MILLENNIAL HOUSING COMMISSION
PRESERVATION AND PRODUCTION TASK FORCES
CONCEPT PAPER:
LONG TERM SUSTAINABILITY AND AFFORDABILITY

THE ISSUE

Most affordable housing is financed with relatively aggressively underwritten debt, little or no true equity (whose return is earned through cash flow), and using governmental subsidies to fund the balance of development costs. Many, perhaps most, of these properties require additional governmental subsidy later.

This paper discusses an alternative approach, using less debt plus a material amount of true equity, in combination with an increased amount of governmental subsidy. The alternative approach offers a number of potentially powerful advantages, including a greatly reduced likelihood that future governmental subsidies will be required.

The Status Quo. Most past and current approaches for subsidized rental housing production and preservation require an additional injection of government subsidy relatively early in the property's life cycle. Typically, roughly between years 15 and 25, subsidized rental properties require additional capital for some combination of repairs, repositioning, and financial restructuring. If this capital is not forthcoming when needed and in the amount needed, the property faces some combination of loss of quality, loss of affordability, and financial failure. This capital generally cannot come from private sources. First, often the properties are structured so that there is little if any economic equity[1]. Second, even if there is equity, often that equity can only be accessed by terminating affordability (for example, by raising rents to market levels).

A Potential New Approach. The Committee wishes to explore whether it is feasible and appropriate to follow a different approach, under which properties would not require additional governmental subsidy for a much longer period such as fifty years[2]. In general, this "sustainable" approach would use more conservative underwriting, so that the property could absorb moderate income and expense shocks without undue risk of failure, and so that the property could self-fund its long term capital needs (through some combination of operations,

[1] Often, the property was designed not to have equity, as a result of utilizing mortgage debt with an unsupportable principal amount. Production programs attempted to offset the unsupportable principal amount through some combination of a below market interest rate, deferred debt service payments, and / or above market rents. So long as the property remained viable, this financial engineering was relatively harmless. However, if the property failed financially, the property found itself over-leveraged, and the government found itself needing to fund a large debt write-down before workout discussions could even begin.

[2] Fifty years is an example of a period long enough for sound capital planning, in that it encompasses at least the first replacement of most major high-cost systems (e.g., elevators, masonry tuckpointing, and in-ground and in-wall utilities). It is also short enough to terminate prior to the need for major redevelopment, demolition, or change of use. Finally, it is long enough to encompass most of the useful life of the buildings. Although a capital planning period beyond fifty years may not be sensible, there is much to be said for an affordability period longer than fifty years (but incorporating increasing flexibility as the building ages, so as to permit appropriate redevelopment).

reserves, cash flow, and periodic refinancing).

Why Sustainability May Be Worth Pursuing. If, in the future, funding for subsidized rental housing were tied to sustainability principles, a number of positive outcomes would occur:

- The percentage of governmental subsidies needed to shore up existing subsidized rental housing would drop steadily from its current high level.
- Affordable housing would have a much more market-like financial structure in which market discipline and market forces would be much more powerfully engaged than is now the case.
- The economic rationale for developing and owning subsidized rental housing would shift from the current focus on up-front fees to a balance between up-front fees and longer-term economics driven by asset management fees and distributable cash flow.
- A new category of investor – the provider of true real estate equity capital, whose return is realized from distributed cash flow – would appear, bringing increased financial discipline to properties and their owners and managers.
- Residents would be much more likely to receive the quality of housing that is intended.
- There would be far fewer incidences of troubled properties.
- Properties that were troubled would rapidly be resolved.
- Public attitudes toward subsidized rental housing would become progressively more and more positive as the incidence of troubled properties declined.

A detailed discussion of factors for and against sustainability is included later in this paper.

STRUCTURE OF THIS PAPER

This paper contains three primary sections:

- **"Term Sheets".** Two "term sheets" are included. The first addresses the development concept itself. The second addresses financing and underwriting. Taken together, the term sheets illustrate the design, development, underwriting, financing and management practices that would be appropriate for affordable housing that is to be both affordable and viable on a long term basis, without the need for periodic injection of subsidy funds. Allocating agencies would adopt these term sheets, or equivalent, for purposes of evaluating future proposals from developer / sponsors.

- **The Case For and Against Sustainability.** Reasons for and against a long-term-sustainable approach to affordable housing development, management and financing.

- **Illustrative Example.** Appendix 1 contains a simple spreadsheet comparing the traditional and sustainable approaches, for a hypothetical affordable housing property.

TERM SHEET FOR
LONG TERM SUSTAINABILITY AND AFFORDABILITY:
THE DEVELOPMENT CONCEPT

Professional Ownership. The ownership entity is led by a "preserving entity" that combines a commitment to affordable housing, strong real estate and business skills, and the organizational capability to conceptualize, package, develop, stabilize, and operate affordable housing.

Professional Management. The property management firm is committed to the management of affordable rental housing as a major line of business. The firm features top quality staff, an effective business and policy framework, and a commitment to continuous learning.

Sustainable Design. Design is compatible with other buildings in the neighborhood. Scale is consistent with the neighborhood. The property is physically and socially integrated into the surrounding area. The property is inherently crime-resistant, using "defensible space" approaches or equivalent.

Cost-Efficient. The property is cost-efficient in every way: in its design, development costs, energy consumption, operating costs, and long term capital needs. The exterior design is low-maintenance. When selecting materials and construction approaches, developers consider not only the up-front cost but also longer-term factors such as durability, quality of warranty, ease of maintenance, maintenance costs, expected useful life, curb appeal, resident comfort, and energy consumption.

Target Market. The development concept is firmly grounded in the demonstrated housing needs of a clearly defined target market that is adequate to support the property and that has housing needs severe enough to justify the public funding required.

Use Agreement. The availability of the property for long-term affordable housing use is assured through a binding covenant running with the land. The long-term affordability of the property is not dependent on the identity or motivations of the sponsor, and is assured even if the property fails financially and undergoes a workout or a foreclosure. The length of the use agreement term and the level of affordability it requires are appropriate for the property, its target resident population, and the subsidies with which it is financed. Long use agreements provide increasing flexibility (for example, in income mixes) over the term.

Community Building. The development plan makes appropriate provisions for creating a community in which residents know each other, residents and management and neighbors interact regularly and productively, and in which community governance is responsive to the evolving needs of residents and neighborhood.

Non-Housing Services. The development plan identifies any services that are appropriate and necessary in order to serve the target market. Any such services are fully funded for a reasonable period of time. If such services are needed but are not fully funded on a long-term basis, the property is capable of continuing as affordable and sustainable in the event the services must be discontinued.

TERM SHEET FOR
LONG TERM SUSTAINABILITY AND AFFORDABILITY:
UNDERWRITING AND FINANCING

First Principle: Financial Flexibility to Absorb Unanticipated Costs. A primary goal of sustainable underwriting and financing is to give reasonable assurance that the property can survive unanticipated financial "shocks" such as temporary market weakness, fluctuations in utility rates, local decisions to dramatically increase real estate taxes, fluctuations in the property insurance markets, and operating costs that escalate more rapidly than the allowable rents. This is achieved through some combination of allowance for vacancy loss, conservative projections for operating expenses, and adequate debt service coverage ratio. A possible additional resource is additional flexibility to increase rents (while still maintaining affordability).

Second Principle: Ability to Self-Fund Long-Term Capital Needs. The second primary goal of sustainable underwriting is to give reasonable assurance that additional governmental subsidies will not be needed to meet the property's long-term capital needs for an extended period such as fifty years. The capital needs would be funded through a combination of initial reserves, future reserve deposits, future refinancing, and future cash flow not needed to provide an equity return.

Affordable Rents. Affordable to the target market and below comparable market levels.

Modest Annual Rent Increases. The owner may increase rents modestly in accordance with an inflation indicator, without needing approval from government. The projected annual rent increases are expected to be affordable to the target market.

Adequate Allowance for Rent Loss. If the property's intended rents are at or only marginally below market levels, the rent loss allowance will reflect an average-of-cycle condition for otherwise similar market rate properties, typically 7% to 9%. If the rents are materially below market levels, the rent loss allowance can be lower, but no less than 5%.

Adequate Operating Expenses. Operating expenses are underwritten based on typical expenses for similar affordable properties in the same market area with good (not necessarily outstanding) management and that are at least five years old. Underwritten expenses reflect typical results under typical (less than ideal) conditions.

Asset Management Fee. The operating budget includes a fee designed to cover the owner's reasonable costs of asset management. The size of the fee is reasonable in light of the ownership tasks required and in light of any performance-based requirements for payment of the fee (e.g., if the fee is expected to be earned only some of the time, the fee amount should be higher so that, on a portfolio basis, a performing owner would generate sufficient funds to cover costs and risk).

Adequate Reserves. The property's reserve deposit is based on a property-specific long-term capital needs projection. The underwriting will demonstrate the property's ability to self-finance its capital needs (not necessarily solely from reserves) over a period of at least fifty years.

Reasonable Debt Service Coverage. The underwriting, when viewed in its entirety, gives

reasonable confidence that the property can withstand moderate shocks without failing financially. For typical underwriting, a DSCR in the 1.20+ range, with a projected operating cash flow of at least 3% of EGI, would be reasonable.

Reasonable First Mortgage Debt. Typically, the first mortgage should have a fixed interest rate and be self-amortizing through constant level monthly payments, over a loan term not to exceed thirty years[3]. Departure from the typical characteristics would be accompanied by other features of the transaction providing additional financial robustness, for example: rents that are at least 10% below comparable market levels, and / or a reserve deposit that is designed to fund 100% of long term capital needs, and / or a higher DSCR. If the financing is tax-exempt, the loan amount is not more than the amount that could be achieved with conventional (non-tax-exempt) financing[4].

Owner / Developer Incentives. In general, the developer makes more money when the property is sustainable and makes less money when the property is not sustainable. The most powerful incentive is the fact that development proposals must be based on sustainability principles in order to be approved. Another example is the asset management fee discussed above. Another potential developer incentive is to escrow a portion of the developer fee that is now paid in cash upon completion (or lease-up, or other traditional trigger point) until the property achieves targeted sustainability-related results, for example:

- Adequate Reserves. The existing reserve balance, plus projected deposits, is determined adequate in accordance with a third party professional capital needs assessment, acceptable to and approved by government, with an appropriately long time horizon.
- Net Cash. The property has cash in excess of accounts payable ("positive Surplus Cash" in HUD terminology).
- Cash Flow. The property's actual cash flow meets or exceeds levels originally determined to be consistent with sustainability.

Governmental Incentives. The governmental agency (ies) that provided the subsidies also have incentives and disincentives that are aligned with the property's sustainability. For example:

- Future Allocations. Each year's allocation formula (by state for LIHTCs, by participating jurisdiction for HOME funds, by HUD Hub or Program Center for §202 and §811 funds) could reward allocators whose previously funded properties are meeting sustainability targets, by directing additional subsidies to them for allocation to developer / sponsors.
- Requirement to Cure Failing Properties. Agencies could be required to set aside significant amounts of otherwise discretionary funds to cure properties that are actually failing (for example, have accounts payable in excess of cash, or negative cash flow, or physical deficiencies), with additional consequences if the property is still failing after a reasonable period of time such as two years. This would provide a powerful incentive to agencies to achieve property success while giving agencies flexibility to negotiate workout / restructuring / transfer / refinancing transactions that respond to individual property needs and that share the costs of restructuring appropriately between agency,

[3] Although 40 year terms (FHA and some tax-exempt bond transactions) and 50 year terms (RHS) are traditional, such loans amortize so slowly that there is little or no ability to refinance to help meet the property's first wave of heavy capital needs at years 15-25. For example, an 8% / 40 year loan amortizes less than 20% in its first 20 years.
[4] Else, the property would be over-leveraged, the "owner" would have inadequate equity, and the bondholders would be the actual "owners" of the property if anything went wrong.

owner and other stakeholders.

- Requirement to Fund Sustainability. With respect to properties that are not failing but that have not achieved sustainability, agencies could be required to set aside otherwise discretionary funds, with additional consequences if the property is still not sustainable after a reasonable period of time such as two years. As with the previous example, this creates powerful incentives in favor of sustainability without tying the agency's hands in terms of achieving a resolution that makes sense for each individual property.
- Choice Among Alternative Allocators. If a particular allocating agency has a particularly poor track record in terms of achieving success and/or sustainability, Congress could provide that future funding and authority be transferred to an alternative allocating agency.

WHAT ABOUT VERY-LOW-MARKET-RENT NEIGHBORHOODS?

Some subsidized rental housing is located in neighborhoods with comparable market rents that are too low to cover operating costs, reserves and vacancy loss, even if the property has no required debt service payments. This pattern most commonly occurs in distressed inner city neighborhoods and rural areas. The problem is exacerbated whenever operating expenses are abnormally high (for example, because of high maintenance costs in the inner city, or because of the higher operating costs of elevator buildings for the elderly).

For such properties, it is not possible to achieve sustainability until neighborhood market rents rise significantly. Policymakers may nonetheless determine that developing affordable housing in such an area is appropriate. In such situations, the property should be structured to be as close to sustainable as possible, in particular:

- Zero debt. Total development costs should be funded by grants, as in the §202 and §811 programs.

- 100% project based deep subsidy. Again, this mirrors practice in the §202 and §811 programs.

- Adequate reserves. Because there is no ability to refinance, the reserve for replacement must be adequate to fund 100% of capital needs for an extended period such as fifty years.

- Adequate operating margin. The rents must include an amount over and above anticipated costs of operation, so that the property can weather moderate "shocks" without failing.

THE CASE IN FAVOR OF SUSTAINABILITY

The status quo has at least the following significant drawbacks that, in combination, may be sufficient to justify developing a new approach:

- **Downstream Funding Problems.** Downstream government funding is likely to be inadequate to meet the needs of all worthy properties. Similarly, government will make mistakes in assessing the needs of properties. As a consequence, funding likely will be piecemeal and inadequate. Funding may arrive years after it is needed. In the absence of adequate and timely subsidy, the property deteriorates, loses affordability, or fails financially, often harming the residents and neighborhood in addition to the owner.

- **Lack of Economic Value.** A property that is not viable except with new government subsidy is a property that has no economic value to its current owner. The owner thus has little opportunity to be 'part of the solution', a situation that is likely to result in some owners becoming 'part of the problem.'

- **Over-Leverage.** Often, affordable properties find themselves needing new capital but saddled with debt (typically held by, or guaranteed by, the federal government) that has modest debt service payments but an unpaid principal balance that dramatically exceeds the property's economic value. In such situations, no one – the owner, a purchaser, a state or local government – can solve the problem until the federal government brings the debt down to size. In such situations, unless the federal government is unusually proactive and agile, properties can spiral downward even when there are non-federal stakeholders who are able and willing to rescue it.

- **Finger Pointing.** When a property fails, rather than taking the stoic (and expensive) view that significant numbers of failures are built into the system, and cutting the debt down to size so that other stakeholders can act, the federal government is tempted to attribute the failure to the owner and manager, or to demand that the owner make economically irrational additional investments to solve the problem. The ensuing process of allocating blame, although sometimes necessary, is always counterproductive from the standpoint of returning the property to viability.

- **Lack of True Equity Capital.** If the property is designed to be economically worthless after 15-25 years, private equity capital will be attracted only for non-traditional reasons such as tax benefits (including LIHTCs). As a result, development must be financed almost totally by grants and debt, with government providing the "first-loss" slice of capital that normally comes from private equity investors. Thus, when the property runs into difficulty, government immediately owns the problem. Conversely, true economic equity would provide a powerful accountability mechanism for owners that is lacking in the status quo.

- **Over-Rehabbing.** Properties that are successful in attracting downstream government subsidies will naturally try to acquire as much subsidy as possible, so as to prolong the period until the next injection of subsidy will be needed. Consequently, those properties that are preserved are likely to be over-funded.

- **Front-Loaded Economics.** Owners' profit opportunities are limited to those occurring at original development, acquisition, and rehabilitation. Owners thus tend to be financially interested in properties at the beginning and then not for many years afterwards. Similarly, this pattern of profit opportunities leads to pressure for "churning" – the periodic sale and rehabilitation of properties – whether or not that is the right outcome for the property.

- **Lack of Long-Term Excellent Owners.** Because ownership is not a viable business, there is no opportunity for ownership organizations to develop and thrive. Those "owners" who do survive long-term do so because of profits from other activities such as development and property management.

- **Happy Stakeholders – With Significant Exceptions.** The status quo is viable for developers, property managers, syndicators, lenders, accountants, consultants, and most other stakeholders, all of whom have reasonable economic opportunities and viable businesses. Owners and the federal government (and, all too often, residents and communities) are left holding the bag when properties fail. Because the pain of failure is concentrated in only a few stakeholders, there has been relatively little pressure for change.

Role of the Federal Government in Initiating Change. Logically, as long as the federal government is willing to continue a fundamentally short-sighted approach to the funding of subsidized rental housing, the other stakeholders – including owners – will continue to figure out ways to cope. Thus, change is unlikely unless initiated by the federal government itself. A recommendation from the Commission could be the catalyst for change.

THE CASE AGAINST SUSTAINABILITY

Arguments against conversion to a "sustainable" model include:

- **Timing of Costs.** It is clear that developing subsidized rental housing under a "sustainable" model will involve additional up-front subsidy, offset by avoiding "bail-out" subsidy later. However, when a sustainable approach is implemented for the first time, federal funding will have to serve two purposes: bailing out properties developed earlier, and subsidizing new properties to a greater degree. Either funding will have to be increased, or the number of new properties that can be developed will drop. This problem will persist for several years, perhaps for a full 15-25 year cycle.

- **Amount of Incremental Up-Front Subsidy.** The extent of the incremental up-front subsidy is subject to debate but is certain to be material. A series of financial models to be produced for the Committee's review will attempt to quantify this incremental up front cost. See also Appendix 1, which indicates that the up-front subsidy likely would increase at least ten percent but probably not more than twenty-five percent.

- **Track Record.** Some argue that there is no need to convert to a new, more expensive

approach because, despite the preceding list of flaws, the current system has successfully produced roughly two million units of subsidized rental housing, most of which continue to provide adequate and affordable housing.

- **LIHTC.** Some argue that many of the criticisms are true of earlier programs but are not true for the most recent program (LIHTC). LIHTC avoids many of the pitfalls associated with earlier programs. In particular, its reliance on private capital means that private debt and equity investors – rather than the federal government – bear most of the risk of the property's financial failure.

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APPENDIX 1: SIMPLIFIED FINANCIAL ANALYSIS

Appendix 1 provides an initial simplified example for review and comment, illustrating various underwriting adjustments that likely would be needed to support sustainable development, by comparison to a more or less worst-case "traditional" approach (with rents at 100% of market, aggressive underwriting, and inadequate reserves). In summary, the worst-case traditional approach requires up-front subsidy of roughly 39% of total development cost. The sustainable approach requires a rather larger up-front subsidy of roughly 53% of total development cost, roughly one-third more up-front subsidy.

As noted in the notes to the Appendix, this one-third increase is probably toward the high end of the range of likely results but suggests that the amount of additional subsidy is likely to be material. If Appendix 1 represented the average result (rather than a worst-case result), the number of units developed with any given amount of up-front subsidy would drop by one-fourth (the amount of up-front subsidy needed to produce four units under the traditional approach would be adequate for only three units under the sustainable approach). Conversely, if Appendix 1 does represent a worst-case result, the increase in up-front subsidy required to achieve sustainability could well be no more than 10% to 15%, and is unlikely to exceed 25%, when averaged across the full range of properties. Future analysis will attempt to arrive at a more accurate estimate of additional up-front subsidy necessary to produce sustainable properties.

It is useful to consider the cost to bail out properties under the traditional approach.

- Preservation. In HUD's Preservation programs in the mid 1990s, government paid owners fair value for their right to convert to market rate use and funded needed repairs as well. In these programs, governmental costs averaged $15,000 per unit when the existing owner remained in place and $30,000 per unit when there was a transfer of ownership to a nonprofit[5].
- Mark-to-Market. In HUD's Mark-to-Market program, government pays to reduce the first mortgage loan to an amount that is consistent with sustainability principles, plus transaction costs and immediate repairs. In the Mark-to-Market Demonstration program, these costs averaged close to $15,000 per unit[6].
- LIHTC. A common approach for preservation transactions is to utilize volume-cap tax-exempt bonds and 4% LIHTCs. Typical transactions involve cost to government with a net present value of $20,000 to $25,000 per unit[7].

As the following analysis shows, these amounts are quite a large percentage of the amount of governmental subsidy needed to facilitate development under the traditional approach. In the traditional approach, in effect government commits $25,000 to $30,000 per unit in subsidy now,

[5] Part of the higher cost of transfers is that, in transfer transactions, owners received 100% of their "preservation equity" versus 70% in "stay-in owner" (non-transfer) transactions.
[6] Unpublished HUD analysis of Demonstration program closings.
[7] For illustration: $60,000 total development cost x 75% eligible basis x 4% credit = $1800 credits per year for 10 years = $13,250 per unit NPV at a governmental 6% discount rate. Tax-exempt loan at $45,000 per unit / 6% / 30 years is worth $36,800 at a market 8% interest rate, implying that the governmental subsidy is worth $8,000 per unit to the developer (and with a cost to government that is somewhat higher, reflecting government's lower cost of funds). $13,250 plus $8,000 is $21,250.

with a moral commitment to spend roughly that same amount again twenty years later. As noted at the end of the Appendix, comments are invited on the various assumptions used.

CAPITAL SUBSIDY REQUIRED FOR SUSTAINABLE DEVELOPMENT

Traditional vs. Sustainable Development
80 Unit Property

	Traditional		Sustainable	
Gross Potential Rent	$576,000	$600	$552,000	$575
Rent Loss	(28,800)	5%	(38,600)	7%
Other Income	8,000	$100	8,000	$100
Effective Gross Income	$555,200		$521,400	
Operating Expenses	(220,000)	$2,750	(240,000)	$3,000
Reserve Deposit	(20,000)	$250	(28,000)	$350
Asset Management	0	$0	(16,000)	$200
Net Operating Income	$315,200		$237,400	
Debt Service	(286,500)		(197,800)	
DSCR	1.10		1.20	
Operating Cash Flow	$28,700		$39,600	
% of EGI	5.2%		7.6%	
Total Development Cost	$5,600,000	$70,000	$5,600,000	$70,000
Supportable Debt	(3,434,000)		(2,246,000)	
Supportable Equity	0		(396,000)	
Capital Subsidy Needed	**$2,166,000**	**$27,075**	**$2,958,000**	**$36,975**
% of TDC	39%		53%	
Mortgage Interest Rate	7.50%		8.00%	
Loan Term	40		30	
Credit Enhancement	0.50%		0.00%	
First Year Equity Yield	n/a		10.00%	

Notes to Appendix 1

"Traditional" Approach Summarized. The "traditional" column features rents at 100% of market, standard (aggressive) underwriting, reserves that are not adequate to fund long-term capital needs, and first mortgage financing that offers little prospect for refinancing in the medium term. A property financed in this way is highly likely to experience negative cash flow whenever anything goes wrong, and is nearly certain to require significant additional governmental subsidy as it hits its first wave of major capital needs at years 15-25.

Two Needs For Additional Up Front Subsidy. The incremental capital subsidy needed to support the "sustainable" approach can be considered to have two dimensions. First, some of the incremental subsidy reduces the likelihood of negative cash flow in the short term (e.g., the subsidy needed to support the lower rents, higher rent loss, higher operating expense amounts, and greater debt service coverage). The remaining incremental subsidy supports the property's ability to self-finance its long-term capital needs (e.g., the subsidy needed to support the higher reserve deposit and faster-amortizing debt).

Sustainable Development Includes True Economic Equity. The sustainable approach involves true economic equity. Accordingly, the estimate for operating cash flow in the sustainable model represents distributable cash over and above any amounts needed to fund operating deficits or to supplement inadequate reserves. It would, of course, be possible to fund some of the property's long-term capital needs from cash flow, especially in properties for which it is reasonable to project an expanding cash flow as the property ages. However, cash flow that is intended for those purposes would not be available to support true economic equity. That is, there is no "free lunch" – equity investors will pay up for distributable cash flow but not for cash flow that is earmarked for other purposes. The cash flow shown in the traditional model is not "bankable" because an investor would not expect to receive it – instead, the investor would expect the projected cash flow to be diverted to supplement inadequate operating budgets, inadequate vacancy allowances, and inadequate reserves. That is, the investor would not find the traditional underwriting credible and would expect an actual DSCR of 1.00 or below, as opposed to the projected DSCR of 1.10.

Additional Market Discipline of True Economic Equity. A side effect of having true economic equity is that the sustainable approach is not as heavily reliant upon debt financing as the traditional approach. Admittedly, private equity capital is more expensive than mortgage debt. However, the need for private equity capital introduces an additional market discipline. If the development concept, development team, and financial projections are not credible to equity investors, the equity funds will not be forthcoming. This additional discipline could well be extremely valuable to government, as an additional check – and – balance on the reasonableness and feasibility of the development proposal.

Potential Impacts on Total Development Cost. Because the traditional approach involves a high likelihood of financial stress (if not outright failure), logically the total development costs include some amount (probably in developer fee, LIHTC investor yield, and/or syndicator load) of compensation for that risk that would not be needed in the sustainable approach. Similarly, the provision of an explicit asset management fee in the sustainable model might make development feasible at a lower developer fee. It is therefore possible that a sustainable approach would involve lower total development costs, although the example above assumes that TDC would be

the same in either scenario.

Brief Discussion of Key Assumptions

- Gross Potential Income – assumes that the sustainable approach will require underwriting at slightly lower rents, for two reasons. First, to produce affordability below market rents. Second, to provide affordability to a broader range of low income households.

- Rent Loss – the sustainable approach uses a 7% rent loss allowance, reflecting typical results when large numbers of markets are averaged, or when a single market is averaged across the real estate cycle.

- Operating Expenses – assumes that the sustainable approach will require higher (realistic) operating expenses. The amounts selected for traditional and sustainable represent typical amounts for average cost areas.

- Sustainable Funding for Capital Needs – preliminary analysis conducted for the Commission suggests that, for new construction garden apartments in modest cost areas, an initial deposit of $300-$350 per unit per year is likely to be adequate to fund all capital needs for the property's first 15-20 years, if subsequently adjusted for inflation, and if the balance is invested at passbook rates. Sustainability past year 15-20 would require additional funding. For example, preliminary analysis indicates that increasing an initial $350 PUPA reserve deposit at inflation plus 400 basis points for the first twenty years would provide sufficient additional funding for fifty-year sustainability. Similarly, a refinancing at year 15-20 that generated $7,500 per unit (in today's dollars) to supplement the reserve would also support fifty-year sustainability, when combined with a $350 PUPA reserve deposit increased at the rate of inflation. A variety of other approaches would be equally effective. These illustrations are specific to new construction (where the reserve builds for several years with few if any withdrawals) in a modest-cost area. In a rehab situation, or for an older property, or in a higher-cost area, the needed reserve deposit (and needed supplemental funding for fifty-year sustainability) likely would be higher.

- Reserve Deposit – traditional reserve deposit amounts range from $200 to $300 per unit per year. The sustainable approach assumes a $350 per unit per year reserve deposit.

- Asset Management – benchmarks for asset management fees are few and far between. Available benchmarks suggest that an asset management fee in the range of half the property management fee is justifiable and is likely to be adequate.

- DSCR – the traditional approach reflects the FHA standard 1.10 DSCR for the §221d4 program. The sustainable approach reflects 1.20 computed against a much more conservative NOI, roughly equivalent to a 1.50 DSCR using the traditional underwriting approach.

- Loan Terms – assumes an FHA §221d4 for the traditional approach and a conventional 30 year loan for the sustainable approach. The shorter amortization period gives much

more potential for refinancing at the time of the first heavy capital needs cycle (year 15-25). At an 8% rate, a 40-year loan pays down less than 20% in 20 years, whereas a 30-year loan pays down 40% in the same period.

- First Year Equity Yield – assumes that a private equity investor would accept a 10% cash on cash yield in the first year. This assumes that the projected cash flow is credible and is entirely distributable.