uc/item/1jv1p99n.

Costs and Harms of Lewis Center Recommendations

Ward and Phillips want Measure ULA to be revised to provide tax breaks to developers, exempting from transfer taxes multifamily projects, as well as commercial and industrial projects, within 15 years of their construction (with no substantive analysis of commercial and industrial sales). But the authors fail to assess the true costs of their proposal to create such severe exemptions that would diminish revenue for homelessness prevention and affordable housing programs. In doing so, they neglect to show consideration of the increased homelessness and demand for affordable housing that would result from their recommendations, which would place further burden on an already-strained housing and homelessness system. Similarly, the authors fail to acknowledge that their proposed developer tax breaks could be exploited by property owners looking to reduce their taxes without actually expanding the supply of affordable housing, leading to less-than-expected housing production and greater-than-expected ULA revenue loss.

Conclusion

The Ward and Phillips report is fraught with flawed methodologies, misused data, faulty assumptions, and incorrect analyses – all of which cast serious doubt on its overstated claim that Measure ULA is "causing" a negative impact on multifamily housing production. The report jumps through a variety of methodological hoops to prematurely judge a tax policy that went into effect only two years ago (April 2023) and that arrived at a time when so many other volatile market and regulatory factors were at play.

Instead, a rigorous analysis should incorporate all of the following:

- **A longer time frame of data analysis, no less than five years both before and after Measure ULA's implementation date.** Over this longer time frame, building permit data is the best indicator of development activity, specifically the number of multifamily units permitted (i.e. building permits issued for multifamily units), including some portion of ED1 multifamily units.[21]
- **Comparisons of the City of Los Angeles to jurisdictions or geographies with similar housing conditions, including developability** (e.g. zoning and land use regulations) and market strength (e.g. median rents and land values). Comparisons could even be at the neighborhood or submarket level, since the City of LA is so large with diverse real estate submarkets. Comparison geographies need to be carefully analyzed over an adequate time period and under a variety of market conditions to confirm that the geographies are truly comparable.
- **Statistical best practices and modeling**, including robustness analysis testing assumptions (e.g. testing for spillover).
- **Accurate assumptions for affordable housing production**, if evaluating trade-offs between inclusionary and subsidized units, including the actual inclusionary percentages and the accurate amount of local city subsidy in 100% affordable projects.
- **Transparency about the limitations of the research and conclusions**, especially around claiming causal linkages between policy interventions and market behavior.

[21] Evaluating market shifts with annual building permits over the short term would likely produce misleading results since building permits are a lagging indicator of market changes, and the significant variation year-over-year can only be controlled for with more longitudinal data.

The Ward-Phillips report includes a final recommendation to exempt new multifamily, commercial, and industrial developments from the ULA transfer tax within the first 15 years of construction. This is accompanied neither by analysis of how the exemptions would spur favored economic activity nor by projecting such impacts on future Measure ULA revenue — let alone their impacts on the programmatic goals funded by that revenue.

The success of Measure ULA is invaluable to Los Angeles's efforts to address our housing crisis and build a city for all. Serious, thoughtful, and methodologically sound research about the measure's ongoing effects, and, in due time, carefully crafted policy adjustments based on empirical and analytical considerations will be critical to that success. **We hope the criticisms in this paper are received in a collegial spirit and in the service of greater equity in our shared city.** We look forward to the authors' future contributions to this discussion.