

## Chapter 12

# Resale Formula Design

### Introduction

A CLT resale formula establishes an upper limit on the price for which a CLT home may be resold – whether it is sold back to the CLT or sold directly to another household. Once a CLT adopts such a formula, the usual expectation is that it will be written into all of the organization’s ground leases and applied consistently to all of the organization’s homes each time each home is sold. Classic CLT bylaws (following the model presented in Chapter 5A) require an elaborate process to change the resale formula, involving supermajority votes by both the membership and board of directors. Clearly the process of designing a formula that will have such long-term consequences is one of the most important and difficult tasks that a new CLT must undertake. Whatever formula is adopted will affect the specific rights and obligations of both the CLT and its many homeowners for generations to come.

Chapter 8, “Implementing Restrictions on Ownership,” discusses the rationale for resale restrictions in general, as well as the CLT’s method of implementing these restrictions through a ground lease. Chapter 9 discusses the legal enforceability of the CLT’s preemptive right to repurchase a homeowner’s home for a price determined by the resale formula established in the CLT ground lease. The purpose of the present chapter is to help new CLTs work through the many issues involved in designing their own formulas in accordance with their own purposes, preferences, and circumstances.

The chapter focuses on formulas designed to regulate the resale price of single, owner-occupied housing units – whether free-standing single-family homes, townhouses, or condominium units. Many, but not all, of the factors discussed will also apply to formulas designed for other types of CLT lessees, including housing co-ops (see Chapters 15-A and 15-B), and nonprofit service providers and businesses of various sorts (See Chapter 16, “Non-Residential Ground Leases”). CLTs that anticipate leasing land to such entities may develop specialized formulas based on their specific goals and practical concerns.

**Equity and Appreciation.** A homeowner’s equity is the value of the home *minus any debt* that encumbers the home – in other words, the amount of money that an owner can expect to receive upon the sale of the home after all debt secured by mortgages or other liens has been paid off. In the case of a just-purchased home, the owner’s equity normally equals the amount of the down-payment, which is typically a small percentage of the total purchase price. As the owner makes monthly mortgage payments, her equity will increase (slowly at first, when payments consist mainly of interest; then more rapidly as an increasing portion of each payment is applied to principal).

In an unrestricted market situation, the owner’s equity will also increase with any appreciation of the market value of the home. In fact, when a person buys a home by making a relatively small, down-payment and borrowing the balance of the cost, market appreciation can cause that person’s equity to increase many-fold in a short period of time. For example, if a home is purchased with a 5% down-payment and appreciates by 5% in the first year (and if the owner is able to capture all of this appreciation), the equity that the owner purchased through the down-payment will increase in that year by 100%. This “leverage” – whereby an

up-front investment of only a portion of the total value allows the investor to capture 100% of any appreciation of that total value – is an important consideration for real estate investors.

In limiting the resale price, a CLT resale formula limits the amount of market appreciation that can be claimed by the owner as equity. In practice, the terms “limited equity formula” and “limited appreciation formula” have sometimes been used interchangeably with the term “resale formula.”

**Theoretical Basis for Allocating Appreciation.** Appreciation in the value of real estate can be caused by two basic factors. One source of appreciation is the dollars, materials, and labor that the owner invests in the home over time to develop or improve it. The other source is a set of social and economic factors that are beyond the control of the individual property owner – factors that can include changes in the level of private investment in the surrounding neighborhood; public investment in streets, sidewalks, streetlights, parks, schools; changes in transportation patterns, employment trends, or population in the surrounding region; changes in tax policies or land-use regulations, among many other factors that affect home prices.

To the extent that other practical considerations allow, CLTs try to allocate appreciated value fairly – to its true source. In other words, as far as possible, *value produced or purchased by the homeowner should be allocated to the homeowner and should add to the owner’s equity. Value produced by other social and economic factors should be “retained by the CLT”* (in the form of a reduction in the resale price that will make the home more affordable for lower income residents of the community).

It should be emphasized that CLT resale formulas do not *guarantee* that a homeowner will receive all of the value that she would ideally be entitled to, or even all of the value that the resale formula would allow, just as the market does not guarantee this kind of return to conventional homeowners. The CLT’s option to purchase the home for a limited price (the “purchase option price”) is usually an option to purchase for a price that is the *lesser* of the price determined by the resale formula *or* the appraised value of the home at the time of resale (see Model Ground Lease, Section 10.8 – 10.10, depending on which version of Article 10 is used). Though a successful CLT may help to stabilize real estate prices in a community – and thereby help to maintain the market value of homes – it cannot promise that a home’s market value will not be eroded by social, political, or market forces beyond the control of both the homeowner and the CLT. CLTs do not normally have the resources that would allow them to repurchase homes for prices higher than what they can expect to resell them for.

### **Goals in Designing a Formula**

For all CLTs the primary goals in designing a CLT resale formula are (1) to ensure *fair access* to homeownership for subsequent lower income residents by preserving the affordability of the CLT home, and (2) to give the present homeowner a *fair return* on her investment when she resells her CLT home.

These goals are not mutually exclusive, but there is clearly a tension between them. Formulas that are most certain to give the outgoing homeowner a fair return are likely to run a higher risk of eroding the home’s affordability for future homebuyers. Formulas that are most certain to preserve affordability run the risk of preventing a “fair” return. Each CLT must decide for itself what is fair and what is likely to preserve affordability, and must then design a formula in which these two essential concerns are reasonably balanced. In doing so, the CLT must also consider a number of important secondary goals. Different CLTs will assign

different priorities to these secondary goals, but all should consider the full range of practical issues they raise. Possible secondary goals include the following.

- *Encouragement of long-term occupancy, avoidance of incentives for quick resale.* CLTs have a basic interest in promoting stable neighborhoods and in providing long-term security for residents of these neighborhoods. They do not intend to provide homeownership opportunities as a way for owners to turn a quick profit and make a fast exit.
- *Promotion of homeowner mobility.* When CLT homeowners wish to sell their homes – perhaps to take advantage of employment opportunities in another community – they have an interest in selling for a price high enough to allow them to purchase a home in their new community. Some people argue that, if a CLT is to provide permanent benefits for lower income people in an increasingly mobile society, it should allow resale prices high enough to allow continued homeownership for those who move away. Others, however, see this goal as inconsistent with the CLT’s concern with long-term occupancy and neighborhood stability, or may see it as impractical in light of the primary goal of preserving the affordability of CLT homes.<sup>1</sup>
- *Incentives for sound maintenance.* CLTs do not want their resale formulas to pose economic disincentives to sound maintenance of the home. A formula that fails to reward an owner’s investment in such maintenance – or fails to penalize poor maintenance – can increase the likelihood that the homes will deteriorate and that their future usefulness will erode.
- *Incentives for useful improvements.* In some situations, CLTs have reason to encourage owners to make useful improvements in their homes, and perhaps make other improvements on the leased land. Rural CLTs may want to encourage ecologically appropriate improvement of the land itself. Many CLTs want to encourage weatherization and other energy-saving improvements of existing homes. Some may want to encourage the expansion of smaller homes to accommodate larger families. In some urban situations, however, a CLT may decide that small residential lots are already used to the optimum and may not want to encourage substantial additions to existing homes. (A few CLTs have chosen not to reward – or even permit – improvements because they want homeowners to *move out* of their “starter homes” when their fortunes increase, making room for the next lower-income, first-time homebuyer.)
- *Ease of comprehension by those affected.* In an effort to allocate equity with perfect fairness, a CLT can develop a formula so complicated that it will be incomprehensible to potential or actual CLT homeowners – and perhaps to everyone except its creators. At some point it must be recognized that a formula that allocates value less precisely to its source but that is readily comprehensible may be preferable to one that is more intricately precise but less comprehensible.
- *Ease of administration.* Formulas that require extensive record-keeping and/or frequent, detailed assessments of the value of improvements to the home may be very fair in theory, but they may also be beyond the capacity of a CLT with limited staff to administer, accurately and consistently, for many homes over many years. Ease of monitoring, record-keeping, and documentation are important concerns.

- *Lack of intrusiveness; sense of ownership.* It is important that owners of resale-restricted homes feel that they are “real” owners, with a sense of privacy and control over their homes comparable to that of conventional homeowners. A formula that requires frequent inspections and prior approval of repairs and improvements can undermine this sense of ownership.
- *Avoidance of disputes.* All resale formulas involve a tension between the interests of the homeowner and the interests of the CLT and community. Disputes can easily arise from this tension, but occasions for dispute can be minimized to the extent that the formula does not require subjective, debatable judgements on the part of CLT personnel in order to determine the resale price.

Given these various and important concerns, it should be clear that there is no one perfect resale formula. A number of trade-offs – among potentially conflicting social goals, economic interests, and practical concerns – must be made in designing a formula. The process of deciding on these trade-offs involves hard, complicated choices, defining the rights and responsibilities of many people. A CLT that tries to avoid or minimize the difficulties of the process is likely to sow the seeds of future confusion and dispute. The process of designing a resale formula should be inclusive and deliberate. It cannot be hurried.

### **Base Price, Equity Build-Up, and Adjustments**

**Defining the base price.** Almost all CLT resale formulas begin by stating a “base price,” which the formula then adjusts by one method or another to arrive at the resale price. (The only type of formula that does *not* start with a base price is the rarely used and not recommended “mortgage-based” formula that is described below.)

The base price is the amount that the buyer actually pays for the home, including both the amount of the buyer’s down payment and the amount of the repayable first mortgage loan that the buyer receives. It is the amount that can usually be called simply the “purchase price,” but for our present purposes we will avoid that term because we want to avoid the confusion that results in those cases where what is called the “purchase price” for certain formal purposes actually includes not only the amount that the buyer herself pays but also some amount of subsidy that is treated as a deferred loan to the buyer. In referring to such cases we will use the term “settlement price” in order to be clear that the settlement price is *not* the base price – and therefore not the base on which a resale formula should rest.

As is emphasized in Chapter 19, “Subsidy Structure,” the relationship between *price* and *subsidy* can be structured in two quite different ways. If the subsidy is committed directly and permanently to the CLT, it will directly and permanently reduce the price of the home for all homebuyers. However if the subsidy is structured as a deferred loan to the homebuyer, the amount of the subsidy will be included in the “settlement price” when, for instance, the price is stated in a “HUD 1 Settlement Statement.” In this case, the subsidy results in a higher settlement price being affordable for a household of a given income because it reduces the household’s monthly mortgage payments, but it does not reduce the settlement price itself. The first of these approaches, which “locks in” the subsidy, is *the* approach taken by CLTs whenever possible. The second approach is a fall-back method used by CLTs only when subsidy cannot be permanently locked in.

If a subsidy source insists on structuring a subsidy in the second way, as a deferred loan to the homebuyer, it is important that the CLT do two things. First, it should make every effort

to see that the deferred loan will be fully assumable by the next homebuyer and is *not* eventually *forgivable* (turned into a grant to the first homeowner). Second, it should structure the resale formula in such a way that the resale price is not inflated by allowing the homeowner to earn a return on the subsidy (deferred loan) as well as on the base price. This can be accomplished by using the term “base price” (not “purchase price”) in stating the resale formula and by defining this term explicitly as consisting of *only* the buyer’s down payment and first mortgage amount.

**Building equity by retiring debt.** Not all of the base price paid by the owner represents owner’s equity until all of that portion of the price that was borrowed by the owner has been repaid. At the time of purchase, the owner’s equity consists of the down-payment, which may occasionally include not only the owner’s cash investment but value contributed as sweat equity prior to the transfer of title. This equity will then increase as debt is retired. The normal assumption is that the amount of monthly equity build-up will be determined by the portion of that month’s mortgage payment that is credited to principal (a small portion at first, when most of the payment goes to cover interest; a larger and larger portion as debt is retired). However, a simple application of this assumption may undermine affordability for subsequent owners in cases where interest has been subsidized in order to increase affordability for an initial owner.

High interest rates can be a major barrier to homeownership for lower-income people. This barrier may be reduced by below-market-rate mortgage financing for a family purchasing a CLT home. The “interest subsidy” represented by the lower rate will allow the family’s monthly mortgage payments to be lower. It will also mean that a smaller portion of each monthly payment consists of interest, with a larger portion going to retire principal.

In such cases, CLTs must decide what portion of the retired debt should be credited to the purchaser as equity. If all repaid principal is credited as equity, the household with subsidized interest will build up equity faster than households paying the same monthly amount on mortgages at higher interest rates. The accelerated equity build-up raises both a question of fairness and a question of future affordability. If a household whose mortgage interest is subsidized is able to accumulate substantial equity through monthly payments of principal and then sells the home for at least the original price, the value of the interest subsidy will be removed – “privatized” – by the seller (except in the case of affordable loan programs like the USDA 502 direct loan program that have provisions for recapturing interest subsidy upon the sale of the home). If the CLT relies on interest subsidy to make a certain purchase price affordable for a homebuyer who could not otherwise afford that price, and if the interest subsidy is then captured by that homeowner, then the CLT will need to arrange another equally low-interest loan (additional interest subsidy) if the home is to be equally affordable for the next purchaser at that income level. Any CLT that relies on interest subsidy (or other forms of homebuyer-by-homebuyer subsidy) to make a home affordable, rather than establishing an affordable base price, is likely to face affordability problems in the future – unless the issue is addressed in the design of the resale formula.

Some CLTs address the problem by not crediting the full amount of debt retired in such situations as equity build-up. Instead, they establish a standard minimum interest rate (normally at or close to market rate), which is used to calculate the amount of interest the homeowner *would have* paid without the subsidy, which then allows a calculation of the amount of interest subsidy received during the time in question. This amount is then

subtracted from the resale price, so that the value of the subsidy is passed on directly to the next buyer.<sup>2</sup>

**Adjusting the base price to determine the resale price.** Most of the questions that a CLT must address in designing a resale formula have to do with the way that the base price will be adjusted upward (or possibly downward) to arrive at the resale price. It is in deciding on the *method* for making these adjustments that the CLT must balance its two primary goals of fairness and affordability, while also taking into account its secondary goals.

In the next section of this chapter we will describe two methods that are quite rare among today's CLTs and that are generally not recommended, but that are useful to examine because they entail relatively direct, uncompromising efforts to achieve one or the other of the primary goals – to be as fair as possible in the case of “itemized formulas,” and to ensure that affordability is preserved in all circumstances in the case of “mortgage-based” formulas. After reviewing these “theoretically pure” approaches, we will discuss the more commonly used types of formulas, which might be described as occupying the middle ground between the theoretically pure approaches.

### **Itemized and Mortgage-Based Formulas, Pure in Theory but Not Practical**

**Itemized Formulas.** Itemized formulas determine the resale price by adding to or subtracting from the base price specific factors that increase or decrease the value of the homeowner's investment in the home. These formulas were relatively common among early CLTs but have generally been abandoned, even by those that initially adopted them. Nonetheless, it is important to understand how such formulas work, because they illustrate issues involved in efforts to base the homeowner's equity gain on a direct measurement of her actual investment over time, and because elements of these formulas find their ways into some more commonly used types of formulas.

Itemized formulas can vary widely in the factors that they itemize and in the ways that they deal with these factors. The factors (or “items”) more commonly considered for inclusion are discussed here.

*Value of Improvements.* Value added to a home through improvements made or paid for by the owner can be treated as additions to the resale price. The measurement of this value represents one of the most important – and most difficult – features of this type of formula. It is difficult because calculating the value of homeowner-initiated improvements depends on distinctions and decisions that are not easily made. Four types of difficulty should be noted.

One difficulty is the distinction between *replacements or repairs*, which are necessary to retain or restore the original value of the home, and *improvements*, which add value beyond the original value. This distinction is simple in principle but often complicated in practice. A huge variety of possible alterations must be classified as either repairs or improvements – and many are actually both. The replacement of a deteriorated single-pane window with a double pane, energy-efficient window is both a replacement and an improvement, as is the installation of a new roof in place of a roof that is now badly deteriorated but that was already half-way through its expected lifetime when the owner bought the home. Efforts to take all such circumstances into consideration when assigning value to an owner's improvements can be extremely complicated.

A second difficulty is the distinction between improvements that increase the *utility* of the home in an appropriate way (e.g., addition of a bedroom) and those that may be considered

unnecessary *luxuries* and that may increase the purchase option price beyond the reach of lower income homebuyers. Should an owner be credited with equity for the value of a swimming pool installed in the backyard, or (to note an extreme example) the value of a marble bathtub with gold faucets? CLTs that have used resale formulas with improvement factors have usually tried to exclude such luxuries from the type of improvements that would be allowed to increase the resale price of the home; nonetheless, defining exactly what is and is not a luxury is not easy.

A third difficulty is the question of *how improvements are actually to be valued*. Should the value be determined by what goes into the improvement (the owner's investment in materials and labor) or what comes out of the improvement (the resulting change in the market value of the home). With the former approach, it is relatively easy to determine the dollar value of the owner's investment if the owner pays a contractor for the full cost of an improvement, but if the owner does some or all of the work herself, or gets a friend to help her, how is the value of the labor to be assessed? The skill and productivity of do-it-yourselfers vary tremendously. But even if the dollar value of the investment can be measured exactly, it does not follow that the market value of the home is correspondingly increased. Resulting changes in market value can be calculated – with some approximation of accuracy – by professional appraisers, but the time and cost entailed in commissioning an appraisal for a specific improvement is substantial.

A fourth difficulty derives from the three factors discussed above. This difficulty is the *potentially contentious process* of approving and valuing improvements that will affect the resale price.

It should be noted that other types of formulas – including the common appraisal-based, fixed-rate and indexed formulas discussed in the next section – can also entail improvement factors, though usually these are limited to major, appraisable improvements, such as the construction of a garage or additional bedroom.

*Maintenance, Repairs, and Depreciation.* An itemized formula would not normally add the value of maintenance and repairs to the resale price unless it also subtracted a certain amount for depreciation. In general, value added through maintenance and repairs should roughly compensate for equal value lost through depreciation, so it is possible not to account for either factor in an itemized formula on the assumption that the two cancel each other out.

*Penalties for Unusual Damage.* Regardless of whether an itemized formula includes a standardized depreciation factor, it may provide a separate direct penalty to cover the cost of extreme damage to the home caused by the owner. Such penalties (which are sometimes added to other types of formulas as well) can provide important protection for the CLT in cases of outright destructiveness or irresponsibility by an owner. Because such a penalty can easily lead to a dispute between the CLT and the owner – or aggravate an already bad situation – it is especially important that very clear procedures be established for assessing the damage and imposing the penalty.

*Inflation Adjustments.* Itemized formulas can also include inflation factors. Monetary inflation – characterized by increased prices of goods and services generally, and therefore by reduced purchasing power of a dollar – can have a major effect on the value of any long-term investment. The common method of compensating for the effect of inflation is to increase the dollar amount of the owner's equity in proportion to an increase in one of the Consumer Price Indexes maintained by the federal Department of Labor – most often the Consumer Price

Index for Wage Earners for the region or metropolitan area in question. When the goal is just to adjust for inflation the value of what the homeowner has “earned,” the inflation factor is applied only to the equity that the homeowner has accumulated over a given period of time. This is a very different practice – with very different results – from the practice entailed by “indexed formulas,” which, as explained later in this chapter, apply the index to the base price rather than to the owner’s equity.

#### *Advantages of Itemized Formulas*

- An “improvements factor” can give owners a direct means of recapturing the value that they add to their homes through improvements.
- An inflation adjustment can prevent the devaluation of the owner’s earned equity – while not giving unfair leverage to an owner with a small amount of equity in a property.
- These formulas can be tailored to encourage and reward improvements that are useful to future, as well as current, residents.
- These formulas insulate resale prices from the fluctuations and speculative pressures of the housing market and the broader economy.

#### *Disadvantages of Itemized Formulas*

- These formulas can require difficult assessments of the value of improvements, particularly where the CLT must enforce fine distinctions between repairs and improvements, between luxury improvements and useful improvements, and between improvements that are properly done and those that are not.
- Accurate application of inflation adjustments to owner’s equity can be fussy and time-consuming. If the inflation factor is to be compounded annually, the CLT must calculate the total amount of equity held from year to year, based on mortgage debt repayment as well as on the other factors introduced by the formula.
- Administration of these formulas makes very burdensome demands on limited CLT staff time. Extensive record-keeping and relatively complex periodic calculations are required, which can strain the CLT’s administrative capacity to the limit – or can result in essential tasks being improperly done or left undone.
- The necessary judgments, calculations, and record-keeping can result in serious misunderstandings and disputes between CLT and homeowners.
- The CLT’s ongoing role in determining what improvements will be allowed to add to the owner’s equity and in assessing the value of these improvements can diminish the owner’s sense of privacy and ownership.

**Mortgage-based formulas.** The more commonly used resale formulas aim at preserving affordability by limiting the price for which a home can be resold. However, they do not limit the interest rates that will also affect the affordability of the next buyer’s monthly mortgage payment. An increase in these rates can undermine affordability. Mortgage-based formulas are the only formulas that directly address this problem. They establish the resale price not in terms of adjustments applied to a base price but in terms of the amount of mortgage financing a purchaser of a given income level will be able to afford at the then-current interest rate. By thus assuring affordable mortgage payments for the next buyer, however, they create potentially serious problems for the homeowner who must sell in a time of increased interest



rates. For this reason they are rarely used. Nonetheless, it is useful to understand how they work.

*Components of mortgage-based formulas.* The designer of a mortgage-based formula must specify the following factors:

- The income level (as a percentage of area median income adjusted for a particular household size) for which affordable monthly payments are to be calculated.
- The components of the monthly housing cost to be considered in calculating affordability (the usual components being principal, interest, taxes, insurance and lease fee).
- The percentage of gross income that will be considered an “affordable” allocation for the monthly housing costs in question (stated either as a fixed percentage, e.g. 30%, or as the maximum percentage allowed at the time of resale by applicable home mortgage programs).
- The percentage of the resale price that is to be covered by mortgage financing (usually at least 95%).
- The type of mortgage (usually 30-year fixed-rate) for which monthly payments are to be calculated at the “current interest rate.”
- The index or benchmark that will be used to determine the exact “current interest rate” for the type of mortgage in question for the time in question.

*Method of calculation.* It should be emphasized that when the resale price is established at exactly the amount that is “affordable” (i.e., the maximum amount “affordable”) for a given income level, the price will be “unaffordable” for any household with a lower income. This means that if the goal is to maintain affordability for households *below* 80% of AMI, the formula cannot establish the price at what is (just barely) affordable for households *at* 80% of AMI. To achieve such a goal, the formula must establish the price at what is affordable for some significantly lower percentage of AMI, say 60%. If a specific mortgage-based formula is designed to keep monthly payments affordable for, say, a four-person household with an income that is 60% of area median income, then the resale price would be calculated as follows.

1. The income, in dollars, for a 4-person household at 60% of AMI would be determined from the figures calculated and published by HUD for the MSA or county for the year in question. (For the purpose of illustration, let us say this amount is \$30,000 per year, or \$2500 per month.)
2. The amount that can be allocated affordably to housing costs each month is determined. (If the percentage used is 30%, then 30% of \$2500 gives us \$750 that can be applied to monthly housing costs.)
3. The portion of this monthly amount that can be used to service debt is determined by subtracting the amounts that must cover other costs. (If taxes for the year in question are \$150 per month, insurance is \$35 per month, and lease fee is \$50 per month, for a monthly total of \$235, then \$515 per month remains available for debt service.)
4. The “current interest rate” is determined. (Say 6.5% for a 30-year fixed rate mortgage)
5. The amount of debt that can be serviced on these terms is determined through an amortization calculation. (The monthly amount of \$515 will amortize a mortgage of \$81,487 in 30 years at 6.5%)

6. The resale price is determined on the assumption that the mortgage amount is a specified percentage of the total price. (If the \$81,487 mortgage is 95% of the price, the price will be \$85,776.)

***Advantages of Mortgage-Based Formulas.***

- This is the only type of formula that can guarantee a given level of affordability upon resale to a household of a given income level, no matter what happens to interest rates – or to property tax rates or other monthly housing costs.
- The basic principle behind this kind of formula – to make sure that each successive buyer has monthly housing costs at the same level of affordability – is easy to grasp for public officials, mortgage lenders, and others directly involved in the buying and selling of homes.

***Disadvantages of Mortgage-Based Formulas.***

- Because these formulas base the resale price entirely on what works for the *buyer*, the price will have no necessary relationship to either the original base price or further investment in improvements by the owner; therefore, these formulas are much less likely than the other types of formulas to give the *seller* a fair return – and may easily give a return that is dramatically unfair. For instance, suppose the seller is someone who had purchased a home, as described in the example above, for \$85,776, at a time when mortgage interest rates were at 6.5%. Suppose the home is then resold a few years later at a time when 60% of AMI for a 4-person household has increased by 5% to a monthly amount of \$2625 – 30% of which would be \$787.50 available for monthly housing costs. If the cost of taxes and insurance had also increased 5% and the lease fee had remained the same, then \$543.25 would be available for monthly mortgage payments. Now suppose that mortgage interest rates have risen to 8.5%. At this rate, a buyer with an income at 60% of AMI can afford a mortgage of only \$70,644, which, with a 5% down payment, would mean a resale price of \$74,362. For the seller who had paid \$85,776 the result would be a loss of \$11,414, even if the home had been improved and had increased in market value. In effect, one lower-income household would be required to provide a substantial subsidy to another. The effect on the former owner is potentially disastrous. Conversely, if interest rates had dropped substantially, the seller could receive a windfall profit, even if the home was unimproved and poorly maintained.
- The fact that these formulas determine resale prices based on factors over which the seller has no control tends to distort the process by which an owner decides whether to sell and when to sell. If interest rates are high the owner may try to hang on until rates go down. Such an owner may be tempted to violate (or perhaps only nominally comply with) the CLT's restrictions on absentee ownership and subletting. In any case such an owner's mobility is diminished.
- Mortgage lenders have reason to object to a formula that could result in a resale price lower than the amount owed on the mortgage, unless an escape clause is added to protect the lender in such a situation.
- Government affordable housing programs with regulations requiring that resale restrictions allow the seller to receive a "fair return" may not approve this type of formula.

- It may be somewhat difficult to establish a clear index or benchmark as the determinant of the “current interest rate” to be used in calculating resale prices over the long run. Particular indices, as well as particular mortgage products, may come and go and change over time.
- Though the principle may be easy to grasp, homeowners are unlikely to be familiar with the specific calculations required to determine resale prices – adding to the owner’s sense of uncertainty.

Clearly the disadvantages of such formulas must be seen as prohibitive if implemented in the manner described here. For those willing to accept yet another level of complication, it is possible to mitigate the most serious disadvantages by establishing upper and/or lower limits beyond which interest rate fluctuations will not be permitted to push resale prices. One way to set a minimum price would be to establish the resale price as the greater of the original base price or the mortgage-based price. However, this approach would not prevent the price of the home from being ratcheted steeply upward when interest rates dropped. The latter problem could be addressed by a more complicated formula that would establish both a minimum and a maximum price – perhaps by establishing minimum and maximum interest rates to be used in calculating resale prices. Any such adjustments, however, would undermine the mortgage-based formula’s one advantage, its ability to preserve affordability in all circumstances.

### Commonly Used Formulas

The more commonly used resale formulas fall between the extremes of the more theoretically pure itemized and mortgage-based formulas. None of them offers as complete a method of measuring a homeowner’s earned equity as does the itemized formula. None of them offers as certain a method of preserving affordability as does the mortgage-based formula. All of them avoid, or at least moderate, the major practical disadvantages of the theoretically pure approaches, and all are easier to explain and implement. We will review in some detail the three basic types commonly used by CLTs.

- *Appraisal-based formulas*, including three subtypes, all of which adjust the price by allocating to the owner a specified percentage of market appreciation as measured by appraisals at the time of purchase and the time of resale.
- *Fixed-rate formulas*, which allow the price to increase by a fixed annual percentage.
- *Indexed formulas*, which allow the price to increase in proportion to changes in an index such as the Consumer Price Index or the median household income.

**Appraisal-based formulas.** Appraisal-based formulas adjust the resale price by adding to the base price a certain percentage of any increase in appraised market value. Rather than itemizing the factors that can cause increases or decreases in value, these formulas let the market measure changes in value. Any increase in value is then shared between the CLT and the homeowner on a specified basis.<sup>3</sup>

For the purpose of determining how much appreciation has occurred, these formulas establish an original market value that is *not* the base price paid by the homeowner but the appraised value of the homeowner’s property at the time of purchase (with “homeowner’s property” defined differently for different subtypes of appraisal-based formulas). It should be emphasized that we are talking here about appraisals of the market value that CLT homes *would* have *if* their market value were not restricted by the terms of the lease. If the resale formula were to require appraisals that discounted market value because of the restrictions

imposed by the lease, then the resale price of the home would, in effect, be discounted twice – once by the appraisal and again by a formula that allowed the price to increase by only a portion of the appreciation reflected by the appraisal.

It should also be noted that the initial appraisal process used for appraisal-based formulas can also serve the purposes of the leasehold mortgage lender who will finance the home for the next purchaser; *however*, the lender will then proceed to calculate a “bottom line value” (the value of the improvements and leasehold interest in the land) that is different from the value that will be used in calculating the resale price. See Chapter 20, “Financing CLT Homes,” for more information regarding the appraisal of the leasehold interest.

The basic idea behind all appraisal-based formulas is that the homeowner should receive a share of the appreciation of that part of the overall property that the homeowner has purchased. The original assumption was simply that what the homeowner has purchased is the improvements only, which are deeded to her, but not the land in which she has only a leasehold interest. In some respects, however, the reality is more complicated than this assumption suggests. Because of these complications there have come to be three subtypes of appraisal-based formula.

- *Improvements-only appraisal-based formulas*, which give the seller a share of the appreciation of the appraised value of just the improvements.
- *Simple appraisal-based formulas*, which give the seller a share of the appreciation of the appraised value of the whole property, including land as well as improvements (usually a smaller share than given by improvements-only formulas).
- *Compound appraisal-based formulas*, which give the seller a share of the appreciation of that portion of the value of the whole property that the base price actually covers.

We will review the specific advantages and disadvantages of these subtypes, but before doing so let us look at the overall advantages and disadvantages shared by all appraisal-based formulas.

#### ***Advantages of (All) Appraisal-Based Formulas***

- These formulas allow homeowners to capture a modest amount of appreciated value, while preventing expensive improvements from pushing the resale price beyond the level of affordability (since the owner receives only a portion of the value added by improvements).
- These formulas avoid all of the difficulties involved in distinguishing repairs from improvements and assessing the value of improvements, and there is no need to intrude on the owner’s privacy and sense of ownership to approve and evaluate improvements (though improvements may still be regulated for reasons unrelated to the resale formula).
- Because these formulas rely on professional appraisals, utilizing standard techniques for appraising market value, the CLT itself does not have to make difficult and potentially controversial assessments of value.
- Detailed record-keeping and fussy arithmetic are not required, relieving CLT personnel of burdensome tasks, and avoiding the confusion and conflict that can result from inaccurately or incompletely maintained records.

#### ***Disadvantages of (All) Appraisal-Based Formulas***

- Appraisals entail significant time and expense. Homeowners cannot know exactly

what resale price they will be permitted to receive unless or until an appraisal is completed.

- During periods of rapid market appreciation, these formulas may give an unduly high rate of return to owners who sell only a few years after having purchased with little or no down payment.
- These formulas do not distinguish between value added by the owner and value added by market factors beyond the owner's control. In most market situations, an owner who has made substantial improvements will recapture only a portion of what she has invested. There is therefore less incentive for making improvements, and perhaps less incentive for repairs and replacements as well.
- These formulas do not isolate that portion of apparent appreciation that results from monetary inflation. If the local real estate market is appreciating only at the rate of inflation, a long-term owner who receives only a portion of this apparent appreciation will receive less value than she has invested.

**Improvements-only appraisal-based formulas.** Most, if not all, of the CLTs that first adopted appraisal-based formulas adopted this “improvements-only” type, and it is the type that was illustrated in the previous versions of the Model Lease. Typically these formulas allocate something like 25% of the appreciated value of the improvements (but not the land) to the homeowner, though some allocate a higher percentage, and some adjust the percentage upward as a homeowner's tenure increases (e.g., a percentage ranging from 5% after 1 year to 30% after 30 years).

Improvements-only formulas are based on the assumption that the improvements are *the* property that the homeowner purchases – therefore the property in which the homeowner has a right to share in appreciation that is likely to derive, at least in part, from the owner's own efforts. If the market value of the underlying land increases, on the other hand, it is assumed that the appreciation has been generated by the surrounding real estate market, not by the owner of the improvements.

In clearly distinguishing between land value and improvement value, improvements-only formulas are solidly based on the fundamental CLT precept that land and improvements should be treated differently. Land tends necessarily to appreciate because it is a finite resource. The supply of land cannot be expanded to meet increasing demand, whereas the supply of housing units, as products of human industry, can always be increased. To be sure, housing is a “lumpy” commodity, which cannot be produced overnight and, once produced, cannot be shipped to wherever the demand exists, so local shortages do occur, but the supply does eventually catch up.

As compared to other types of appraisal-based formulas, improvements-only formulas have the important advantage of excluding increases in land value from the determination of resale prices. At least they do this in so far as the nature of real estate appraisals makes it possible to do so, but there are some limitations on what is possible in this respect.

The primary method of appraising owner-occupied homes is the “market comparison” method, by which a home is compared to more or less similar homes that have recently sold, for known prices, in the vicinity of the subject home. The sale prices of the “comparables” provide a base, from which value is added or subtracted as the subject property is compared, feature by feature, to these comparable properties.

When the value of a CLT home (improvements only) is appraised through a comparison with recently sold properties that include land as well as improvements, then, if a simple appraisal-based formula is used, the market value of the land must be subtracted from the prices of the comparables. Conceptually, this adjustment is one with which professional appraisers have no problem, since they are accustomed to adjusting market comparisons to account for differences in site value. However, these adjustments can be quite imprecise.

The precision of this method depends on the existence of relevant comparables for both land and improvements. The method is most dependable in situations such as recently developed suburban areas, where most homes *and most lots* can be closely and meaningfully compared. It is least dependable in low-income neighborhoods, which are typically affected by disinvestment or by complex patterns of disinvestment and reinvestment, with older buildings in widely varying conditions. In such neighborhoods, good comparables may be hard to find.

It can become particularly difficult to establish the value of *land* through the comparison method in disinvested neighborhoods. In such circumstances land may actually have a kind of negative market value. The “undesirable” location of a lot can reduce the value of a building on that lot to an amount substantially below the replacement cost of the building, so the land actually subtracts value from the building, rather than adding value to it. But an appraisal by the market comparison method in such a neighborhood will not assign a negative value to the lot. It will recognize the effect of the location on the overall value of the property, but it will do this, in effect, by reporting the value of the building itself as less than its replacement cost, while assigning a nominal positive value to the lot. If the neighborhood later becomes a more desirable place to live – perhaps through the neighborhood improvement efforts of the CLT itself – an appraisal will then show the building itself having *gained* substantial value. Really it is the land (location) that has gained value, but the appraisal may assign much or all of the increase to the building.

Even in less extreme market situations, it remains difficult for appraisers to distinguish precisely between the part of a property’s value that derives from the land and the part that derives from the improvements. This is one of the disadvantages of improvements-only formulas. Another disadvantage stems from the fact that, because most real estate transactions do not require anyone to separate the value of improvements from the value of the land, there is virtually no record of historical trends in the prices of improvements separate from land. There is therefore no precise way that a new CLT can test the way an improvements-only appraisal-based formula would have performed in the local market over past years, as can be done with other common types of formulas.

A final disadvantage of these formulas lies in the fact that the base price that the homebuyer pays is usually not the same as the appraised value of the improvements – which raises a question of fairness, especially in expensive markets where the homeowner may actually pay for a significant portion of the land value as well as the value of the improvements, as will be noted below in connection with the discussion of “compound appraisal-based” formulas.

**Simple appraisal-based formulas.** These formulas directly address the difficulties entailed in trying to separate the value of improvements from the value of land: they simply do not separate them. They measure the appreciation of the combined value of both land and improvements, and then allocate to the homeowner a percentage of this appreciated value that

is normally smaller than would be assigned by an improvements-only formula in the same circumstances.

Because they eliminate one of the variables inherent in improvements-only formulas, these formulas are in fact simpler to apply, and it can be argued that, if the homeowner's share of appreciation is set at an appropriately low level, the simple formula will be as effective as improvements-only formulas in preserving affordability against rising land values. Another advantage is that, because reliable historical data is available regarding trends in home sale prices (land and improvements combined), it is possible for new CLTs to determine with some precision the effect that such a formula would have had on resale prices over past years.

In their simplicity these formulas abandon the significant distinction between the factors that may cause increases in the value of land and improvements. They may *limit* the effect of increasing land values, but they do not screen it out. Therefore, in an effort to preserve affordability against rising land values, they must allocate to the homeowner such a small percentage of overall appreciated value that there will be little economic incentive for preserving and enhancing the value of the improvements. The percentage may also be so low that, in any but the hottest real estate markets, resale prices will not keep up with inflation.

It should also be noted that, like improvements-only formulas, simple formulas do not take into consideration the percentage of a property's appraised value that the homeowner actually paid for through the base price. For this reason, the owner of a deeply subsidized home will receive a significantly higher rate of return than the owner whose base price covered most of the appraised value of the property. For instance, suppose a home that appraised for \$100,000 is sold to one buyer for \$90,000, while a home appraised for the same amount is sold to another buyer, requiring more subsidy, for \$60,000. Suppose that over a certain period of time the appraised value of both homes increases to \$150,000, and both homeowners receive a 20% share of the \$50,000 appreciation. The purchaser of the less deeply subsidized home will receive a 11.11% return, over the time of her ownership, on the investment of \$90,000. The purchaser of the more deeply subsidized home will receive a 16.67% return on the investment of \$60,000. The lack of fairness here can be seen as a problem.

**Compound appraisal-based formulas.** What we have chosen to call “compound appraisal-based formulas” give homeowners a percentage of the appreciated value of that portion of the total property that they have actually paid for through the base price. These formulas are like simple appraisal-based formulas in that they begin with the appreciated value of *both* land and improvements. And they are like improvements-only formulas in that they give the homeowner a specified percentage of only a *part* of that overall appreciation – but a part defined not in terms of the distinction between the value of land and the value of improvements but in terms of the distinction between the value covered by the base price and the value covered by the subsidy.

The first step in implementing these formulas is to determine what percentage of the total value of land and improvements is covered by the base price – by dividing the base price by the appraised value of the total property at the time of purchase. At the time of resale, the amount of any appreciation for the total property is multiplied by this percentage to determine the amount by which the value of what the homeowner paid for has appreciated. The CLT then applies its “appreciation sharing percentage” to the resulting amount. For example, let's look again at the two homes described above, both of which appreciated in value from

\$100,000 to \$150,000. For the home originally purchased with a base price of \$90,000, the base price covers 90% of the value. If the appreciation sharing percentage is then 25%, the seller would receive a share of appreciation equal to 25% of 90% of \$50,000 – or \$11,250 (thus a total resale price of \$101,250). For the home originally purchased with a base price of \$60,000, the base price covers 60% of the value. If the appreciation sharing percentage is then 25%, the seller would receive a share of appreciation equal to 25% of 60% of \$50,000, or \$7,500 (thus a total resale price of \$67,500). Both homeowners thus receive a 12.5% return on investment over the time of their ownership.

As this example illustrates, these formulas have the advantage of being fairer than simple appraisal based formulas, which provide a lower rate of return for those able to pay a higher base price (those needing less subsidy) than for those paying a lower base price (those needing more subsidy). It can also be said that these formulas are fairer than improvements-only formulas, which give a higher rate of return to those whose base price was less than the original value of the improvements alone, and a lower rate of return to those whose base price was greater than the value of the improvements alone (whose base price paid for a part of the cost of land).

Like simple appraisal-based formulas, compound appraisal-based formulas have the additional advantage of avoiding the imprecision and inconsistency entailed in distinguishing the value of improvements from the value of land. Also like simple appraisal-based formulas, these formulas have the disadvantage of allowing resale prices to include some portion of appreciated land value, which in hot real estate markets may undermine affordability.

As compared with both improvements-only and simple appraisal-based formulas, compound appraisal-based formulas have the disadvantage of being harder to explain, and, on a superficial level, more complicated to justify. Though these formulas are actually fairer than other appraisal-based formulas, it may still strike some people as unfair to give the homeowner only a “piece of a piece” of appreciated value.

**Other variations of appraisal-based formulas.** Some of the disadvantages of the several types of appraisal-based formulas discussed above can be addressed through other kinds of variations. Inevitably, these variations give up some of the simplicity that is the central advantage of appraisal-based formulas, but they may still be worth considering. One such variation is discussed below. Others are possible.

*Appraisal-based formulas with capital improvement factors.* These formulas combine certain features of itemized and appraisal-based formulas. Like most itemized formulas, they credit the homeowner with equity for the value of at least certain specified major improvements made at the owner’s expense. Then they allocate to the homeowner a certain percentage of any additional appreciation, beyond the value of the owner’s improvements, as determined by appraisals. For example, suppose a CLT homeowner has paid a base price of \$80,000 for a home (improvements only) that appraised for \$80,000 (land cost being subsidized), and has then made improvements (e.g., added a bedroom) that have been duly valued at \$10,000. When she decides to sell the home, it is appraised at \$120,000. If the CLT’s formula allocates 25% of additional appreciation to the homeowner, the resale price would be calculated as follows: \$80,000 base price, plus \$10,000 in improvements, plus 25% of the \$30,000 additional appreciation (\$7,500) equals a resale price of \$97,500. If the formula had not included an improvement factor and she received a straight 25% of the total \$40,000 appreciation, the resale price would have been \$90,000. This example involves an



improvements only appraisal-based formula, but other formulas can be varied in this way as well.

This type of variation avoids one of the major disadvantages of other appraisal-based formulas (failure to compensate owners directly for their direct investments in improvements), but in doing so it assumes one of the disadvantages of itemized formulas (the burden of defining and assessing the value of improvements). However, most of the CLTs that have adopted such formulas have kept this burden within manageable bounds by limiting the improvements for which equity can be earned to a specific list of useful, separately appraisable major improvements such as the addition of a bedroom or a garage.

**Fixed-rate formulas.** The simplest of all types of resale formulas, fixed-rate formulas adjust the resale price upward by applying what is in effect a fixed rate of interest on the base price (not the settlement price) from year to year. At any given time, a simple mathematical calculation will allow either the CLT or the homeowner, independently, to determine the then current purchase option price.

This type of formula has become increasingly common in recent years. The percentage rates applied in these formulas typically range from 2% to 3%. In most cases the rates are compounded annually – so that the rate is applied at the end of each “ownership year” to an amount equal to the original base price plus accumulated “interest” as of the beginning of that year.

Both the advantages and disadvantages of these formulas flow from the fixed and simple nature of the mechanism. They require neither the burdensome record-keeping and potential disagreements entailed by itemized formulas nor the expensive and time-consuming appraisals required by appraisal-based formulas. They make it easy not only to determine the present purchase option price but also to project what the price will be at any given time in the future. By the same token, there are potential disadvantages in the fact that these formulas do not establishing any particular relationship with either current market conditions or the homeowner’s efforts to preserve or enhance the value of the home.

#### ***Advantages of Fixed-Rate Formulas***

- These formulas are extremely easy to apply, involving no record keeping by the CLT and no difficult judgments.
- Since they do not depend on appraisals or other external events or conditions, they allow homeowners to know exactly what price they can receive for their homes at any given time – now or in the future.
- These formulas do not allow resale prices to be pushed upward beyond the intended level of affordability by spikes in the local housing market (as appraisal-based formulas may) or by sharp rises in consumer prices or wages (as indexed formulas may).
- These formulas recognize the homeowner’s interest in receiving some return on her investment in the home, while limiting that return to a level likely to keep the home affordable for the next buyer.
- Unlike indexed formulas, fixed-rate formulas avoid the possible complications that can result from changes in the ways indexes are generated or published.

### ***Disadvantages of Fixed-Rate Formulas***

- Like the indexed formulas described below, fixed-rate formulas do not distinguish between “earned equity” and “unearned equity,” since the purchase option prices they yield have no relationship to the degree to which the homeowner maintains or improves the home. They do not provide an economic incentive for sound maintenance.
- Like indexed formulas, these formulas guarantee a high rate of return for “highly leveraged” short-term owners, while providing only a limited return for long-term owners who have paid off their mortgages.
- In weak housing markets, these formulas can allow resale prices to increase faster than market prices, thereby diminishing the effect of the subsidy and making marketing more difficult.
- When the rate of inflation exceeds the fixed rate applied by these formulas, the real value of the resale price for the seller will be less than the original purchase price.

**Indexed formulas.** By “indexed formulas” we mean formulas that adjust the resale price (above or below the purchase price) by applying a single factor drawn from an index such as area median income or the Consumer Price Index. Indexed formulas were once rare among CLTs but have become relatively common. Such formulas – especially those that use area median income as the index – are also common among non-CLT resale-restricted homeownership programs.

Median-income-based formulas are sometimes a response to government program regulations requiring that homes subsidized through the program remain affordable for a certain number of years for households of a given income level. Since income levels are conventionally defined in terms of percentages of HUD’s adjusted figures for area median income (AMI), the simplest way to achieve probable compliance with these regulations is to allow the resale price to increase beyond the purchase price only in proportion to increases in AMI. Thus, for instance, if an \$80,000 purchase price is affordable for a family at 80% of AMI, and if AMI increases by 25% during the period of a family’s ownership, the home may be resold for 25% more than the purchase price ( $\$80,000 + \$20,000 = \$100,000$ ) and still be presumed affordable (if mortgage interest rates do not rise) for a family at the now-increased 80-percent-of-AMI level. It should be emphasized that (except as noted in the following paragraph) the adjustment here is applied to the purchase price, not just to the owner’s equity as in the case of the inflation adjustments included in some itemized formulas.

With both fixed-rate and indexed formulas, the relationship between the settlement price and the subsidy will have especially important consequences. As noted above in the section on “Defining the Base Price,” subsidies that are structured as deferred loans or grants *to the homebuyer* are normally *included* in the settlement price – i.e., a market-rate price is made affordable for the buyer by assistance provided directly to the buyer, not by subsidizing the CLT’s costs and thus reducing the price that must be charged to the buyer. In such situations, there is an important distinction to be noted between the application of the index to the settlement price (including the subsidy), and its application to the base price (the amount the buyer actually pays). Application of the index to the settlement price will result in a higher resale price than if the index is applied only to the base price.

In deciding what index to use the following questions are relevant.

- Does the index measure changes in the *cost* of goods (as in the case of CPI) or changes in the *income* of households (as in the case of AMI)?
- Is the index relevant for the *population* being served?
- Is the index relevant for the *area* being served?
- Is the index *consistent* from year to year?
- Is the index published with enough *frequency* and *reliability* to be available and current when needed?
- Is the index published by an *objective, reputable* public or private agency?
- Can the average person easily *understand* the index and, if necessary, easily *confirm* for herself that the CLT is using the correct index information?

#### ***Advantages of Indexed Formulas***

- These formulas allow a reasonable return to the homeowner while limiting resale prices to a level that is likely, though not certain, to be affordable for other households at the same income level as the initial family.
- Though not as simple as fixed-rate formulas, these formulas are relatively simple and comprehensible and do not require subjective judgments by either CLT personnel or professional appraisers. Occasions for misunderstandings or disputes are minimized.
- Compared to appraisal-based formulas, these formulas are likely to provide a return to the homeowner that is more predictable and less drastically affected by the ups and downs of local real estate markets (though not as predictable as fixed-rate formulas).
- Information regarding common indexes is readily and continuously available, so it is relatively easy for a CLT to provide periodic reports of what the formula price of a home would be if the owner were to sell at that time.
- These formulas – particularly AMI-based formulas – should easily be approved under the guidelines of public subsidy programs with which a CLT may be working, without the need for complicated negotiations.
- Compared with fixed-rate formulas, these formulas – particularly CPI-based formulas – are more likely to allow the real value of resale prices to keep up with inflation.

#### ***Disadvantages of Indexed Formulas***

- Because these formulas do not distinguish between value produced by the owner and value produced by other factors, they may not provide adequate incentive for maintenance and repairs – and may fail to provide a reasonable return on actual investment for owners who actually improve their homes.
- A formula that allows resale prices to rise at the same rate as area median income (or at the rate of the CPI) may not preserve real affordability for lower-income households. Low-income people often do not benefit from economic trends reflected by area-wide median income (particularly in the case of “Standard Metropolitan Statistical Areas” that include affluent suburbs as well as low-income neighborhoods). Resale prices pegged to median income may tend to widen the gap between *haves and have-nots*. Indexes, such as CPI, that reflect *costs* can have a similar effect, since increases in the costs borne by low-income people can easily outstrip increases in their incomes.

- The leverage provided by these formulas is likely to yield an unduly high rate of return for short-term owners.
- In weak housing markets, these formulas can allow resale prices to increase faster than market prices, thereby diminishing the effect of the subsidy and making marketing more difficult.
- For the long term there is no guarantee that indexes will continue to be generated and published as they are now. Discontinuation or significant changes in an index would create major problems for CLTs relying on that index.

### Testing Possible Formulas for Your Area

Testing the possible consequences of different types of formulas is obviously an important part of the formula design process. Those charged with designing a CLT's resale formula should test each specific formula that is considered by projecting its effect on resale prices for different homeowner situations in different hypothetical economic situations, including the economic situation that has prevailed in the immediate area over the past ten years or longer. For instance, they should try to answer the hypothetical question: if a home was purchased ten years ago for a given price that was affordable for a household of a given size at a given percentage of median income, and if home prices in the area have increased by a given percentage, and if median income has increased by a given percentage, and if interest rates have (or have not) increased or decreased by a given number of points, how would the affordability of the home compare with what it was ten years ago. The availability and reliability of the data needed to address such a question will vary from area to area, as well as from one type of data to another, but it should be possible to find relevant data, of most types, for most areas.

**Sources of information.** In general, HUD-adjusted median income data is available for all "metropolitan statistical areas" (MSAs) and all counties that are not part of an MSA. Be aware, however, that the year-by-year HUD adjustments involve interpolations or estimations of trends for years in between national census years. The decade-long cumulative effect of these interpolations is corrected when new census information becomes available, and in some cases the correction may create the appearance of a sudden one-year increase or decrease in median income. For this reason, apparent trends from one census year to the next will be more reliable than apparent trends for ten-year periods that bridge only a single census year.)

Information regarding changes in local and regional median home prices is generally available from local and regional associations of realtors. This information normally does not distinguish between land costs and the costs of improvement. If you want to test an improvements-only appraisal-based formula, you will need to estimate the percentage of the overall price that derives from the value of improvements rather than land. Local appraisers should be able to help you develop a reasonable estimate of the average percentage..

It is of course true that projections of *future* home prices based on information regarding *past* trends can sometimes be dramatically unreliable. Projections made in 2007, at the height of the "housing bubble," based on housing market trends over the previous ten years, were anything *but* reliable indicators of what turned out to be the collapse of home prices in many markets between 2007 and 2009. Nonetheless, it is important to have as much information as possible about historical trends – and to have year-to-year information as well as information

about long-term trends. In other words, it is important to consider not only the affordability of homes purchased ten years ago and sold today but also the affordability of homes purchased and sold at various times within that ten year period where resale prices could be affected by shorter-term changes in the market.

Information regarding changes in the consumer price index is available from the US Bureau of Labor Statistics ([www.bls.gov](http://www.bls.gov)) for those wanting to test a CPI-based indexed formula (or wanting to check, for other types of formulas, the relative buying power of dollars received by a homeowner at resale as compared with dollars spent on the original purchase).

**Burlington Associates interactive tool.** All designers of resale formulas will want to make use of the “interactive resale formula comparison tool” that can be found in the Burlington Associates CLT Resource Center ([www.burlingtonassociates.com/](http://www.burlingtonassociates.com/)). The tool allows you to test various appraisal-based, indexed, “fixed-rate,” and mortgage-based formulas over different “holding periods,” under different economic conditions. For a given formula you can specify the cost of producing the home, the amount of subsidy to be applied, the length of time the home is owned by the initial buyer, and projected rates of median home price inflation (or deflation), median income inflation, and different interest rates. The tool will then calculate the initial purchase price and affordability level (percent of AMI for which the price is affordable), the resale price, the seller’s equity upon resale, and the affordability level of the resale price.

The tool includes four identical calculators in side-by-side columns, so you can easily compare the results of four different formulas acting on the same basic assumptions about cost and economic trends. Another extremely useful feature is a link to sites providing historical data on median home price trends and median income trends for every MSA in the country.

The great virtue of this tool is that it makes it so easy to test the effects of multiple formulas under many different sets of circumstances – and you should make full use of this virtue. As the recent “bursting of the housing bubble” should remind all of us, we should consider the consequences of hypothetical circumstances that deviate significantly from past trends as well as circumstances that sustain past trends. The resale formula comparison tool makes it easy to look at all sorts of hypothetical situations. It also makes it easy to look at the effects of different approaches to subsidy allocation and pricing on the affordability (and marketability) of resale prices for different formulas in different circumstances. As emphasized in Chapter 19, “Project Planning and Pricing,” initial pricing should provide enough “cushion” so that neither affordability nor marketability is likely to be wiped out by changes in market conditions.

## Implementation

The specific concerns and responsibilities involved in implementing a resale formula will depend on the specific formula a CLT adopts and on other aspects of the relationship between the CLT and its homeowner-lessees. However, there are some basic concerns that are important for all CLTs.

**Building consensus in support of the formula.** The model Classic CLT Bylaws presented in Chapter 5-A require that the CLT’s resale formula be approved by a two-thirds vote of the organization’s membership as well as by its Board of Directors. It is important that this approval be based, as much as possible, on a real understanding of the issues and a real

acceptance of the formula itself – not on blind faith that the board or committee members “must know what they’re doing.” A new CLT should involve as many people as possible, representing as many constituencies as possible, in the process of deciding on the formula.

A smaller committee will need to coordinate this process and do the careful background work needed to test the possible consequences of different types of formulas, but the committee should consult regularly with the membership. The pros and cons of alternative approaches should be explained, and feedback from the membership should be invited.

The fact that this will necessarily be a slow process should be seen as an advantage, rather than a burden. Price restrictions go against the grain of traditional American attitudes toward real estate. Your resale formula will almost certainly be questioned. As John Davis has written, “There will be skeptics, critics, and opponents aplenty *outside* of your organization, without fostering them on the inside as well. The process of adopting a limited equity formula should be gradual enough and inclusive enough to earn the full understanding and wholehearted support of most – if not all – of your members.”<sup>4</sup>

**Ensuring informed consent from homeowners.** Informed consent is of course necessary if the terms of the ground lease, including the CLT’s preemptive option, are to be legally enforceable. Informed consent is also essential if the CLT and its approach to resale-restricted ownership are to be accepted and supported in the community. Any suspicion that the CLT’s homeowners are in some sense “duped” – that they do not really understand what they are doing when they purchase a home and enter into a ground lease agreement that limits the resale price of their home – can seriously undermine support for the organization.

The Model CLT Ground Lease provides a means of documenting informed consent through the “Letter of Agreement,” which states the homeowner’s own understanding and acceptance of the agreement, and the “Letter of Attorney’s Acknowledgement,” which confirms that an attorney has reviewed the lease and related documents with the homeowner. But the process of informing the homeowner about the nature of limited equity ownership must obviously begin well before the signing of documents – and before counsel discusses the actual documents with the homeowner. Explaining the nature of this “different kind of homeownership” is an important ongoing concern for all CLTs – from initial contacts with potential home-buyers, through orientation sessions for those interested in CLT homeownership, on through the “resident selection” process, and beyond.

It should also be emphasized that such efforts to ensure informed consent are important each time a CLT home is transferred to a new owner – not just the first time a home is sold by the CLT. CLTs should be careful not to neglect these efforts in situations where a home is resold directly to a household identified by the prior owner. In such cases the CLT should be sure not only that the buyer is income-qualified but that she fully understands and accepts the resale formula and other provisions of the ground lease. CLTs should also be sure that those who receive CLT homes through inheritance fully understand and accept these provisions. Letters of Agreement and Attorney’s Acknowledgement are especially important in situations where a new homeowner has not been through a formal CLT orientation program with other potential CLT homeowners.

Every CLT should make sure that all personnel who may have occasion to explain the resale formula to prospective homebuyers are prepared to give fully accurate explanations. Because the task can seem dauntingly complicated, it can be very tempting to offer an over-simplified explanation, but over-simplification can be dangerous. For instance, potential

buyers are being seriously misinformed if they are told, “The formula gives you back what you have invested in the home but not more than that,” if in fact the CLT has an appraisal-based formula (or any type other than certain itemized formulas). If such a buyer eventually wants to sell and finds that the formula will give her back less than she has invested over time in improvements and repairs, she may come to the CLT and say, “But I was *told*...” At that point the CLT faces a serious problem – one that can easily be amplified into a public relations problem, if not a legal problem. When a CLT representative *cannot* respond to questions with a fully accurate explanation of the resale formula – and certain formulas indeed make this rather difficult – it is best to say, “It’s a little complicated; we’ll get someone to sit down and go over the details with you.”

It is also important to provide carefully prepared written materials to accompany oral explanations of the formula. These materials should be clear and concise – but again not over-simplified – and should include examples of typical resales, showing how an actual resale price is arrived at. Every serious prospect for CLT homeownership should be given such materials.

**Record-keeping.** Though the nature of the records will vary, depending on the specific formula in effect, some form of record-keeping is essential to the implementation of all resale formulas. As has been noted in this chapter, itemized formulas can impose particularly heavy record-keeping burdens on a CLT, and it is important to evaluate the organization’s capacity to bear the burden, consistently, over time, before adopting such a formula. Appraisal-based formulas require much less burdensome record-keeping, but it is still crucial to preserve the relevant documents – including the signed appraiser’s report completed at the time of purchase (a copy of which should be attached to the ground lease). Generally, CLTs should remind themselves that they not only need to collect the information required to calculate the purchase option price at the time of resale, but must be able to document and preserve this information.

**Reporting and retraining.** Most CLT homeowners pay close attention to the resale formula in their ground lease at only two times: when they first purchase their home and when they later resell it. Years, even decades, may pass between these times. It is a mistake for a CLT to allow this period to pass without reminding its homeowners of the conditions and limits that are placed on the resale of their homes. The formulas used by some CLTs (fixed-rate and indexed formulas, in particular) allow the CLT to report periodically to its homeowners what the formula-based prices of their homes would be if they were to sell them at that time. This kind of reporting is an important way of reinforcing the homeowners’ understanding of the limited-equity arrangement and, at the same time, a way of reassuring them that the CLT is fully accountable and attentive to their rights. It should greatly reduce the likelihood of misunderstandings or disputes at the time of resale. Even formulas that do not lend themselves to periodic reporting of what the current resale price would be (notably appraisal-based formulas) should be periodically reviewed with homeowners who are subject to them. It may be as important to offer long-time CLT homeowners an occasional “refresher course” in the details of their resale formula as it is to offer an introductory course to a first-time homebuyer who is considering the purchase of a CLT home.

**Amending resale formulas.** Classic CLT bylaws, as presented in Chapter 5-A, make it difficult to change a resale formula after it has been adopted. The balance of interests within

the classic CLT board, the balance of powers between the CLT's membership and its board, and processes for amending either the CLT's bylaws or the resale formula itself, which require super-majorities of both the board and the membership – all of these make it difficult to amend a resale formula without a careful, deliberate process and broad-based eventual approval. The CLT is a model that was designed, in part, to avoid the mistakes made by earlier models of affordable housing where controls over resale prices were easily relaxed and, in many cases, eventually removed. Demanding as the amendment process may be, however, resale formulas can be amended, and a time may come when a CLT will have reason to consider altering its formula. Should that time arrive, a CLT should devote as much time and care to amending its formula as it devoted to creating and adopting that formula in the first place.

It should be noted that any changes in the resale formula cannot be unilaterally imposed on leases already in effect. The homeowners themselves must agree to have their leases amended to include the new resale formula. If any homeowners do not accept the new formula, the CLT will have different formulas in effect for different leaseholds. This is a state of affairs that CLTs should clearly try to avoid; nonetheless, it is possible that it will come to pass during a transition from one formula to another.

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<sup>1</sup> Our discussion of the promotion of homeowner mobility has been limited to lateral mobility. It should be noted that some may express a concern with promoting vertical mobility as well, suggesting that CLT homeowners should be able to sell their homes for enough money to allow them to move into the traditional market or to “move up” to a more expensive home. Few people would argue against the idea that CLT homeownership can and should promote this kind of vertical progress over the long term, as an owner's equity increases through debt repayment and perhaps through improvements to the home, and as lower monthly housing costs promote savings. The question is how much equity the CLT homeowner should be allowed to claim from market appreciation that she herself did not cause. Many supporters of the CLT model would answer “none.” Nearly all would answer “as little as possible,” because every dollar of socially created appreciation claimed by a homeowner today makes housing less affordable for another low-income homebuyer tomorrow.

<sup>2</sup> As noted, the U.S. Department of Agriculture's “502 program,” administered by Rural Housing Services, has provisions for recapturing interest subsidies out of any appreciated value at the time of resale. The definition of “appreciated value” employed by the 502 Program (which determines appreciated value based on an appraisal at the time of resale) had raised issues for CLTs, since CLT resale formulas can result in resale prices that are substantially less than the appraised value of the home. However, the Housing and Community Development Act of 1992 specifically provides that, for purposes of recapturing interest subsidy for CLT homes under the 502 Program, appreciated value is to be measured based not on appraised value but on the actual resale price under the CLT's formula.

<sup>3</sup> The “*appraisal-based*” price restrictions that are employed by certain programs to keep the resale prices of farms affordable for farmers are different from the “appraisal-based formulas” used by CLTs for residential property to determine the amount of appreciation to be shared between homeowner and CLT. These agricultural price restrictions, which may be embedded in ground leases or conservation easements that require agricultural use of the property, call



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for appraisals of the as-restricted agricultural value of the property, which then *becomes* the purchase option price for the holder of the easement. For detailed information on agricultural price restrictions, see *Preserving Farms for Farmers: A Manual for Those Working to Keep Farms Affordable*, Equity Trust, Inc., 2009.

<sup>4</sup> John Emmeus Davis, unpublished monograph prepared for ICE in 1985.