

Building Fee Increases and Reduced Housing Affordability
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Every time a local or regional government raises construction costs by, for example, increasing the price of construction permits, tap fees, proffers or impact fees, the cost of building a house in that area rises. Making matters worse, the rise in the house price will generally be greater than the increase in the government fee. This is because each time construction costs increase other seemingly unrelated costs also rise. The sum of these "other" costs is about 22 percent. Thus, every \$819 increase in fees results in a \$1,000 increase in house prices. Table 1 give the numeric details, a detailed explanation follows.

Table 1.	
Financing Costs	
Hypothetical Construction Fee Increase	\$819
Cost of Capital	
Average Annual Interest Rate	10%
Length of Time From:	
Authorizaton to Start (in Months)	0.8
Start to Completion (in Months)	6.2
Completion to Sale (in months)	4.8
Total Time	11.8
Total Increase in Finance Charges	\$80.54
Brokerage Commissions	
Average Fee as a Percentage of House Price	2.90%
Total Increase in Brokerage Fees	\$23.75
Compensation and Normal Profit	
Total Compensation and Profit	9.30%
Total Increase in Compensation and Profit	\$76.17
Sum of all Added Costs	\$180.45
Sum of all Added Costs as a Percentage	22.03%
Total increase in House Price	\$999.45

Financing

Financing is the first cost to necessarily increase. The dollar amount of the increase is dependent on when the new and or higher fee is paid by the developer or builder to the taxing authority. Building fees, HVAC fees, plumbing fees, electrical fees, platting fees and other similar and related fees are commonly paid at the time the permit is issued. There is strong evidence that park fees, library fees, police and fire fees, school fees, road fees and other infrastructure related fees are also paid when the permit is issued¹. Therefore, the increase in financing costs is the amount of the fee multiplied by the length of time from payment of the fee until the house is sold.

This time period can conveniently be broken down into three sub-parts; permit to start, start to completion, and completion to sale. The 20-year average period of time from permit issuance to the start of construction for single family detached units based on data from the Survey of Construction (SOC) conducted by the Bureau of the Census is eight-tenths of a month. Interestingly this period of time has been as low as sixth-tenths of a month in 1998 and as long as a full month in 2006, with a full month being about 65 percent longer than the shortest time period. During this several week period of time, land may be cleared, a security fence may be erected, heavy machinery may be brought to the site, a barrier wall may be put up to prevent runoff from the jobsite, and other staging activities may be performed.

Based on the Census Bureau's SOC the 20-year average length of time from the start of construction to completion of the home, is 6.2 months. This period has at times been as short as 5.9 months in 1995 and as long as 6.9 months registered just last year, a difference of just 17 percent. By the end of this period a house is ready for sale. All finishing work has been completed and the house is ready to be shown.

The final phase, or the period from completion to sale also varies over time. Over the past 20 years it has been as short as 3.6 months in 2003 and as long as 6.9 months during the recession of 1991, a difference of over 90 percent. During this time the house sits vacant while the builder and or real estate agent work to find a buyer.

Note that the variation in the duration of the permit-to-start phase and the completion to sales phase is quite large, 65 percent and 90 percent respectively, while the variation of the duration of the construction phase is quite small. Moreover, in all three periods the duration increases when sales fall, and decreases when sales rise. This shows that the amount of the "mark up" actually rises during weak housing markets, when things are stretched out, and contracts when sales are brisk as the sum of all three phases are shortened.

Taken together these three periods of time add up to 11.80 months; almost an entire year. By multiplying the \$819 increase in home construction costs by 10 percent (the interest rate currently paid by builders) and then multiplying that amount by almost an entire year results in additional financing costs to builders of \$80.54.