

BEYOND THE GILDED GATE:

CALCULATOR: **PENCILING OUT** **A PROJECT**

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Planning a new apartment building is kind of like a math problem. Developers calculate an array of costs to help determine a rent that will generate enough revenue to make a project feasible to build. And they have some choices to make along the way that can alter that rent by hundreds of dollars a month. The Globe designed a calculator to show the trade-offs.

The question: How do construction costs factor into the rent at a hypothetical 170-unit apartment building in Greater Boston? And how do some key decisions bring those rents up or down?

The methodology: The Globe spoke to numerous developers to understand the math behind housing construction, including the “hard costs” such as labor and materials, and “soft costs” like architectural and legal fees and financing. To make this as realistic as possible, the budget includes a 6 percent profit margin that is typically needed these days to attract investors, and a 2 to 3 percent fee that developers take to cover their expenses.

The answers: Check out the calculator below.

A DEVELOPER'S PERSPECTIVE

PENCILING OUT A HYPOTHETICAL 170-UNIT RENTAL BUILDING NEAR BOSTON *

1. Land

2. Union labor

3. Parking

4. Green energy

5. Affordable housing

First: Where would you like to build?

The closer you get to the core of the region, the more land tends to cost.

Downtown Boston

Outer neighborhood, close to transit

Suburban

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Total project cost

\$90.8 million

Land	<input type="text"/>	\$6.8 million
Soft costs	<input type="text"/>	\$15 million
Hard costs	<input type="text"/>	\$69 million
Return for investors:		\$5.45 million

Average rent per unit

Market rate	153 units	\$3,468 per month
Affordable housing	17 units	\$1,625 per month

* Sources: The calculator was built off of data from a financial plan for a proposed apartment building in Greater Boston that was provided to the Globe by a developer who requested anonymity in order to share sensitive information. The estimated cost impacts of land, parking, union labor and green energy were drawn from interviews with a number of industry experts. Calculations assume a fully-occupied building and a 6 percent return on cost for equity investors.

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BEYOND THE GILDED GATE

People in and around Boston are being challenged, in ways never before, to address the region's unprecedented housing crisis. The Globe Spotlight Team probed this question and found yet another crisis: One of consensus and will.



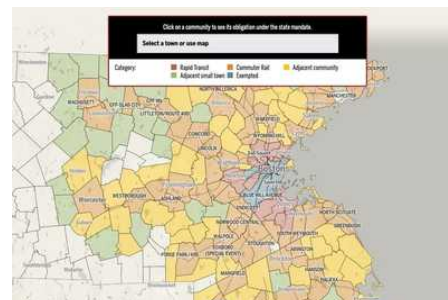
PREVIEW: DATA

Graphics: Why it's so hard to afford housing in Boston



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MAP

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PART 2: GENERATIONS



PART 3: LUXURY TOWERS



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A Boston building, scattered souls, and rent control revisited

An identity crisis comes to Brookline



PART 7: CONSTRUCTION COSTS

The \$600,000 problem. Why does it cost so much to build housing in Boston, and what can we do about it?



CALCULATOR: CONSTRUCTION COSTS

Calculator: Penciling out a project

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