# Resale Formula Comparison
## Itemized Formulas

| Narrative Description of Itemized Formula | Symbolic Description of Itemized Formula | Advantages of Itemized Formulas | Disadvantages of Itemized Formulas |
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| Itemized formulas adjust the original purchase price by adding or subtracting factors that affect the value of the owner's investment in a home and the value of the home itself. Factors included in an itemized formula vary widely from one CLT to another, but commonly included are: an inflation adjustment; a credit for the value of later improvements, a deduction for depreciation (if the home is not maintained), and a penalty for unusual damage.<br><br>VARIATIONS:<br>* There is wide variety in the method and index used to adjust for inflation.<br><br>* There is wide variety in what is deemed a "useful" improvement and in how the value of improvements is calculated.<br><br>* Depreciation is sometimes NOT included as a factor subtracting value.<br><br>* Public and private subsidies sometimes ARE included as a factor subtracting value. | **Purchase price**<br><br>**+ (Homeowner equity invested or earned to date**<br>**x inflation factor)**<br><br>**+ Value of improvements added by homeowner**<br><br>**– Depreciation**<br><br>**– Damage beyond normal wear and tear**<br>____________<br>**= Resale price** | 1. The equity that an owner receives is tied directly to a measurement of her personal choices and personal investment of time and money.<br><br>2. An inflation adjustment can prevent the devaluation of the owner's earned equity, while not giving unfair advantage to a homeowner with a small amount of equity in a valuable property.<br><br>3. A distinction can be made between "useful improvements" and "luxury improvements," with only the former adding to the resale price.<br><br>4. There is an incentive for sound maintenance and repair – and penalties for deferred maintenance damage.<br><br>5. Itemized formulas are insulated from the market and do not depend upon appraisals of market value. They avoid the potential difficulty of achieving dependable appraisals and of separating out the market value of land from the market value of buildings.<br><br>6. Because they do not depend on an appraisal of market value at the time of resale, itemized formulas allow an owner's potential equity to be calculated and reported from year to year. | 1. Depending on the index of inflation that is used, inflation adjustments can push resale prices beyond the reach of households whose incomes do not keep up with inflation.<br>2. These formulas require difficult-to-describe and difficult-to-quantify distinctions between improvements vs. repairs, useful improvements vs. luxury improvements, the value of materials vs. the value of labor.<br>3. The CLT's oversight role in reviewing and approving proposed improvements – and in calculating the value of those improvements -- can diminish the owner's sense of privacy and can lead to disputes between the owners and the CLT.<br>4. An accumulation of improvements over an extended period of time -- even if none are considered luxuries-- can push the resale price beyond the financial reach of future low-income homebuyers.<br>5. If depreciation is a factor, separate depreciation schedules must be adopted for each major system in a house and records must be kept of on-going repair.<br>6. The valuation of "unusual" wear and tear can be elusive (and contentious).<br>7. Itemized formulas make enormous demands on CLT staff time, requiring extensive record-keeping and periodic calculations of great complexity – lots of moving parts to track, count, and explain. |

# Resale Formula Comparison
## Appraisal-based Formulas

| Narrative Description of Appraisal-based Formula | Symbolic Description of Appraisal-based Formula | Advantages of Appraisal-based Formulas | Disadvantages of Appraisal-based Formulas |
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| Appraisal-based formulas adjust the original purchase price of a CLT home by adding a certain percentage of any increase in the home's market value, as measured by market appraisals at the time of purchase (***Appraisal$_1$***) and at the time of resale (***Appraisal$_2$***). The percentage of this appreciated value allocated to the homeowner is stipulated in the formula (25% is common, although some CLTs allocate a higher percentage). Appraisals are done for the building alone, not for the combined value of the land and building.<br><br><u>VARIATIONS:</u><br>* Some CLTs have added a credit for later improvements.<br><br>* Some CLT's have used a % that increases over time, so that the longer a homeowner stays, the more appreciation s/he gets when s/he leaves.<br><br>* Some CLTs appraise the value of ***both*** the land and building, use a ratio to determine how much of the property's value is owned by the homeowner, and the apply a % to appreciation. | **Purchase price**<br><br>**+ [(Appraisal$_2$ – Appraisal$_1$) x %]**<br>**____________**<br>**= Resale price** | 1. Appraisal-based formulas are easy to explain and easy to understand.<br><br>2. Because they rely on professional appraisals, utilizing standard techniques for appraising market value, these formulas do not require CLT staff to make difficult and potentially controversial assessments of value. Chances for conflict between homeowners and the CLT are reduced.<br><br>3. These formulas avoid the difficulties involved in distinguishing repairs from improvements, in assessing the value of improvements, and in gauging "wear and tear." The difficulty involved in inflation adjustments is also avoided.<br><br>4. There is no need to intrude on the owner's privacy and sense of ownership to approve and evaluate improvements.<br><br>5. These formulas discourage the accumulation of expensive improvements over time that can push the resale price beyond the reach of future low-income homebuyers.<br><br>6. Detailed record-keeping and fussy arithmetic are not required, relieving CLT staff of burdensome tasks and avoiding the disputes that can result from inadequate or incomplete records. | 1. Appraising real estate is not an exact science, particularly when the value of land must be distinguished from the value of a building located on that land.<br><br>2. These formulas do not allow year-to-year measurement of the owner's equity (except for equity built up through debt repayment) unless an owner wants to bear the expense of periodic appraisals.<br><br>3. In a rapidly appreciating real estate market, appraisal-based formulas can allow resale prices to rise beyond the affordability level for future homebuyers if the percentage of appreciation allocated to the present owner is too high.<br><br>4. These formulas do not distinguish between value added by the owner and value added by market (a factor that is beyond the owner's control).<br><br>5. In a stable real estate market, owners who have made substantial improvements will recapture only a portion of what they have invested. There is, therefore, a disincentive for making improvements and, perhaps, for replacements.<br><br>6. Market appraisals in an appreciating market may not take adequate account of poor repair. These formulas may fail to encourage good maintenance. |

# Resale Formula Comparison
# Indexed Formulas

| Narrative Description of Indexed Formula | Symbolic Description of Indexed Formula | Advantages of Indexed Formulas | Disadvantages of Indexed Formulas |
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| Indexed formulas adjust the original purchase price by applying a single factor – the change in a particular index between the date the homeowner purchases his/her home and the date s/he resells that home. This index, which is specified in the formula, can be a measure of incomes in the CLT's service area (e.g., change in median income) or a measure of rising costs (e.g., the CPI for housing). Although indexed formulas are not as common as appraisal-based formulas among CLTs , they are quite common among public programs that subsidize low-income rentals and low-income homeownership. Indexed formulas pegged to AMI are increasingly being used in rapidly appreciating markets<br><br>VARIATIONS:<br><br>* There is wide variety in the index used in these formulas.<br><br>* Some indexed formulas add a credit for later improvements made by the homeowner. | **Purchase price**<br><br>**x Change in index**<br>______________<br>**= Resale price** | 1. If the index is pegged to the income of people for whom the CLT is trying to keep housing affordable, these formulas do a good job ensuring that the resale price will, indeed, be affordable for this target population in the future.<br><br>2. Depending on the index used, these formulas can give a sizable return to homeowners who sell their homes, promoting mobility for low-income people.<br><br>3. A formula that uses median income as its index fits easily and understandably into the guidelines of most federal and state housing subsidy programs, eliminating the need for lengthy negotiations.<br><br>4. Depending on the index used, the information needed to calculate resale prices is readily available – and verifiable – by homeowners and staff alike.<br><br>5. These formulas are relatively simple and comprehensible and do not require judgments by CLT staff or professional appraisers. Occasions for misunderstandings and disputes are minimized.<br><br>6. Administration by CLT staff is simple, easy, and inexpensive, requiring neither the record-keeping of itemized formulas nor the market appraisals of appraisal-based formulas. | 1. Everything hinges on choosing the "right" index. Even median income can prove to be the "wrong" index, since low-income people often do not benefit from economic trends that increase median income for an SMSA or a county.<br><br>2. An index that is accurate in tracking the income of low-income people may still fail to keep housing affordable, because other factors – most notably, increases in mortgage interest rates – affect the home's affordability.<br><br>3. These formulas do not distinguish between appreciating value produced by the owner and value produced by other factors. Some owners may not receive a reasonable return on their investment, while others may benefit richly from appreciation they did little to produce.<br><br>4. These formulas may provide scant incentive for repairs and improvements. A change in the index gives owners an automatic increase in price, even for a poorly maintained, unimproved home.<br><br>5. These formulas allow shorter-term owners with little equity and a large mortgage debt to capture the same appreciated value as longer-term owners who have paid down their mortgages. This may encourage shorter occupancy. |

# Resale Formula Comparison
## Mortgage-based Formulas

| Narrative Description of Mortgage-based Formula | Symbolic Description of Mortgage-based Formula | Advantages of Mortgage-based Formulas | Disadvantages of Mortgage-based Formulas |
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| Mortgage-based formulas adjust the resale price based on the amount of mortgage financing a purchaser of a given income level will be able to afford at the then-current interest rate. Factors that must be specified in designing a mortgage-based formula ***must*** include:<br>- the income level for which the home must be affordable<br>- what is to be included in monthly housing costs<br>- the front end ratio allocation for monthly housing costs<br>- the percentage of the resale price that is to be covered by mortgage financing<br>- the type of mortgage (term, fixed-rate, etc.) for which monthly payments are to be calculated at the "current interest rate<br>- 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. | **Resale price =**<br><br>**price affordable to household at __% of area median income adjusted for family size**<br><br>**assuming the following conditions:**<br><br>**housing costs = principal, interest, taxes, insurance, lease fee & any HOA fees**<br><br>**__% front-end ratio**<br><br>**__% of resale price to be covered by mortgage**<br><br>**at prescribed terms and requirements for mortgage (e.g., 30-year term, fixed rate, etc.)**<br><br>**at "current interest rate", as defined** | 1. The mortgage-based formula is the only formula that can *guarantee* a given level of affordability at resale to a household at a given income level – regardless of what happens to interest rates, property tax levels, increases in market values and the like.<br><br>2. The basic principle – to make sure each successive buyer has monthly housing costs at the same level of affordability – is easy to grasp for homebuyers, mortgage lenders, and others directly involved in the buying and selling of homes. | 1. These formulas base the resale price entirely on what works for the *buyer*; therefore, these formulas are less likely than the others to give the *seller* a fair return – and may give a return that is dramatically unfair.<br>2. As these formulas are based on factors over which the seller has no control, the process for selling tends to become distorted. If interest rates are high, sellers would be penalized – prompting them to delay selling or tempting them to violate occupancy requirements.<br>3. Mortgage lenders would have reason to object to a formula that could result in a resale price lower than the amount owed on the mortgage.<br>4. Government funding agencies with regulations requiring that resale restrictions allow seller a "fair return" may likely not approve.<br>5. It can be difficult to establish a clear index or "benchmark" to determine the "current interest rate".<br>6. As the resale price has no real basis in value, there is little motivation for owner to make improvements to the home.<br>7. Homeowners are likely to be unfamiliar with how to calculate resale price – potentially creating trust and eroding homeowners' sense of controlling their own homes. |