NCSHA

Development Costs in the Low Income Housing Tax Credit Program

Background and Methodology: Overview

NCSHA engaged Abt Associates (Abt) to analyze development costs of affordable apartment projects financed with the Low Income Housing Tax Credit (Housing Credit).

Abt analyzed development cost data for more than 2,500 projects containing more than 160,000 housing units developed through the Housing Credit and placed into service between 2011 and 2016. The sample includes approximately 47 percent of 9 percent deals and 20 percent of 4 percent deals placed in service over this time period.

The sample spans the country, including at least two projects in every state and more than 25 projects in each of 35 states.

The data was provided by 14 syndicators, including 8 of the largest national syndicators active during the study period and 6 regional equity funds.

Background and Methodology: Study Focus

How have Housing Credit development costs varied over time?

How do Housing Credit development costs vary by project characteristics and geography?

What are the principal observable factors that impact the costs of developing Housing Credit properties?

Background and Methodology: Methodological Approach

Abt developed descriptive tables that show the relationship of particular factors to per-unit costs.

Abt also constructed regression models that look at multiple factors affecting costs at the same time.

Abt inflated all costs to 2016 dollars using a construction index from RS Means.

Factors analyzed included:

- Year placed into service
- Location (region, metro/rural, poverty rate, DDA, QCT, state construction wage)
- Project (9 Percent vs. 4 Percent, NC vs. AR, total units, # bedrooms, target population, developer type, # of financing sources)

Key Finding: Housing Credit TDC Medians and Means

The Abt analysis focuses on per-unit total development cost (TDC) which reflects the total development cost for a project — **including the cost of land** — divided by the number of units in the project.

Abt finds that the median per-unit TDC over the six-year time period was $164,757, adjusted for construction cost inflation.

Abt finds that the mean per-unit TDC over the six-year time period was $182,498, adjusted for construction cost inflation.

Key Finding: Location Is a Major Driver of Development Cost

Abt finds that Housing Credit total development costs (TDCs) were higher for projects developed in principal cities of metropolitan areas, and in HUD-designated difficult development areas (DDAs) and qualified census tracts (QCTs).

Costs were also higher for projects developed in New England, the Mid-Atlantic, and the Pacific regions, as compared with other regions.

These relationships held true even when Abt analyzed total development costs without land, suggesting the higher cost of land is not the sole factor driving this finding.

Nor is the finding due solely to differences in construction-cost wages, since Abt controlled for state-level differences in these wages, which also had a significant effect on costs.

Key Finding: Project Size, Type, and Financing Also Drive Costs

Smaller projects were more expensive per unit to build than larger projects, likely due to the economies of scale of developing larger projects.

Projects where the unit size averaged more than 2.5 bedrooms were also more expensive on a per-unit basis.

New construction projects were substantially more expensive than projects developed by acquiring and rehabilitating existing structures.

Projects with multiple financing sources were more expensive on a per-unit basis, which could be due to the challenges associated with assembling multiple financing sources or could be due to the need to find multiple financing sources to pay for higher-cost projects.

Market Context: Cost Comparison

According Dodge Data and Analytics, the average TDC per unit for multifamily new construction — **not including soft costs or land** — was $151,000 (2011 to 2016).

Adjusting the Dodge data for common estimates of soft costs and land yields a mean TDC of between $196,000 and $204,000.

Abt's findings indicate the mean TDC for new construction of a Housing Credit unit was $209,000 over that time period. This includes costs that do not generally apply to market rate properties, such as reserves and developer fees.

Thus, Housing Credit development costs are generally consistent with overall apartment development costs

Source: Historical Starts Information: Multifamily Starts US Summary, Annual Totals, Dodge Data and Analytics, August 2018

Market Context: Cost Growth Comparison

Abt finds that the costs of developing Housing Credit developments generally grew in line with the average growth of all construction costs nationwide between 2011 and 2016, which was about eight percent over that period according to the RS Means Historical Cost Index.

A 2017 study by Fannie Mae found that overall apartment costs have risen **between 10 percent and 30 percent**, depending on the number of stories, over the past five years.

Source: Fannie Mae Multifamily Market Commentary (March 2017)

Market Context: Tradeoffs

The Abt findings illustrate the important tradeoffs involved in developing affordable housing across the United States:

- While it may be more expensive to build in high-cost areas, housing needs exist in high-cost as well as low-cost communities.
- While rehabilitating an existing building may be less expensive than new construction, suitable properties for redevelopment are not available everywhere — and new construction is a cost-effective approach in some situations.
- Smaller units cost less to build but are not appropriate for all households, and smaller projects cost more to build per-unit, but larger projects are not desirable in all locations.

Per-Unit TDC by Year (2011 – 2016)

Year	Number of Projects	Number of Units	25th Percentile	50th Percentile	75th Percentile	Mean
2016	399	24,639	$120,906	$166,817	$237,721	$186,325
2015	424	27,733	$121,520	$163,662	$221,236	$177,784
2014	411	26,210	$133,050	$177,621	$233,066	$195,875
2013	467	29,399	$120,473	$164,105	$224,244	$181,162
2012	467	29,888	$115,839	$153,166	$218,719	$175,852
2011	379	24,578	$115,893	$160,393	$214,031	$179,393
All Years	2,547	162,447	$121,254	$164,757	$224,903	$182,498

Note: All dollars adjusted to constant 2016 dollars based on the RS Means Historical Cost Index.

Per-Unit TDC by Development Type

	Number of Projects	Number of Units	25th Percentile	50th Percentile	75th Percentile	Mean
New Construction	1,425	81,595	$146,246	$190,804	$249,236	$209,095
Acquisition-Rehab	1,077	77,861	$98,045	$131,074	$183,192	$153,394
All Projects[1]	2,547	162,447	$121,254	$164,757	$224,903	$182,498

[1]Total includes 45 projects that are identified as a mix of both development types.
All dollars adjusted to constant 2016 dollars based on the RS Means Historical Cost Index.

Relationship of Location Characteristics to Per-Unit TDC

Factor	Description of Relationship to Per-Unit TDC	Statistical Significance
Region	Costs varied strongly by region, even when we analyzed per-unit TDC without land costs. The highest-cost regions were the New England, Mid-Atlantic, and Pacific regions. The lowest-cost regions were in the South.	Highest-cost regions were highly significantly different from mid-cost regions.
Project location type	Costs varied by type of area. Projects developed in the principal city of metropolitan areas had the highest costs, followed by metropolitan area projects developed outside of principal cities, followed by projects in non-metro areas.	Highly significant
Difficult-to-develop area	Projects located in DDAs had higher per-unit costs.	Highly significant
Qualified census tract	Projects located in QCTs had higher per-unit costs.	Highly significant
Construction wages	Projects located in states with higher construction wages had higher per-unit costs.	Highly significant
Poverty rate	We found different results in different models, suggesting the relationship between poverty rate and per-unit TDC is not robust.	Mixed

Note: Mixed indicates we found significant relationships for some categories, but not all, included in the regression model, or that results differed in different regression models. Highly significant indicates a significance level of $p < 0.001$. Significant indicates a significance level of $p < .10$.

Relationship of Project Characteristics to Per-Unit TDC

Factor	Description of Relationship to Per-Unit TDC	Statistical Significance
Development type	New construction projects had higher costs than acquisition-rehab projects.	Highly significant
Total units	Projects with more units had lower per-unit costs.	Highly significant
Tax credit type	Projects developed with 9 Percent Credits had higher per-unit costs than 4 Percent Credit projects.	Significant
Financing sources	Costs increased as financing sources increased.	Significant
Average bedrooms	While results differed a bit in different models, in general, we found projects with a higher average bedroom size had higher per-unit costs.	Significant
Target population	Our main model finds that projects for the elderly had lower per-unit costs than family projects and that special needs projects had higher per-unit costs than family projects. However, these effects did not persist in two of our alternative models.	Mixed
Developer type	In our main model, we found that projects developed by non-profit developers had higher per-unit costs than projects developed by for-profit developers. However, we did not find this result in two of our alternative models.	Mixed

Note: Mixed indicates we found significant relationships for some categories, but not all, included in the regression model, or that results differed in different regression models. Highly significant indicates a significance level of $p < 0.001$. Significant indicates a significance level of $p < .10$.

About NCSHA

The National Council of State Housing Agencies is a nonprofit, nonpartisan organization created by the nation's state Housing Finance Agencies (HFAs) more than 40 years ago.

NCSHA advances the agencies' shared policy priorities with Congress and federal agencies; produces and disseminates educational, training, and best practice information for agency staff; and promotes HFA leadership and innovation in meeting their states' housing needs.

NCSHA's vision: An affordably housed nation

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