A Paradigm For Affordable Housing Through Equity Sharing and the Use of Accrued-Interest Mortgage Notes

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Affordable housing is a familiar problem to first-time homebuyers in North Carolina's most expensive housing market, Chapel Hill. Culbreth Park, a new Chapel Hill subdivision, will address this problem by creating an economically diverse neighborhood that will include very low income to moderate-income homeowners. This article describes the goals of Culbreth Park Community Development Corporation, the project's sponsor, and then focuses on the financial arrangements for the project.

The lack of affordable housing for first-time homebuyers has reached crisis level in Chapel Hill, North Carolina. A novel approach to housing affordability using a combination of equity sharing and accrued-interest mortgage notes has been developed to address this problem. The approach is now being implemented on a demonstration basis in Culbreth Park, a new Chapel Hill subdivision.

Culbreth Park will be a single-family cluster subdivision with 50 small lots surrounding a five-acre park. The project is less than one mile from the main campus of the University of North Carolina. Public housing will be built on 8 of the lots, another 12 of the lots will have market-rate houses selling for $125,000, and the remaining 30 will be targeted to moderate- to low-income buyers. The contrast between these target populations is indicative of the unusual nature of the development.

Chapel Hill is North Carolina's most expensive housing market, with the average cost of a single-family house in excess of $135,000. The area median income has increased an average of 10.54 percent per annum over the last eleven years and is currently $41,900. Culbreth Park's main purpose is to create a community that will be immune to these escalating trends.

The project's sponsor, Culbreth Park Community Development Corporation, is a nonprofit firm organized by private citizens in Chapel Hill to accomplish three goals:

1. To build quality homes at prices affordable to low-income purchasers.
2. To keep these homes affordable to low-income families (those earning 50 percent to 80 percent of median area income) in perpetuity and, over time, reduce the relative purchase price of the homes until they are affordable to very low-income families (those earning under 50 percent of median area income).
3. To produce a model neighborhood that includes a wide range of income levels while primarily focusing on those families increasingly priced out of the Chapel Hill market.

There are 30 lots besides those devoted to market-rate and public housing. On these will be built three-bedroom, two-bath homes with an appraised value of $114,000 that will be sold for an average active mortgage cost of $73,635. No down payment will be required. By using either low-interest mortgages or mortgage credit certificates from the North Carolina Housing Finance Agency, these homes will be affordable to families of four making $26,496, or 63 percent of area median income. Housing payments are based upon 30 percent of gross income including principal, interest, taxes and insurance.

Sources of Funds

The difference between the first mortgage and the appraised value of $114,000 will be made up by a deferred second mortgage whose average size among the 30 homes will be $40,365. No monthly payment of any sort on the deferred second mortgage will be required. Instead, in exchange for the deferred second mortgage, the purchaser will sign a right of first refusal as well as an appreciation sharing arrangement at closing.

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Local officials at groundbreaking ceremony for Culbreth Park. Chapel Hill Mayor Jonathan Howes (third from right) takes the first shovel as Runyon C. Woods (fifth from right) waits his turn.

The right of first refusal will give the administering organization the first right to purchase the house at fair market value if the owner decides to sell. The organization would then resell the home to another low-income purchaser and reissue the deferred second mortgage.

The agreement for appreciation sharing assigns to the seller 50 percent of the appreciation as long as it does not average more than 4 percent per annum. The other 50 percent is used by the organization to increase the size of the deferred second mortgage at each resale. If the home appreciates at more than four percent per annum, all appreciation in excess of four percent will also go to the organization and be used to increase the deferred second mortgage total.

The total cost of the deferred second mortgages for the 30 units will be approximately $1,210,950. The $232,410 in profit from the sale of the twelve market-rate houses will be used toward that total. The Culbreth Park Community Development Corporation will not take a profit, but will leave the $446,040 which would have been additional profit in the project to be applied to the deferred second mortgage total. Thus the private organizers will be able to generate $678,450 of the necessary $1,210,950, leaving just $532,500 to be generated from outside sources.

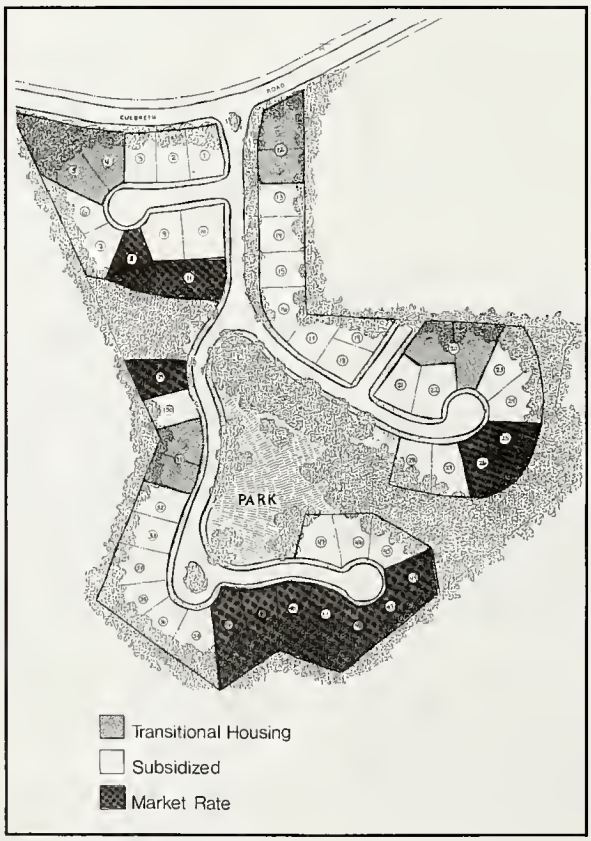
Essential in creating these levels of foregone second mortgage profits is a $2.25 million dollar CDBG interim construction loan at two percent per annum, obtained through the cooperation of Orange County and the North Carolina Department of Economic and Community Development. Before Culbreth Park, one of the eligibility criteria for granting this loan to a single-family development was 100 percent occupancy by low-income families, but for a multifamily project only 51 percent low-income occupancy was required. The criteria were altered to allow the 51 percent standard to apply to a single-family development. This significant change can now allow other developments to follow the same strategy to decrease costs dramatically and apply profits made on market units toward lowering the prices of low-income units.

A North Carolina Housing Finance Agency energy-related grant of $112,500 is the third source of funds for the deferred second mortgages. This grant, along with NCHFA low-interest primary mortgages and mortgage credit certificates, makes the Housing Finance Agency an essential component in the overall financing.

The remaining $420,000 in deferred second mortgage funds has been granted from the town of Chapel Hill. The town has also been asked to administer the resales of the low-income homes. In order to secure town support, it was necessary to demonstrate that the town funds could be repaid with interest and still leave behind a permanent low-income home ownership neighborhood.

It seemed to the organizers that an equity sharing arrangement could generate enough funds to repay the interest on the town's share of the deferred second mortgage at the time of resale of each unit, and also generate enough funds to slowly repay the town's principal.

Further, it appeared that a properly structured equity sharing arrangement could simultaneously achieve two objectives: (1) the fair treatment of each generation of owners from the viewpoint of equity build-up, and (2) the average income level needed by subsequent purchasers, when expressed as a percentage of the area median, could eventually fall below 50 percent (particularly if the area median income were to continue its dramatic increase).



Site plan of Culbreth Park

Results of the Computer Simulations

The firm of Dennis Eisen & Associates, in Rockville, Maryland designed a computer model to take into account the numerous parameters involved. These numbered more than 30 and included inflation rate adjustments to income, housing prices, and operating expenses, in addition to interest accruals and repayment rates, and applicable legal restrictions. Using these inputs the model simulates the results of different financing arrangements under various economic conditions. From these results the following general conclusions were drawn:

- Repayment of the town's share of the deferred second mortgage should be done on a prorated basis over twenty years (e.g., at a sale in year five, the town should receive all interest due and 25 percent of its principal; at a sale in year ten, the town should receive all interest due and 50 percent of its principal). A time period of 20 years allows the town's share of the appreciated equity to grow large enough to both repay interest and pay back the principal in full.
- Appreciation in selling price must be controlled, and preferably limited to the general inflation rate of four percent per annum. This serves two purposes. First, it keeps the basic price of the house low enough to remain affordable in the future to low-income buyers. Second, if the sale price of the house were to appreciate at a rate greater than that of general inflation, an appropriate second mortgage program could not be structured which would keep up with housing prices (unless more than 50 percent of the equity increase were returned to the second mortgage funding pool).
- Equity increases should be split 50-50 with the current owner. Giving the owner more than 50 percent of the equity would decrease the interest amount that can be paid to the town.

When resale occurs, the proceeds of sale will be distributed in the following order: (1) payoff of the remaining balance on the first mortgage; (2) payment of accrued interest on the accrued-interest mortgage(s); (3) prorated return of capital of the accrued-interest mortgage(s) (the complementary portion remains with the package and will be assumed by the next buyer); (4) return of the down payment to the homeowner; and (5) any residual equity remaining is split between the owner and sponsor on a shared equity basis.

The numerous computer simulations conducted showed that for the most likely economic conditions (e.g., a general inflation rate between 4 and 5 percent, housing appreciation limited to 4 percent, and annual increases in area median incomes of between 8 and 10 percent), the income needed by subsequent purchasers, assuming a zero down payment, drops to less than 50 percent of area median within six to nine years.

The allocation of residual equity between homeowner and sponsor is completely arbitrary and can be specified as a 50-50 split or any other proportion desired. This can help reduce costs for the next owner because the sponsor's portion of the residual equity is left in the package and is treated as a permanent grant for subsequent purchasers. Thus, it does not accrue interest, never needs to be repaid, and is used in effect to reduce the amount of the regular first mortgage needed by subsequent purchasers. It is in this manner, by reducing the carrying costs, that the home can become increasingly affordable to subsequent purchasers.

As mentioned above, the computer model to develop these results takes into account over 30 independent variables, including:

- Purchase price and closing costs
- Down payment
- Regular first mortgage amount and terms
- Federal mortgage interest tax credits
- Accrued-interest mortgage(s) and terms
- Accrual methods (simple or compound)
- Planning horizon(s) for return of principal
- Permitted appreciation rate in resale value
- Residual equity retained by homeowner and sponsor
- Area median income and growth rate
- Property tax and insurance costs

Six reports in tabular format are produced by the computer model:

1. *Housing Expense Analysis,* containing the projected before-tax expenses of homeownership for the initial owners.
2. *After-Tax Housing Expense Analysis,* showing the projected housing expenses as adjusted for the effects of federal tax law (including interest deductability and the Federal Mortgage Tax Credit).
3. *Housing Equity Analysis,* showing the effects of appreciation and the manner in which the proceeds of sale would be distributed between the homeowner and sponsor.
4. *Accrued-Interest Mortgage Analysis,* showing the potential repayment schedule of accrued interest and principal for the accrued-interest mortgage(s).
5. *Housing Turnover Analysis,* containing a financial and affordability analysis for the second generation of homeowners buying into the project.
6. *Affordability Analysis,* summarizing the results of the other analyses and comparing them to the same case the Federal mortgage tax credit.

Armed with good supplemental support, accurate data, and clear predictions, the developer has petitioned for town support. Computer analysis has enabled those involved to examine in detail the consequences of their decisions and to assure that the development will achieve the original goal: a well-located and designed permanent community of moderate-, low-, and very low income families in the middle of the state's most expensive market. ■