LAND BANK
FEASIBILITY STUDY

Prepared By:
BAE
Bay Area Economics

Prepared for:
City of Fort Collins
Advance Planning Department

December 2000

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The purpose of this study is to evaluate the feasibility of establishing an Affordable Housing Land Bank Program in Fort Collins. The primary objectives for the Land Bank program include establishing a program that will facilitate the production of affordable housing by providing land that affordable housing developers can feasibly purchase, and helping to ensure that appropriate sites will be available in the future for the development of affordable housing within the City of Fort Collins.

The study was structured to answer a series of questions regarding the feasibility of implementing a Land Bank program in Fort Collins. Those questions, and summary conclusions from the study are presented below. The main body of the report contains detailed explanations of the research, assumptions, and analysis that lead to these conclusions.

A. Is there an adequate supply of sites that could be considered for acquisition for land banking purposes at present?

Yes. The study identified over 5,000 acres of vacant land that could be considered for acquisition by a land banking program. This represents sites that would potentially be suitable for eventual development of affordable housing, based on proximity to either existing or planned amenities such as schools, parks, commercial centers, employment centers, and transit. These sites are distributed throughout Fort Collins, so that Land Bank sites could be selected to avoid undue concentrations in any particular neighborhood.

B. What, if any, potential impact would a Land Bank program have on the residential land market in Fort Collins?

The likely scale of the Land Bank program in relation to the existing supply of vacant land is sufficiently small that the program should not have a significant impact on the private residential land market in Fort Collins. The Land Bank program itself would not create demand for housing; rather, it would act as an intermediary for affordable housing developers who would otherwise have to purchase the same land in the private marketplace.

C. Are there mechanisms available to successfully implement a Land Bank program, including mechanisms to acquire property, to finance the purchase and "banking" of property, and to ultimately convey the property to developers of affordable housing?

Yes. There are a number of examples of land banking programs in other communities in Colorado, California, and elsewhere in the U.S that can serve as models for Fort Collins. In addition to operational strategies employed by existing land banks, there are numerous other mechanisms to acquire land, raise capital, obtain debt, and dispose of land that are potentially applicable to a Land Bank in Fort Collins.

D. Can the Land Bank program acquire and ultimately dispose of enough land to facilitate the production of a significant number of housing units each year?

With an initial commitment of approximately $925,000 in seed money, plus the possibility of using idle City funds as a source of debt financing, the Land Bank program has the potential to

acquire a modest amount of land each year, which could ultimately support the production of a substantial number of housing units over an extended period of time. Using a baseline assumption that calls for acquiring an average of about 3.5 acres of land each year, which would be targeted to yield at least 12 affordable housing units per acre, the program could support production of over 600 affordable housing units over a 15-year period.

E. Can the program be structured so that it is not dependent on the City General Fund for financial support, to the detriment of other Citywide needs?

Under a conservative baseline set of assumptions, the Land Bank program can achieve its objectives with an initial General Fund investment of $925,000 and annual investments to support cash flow that would begin in Year one at $0 and gradually increase over a 15-year time period to approximately $76,000 per year (2000 $). In addition the Land Bank would require the ability to borrow money to finance land purchases and holding the land until it is sold to affordable housing developers. If the City chooses to amend its investment policies to allow loans to and investments in the Land Bank program, these funds would come from non-General Fund sources. The Land Bank would pay the City interest on its loans and the City could likely recoup the principal on its loans as well as its annual investments if the program was shut down and all land assets sold. During the operation of the program, it is expected that the annual investments would appreciate in value through the increasing value of the Land Bank's land assets.

Relying solely on City financing sources, with no injection of outside funding, the net program cost to the City over a 15-year period is approximately $169,000. This means that the economic benefits of the program are approximately $169,000 less than the costs; however, over a 15-year operating period, it is likely that the program would be successful in attracting outside funding or achieving cost savings in the acquisition of land that could eliminate the net City cost. In other words, there is good potential for the program to generate local benefits greater than its costs to the City. Even without any outside funding, a strong argument can be made that the non-economic benefits of the program, such as helping to ensure a steady supply of sites for affordable housing development, assisting affordable housing developers to secure quality sites, promoting strategic site selection for affordable housing projects, and providing greater community awareness of affordable housing projects (by identifying sites well in advance of their planned development) can justify the baseline net program cost.

INTRODUCTION

The City of Fort Collins and surrounding Larimer County, like many Front Range communities, have experienced rapid growth during the last decade. Fort Collins itself grew 26 percent between 1990 and 2000. It is not surprising that this rapid population growth has put pressure on the local real estate market, resulting in rising costs for unimproved land to support new residential development.

Rising land costs have made it more difficult for developers to feasibly build affordable housing to meet demand from lower-income households. According to the City's Priority Affordable Housing Needs and Strategies Study, 43 percent of households include workers in lower paying service-related and retail jobs and that, furthermore, these sectors are the most rapidly growing in the local economy. As a result of these factors, the City has identified the need to facilitate the development of affordable housing for households earning between $12,000 and $25,000 per year. The same study identified the linkage between the ability to provide service and retail sector workers with affordable housing and the health of the local economy, which is dependent on a continued ability to draw these types of workers from among the local resident labor pool.

Another issue relating to the local production of affordable housing is the diminishing supply of vacant land available to prospective developers. Anecdotal information from local affordable housing developers indicates that it is becoming increasingly difficult to secure sites for new affordable housing projects. In addition, a local ballot initiative that would prevent new land annexations to the City of Fort Collins without a vote of the people will come before the voters this fall. The potential approval of this measure raises the possibility that the supply of vacant developable land will become even more constrained while demand is anticipated to remain strong.

Based on additional follow-up to the Priority Affordable Housing Needs and Strategies Study, including work completed by a City team that participated in the National League of Cities' Strengthening Partnerships for Housing Opportunities project workshop in June 1998, the City Council endorsed a concept paper on a housing land banking program intended to address the need for affordable housing, and allocated resources to study the feasibility of establishing such a program in Fort Collins. In response to this Council direction, the Advance Planning Department circulated a request for proposals and subsequently retained Bay Area Economics (BAE) to prepare this feasibility study for the establishment of a land banking program in Fort Collins.

Land Bank Program Objectives

The feasibility of a Land Bank program must be considered in light of the objectives for the Land Bank program. The primary objectives for the Land Bank program include:

Establish a program that will facilitate the production of affordable housing by providing land that affordable housing developers can feasibly purchase.

A. Establish a program that can help to ensure that appropriate sites will be available in the future for the development of affordable housing within the City.

Feasibility Criteria

For the purposes of this analysis, we have utilized the following criteria to evaluate the feasibility of the Land Bank program:

A. Is there an adequate supply of sites that could be considered for acquisition for land banking purposes at present?

B. What, if any, potential impact would a Land Bank program have on the residential land market in Fort Collins?

C. Are there mechanisms available to successfully implement a Land Bank program, including mechanisms to acquire property, to finance the purchase and "banking" of property, and to ultimately convey the property to developers of affordable housing?

D. Can the Land Bank program acquire and ultimately dispose of enough land to facilitate the production of a significant number of housing units each year?

E. Can the program be structured so that it is not dependent on the City General Fund for financial support, to the detriment of other Citywide needs?

Land Bank Feasibility Study Process

This Draft Report represents the second work product from the Land Bank Feasibility Study. In August, BAE prepared and submitted to City staff a preliminary memorandum of findings, to serve as an interim analysis and give City staff the opportunity to comment on the basic structure of the analysis and key assumptions. In response to the preliminary memorandum, City staff provided BAE with comments and suggestions, which were into a Draft Report, which was circulated to the City staff and the Land Banking Committee, for review and comment. City staff compiled the comments and forwarded them to BAE. BAE then addressed those comments and prepared this Final Report. BAE will next coordinate with City staff to present this Study to the City Council. January 9th, 2001 is the targeted date for this presentation.

Report Contents

This report is organized in the following sections, which document the assumptions, research and analysis, findings, and recommendations of the Land Bank Feasibility Study:

- **Land Bank Site Availability and Potential Market Impacts**
- **Economic Feasibility Analysis and Sensitivity Analysis**
- **Operational Options**
- **Implementation Recommendations**
- **Appendices**

LAND BANK SITE AVAILABILITY AND POTENTIAL MARKET IMPACTS

An important consideration in evaluating the feasibility of a local Land Bank program is the availability of suitable sites. Key issues identified for this study included a need to determine whether there are an adequate number of potential sites to make the pursuit of a Land Bank program worthwhile; a need to evaluate the potential impact of Land Bank activity on the market for residential land in Fort Collins, and; a need to determine whether a Land Bank program could successfully disperse sites for future affordable housing development so that affordable housing is not unduly concentrated in a limited number of neighborhoods.

Vacant Land Availability

GIS Screening. There are numerous vacant properties that could be targeted for land banking. A broad-brush GIS analysis has identified a total of approximately 700 parcels of vacant residentially zoned land that are within ½ mile of existing or planned transit, schools, parks, employment centers and commercial centers. These are considered important amenities for neighborhoods that could support housing for lower-income households, particularly multifamily housing. These sites amount to approximately 5,150 acres of vacant land within the urban growth area. Restricting the search to properties within ¼ mile of these amenities (existing or planned) the total drops to 239 sites and 1,430 acres of land.

It would be possible to relax the screening criteria to consider sites within ¾ or 1 mile of the various amenities; however, we do not believe this is necessary at this time. The analysis shows that there are adequate sites within ¼ to ½ mile of important neighborhood amenities to consider for acquisition by a Land Bank program. If the criteria were relaxed, additional sites would be identified, reinforcing this conclusion. As discussed below, these screening criteria are for feasibility study purposes only, and they are not intended to restrict the range of sites that could actually be acquired if a Land Bank program is implemented.

Staff-Identified Sites. We believe the City's GIS system has provided an extremely useful screening tool for this analysis, and that this part of the exercise has shown that although the perception is that Fort Collins is rapidly building out, there are still a substantial number of sites that could be considered for a land banking program. The screening criteria alone are not sufficient to determine suitability for land banking. Other unique factors such as site configuration, adjacent land uses, location in relation to flood plains, and potential interest on the part of owners in selling the property are also important. City staff have assisted in this regard by identifying a more limited number of sites based on professional knowledge of potential residential development sites within Fort Collins. Staff identified 22 potential sites, totaling almost 650 acres of land within ½ mile of existing or planned parks, schools, transit facilities, employment centers commercial centers. Of this land, and approximately 350 acres lie within ¼ mile of these existing or planned amenities.

Exhibit 1 is a map that shows the GIS- and staff-identified and staff-identified sites within ¼-mile of existing amenities. Exhibit 2 is a map that shows the GIS- and staff-identified sites within ½ mile of existing or planned amenities.

Conclusions Regarding Site Availability

Considering the results of the GIS analysis as well as the results of the Staff evaluation of potential sites, we have concluded the following:

a. There are sufficient vacant sites in Fort Collins to make land banking a program worthy of continued consideration. Furthermore, potential sites are reasonably well scattered throughout the City, indicating an opportunity to disperse Land Bank sites and avoid over-concentrating affordable housing. At the same time, it must be acknowledged that the most obvious opportunities are located in those parts of the City that are newly developing (i.e., the northern part of the City), where remaining vacant sites are more likely.

b. While many of the approximately 5,150 acres identified in the GIS analysis may prove to have development constraints that make them unsuitable for land banking, the staff analysis of potential sites provides reassurance that there are a significant number of potential residential development sites that are known to have good potential. When one considers that the Land Bank program would most likely acquire land gradually over time, it is likely that additional sites that are not attractive today would become more attractive within five, ten, or fifteen years.

c. While we have identified a set of site selection criteria for the purposes of this analysis, these criteria do not suggest that the City should adopt them as a rigid or determinant view of what sites should actually be acquired for land banking purposes. Criteria such as these can be useful as a means to evaluate the relative attractiveness of sites that may be available; however, other tangible and intangible factors that could affect the suitability of a given piece of property for land banking purposes must also be considered. Principal considerations will also be the cost at which land is available and the willingness of the owner to sell at a particular point in time.

Potential Land Market Impacts

Given the relatively large amount of vacant residential land, and assuming that the Land Bank would likely acquire relatively modest amounts of land in relation to the total number of sites available, we can preliminarily conclude that there is little potential for the Land Bank activity to have a significant affect on the local land market. It is important also to consider the fact that while the Land Bank would compete in the marketplace to purchase land, the creation of the Land Bank itself would not contribute to an increase in demand for housing. While the Land Bank would take land off of the private market, it would also sell land to affordable housing developers, who would otherwise have to seek land in the private market. In our opinion, other factors could have a much more significant affect on the Fort Collins residential land market than the operation of a modest Land Banking program. One example is the possible adoption of a growth management measure that would limit the City's ability to expand the supply of residential land as existing vacant land is absorbed.

Exhibit 1: Land Bank Feasibility Study Site Analysis (Sites within 1/4 Mile of Amenities)

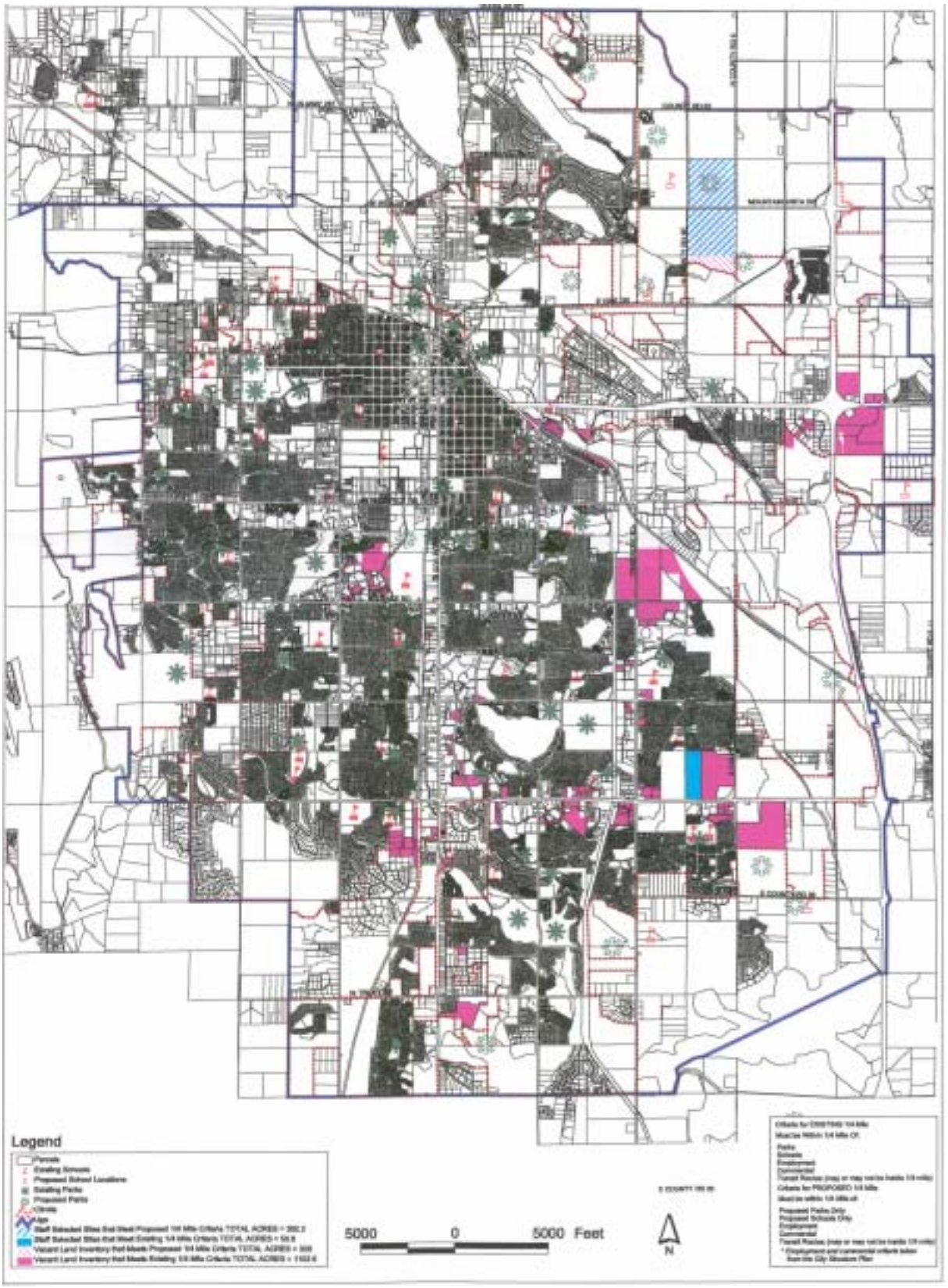
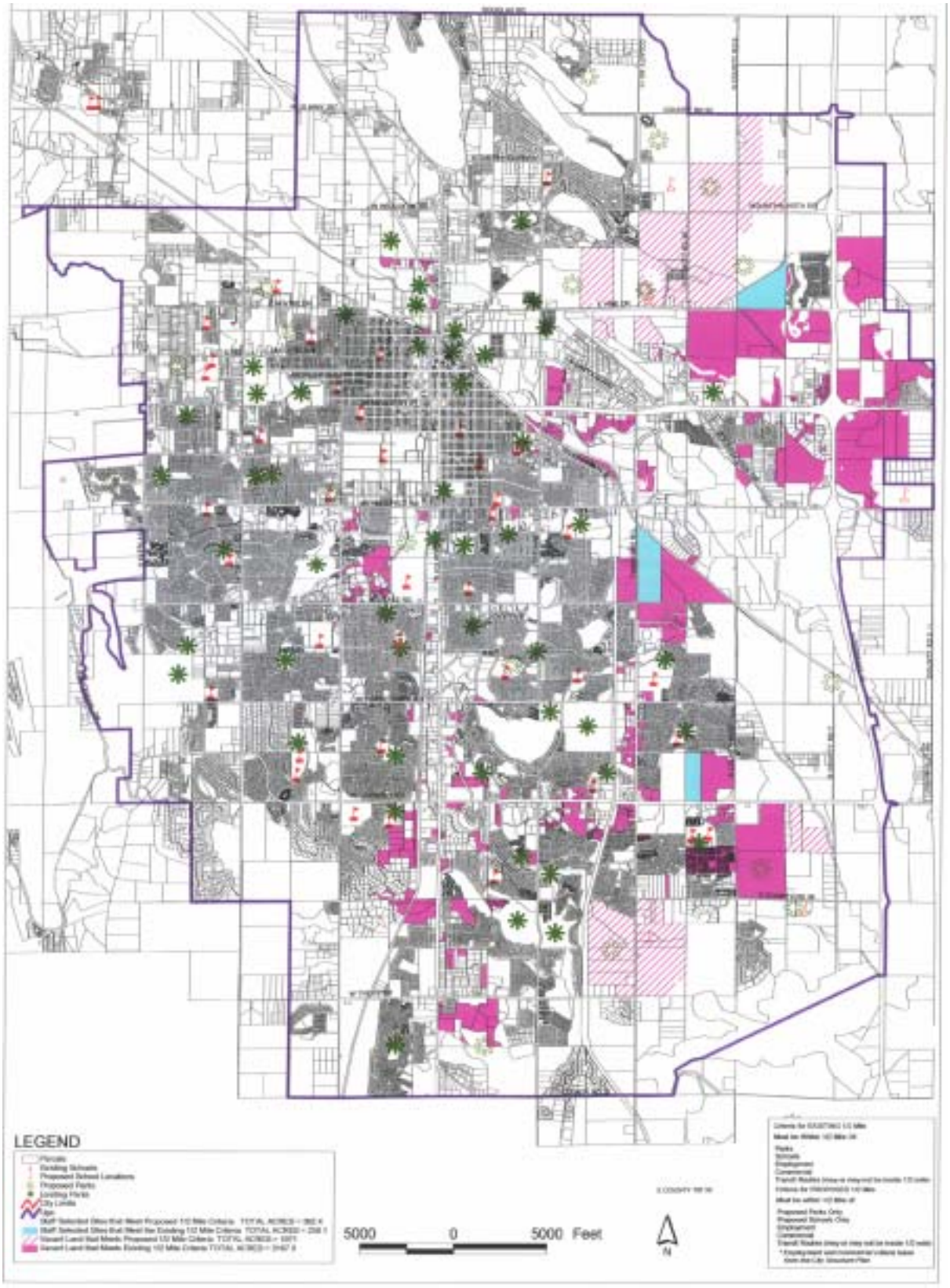


Exhibit 2: Land Bank Feasibility Study Site Analysis (Sites within 1/2 Mile of Amenities)



ECONOMIC FEASIBILITY ANALYSIS

A second critical consideration for the Land Bank feasibility analysis is whether the concept is economically viable, given the objective to make the program financially self-supporting so that it is not an ongoing drain on General Fund revenues that the City needs for other municipal purposes that may be equally as pressing as the need to promote affordable housing. This program parameter makes the Fort Collins Land Bank program unique among the other similar programs that BAE has identified and researched in conjunction with this study. It appears that all the other programs we examined incorporated either direct or indirect subsidies in order to achieve the other "financial" objective, which is to eventually dispose of Land Bank property at a cost to the affordable housing developer that will enhance project feasibility. Appendix A provides a listing of a number of other land bank programs. The matrix includes information regarding primary funding sources and the programs shown rely on various combinations of local, state, federal, and private funding to subsidize their land bank programs.

In order for the Fort Collins Land Bank program to be financially self-supporting, it must operate in an entrepreneurial way, purchasing property at low prices and then selling the property at a future time for a price that is adequate to cover the Land Bank's initial purchase costs and the carrying costs for the interim period. At the same time, the Land Bank must try to limit the amount of this "spread" so that it can sell the property to affordable housing developers at prices that will help keep development costs low and limit the amount of other subsidies that the development will require in order to produce affordable housing units.

To test the economic feasibility of this Land Bank concept, we have developed a refined version of the land bank program cash flow model example that we shared with the Land Bank Committee and City staff at our project start-up meetings in early July. This model incorporates a series of key assumptions regarding how the Land Bank program would operate and then models the flow of cash into and out of the program over a 15-year period. While this model is a simplification of how a Land Bank program would actually work, it is a useful tool to test the financial feasibility of the concept.

Key Modeling Assumptions

To explain the cash flow model, we first begin with an explanation of the key assumptions for the modeling effort. These assumptions are shown in Table 1 of the Land Bank Cash Flow Model. To assist in evaluating the sensitivity of the conclusions of the analysis to variations in these assumptions, a Sensitivity Analysis section is included below.

Acres Acquired Per Year. For the purposes of this analysis, it is assumed that the Land Bank would acquire, on average, one 3.5-acre site each year. Table 2 in the Cash Flow Model tracks these acquisitions over time. With respect to potential impacts on the private land market, in relation to the 5,150 acres of vacant land within ½ mile of key existing or planned amenities in Fort Collins at this time, this level of acquisition activity does not appear to be significant. At the same time, over an extended period of time, the production of new affordable units could be significant.

Density of Land Bank Projects. The density of residential projects developed on Land Bank sites will have a significant impact on the perceived program benefits. According to City staff,

typical densities for multifamily projects recently constructed in Fort Collins have been approximately 12 units per acre. This assumption is used in Table 5 to estimate the estimated subsidy provided to each unit constructed with the assistance of the Land Bank program. If Land Bank projects produce similar yields of 12 units per acre, a 3.5-acre site could support approximately 42 new multifamily units. If affordable housing projects using Land Bank sites can achieve higher densities, the benefits of the land banking program can be magnified. On the other hand, if Land Bank projects yield lower densities, the benefits would be reduced. For example, if land bank sites are developed at only six units per acre instead of 12 units per acre, the program costs would be similar; however, the number of affordable housing units assisted would be cut in half.

Land Purchase Price. This is a difficult assumption to establish, because the actual cost of land to be acquired will depend on many factors including timing of buying opportunities, level of improvement of available sites, site size, configuration, locational amenities, and a host of other factors. For the purposes of this analysis, it is assumed that the purchase price (in 2000 $) would be approximately $2.25 per square foot. This is based on staff analysis of the approximate price of vacant residential land in the "MMN" zones in the southeast and southwest parts of the City. Based on a review of Exhibit 1, such sites that are likely to be in close proximity to necessary infrastructure, established neighborhoods, and therefore likely developable in the near to mid term. Table 2 calculates the cost of land purchases over time. The Land Bank may be able to purchase greater quantities of land for a given dollar amount in the northern part of the City; however, these sites are likely to be more costly to develop, because infrastructure is typically less readily available. The Land Bank should seek strategic opportunities to purchase inexpensive land that will benefit from planned infrastructure improvements.

Number of Years Held Before Sale. Consistent with the characteristics of sites that are assumed for purchase above, the baseline analysis assumes that the Land Bank will sell sites that it acquires after an approximately five-year holding period. The upper part of Table 3 shows the holding period for each property that the Land Bank purchases.

Land Value Appreciation Rate. This is another difficult assumption to establish with precision. In preparation to set this value for modeling purposes, BAE has consulted with City staff responsible for acquiring real estate for right-of-way projects, and with a representative of a local real estate brokerage firm who is knowledgeable about land price trends for multifamily housing. Information gathered from these sources indicates that land price appreciation has fluctuated significantly between 1984 and 2000. For the entire time period, information provided by Steve Phister of Realtec (a local real estate brokerage firm) indicates that the price for a typical multifamily parcel has increased an average of about 3.4 percent per year, including a period of price declines between 1984 and 1992. However, considering the post-recession period of 1992 to 2000, the average rate of increase was 13.9 percent per year, while average increase during the last three years was about 15.6 percent per year.

Based on the information above, it appears that the trend in Fort Collins is toward accelerating price increases for multifamily land; however, over time, we should also expect some moderation of the rate of increase or even temporary declines in prices due to changes in regional and national economic cycles. In addition, the value of a given piece of land may change independent of prevailing market conditions due to changes in site-specific conditions such as public infrastructure improvements, development on adjacent properties, etc. As a baseline assumption, we have chosen a long-term land value appreciation rate of 6.0 percent per year. This reflects the

general trend for land prices to increase at a rate that is faster than inflation. We believe that this figure represents a reasonable balance between the rapid price appreciation that has occurred during the economic boom of the last seven to eight years and the fact that the real estate industry is also likely to go through down-cycles in the years ahead. The upper part of Table 3 tracks the appreciation of land during the 15-year period modeled in the Cash Flow Model.

Land Transaction Costs. This analysis assumes that transaction costs for either buying or selling land will average approximately $5,000. This is a modest figure, which allows for some due diligence, escrow and closing costs. In practice, it may be possible for the Land Bank program to obtain reduced cost or donated services, given the nature of the project; however, the overall program feasibility is not especially sensitive to this assumption. Table 2 shows how these costs combine with land sale price to produce the total cost to acquire land. These transaction costs are assumed to increase at the general rate of inflation, described below.

General Inflation Rate. For costs other than land, this analysis assumes a general inflation rate of 3.5 percent per year. This approximates historic trends.

Interest Rate for Program Borrowing. Because the trend in land prices tends to be upward, it is most beneficial if the Land Bank can purchase land as early as possible. While the City has committed $925,000 to fund the Land Bank program initially, and the Land Bank could likely obtain additional funds from various sources on an ongoing basis, it is assumed that the Land Bank would also borrow money in order to purchase sites. For this analysis, it is assumed that the Land Bank would have access to debt from internal City sources and that the interest rate for these loans would be equal to the City's normal investment returns. In other words, the loans to the Land Bank would be targeted to pay the City the same return as if the City invested the funds in more conventional ways. The City Finance Department has provided information indicating that this interest rate would be approximately 6.25 percent per year. It should be noted that this is but one of many ways for the Land Bank to obtain debt; however it is one of the most simple and cost effective methods to finance relatively small projects. Additional options to finance land bank purchases are discussed in the portion of this memo that discusses operational options. Table 3 tracks the Land Bank's outstanding debt during the 15-year period shown. This table assumes that the Land Bank would use available cash, either from land sales or other sources, to pay down debt each year.

The debt interest rate is a critical assumption for the Land Bank Feasibility analysis, because it assumes that most of the money to purchase property will come from debt. Because interest accrues during the time properties are held, the interest rate establishes a minimum annual return that the Land Bank must earn on the sale of its properties in order to be financially viable. Considering the debt interest rate in addition to property maintenance costs, it is clear that it will be difficult for the Land Bank program to achieve total self-sufficiency. This is particularly true if the Land Bank also wishes to limit the increase in the cost of land that it sells to affordable housing developers. An alternative would be to acquire land on a pay-as-you go basis, but this would limit the ability of the Land Bank to acquire properties in the near term. Debt service costs are shown on Table 4. It is assumed that interest is paid annually, so that it does not compound during the time period the Land Bank holds property. As discussed in the operational options section of this memo, other debt mechanisms could allow the Land Bank to defer payment of interest until the point in time that it sells land.

Interim Use/Income Assumptions. At this time, no additional revenues are assumed from interim use. Because it is assumed that acquired sites will be relatively small, it is likely that arranging for interim uses would generate relatively little income in most cases. The feasibility analysis is not very sensitive to this assumption.

Interim Maintenance Cost Assumption. During the time that the Land Bank holds land, it will be liable for certain property maintenance expenses, such as weed abatement, special assessments, snow/ice removal, etc. Based on information provided by the City Finance Department, it is estimated that these additional costs will average approximately $275 per acre per year. Interim maintenance costs are calculated on Table 4.

Program Staffing Costs. It is assumed that this program will require dedicated staffing in order to make a significant impact on affordable housing in Fort Collins. BAE's experience with other programs in other communities has shown that a particularly important ingredient for the success of a new program is to assign competent, motivated staff to champion and implement the program. Because the number of transactions is anticipated to be relatively small and because the program would likely own a relatively small portfolio of properties at any given time, it is assumed that a program manager would be assigned to the Land Bank program on a one-fourth time basis, and this person would be assisted by a program assistant on a .15 FTE basis. It is assumed that these staff would have other assignments within the organization to achieve full-time status. The FTE costs for these positions, including salary and benefits, are assumed to be $65,000 and $36,400 per year, respectively. It is assumed that whether the Land Bank program resides within the City or in an outside organization, it would not be a stand-alone program and there would be additional in-kind support provided to the program for functions such as executive administration, accounting, legal services, etc. The cash flow model assumes that the Land Bank would be a City program, and that the City would absorb the program administration costs as part of its overall community development activities. Annual program administration costs are not included in the operations costs shown in Table 4.

Sales Price Discount. This assumption was established with the RFP for the Land Bank Feasibility Study. The baseline assumption is that that the Land Bank would sell its properties at a price equal to 90 percent of market value at the time of sale. This assumption is reflected in the net land sales proceeds calculated at the bottom of Table 5. The bottom of Table 5 also contains calculations showing the cost savings for each affordable housing unit is made possible by the discounted Land Bank sale price.

Baseline Conclusions Regarding Economic Feasibility

The Annual Expenditures Summary at the top of Table 6 tracks the annual outflows of money from the Land Bank program. As shown, annual expenditures would begin in Year 1 at about $370,000, increasing to approximately $950,000 by Year 15, primarily due to the increasing cost of land and increased debt interest.

The Annual Revenues Summary is shown in the middle portion of Table 6. This includes an assumed initial investment of $925,000 of City funds to seed the program, which would be set aside for the program over the years 2000 ($425,000) and 2001 ($500,000). Other than excess cash retained from prior years, the primary sources of funds flowing into the land bank program include debt proceeds and the proceeds from the sale of Land Bank property.

The line in Table 6 labeled "Net Land Bank Cash Flow" represents the estimated amount of additional funding that would need to be provided to the Land Bank program each year in addition to the assumed initial General Fund seed money and loans for land bank property purchases. This need for additional annual funding support begins in Year 5, at approximately $24,000 and gradually increases over time to approximately $123,000 per year by Year 15. This money is needed each year for cash flow purposes, due primarily to the assumption that the Land Bank would make debt service payments each year. One can view these payments as investments of City money that could likely be repaid (with interest) if the Land Bank program was closed and all was property sold. In the interim period; however, they represent a diversion of funds that the City could otherwise invest in other ways that may entail less risk and/or be capable of generating greater rates of financial return. If it chose to do so, the City could actually "fund" most or all of these annual cash flow requirements by deferring the Land Bank's debt interest payments each year.

The method that we suggest to evaluate the ultimate feasibility of the land bank program is to evaluate the economic benefits versus the economic costs of operating the program. The box at the bottom of Table 6 assists in this regard. The upper part of the box shows the net present value of the land value program, considering not only the value of the annual subsidies provided when Land Bank properties are sold at less than market value, but also the discounted value of the land assets owned by the Land Bank at year 15. The latter represents the net proceeds to the City if it were to close the Land Bank program and sell all of the property. The lower part of the box calculates the net present value of the City's initial capital investments to seed the Land Bank program plus the net present value of the annual cash flow payments that would be required over the 15-year period that is modeled.

Subtracting the total net present value of program investments from the estimate of total financial returns yields a net cost of about $170,000. This means that under the baseline assumptions stated above, the City would spend about $170,000 more on the Land Bank program than the financial benefits that would be created. However, it should be noted that this analysis has thus far assumed that all of the investments in the Land Bank program would come from the City of Fort Collins. In reality, the establishment of a Land Bank program should create opportunities for the City of Fort Collins to attract additional funds from outside sources. The analysis of Operational Options that follows includes the identification of numerous sources of outside funds as well as other mechanisms, such as private donations or purchases of property at discounted prices, which can serve to reduce or eliminate the net City cost identified above, or even produce excess economic benefits.

In addition to the financial returns, it is also important to consider the potential programmatic benefits from a Land Bank program. This includes the beneficial effect of providing affordable housing developers with a supply of land for future development projects; pre-identifying sites for affordable housing development so that adjacent property owners are aware of the plans for the sites; systematically securing affordable housing sites so that the developments can be dispersed throughout the community; and introducing strategic site selection to the affordable housing development process, so that future residents benefit from housing developed in good locations.

Considering the economic as well as the non-economic factors, we believe that this analysis shows that the Land Bank program holds promise and should be given favorable consideration.

Table 1: Land Bank Feasibility Study Key Assumptions

Initial City Investments (spread over Years 0 and 1)	$925,000			
Additional Annual City Investments	$0	per year, for 10 years		
Average Acres Acquired Per Year	3.5	acres		
Average Parcel Size	3.5	acres		
Average Purchase Transactions Per Year	1	transaction per year		
	At Purchase		**At Sale**	
Land Value	$2.25	per square foot	$3.01	per square foot
Interest Rate for Land Bank Borrowing (a)	6.25%	per year		
Number of Years Land Held Before Sale	5	years		
Land Value Appreciation Rate	6.00%	per year		
Land Purchase/Sale Transaction Costs	$5,000	per transaction		
General Inflation Rate	3.5%	per year		
Interim Use/Income Assumptions	$0.00	per acre, per year		
Interim Maintenance Cost Assumptions (b)	$275	per acre, per year		
Program Administration Costs				
Program Manager				
Salary & Benefits	$65,000	per year		
FTE	0.25	FTE assigned to program		
Program Assistant				
Salary & Benefits	$36,400	per year		
FTE	0.15	FTE assigned to program		
Sales Price Discount: Sales Price as Pct. of Market Value	90%	of future market value		

Notes:
(a) Assumes capital is obtained through internal borrowing. Interest rate is equal to City's normal return on investments, which was approximately 6.25 percent as of 9/27/00.
(b) Interim land maintenance cost is based on information from Finance Department indicating that maintenance costs are usually approximately 0.25 percent of property value each year. This assumes an approximately $2.50 per square foot land value.

Sources: City of Fort Collins; BAE, 2000.

Table 2: Land Acquisition

	Program Year (2000 = 0)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Number of Transactions	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Acres of Land Acquired	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Land Purchase Price	$383,617	$385,434	$408,560	$433,074	$459,059	$486,602	$515,798	$546,746	$579,550	$614,323	$651,183	$690,254	$731,669	$775,569	$822,103
Other Acquisition Costs	$5,175	$5,356	$5,544	$5,738	$5,939	$6,146	$6,361	$6,584	$6,814	$7,053	$7,300	$7,555	$7,820	$8,093	$8,377
Total Acquisition Costs	$388,792	$390,790	$414,104	$438,811	$464,997	$492,748	$522,159	$553,330	$586,365	$621,376	$658,483	$697,809	$739,489	$783,663	$830,480

Assumptions

Type of Land Vacant Residential Land, No Water	Current Valuelas. $86,010	Anticipated Price Increase /Year 6.0%
Estimated "Other" Costs	Per Transaction $5,000	Cost inflation/year 3.5%

Source: BAE, 2000.

Table 3: Acquisition Financing Assumptions

Table 3: Acquisition Financing Assumptions

	Program Year (2000 = 0)															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Starting Capital	$0	$425,000	$556,208	$165,418	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
New City General Revenues	$425,000	$530,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Proceeds from Sales	$0	$0	$0	$0	$0	$0	$431,795	$457,857	$485,487	$514,781	$545,838	$578,768	$613,673	$650,692	$689,919	$731,516
Sub-total Available Capital	$425,000	$425,000	$556,208	$165,418	$0	$0	$431,795	$457,857	$485,487	$514,781	$545,838	$578,768	$613,673	$650,692	$689,919	$731,516
Less Acquisition Costs	$0	$388,792	$390,790	$414,104	$438,811	$464,997	$492,748	$522,159	$553,330	$586,365	$621,376	$658,483	$697,809	$739,489	$783,663	$830,480
Sub-total	$425,000	$536,208	$165,418	($248,686)	($438,811)	($464,997)	($60,953)	($64,302)	($67,843)	($71,584)	($75,538)	($79,716)	($84,136)	($88,806)	($93,744)	($98,964)
Amount Available for Debt Paydown	$425,000	$536,208	$165,418	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Starting Debt	$0	$0	$0	$0	$248,686	$687,498	$1,152,494	$1,213,447	$1,277,749	$1,345,592	$1,417,176	$1,492,714	$1,572,432	$1,656,569	$1,745,375	$1,839,119
Increase Debt Balance	$0	$0	$0	$248,686	$438,811	$464,997	$60,953	$64,302	$67,843	$71,584	$75,538	$79,716	$84,136	$88,806	$93,744	$98,964
Debt Paydown	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Ending Debt	$0	$0	$0	$248,686	$687,498	$1,152,494	$1,213,447	$1,277,749	$1,345,592	$1,417,176	$1,492,714	$1,572,432	$1,656,569	$1,745,375	$1,839,119	$1,938,083
End of Year Capital	$425,000	$536,208	$165,418	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
End of Year Land Assets Value		*$363,617*	*$770,868*	*$1,225,691*	*$1,732,285*	*$2,295,291*	*$2,433,009*	*$2,578,089*	*$2,733,728*	*$2,897,752*	*$3,071,617*	*$3,255,914*	*$3,451,269*	*$3,658,345*	*$3,877,846*	*$4,110,517*

Source: BAE, 2000.

Table 4: Annual Operating Costs

Acres of Land Owned	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
New Acres Acquired	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Cumulative Acres Acquired	3.5	7	10.5	14	17.5	21	24.5	28	31.5	35	38.5	42	45.5	49	52.5
-Acres Sold	0	0	0	0	0	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5
Cumulative Acres Sold	0	0	0	0	0	-3.5	-7	-10.5	-14	-17.5	-21	-24.5	-28	-31.5	-35
Net Acres Owned	3.5	7	10.5	14	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
Annual Maintenance Costs (taxes, assessments, weed control, snow/ice removal, etc.)															
Vacant Land Owned	$996	$2,062	$3,201	$4,418	$5,716	$5,916	$6,123	$6,337	$6,559	$6,789	$7,028	$7,272	$7,527	$7,790	$8,063
Annual Debt Service															
Annual Debt Outstanding	$0	$0	$246,666	$697,406	$1,152,494	$1,213,447	$1,277,749	$1,345,592	$1,417,176	$1,492,714	$1,572,432	$1,656,569	$1,745,375	$1,839,119	$1,938,083
Annual Interest Accrual (interest on prior year)	$0	$0	$0	$15,543	$42,969	$72,031	$75,840	$79,859	$84,100	$88,574	$93,295	$98,277	$103,536	$109,086	$114,945
Total Annual Operating Costs (a)	$996	$2,062	$3,201	$19,961	$48,684	$77,947	$81,963	$86,196	$90,658	$95,362	$100,321	$105,549	$111,062	$116,876	$123,008
Operating Costs as % of Land Assets	0.3%	0.3%	0.3%	1.2%	2.1%	3.2%	3.2%	3.2%	3.1%	3.1%	3.1%	3.1%	3.0%	3.0%	3.0%

Assumptions

	Maintenance Costs/acre	Inflation
Maintenance Costs for Vacant Land Owned	$275 (b)	3.5%
Debt Interest Rate	6.25%	

Notes:
(a) Annual program administration costs are estimated at approximately $22,000, based on approximately 1/4 FTE program manager and .15 FTE program assistant. This assumes that the City would absorb program administration costs as a component of its own
(b) Based on Finance Department estimate that maintenance costs for vacant land are about 1/4 percent of property value per year. To simplify, this was calculated as a $/acre value based on a uniform property value of $2.50 per square foot.

Source: BAE, 2000.

Table 5: Land Disposition

	Program Year														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Estimated Land Value Per Acre	$103,891	$110,124	$116,731	$123,735	$131,159	$139,029	$147,371	$156,213	$165,586	$175,521	$186,052	$197,215	$209,048	$221,591	$234,887
VALUE OF LAND ASSETS															
Purchased Year 1	$363,617	$385,434	$408,560	$433,074	$459,058										
Purchased Year 2		$385,434	$408,560	$433,074	$459,058	$486,602									
Purchased Year 3			$408,560	$433,074	$459,058	$486,602	$515,798								
Purchased Year 4				$433,074	$459,058	$486,602	$515,798	$546,746							
Purchased Year 5					$459,058	$486,602	$515,798	$546,746	$579,550						
Purchased Year 6						$486,602	$515,798	$546,746	$579,550	$614,323					
Purchased Year 7							$515,798	$546,746	$579,550	$614,323	$651,183				
Purchased Year 8								$546,746	$579,550	$614,323	$651,183	$690,254			
Purchased Year 9									$579,550	$614,323	$651,183	$690,254	$731,669		
Purchased Year 10										$614,323	$651,183	$690,254	$731,669	$775,569	
Purchased Year 11											$651,183	$690,254	$731,669	$775,569	$822,103
Purchased Year 12												$690,254	$731,669	$775,569	$822,103
Purchased Year 13													$731,669	$775,569	$822,103
Purchased Year 14														$775,569	$822,103
Purchased Year 15															$822,103
Purchased Year 16															
TOTAL VALUE OF LAND ASSETS	$363,617	$770,868	$1,225,681	$1,732,295	$2,295,291	$2,433,009	$2,570,989	$2,733,728	$2,897,752	$3,071,617	$3,255,914	$3,451,269	$3,658,345	$3,877,846	$4,110,517
Acres Sold (end of prior year)	0	0	0	0	0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Parcels Sold (end of prior year)	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1
Year Purchased						1	2	3	4	5	6	7	8	9	10
Total Market Value of Property Sold	$0	$0	$0	$0	$0	$486,602	$515,798	$546,746	$579,550	$614,323	$651,183	$690,254	$731,669	$775,569	$822,103
Land Sales Price (% of Market)	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Total Value of Sales	$0	$0	$0	$0	$0	$437,942	$464,218	$492,071	$521,595	$552,891	$586,065	$621,228	$658,502	$698,012	$739,893
-Land Sales Expenses	$0	$0	$0	$0	$0	($6,146)	($6,381)	($6,584)	($6,814)	($7,053)	($7,300)	($7,555)	($7,820)	($8,093)	($8,377)
Net Sales Proceeds	$0	$0	$0	$0	$0	$431,795	$457,857	$485,487	$514,781	$545,838	$578,765	$613,673	$650,682	$689,919	$731,516
Land Sale Subsidy Provided	*$0*	*$0*	*$0*	*$0*	*$0*	*$48,680*	*$51,580*	*$54,675*	*$57,955*	*$61,432*	*$65,118*	*$69,025*	*$73,167*	*$77,557*	*$82,210*
Estimated Subsidy Per Unit	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*$1,159*	*$1,228*	*$1,302*	*$1,380*	*$1,463*	*$1,550*	*$1,643*	*$1,742*	*$1,847*	*$1,957*

Assumptions

Sales Price Appreciation	6.0% per year.
Year 2000 Land Sales Expenses (per sale)	$5,000
Sales Cost Inflation	3.5% per year
Assumed Land Bank Project Density	12 units/acre

Source: BAE, 2000.

Table 6: Land Bank Cash Flow Summary

	Program Year (2000 = 0)														
Land Bank Inventory Summary	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Acres Acquired	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Acres Sold	0	0	0	0	0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Acres Owned	3.5	7	10.5	14	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
Annual Expenditures Summary															
Property Acquisition Costs	$368,792	$380,790	$414,104	$438,811	$464,997	$492,748	$522,159	$553,330	$586,365	$621,376	$658,483	$697,809	$739,489	$783,663	$830,480
Operations and Maintenance Costs	$996	$2,062	$3,201	$4,418	$5,716	$5,916	$6,123	$6,337	$6,559	$6,789	$7,028	$7,272	$7,527	$7,790	$8,063
Annual Interest Payments	$0	$0	$0	$15,543	$42,969	$72,031	$75,840	$79,859	$84,100	$88,574	$93,295	$98,277	$103,536	$109,086	$114,945
Debt Payoff (a)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal Expenditures	$369,788	$382,852	$417,305	$458,772	$513,681	$570,695	$604,122	$639,526	$677,023	$716,738	$758,803	$803,358	$850,551	$900,539	$953,488
Annual Income Summary															
General Fund Capital Investment	$925,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Prior Year Cash Flow	$0	$555,212	$197,060	$40,757	$23,344	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Debt Proceeds	$0	$0	$249,688	$439,811	$464,997	$80,053	$84,303	$87,843	$71,584	$75,538	$79,718	$84,136	$88,806	$93,744	$98,964
Interim Use Income	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Property Sales Proceeds	$0	$0	$0	$0	$0	$431,795	$457,857	$485,487	$514,781	$545,838	$578,785	$613,673	$650,682	$689,919	$731,516
Interest on Prior Year's Cash Bal.	$0	$34,701	$12,316	$2,547	$1,459	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal Income	$925,000	$589,912	$458,062	$482,116	$489,799	$492,748	$522,159	$553,330	$586,365	$621,376	$658,483	$697,809	$739,489	$783,663	$830,480
Cash Flow Retained in Program	$555,212	$197,060	$40,757	$23,344	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Land Bank Cash Flow	**$0**	**$0**	**$0**	**$0**	**($23,882)**	**($77,947)**	**($81,963)**	**($86,196)**	**($90,658)**	**($95,362)**	**($100,321)**	**($105,549)**	**($111,062)**	**($116,876)**	**($123,008)**
NPV of 15 yrs. Cash Flow (a)	*($535,600)*														
-or-															
Annual Investment (2000 $) (b)	*$0*	*$0*	*$0*	*$0*	*($20,811)*	*($65,929)*	*($68,677)*	*($67,750)*	*($68,847)*	*($69,970)*	*($71,119)*	*($72,295)*	*($73,498)*	*($74,731)*	*($75,992)*

NPV of Land Sale Subsidies Provided (15 yrs)	$334,662
NPV of Net Assets at Year 15	$875,009
Total Financial Returns (15 yrs)	**$1,209,671**
NPV of Initial General Fund Investments	($842,907)
NPV of Annual Program Subsidies (15 yrs)	($535,600)
Total NPV of Program Investments	**($1,378,506)**
NET PROGRAM COST	**$168,836**

Land Bank Acres Purchased	53

Notes:
(a) For purposes of this analysis, discount rate is set equal to the City's investment earnings rate.
(b) Future subsidy payments are deflated to 2000 $ using annual general inflation rate assumption from Table 1.

Source: BAE, 2000.

Sensitivity Analysis

The preceding portions of this section have stated numerous assumptions regarding the future operation of a Land Bank program in Fort Collins. Past experience has shown that economic conditions can fluctuate significantly from year to year and can take unexpected turns. It is useful to conduct sensitivity analysis to determine what impact changes in various assumptions will have on the viability of the Land Bank program. This is a method of exploring risks and to fine-tune program assumptions. The starting point for the sensitivity analysis is the result of the baseline analysis that is described above. Using the cash flow model shown on Tables 1-6, on or more key variables are changed while all other baseline assumptions are held constant, and the results are recorded. For the purposes of this analysis, the results of the sensitivity analysis are primarily expressed in terms of the change in the "Net Program Cost" shown in the box at the bottom of Table 6. Following are the results of a series of sensitivity analyses:

Table 7 contains summarizes some of the key findings with regard to the economics of the different Alternatives in comparison to the Baseline scenario. In addition, Appendix B contains the full spreadsheet model printout for each of the Alternatives.

Alternative 1: Baseline Scenario, but with Administrative Costs and Property Taxes Charged to the Program. Whereas the baseline scenario assumes that the City will absorb the administrative staffing costs for the program and that the program will not pay property taxes, this Alternative charges these costs to the program. These additional costs would range from about $35,000 per year at the beginning of the program and would rise to about $141,000 (inflated $) per year, by year 15.

Appendix B-1 contains the results of this Alternative analysis. As shown in Table 6 (cash flow summary) of Appendix B-1, the net program cost under this scenario would increase to about $1 million over 15 years, because of the added expenses charged to the program. This added cost would occur in the form of greater annual City investments in the program to support cash flow needs.

Alternative 2: Baseline Scenario, but with 10-Year Hold. This Alternative assumes that the land bank will hold properties for ten years before selling them to affordable housing developers, instead of five years. A key feature of this Alternative is that the Land Bank program would build a much larger portfolio of property, for which it would require greater amounts of financing. Also, net program costs would tend to increase because in the baseline scenario it is assumed that the future land sales price will appreciate at a rate that will not cover the increased interest and operating costs during the extended holding period.

Appendix B-2 contains the sensitivity analysis results for this Alternative. As shown in the summary in Table 6 of this appendix, the net 15-year program cost to the City would increase modestly, to about $204,000, in comparison to a net cost of about $170,000 for the Baseline scenario. The key difference is the amount of debt that this Alternative would require. Because the Land Bank would build its portfolio of property every year until Year 11, when it would sell land for the first time, it would a much greater outstanding loan balance than the Baseline by Year 15. At that time, the projected outstanding loan balance would be $4.4 million. In addition to the increased debt requirements, this Alternative would need to wait five additional years (beyond the Baseline 5-year hold period) to begin providing benefits to affordable housing developers.

Generally, longer hold periods will be financially beneficial only if the rate of land price appreciation is also assumed to be greater, so that the increased sales price offsets the increased cost to hold the land over a longer period of time.

Alternative 3: Cash Infusion Scenario, $925,000 initial investment plus $500,000 annual investment for 10 additional years. All operating assumptions are the same as the baseline scenario, with the exception of the additional $500,000 investments in the program. Instead of relying primarily on loans to finance purchases of land, this Alternative assumes that the Land Bank would use City investments to purchase the land and that these investments would be retained in the program as long as it continued to operate. Another key aspect of this program is that it would allow the Land Bank to purchase an estimate 91 acres of land over a 15-year period, instead of the 53 acres assumed for the Baseline and Alternatives 1, 2, and 5.

The tables in Appendix B-3 summarize the sensitivity analysis results for this Alternative. In this case, the net 15-year program cost drops to $112,000. This means that the City's returns on its investments (in the form of the appreciated value of the Land Bank's portfolio of property) would be estimated to be $112,000 less than if the City invested its funds in keeping with its current practices. Of the Baseline and the five different Alternatives, this scenario is projected to have the lowest net cost to the City. This, combined with the fact that it would support greater quantities of land purchases (and thus affordable housing production) may make this an attractive alternative, if funds are available to invest for affordable housing in this manner.

Alternative 4: Cash Infusion Scenario, but with 10-Year Hold. This Alternative is the same as Alternative 3, above, except the land bank is assumed to hold property for ten years instead of five years. In this scenario, the Land Bank would require access to significant debt in addition to the City investments in order to purchase the targeted amount of land each year.

The results of the sensitivity analysis for Alternative 4 are shown in Appendix B-4. As shown in Table 6 of Appendix B-4, the net program cost for this Alternative rises to $875,000 for the 15-year period. This is primarily due to the increased costs of holding land for a 10-year period instead of a 5-year period before selling it. Like Alternative 3, this Alternative would involve purchasing 91 acres of land over a 15-year period. Unlike Alternative 3, in addition to the City "investments," this Alternative would also require that the Land Bank obtain additional capital through borrowing in order to purchase the targeted amount of land each year. As shown in Table 3 of Appendix B-4, the Land Bank's outstanding debt balance by Year 15 would be approximately $6.0 million.

Alternative 5: Baseline, but borrow capital at conventional rates. This scenario is the same as the Baseline, but it assumes that rather than borrowing funds from internal City sources at the City's cost of funds, the Land Bank would borrow funds from a commercial bank at prevailing market rates, which are assumed to be approximately 13.5 percent annually. This reflects interest rates charged by banks for the acquisition of undeveloped land.

Appendix B-5 shows the sensitivity analysis results for the last Alternative. In this case, the projected net program cost is about $660,000. This increased program cost is directly attributable to the assumption that the Land Bank would have to pay an interest rate for borrowed capital that is approximately twice the interest rate that the Land Bank is assumed to pay the City for internal loans under the Baseline scenario. As the debt interest rate increases, the benefits of holding land

for extended periods of time decrease, unless land appreciation rates also increase commensurately. If the Land Bank must pay higher interest rates to purchase and hold property, it must secure greater amounts of subsidy.

Sensitivity to Other Factors. Beyond the Alternatives defined above, numerous other factors can influence Land Bank feasibility. Following are discussions of several, indicating how the net program costs vary with changes in a specific variable; holding all other Baseline assumptions constant.

Land Purchase Price. Holding all other variables constant, the impact of changing the baseline assumption regarding the initial land purchase prices from $2.25 per square foot is as follows:

Initial Land Purchase Price	Net Program Cost
$1.50	$153,009
$2.00	$163,650
$2.50	$174,111

In addition, generally, the greater the initial land purchase price, the greater the annual program investment that will be required for cash flow purposes.

Land Sale Price Appreciation Rates. Following are the results from changing the assumption regarding the sale price appreciation rate:

Sale Price Appreciation Rate	Net Program Cost
3.0%	$609,114
8.0%	$268,280 surplus
12.0%	$1,645,410 surplus

When the debt interest rate is held at 6.25 percent per year, sale price appreciation rates of about seven percent and above will generate net economic surpluses for the Land Bank program. This demonstrates that it would be most advantageous for the Land Bank to acquire more property during periods when it is anticipated that land prices will increase rapidly, and less property during periods when land prices are anticipated to be stagnant or to actually decline. When land prices are increasing at more rapid rates, the Land Bank program will require greater amounts of annual cash flow investments in order to purchase the same quantity of land each year; however, these annual investments will be recouped upon sale of the property at higher prices.

Land Sale Price Discount Rates. If the land sale price is reduced, the Land Bank can provide a greater subsidy to affordable housing developers; however, to do this, the City will need to invest more money into the program in order to sustain it. In fact these factors exactly balance themselves out, in terms of the program's economic cost. Whether the sale price is reduced to 85 percent or 80 percent or market value, or increased to 95 percent of market value, the "Net Program Cost" remains at $168,836. What this means is that the Land Bank can offer greater discounts and provide greater benefits to affordable housing developers, but it must invest more money to do so. From a cash flow standpoint, selling properties at a greater discount will require that the Land Bank receive larger annual investments. This increase in investments will be "paid back" when the properties are sold at a greater discount, thus creating greater program benefits. By Year 15, the cost savings would amount to approximately $3,915 per unit if the land were sold

at 80 percent of market value as opposed to a savings of $1,957 per unit if the land is sold at 90 percent of market value.

Table 7: Key Indicators for Alternative Scenarios

	Baseline Scenario	**Alternative 1** Baseline + Taxes and Admin. Costs	**Alternative 2** Baseline with 10-Year Hold	**Alternative 3** Cash Infusion	**Alternative 4** Cash Infusion+ 10-Year Hold	**Alternative 5** Baseline+ Conventional Debt
Acres Purchased (15-years)	53	53	53	91	91	53
Units Produced (12 du/acre, 15 years)	630	630	630	1092	1092	630
Annual Program Subsidies Required, Year 15 (2000 $)	$75,992	$163,222	$175,021	$0	$223,233	$158,364
Net Program Cost	$168,836	$1,003,542	$204,722	$112,366	$875,155	$659,796
Net Program Cost Per Unit Produced	$268	$1,593	$325	$103	$801	$1,047

Source: BAE, 2000.

OPERATIONAL OPTIONS

Property Acquisition, Conveyance, and Financing Techniques

There are many potential options for property acquisition and financing, most of which appear to be untested for a land bank program, meaning that they will likely require further study before they are incorporated into a land bank program in Fort Collins. What should be of interest to the City at this stage is the fact that most of these options are not mutually exclusive, so that if proven to be feasible mechanisms, the City can choose from a menu of different tools to help it achieve land bank objectives, depending on circumstances that may present themselves during program implementation.

Tables 8, 9, 10, and 11 summarize information about different operational options that we have identified in the course of our work on this study. Appendix C contains a listing of various organizations and resource persons contacted as part of this study.

Land Acquisition. The land acquisition mechanisms shown in Table 8 can generally be divided among active targeting and acquisition techniques, passive selection techniques, and a hybrid solicitation approach. In the first category the City consciously selects and acquires properties (or elects to utilize property it already owns). Probably the most common technique used will be to purchase desired property through fee simple title. While this option provides maximum control over site selection and the use of the site, it may be one of the more expensive mechanisms. The Land Bank may be able to leverage available funds by instead only purchasing only a portion of the land rights, or by entering into purchase contracts that will not require payment until closer to the time when the property would be acquired by an affordable housing developer who is ready to build.

The second category of acquisition methods involves various mechanisms used by many conservation land trusts. Some involve receiving donations of land from owners with charitable interests. Others involve acquiring property that may become available due to various circumstances, such as foreclosure proceedings, or the voluntary participation of property owners in programs that give them tax benefits. The disadvantage of these techniques is that the sites offered are not always appropriate for land banking purposes; however, if an appropriate property does become available, it could be acquired at a discount. Also, inappropriate properties that are donated may be resold for other uses and the proceeds used to help fund the land banking program.

The final acquisition method, solicitation, is a hybrid of the two prior methods. Through a request for proposals process, the Land Bank would establish criteria for desired sites and rely on interested property owners to come forward. While this is a method for identifying sites for acquisition, it can be combined with various mechanisms to actually take title to the property, including discount purchase prices or donations, leasehold interests, etc.

Strategies for Land Conveyance. As shown in Table 9, there are a limited number of methods to convey land to affordable housing developers. The first, and most common, is fee simple title, which typically includes legal mechanisms to ensure that the property is used for the production and operation of affordable housing over a specified time period. Community land trusts typically do not sell their land, but instead lease the land to affordable housing developers. An

entire site can be leased to a developer, or in certain cases only a portion of the land rights may be leased, as in the example provided in which a land bank offered an air rights lease for the construction of affordable housing above a parking lot.

Strategies for Raising Capital. Table 10 summarizes numerous methods to raise capital for the Land Bank program. One or more of these mechanisms could be utilized to generate extra funds to invest in the Land Bank program to allow it to operate at a break-even level.

Although the first option shown is General Fund contributions, it is acknowledged that this is not the City's desired option; however, the City may wish to consider this as a seed funding source that could be replaced by other sources once they are developed. Other possibilities for locally controlled funds include establishment of a construction excise tax, affordable housing impact fee, or jobs/housing linkage fee.

The City may also wish to consider earmarking a pool of its own capital to use as an investment fund to support the Land Bank program. The concept would be to set aside a pool of capital that is normally invested in relatively conservative, but lower-yielding investment instruments and instead place it in investments that may be more volatile, but which offer the possibility of achieving greater returns. The incremental increase in investment returns would then be earmarked to support the Land Bank activities. This type of activity would require that the City establish a longer-term investment horizon for the dedicated funds, in conjunction with a change in its adopted investment policies. The advantage of this type of strategy is that it would leverage existing City assets to produce more annual revenue, rather than diverting existing revenue away from other City priorities.

Other options to raise capital involve working to secure grant or low-interest loan funds from other governmental or private sources. The challenge with these funds is that they are usually in short supply relative to demand, and there are usually many program restrictions which may preclude their use for the Land Banking program. In particular, where Table 10 indicates that other jurisdictions have used federal sources like HOME and CDBG to fund land bank and/or land trust programs in the past, current program guidelines may preclude using of these funds to help a Land Bank acquire sites, because the actual affordable housing units may not be produced until five or more years after the money is allocated. Further exploration with funding program representatives is required to confirm the potential use of the various funding sources.

To the extent that the Land Bank is successful in obtaining funds from any of these sources, the Land Bank will be able to acquire more land and/or offer greater benefits to affordable housing developers by selling land at a greater discount. Some of the mechanisms that require more immediate production of affordable housing might be used in conjunction with another acquisition or financing mechanism. For example, the Land Bank could purchase land by borrowing money, if it knew that the land would be sold in five years and funding from another source would be available to pay off the debt at that time.

Strategies for Obtaining Debt. Table 11 summarizes various mechanisms to obtain debt. As discussed above, internal borrowing from the City's idle funds is assumed in the Cash Flow Model; however, there are numerous other mechanisms that the Land Bank could employ, either as an alternative to internal borrowing or in addition to internal borrowing. Internal borrowing is probably the most flexible and cost effective; however, for other reasons the Land Bank may decide to pursue other options that may pose less risk to the City's capital.

Table 8: Options for Land Acquisition and Interim Holding Period

Mechanism	Advantages	Disadvantages/Issues	Example
Active Targeting and Acquisition Techniques			
Buy Property through Fee Simple Title	Maximum control over site. Could partner with other City departments that are involved in land acquisition with site split for different purposes depending on suitability.	High cost, interim period maintenance responsibility.	*City of Boulder Housing Authority* - seeking to develop 260 homes, 50% affordable at a former drive-in theater. Land Bank could use excess property acquired by Utilities, Natural Resources, or Parks Departments but unsuitable for their purposes.
Use Existing City Property	Absolute control, no cost of acquisition	Opportunity cost to city, loss of property or revenue for alternative use. Due to City policy of returning proceeds from surplus property sales to General Fund, this may not be an option.	*City of San Mateo, CA* - housing division reimbursed public works department cost of purchase from 10 years earlier rather than paying an assessed fair market value, *City of Boston* - inventoried 1125 vacant properties including those owned by City for housing opportunities
Rolling Options or contracts to purchase property at a later date for a pre-determined sale price.	Lower up-front cost, flexibility should site prove infeasible or undesirable. May avoid interim period maintenance expenses.	Final cost may be higher	*Kalkow Group* - the private firm has just created a new land bank division in Westbury NY and closed on over 300 acres in Orlando FL. In essence, this privatizes the land bank function.
Partner with private sector land banking organization	Private capital used to finance acquisition and interim holding costs; up-front agreement ensures that property can be acquired at a set price at a later date.	Private land bank partners will demand a fair rate of return in exchange for use of their money. Ultimate cost of sites may be higher.	*Kalkow Group* - the private firm has just created a new land bank division in Westbury NY and closed on over 300 acres in Orlando FL
Affordability Easement	Lower up-front cost; property owner is responsible for maintenance during interim period	Market acceptance unproven. Difficult to value easement.	Possible variation of standard conservation land trust strategy
Passive Selection Techniques			
Nuisance abatement/legal enforcement combined with acquisition	Coordinates other city agencies (police, code enforcement) with housing, community development. Discount to property likely.	Replacement units require additional capital, rehabilitation may be more costly, interim O&M costs. Property discount may not justify expense of enforcement/abatement activities, unless these activities are seen as achieving other valued purposes, such as blight removal, etc.	*City of Boston* - targeted acquisition of "Ten Most Wanted Drug Dens/Abandoned Properties" associated with illegal activities and then rehabilitates properties.
Private Tax Deductible Donations - Land	No acquisition costs other than administrative. Funds not drawn from source with competing need.	No control over site selection, as this mechanism relies on donors to self-select.	*Jackson Hole Community Land Trust* - developing 5 acres provided specifically for teachers etc to have ownership opportunity. Part of a larger 70 acre development of benefactor. *City of Oakland* found properties gifted by elderly to often be too far leveraged to offer real value.
Private Tax Deductible Donations - Land Rights	Funds not drawn from source with competing need.	Possible complexity of accounting related to valuation of 'rights' regarding easements, covenants, rights of refusal, etc.	Standard conservation land trust strategy.

Table 8: Mechanisms for Land Acquisition and Interim Holding Period, continued

Mechanism	Advantages	Disadvantages/Issues	Example
Bargain Sales	Property bought at less than it's fair market value, seller provided incentive by tax benefits, administrative simplicity for "buyer" - burden of accounting value of "bargain" is upon seller and their accountant	Maintenance costs over long term. No control over site selection. Need to confirm tax benefits if City is recipient.	*Jackson Hole Community Land Trust* - Seller had property bought at $225k selling at $185, appraised at $212k and sold to JHCLT for $135k. Tax benefits on difference. Permanent covenant for affordability on resulting homes. Resale profit limited to CPI, generally at 3-4%. Based on 5% down ($5,000) on an affordable house purchased for $100k, buyer would be entitled to $3,000 to $4,000 in appreciation profits, for a 60 to 80 percent annual return.
Bequests (left to a Trust in owner's will)	No acquisition costs other than administrative. Funds not drawn from source with competing need.	Maintenance costs over long term. No control over site selection, timing.	Standard conservation land trust strategy
Remainder Interests/ Life Estates	No acquisition costs, owner given tax incentives while retaining rights for period of their concern	Maintenance costs over long term. No control over site selection, timing.	Standard conservation land trust strategy
Donated Affordability Easement	No up-front cost, property owner may retain responsibility for interim period maintenance.	Market acceptance unknown - may relay on possibility of variation of IRS valuation for conservation easement and accrual of estate and income benefits. Need to explore tax benefit for affordability easement as with a conservation easement.	Possible variation of standard conservation land trust strategy.
Foreclosure on tax delinquent properties/ Protest Sale with Fee Simple Title	Lower up front cost, scattered sites. Targets vacant, abandoned properties.	Parcels may be very small. Local success of program tends to rely on depressed land values not characteristic of Fort Collins. Advertising and solicitation may be time-consuming. Actual property participation is owner dependant vs. pro-active site selection.	*City of Atlanta/Fulton Co. Land Bank Authority*- received HUD Blue Ribbon Practice award for partnering with private developers to re-utilize tax delinquent sites. *City of Oakland,CA* - had aggressive protest sale program but found private developers were outcompeting for viable sites and remainder were problematic to finance. *City of Redwood City,CA* - acquired property after existing developer was foreclosed on, paid perhaps more than property valued, as it was over leveraged
Forgive Back or Future Taxes In Exchange for Property	Lower up front cost, scattered sites. Participants self-identify versus tracking available properties.	Parcels may be very small. Local success of program may rely on depressed land values not characteristic of Fort Collins. Advertising and solicitation may be time consuming. Actual property participation is owner dependent vs. pro-active site selection.	*Rock Hill Joint Venture for Affordable Housing and City of Rock Hill, South Carolina*,- HUD Blue Ribbon Practice award for waiving back taxes and partnering with private developers to re-utilize sites.

Table 8: Mechanisms for Land Acquisition and Interim Holding Period, continued

Mechanism	Advantages	Disadvantages/Issues	Example
Forgive Back or Future Taxes In Exchange for Affordability Covenants	Lower up front cost, scattered sites. Targets vacant, abandoned properties.	Parcels may be very small. Possibly complex time consuming mechanism for transfer requiring policy change.	Hypothetical change to HUD recognized Blue Ribbon Practices
Forgive accrued taxes in exchange for affordability covenants or title for Elderly Property Tax Deferral Program participants.	Lower up front cost. Partnership opportunity with State program. Scattered sites. Participants self-identify versus tracking available properties.	Existing single-family homes most likely property type. Possibly complex time consuming mechanism for transfer requiring policy change.	Hypothetical change to Colorado State Elderly Property Tax Deferral Program
Forgive interest and/or principal in exchange for affordability covenants or title for Reverse Mortgage Program Participants	Lower up front cost. Partnership opportunity with HUD and/or Fannie Mae program, products. Scattered sites. Participants self-identify versus tracking available properties.	Existing single-family homes most likely property. HUD Community Builder does not see much role except in case of default; then city has first right of refusal. Possibly complex, time-consuming mechanism for transfer requiring policy change.	Hypothetical change to HUD/Fannie Mae HomeKeeper for Second mortgage or concurrent application of lease hold and reverse mortgage. Fannie Mae community development manager sees as interesting as long as public entity makes up the gap. Programmatic experience in Portland with CLT. Partnership director there sees feasibility as long as city, non-profit covers risk.
Hybrid Solicitation Technique			
Land Bank can periodically issue Requests for Proposals or similar solicitations.	Land Bank can specify desired criteria for land bank sites. This technique can help to create a more open process of site selection, and can be tied in with a coordinated marketing and outreach effort.	This technique can be cumbersome and time consuming and would limit acquisition activities to specific time periods. This may lead to missing some purchase opportunities that present themselves at other times. Still relies on self-selection of interested property owners.	

Source: BAE, 2000.

Table 9: Options for Land Conveyance

Mechanism	Advantages	Disadvantages/Issues	Example
Fee Simple Title	LB no longer responsible for property. Affordability can stay with property rather than individuals.	Need to establish covenants (either rental deed restrictions or resale restrictions) to ensure affordability, eligibility requirements, and possible first right of refusal for City/Land Bank.	
Ground Lease/Air Rights Lease	Remove rising land value from value of home. Fannie Mae Partnership office actively exploring this model. Thistle CLT has approved lease documents which, if model in Oregon is followed, could be broadly utilized throughout state while resale covenants are locally determined.	Up front site acquisition costs not addressed explicitly by model but can combine with alternate acquisition strategy. Uncertainty re: resale formula, rights of first refusal, inheritance, tax reassessment and traditional lenders acceptance and their pursuit of their interest in default situation (Fannie Mae voids all affordability covenants in foreclosure situation).	Used by over 100 Community land trust's throughout Country. Fannie Mae financing CLT for last year in Portland partnership office. Air rights legal history dating to first use in NYC in 1910. *City of Boulder and Thistle Community Land Trust* provides both rental and ownership opportunities in Boulder with this structure. *City of San Mateo* used air rights lease for affordable senior center next to city-owned parking lot to allow development of structure serving both development and public.
Leasehold Estate	Potential mechanism to avoid danger of bank foreclosure on land on which affordable units are constructed.	Little information on model found.	Western CLTs are reputed to use this mechanism.

Source: BAE, 2000.

Table 10: Options for Raising Capital

Mechanism	Advantages	Disadvantages/Issues	Example
General Fund Contributions	Administrative simplicity, flexibility and control	Start-up only, less capital available for single year start-up fund then if debt mechanism utilized	
Sales of surplus Land Bank property not suitable for housing.	Retention of profit from land appreciation can be directed to landbanking in more, or more appropriate sites.	Loss of asset that may be collateral for more significant financing or for future development that may have increased value in meeting provision of affordable housing goals	*Jackson Hole Community Land Trust* is provided land through donation but found in one case, donated land to be cost prohibitive (due to site constraints, geography) and instead sold to more appropriate site for desired economies of scale > 12 units/acre
Excise Tax/Jobs-Housing Linkage Fee/Affordable Housing Impact Fees	Provides for concurrency between new development and affordable housing, legal status & local implementation modeled by Boulder, leverage private and federal dollars (Boulder model 1:7 ratio)	Increases burden on market rate development	*Boulder's Community Housing Assistance program (CHAP)* - initiated in 1991 excise tax of .06 percent of property tax on new development results in about $.39/sq ft for annual funds of about $1M and *Cash In-Lieu* program (initiated 1996/97) generates about $500,000/year - explicitly prioritize landbanking but funds are flexible in uses supporting permanently affordable units. Combined with federal entitlements from CDBG and HOME to create annual grant program of $2.5M. Opportunity Fund available for real time requests for site acquisition. Prior to these funds creation Boulder used federal dollars to initiate landbanking in 1980's.
Special Property or Sales Tax	Spreads burden over the whole City; could generate significant on-going revenues which could provide a source of revenue for bonding in order to generate up-front funds.	Requires significant political support (i.e., voter approval).	Increase base tax and earmark increment for Land Bank program.
Colorado State Local Affairs Housing Division Grants	Annual grant funds generally proportionate to county population, funding has been stable over multiple years and various administrations, organizations in Fort Collins predominant recipients of funds in Larimer county, pool potentially expanded this year	competing needs for capital pool, traditionally poorly leveraged for numerous projects	State Housing grant program currently allocates about $2.6 million per year, staff attempting to raise fund allocation to $6 million with next budget From April 1, 1998 to March 31, 2000 projects in Larimer county received $1.26M or 5.28% of grant dollars while population made up 5.7%
State Trust	eliminates use of direct transfers from assets held in trust by state while covering program otherwise require general funds or cuts, treasurer advocate	Funds dedicated to CUHIP and Tobacco related use, May not be similar accounts with assets available to build trust off of,	*Colorado Unclaimed Property Fund*- interest (set at 6.5%) sufficient to support Colorado Uninsurable Health Insurance Program, *Colorado Tobacco Settlement Fund* - money is used similarly

Table 10: Strategies for Raising Capital, continued

Mechanism	Advantages	Disadvantages/Issues	Example
CDBG allocations	Funds available each year, federal	HUD under pressure to make timely expenditures, drains funds from other current projects,	*Boulder, CO* used exclusively with HOME money to landbank in 1980's prior to creation of local financing options, *San Mateo and Redwood City, CA* used with HOME money and local redevelopment dollars in 1990's
Home investment partnership program (HOME) allocation	Funds available each year, federal	HUD under pressure to make timely expenditures, drains funds from other current projects,	Boulder, CO used exclusively with CDBG money to landbank in 1980's prior to creation of local financing options, *San Mateo and Redwood City, CA* used with CDBG money and local redevelopment dollars in 1990's
Private Tax Deductible Donations - Cash	Funds not drawn from source with competing need	reliance on public opinion is increased with then increased bias toward ownership over rental	*Jackson Hole Land Trust* is 100% privately supported through donations of cash and land
Private Tax Deductible Donations - from targeted employers	Funds not drawn from source with competing need, Can target funds to specific need areas	Legality of program restrictions, viability of employer participation	
Private Tax Deductible Donations - Home without associated land	Opportunity to couple such donations with land acquisition offers opportunity to provide real time unit production during interim holding period.	Cost of movement, rehabilitation, perhaps more than once and possible eventual demolition,	*Habitat for Humanity* - in Boulder, CO receives approximately a dozen calls per year offering homes from parties wishing to remodel

Source: BAE, 2000.

Table 11: Options for Obtaining Debt

Internal Borrowing	Local discretionary control, low administrative cost	risk to City capital, opportunity cost to City	Use idle fund balances rather than borrowing from outside sources.
Pension Fund Line of Credit	Potential local discretionary control	Risk to capital, opportunity costs, land alone may not be adequate to secure debt	*Burlington CLT* - provided $1M line of credit from City Employee's pension fund, *CALPERS* sought as major investor in social investment initiative in Northern CA regional initiative
Stripped bonds and coupons (variously called CATS, TIGRs, etc.).	Bond residues and coupons are sold separately at significant discounts from their face value. Any type of bond can be stripped. By selling bonds at a discount to face value, interest can be paid only at maturity.	Appear to rely on third party broker to strip bonds to entice investment. Need to evaluate required relationships to use this type of debt instrument. Need to evaluate securitization requirements and costs.	Zero Coupon Bonds, short-term discount obligations issued by the Federal Home Loan Banks, the Federal National Mortgage Association, and Federal Home Loan Mortgage Corporation
Certificates of Participation	Act like bond, ability to delay payback, tax exempt borrowing rate. Could potentially structure as Zero Coupon.	Risk to specific asset base used as security. Rely on public appetite for debt, individual deals may be too small to be efficient	*Denver School Board* established separate facilities corporate trust which serves as a leasing board determines what of School district total asset base will secure sufficient debt
Institute for Community Economics Revolving Loan Fund	Money earmarked for land acquisition targeting landbanking	Require development of institutional capacity for implementing CLT, Loans of more then 10 years range from 0 to 5%	Since 1979 ICE's RLF loaned out $34 M over 370 loans in 29 states to produce 3,850 housing units
State Revolving Loan Pool	Opportunity for Fort Collins to partner with State, match funds, and avoid need to develop administrative structure and carry overhead	Pool target appears to be construction monies rather than acquisition money, State wants to fund units in year of allocation, not fund landbanking (might fund last year of a rolling option instead of first year).	State partnering with non-profits throughout state, and national players (HAC, Fannie Mae) with initial capital of $2.5M (state bringing $1M) for primarily construction loans 4-5% interest, 2-3 year terms
CDBG/HOME Revolving Loan Fund (i.e., program income)	City may have more flexibility in the use of these loan repayment funds in for landbanking as compared to using current year allocations. Program income could potentially be used to fund Land Bank operating costs and annual debt service.	Need to check on whether City has an RLF now. It may take significant time to build up adequate pool of repayment funds.	Revolving loan fund income from repayment of HOME or CDBG loans made by City in prior program years.
CDBG Section 108 Loans	Future CDBG allocations are security, even if repayment is targeted to be from another source	See limitation re use of CDBG funds. Also, preliminary indications are that local CDBG program would not want to commit available funds to land bank program.	
Housing Assistance Council Self-Help Opportunity Program (HAC SHOP)	Zero interest loans, up to 75% forgivable with donation of sweat equity	Units must be produced in 3 years unless HUD changes production schedule which is not yet finalized. Funding not yet secured, rural targets.	$4.8 Million in HUD dollars expected for 12 state region containing CO in FY2000

Source: BAE, 2000.

Organizational Structure

City staff have prepared the following organizational development information for inclusion in the Land Bank Feasibility Study. This information provides preliminary direction for the operation of a Land Bank program in Fort Collins, should the City decide to pursue the project.

Organizational Options. From the time of the first discussions within the City about implementing a Land Bank program, it was the intent that the City would take the lead in establishing the program, but would consider options for the ongoing operation of the program that might involve transferring the responsibility for the program to another entity. The City considered several such organizational options to take over the program and effectively achieve the goals of land banking. Organizational structures with proven track records and creative approaches were considered. Following are some examples of possible approaches:

1. The City itself operates the program on a "self-supporting" basis.

2. The City spins off a non-profit entity to manage the program.

3. The City joint ventures with an existing agency to administer the program.

4. The City creates a land trust to manage the program.

With respect to the financial feasibility of the proposed Land Bank program, the operational costs for staff time and other program expenses most likely will preclude the feasibility of spinning the program off to another entity. The estimated personnel costs to administer the program, including salary and benefits, would be $36,400 per year. This would not include other program related costs such as professional services, office expenses, etc. If an independent organization had to internalize all of these costs, the financial benefits from land banking would be diluted.

Recommended Organization. As the Land Bank is currently proposed, it would have a relatively small portfolio of properties at any given time, and it would engage in a limited number of real estate transactions each year. This means that it would require that only fractional portions of full-time staff be allocated to the program. The volume of land bank activity will not likely be large enough to support dedicated staff in a cost effective manner. At the same time, the Land Bank operations will require a range of special expertise. For these reasons, the program would best be integrated into an organization where there are existing staff who possess many of the requisite skills, and who can be assigned part-time to the Land Bank program, filling the rest of their available time with other assignments outside the Land Bank program. The best fit for the program at this time appears to be within the City, with the City absorbing the administrative and related costs as part of its overall housing and community development activities.

Administrative Structure. It is proposed that the City of Fort Collins Community Planning and Environmental Services' Advance Planning Department manage and operate the Land Bank Program. Specifically, the Advance Planning Director or his designee will be responsible for delegating the day-to-day operations of the program. This will include locating properties, coordinating acquisitions, arranging closings and performing other management details of the program.

Site Acquisition Activities. Advance Planning Department staff will coordinate and use the expertise of other departments and offices (Real Estate Services office, City Attorney's office, etc.) to form an Acquisition Team in developing an inventory of land banking properties. The Acquisition Team will assist in identifying, screening and selecting appropriate properties that reflect criteria for acquiring appropriate affordable housing sites. In this process, a presentation will be made to the Affordable Housing Board when the site is selected for acquisition.

Site Selection Process. Sites for land banking will be acquired through a direct approach. In the direct approach, individual property owners will be contacted to discuss the purchase of their properties or in some cases individual property owners may contact the City to inquire about selling their properties to the Land Bank Program. In any event, staff will explain the Land Bank concept and the potential community benefits of the program to interested landowners.

Site Acquisition Approach. The Land Bank will acquire land only through negotiated purchases of properties with willing sellers. The program is not intended to be a redevelopment program, and will not involve the use of eminent domain powers. In most cases, City staff will negotiate with prospective sellers on the City's behalf. However, when deemed appropriate, the City may decide to use a Real Estate Buyer's Agent to negotiate property acquisitions. In implementing the direct contact approach, the City will use three steps in purchasing properties. The steps are site identification, due diligence, and acquisition.

Site Identification. The Land Bank site selection criteria discussed in this report will be used as a guide in locating appropriate parcels for the program. Other factors may be considered as deemed appropriate. In general, the land identification process will include the following activities:

- Identify land to be acquired
- Identify ownership, parcel and estimate cost
- Make initial contact to land owner by phone or mail
- Make Land Bank presentation to property owner
- Follow up communication and negotiation

Due Diligence. Once a willing seller has been identified and land has been deemed to meet the basic site selection criteria, the next step involves more in-depth investigation and research regarding issues potentially affecting the suitability of the property for the Land Bank Program and any risk associated with the acquisition. These activities will include:

- Initial agreement with specific performance conditions to satisfy
- Perform title work
- Appraisal, if needed
- Perform environmental audit
- Land survey

Site Acquisition. The final step in the process is executing the purchase of the land after all conditions have been satisfied. Acquisition steps will include:

- Obtain Council approval
- Prepare contract
- Review contract and satisfy all conditions
- Closing

Process to Allow Use of City Funds to Support Land Banking Program. For the Baseline analysis, as well as the other Alternatives analyzed in this study, it was assumed that the City of Fort Collins would utilize some of its own internal funds to help support the Land Bank program. The Finance Department has indicated that it would be necessary for the City to amend its investment policies in order to permit this type of use of funds. Based on information provided by the Finance Department, the following steps would be required in order to permit the City invest in, or lend money to, the Land Bank program:

1. **Identify financing needs**. It will first be necessary to identify the magnitude of the funding that the program would require. As reflected in the analysis prepared for this report, the outstanding debt balance for the Land Bank program under a baseline set of assumptions indicates that the outstanding debt would rise as high as approximately $2 million by year 15 of the program, increasing thereafter primarily due to inflation because the program will be paying increasing prices for the land that it acquires. This debt would be in addition to the $925,000 in initial "seed" funding that is assumed to be available to the program. The program's actual needs for loans from City sources will vary depending on the level of Land Banking activity that the City desires, decisions regarding the length of time that the Land Bank will hold property before selling it, the level of direct investments (subsidies) that the City might provide to the program in place of debt, the availability of funding from outside sources that the City may seek to target, and other factors. For example, if the Land Bank decides to hold property for 10 years before selling it for development, the portfolio of properties that must be financed would be much greater than under the baseline assumption of a five-year hold period. With a 10-year hold period, acquiring an average of 3.5 acres per year, the outstanding debt level could rise as high as $6 million in alternative scenarios analyzed for this report. Some or all of this debt could be required from City sources.

2. **Draft Changes to City Investment Policy**. Finance Department staff will then need to draft proposed changes to the City's existing investment policies to allow lending to the Land Bank program or investing money directly into purchasing land for the Land Bank. In conjunction with this step, the Finance Department would review proposed changes with the City Attorney's Office to ensure that public purpose involved, facilitating production of affordable housing, is sufficient to support the change in public policy to allow the City to potentially lose money on use of its assets or to earn less than the market rate of return. After completing this review, Finance Department staff would formulate findings for the City Council's consideration, to clearly support the public policy foundation for the proposed changes in investment policy.

3. **City Council Finance Committee Review**. City staff would present the investment policy changes to the Finance Committee for their review, in conjunction with review

of the Land Bank Feasibility Study, which will provide the Committee with a more complete picture of the proposed uses of the funds.

4. **City Council Study Session**. After review by the Finance Committee, the issue may be discussed at a Study Session of the full City Council. This Study Session could be conducted in the context of a Study Session on the Land Bank Feasibility Study and its overall findings and recommendations.

5. **Draft Resolution or Ordinance to Approve Changes to Investment Policy**. The City Council can approve formal changes to the City investment policy by ordinance or resolution. The Finance Department suggests that because of the nature of the changes that would be required, changes allowing loans to or investments in the Land Bank program be made by ordinance. If no major problems or objections are identified through in the Study Session, Finance Department staff and the City Attorney's Office would draft the resolution or ordinance to implement the changes to the investment policy. Resolutions take effect immediately if approved and they require only a single reading before they can be approved. Ordinances must be read on two separate dates and can then do not go into effect until ten days after being approved at the second reading.

6. **Establish Land Bank Loan/Investment Accounting Procedures**. Parallel to the investment policy amendment process, Finance Department staff would work out how the program and the investments would be accounted for. This would include specifying reporting requirements so that the City Council would be able to see and understand how the program is doing on a regular basis.

Other Land Bank Operational Issues. In addition to the basic procedures for land acquisition outlined above, staff assigned to the Land Bank program will need to spend time establishing other operational procedures for the program, including policies regarding the treatment of properties while they are held in the Land Bank program, prior to being sold to affordable housing developers, and policies regarding the circumstances under which the Land Bank will sell property. As with site acquisition policies and procedures, Land Bank staff will develop policies addressing land bank operation as well as procedures for determining when Land Bank sites should be sold, based on indicators reflecting site development readiness (e.g., development activity and interest in the area, infrastructure and amenities developed in the area).

Additional research will be necessary regarding opportunities for the Land Bank to access various forms of capital from outside sources, either in the form of grants, loans, or charitable donations. As appropriate, this work should be integrated with other program administrative activities.

IMPLEMENTATION RECOMMENDATIONS

As indicated above, the Land Bank program has the potential to generate significant affordable housing benefits in Fort Collins, particularly if the Land Bank can actively pursue outside funding and other opportunities to reduce program costs to the City. The following recommendations are provided for the City's consideration, should the City decide to implement a Land Bank program.

A. *Incorporate pro-active site selection and acquisition techniques, and pursue program financing, interim holding period asset management, and conveyance of sites to affordable housing developers in a businesslike manner.*

The City should continue to approach the Land Bank program with the goal of operating the program on a self-sufficient basis to the maximum extent practical. At the same time, the City should allow the Land Bank program flexibility to take advantage of opportunities that may present themselves.

B. *Commit City resources to the program for a defined time period, recognizing that land banking is a long-term process. Periodically adjust the amount of resources invested into the Land Bank program, purchasing more land when land prices are anticipated to appreciate rapidly and borrowing more money when interest rates are lower.*

This should include establishing the procedures and terms for the Land Bank program to access City capital sources to finance program operations, if deemed appropriate by the City Council.

C. *Appoint City employees to serve as Land Bank staff.*

To have an active Land Bank program, it is imperative that personnel assigned to staff the Land Bank program be allocated sufficient time away from other responsibilities to dedicate to the Land Bank program.

D. *Establish a Land Bank oversight body.*

The role of this body will be to monitor and assist in guiding Land Bank program activities.

E. *Establish a Land Bank site selection committee comprised of City staff and, if deemed desirable, local real estate and residential development professionals to assist in screening land acquisition opportunities and making recommendations regarding purchases.*

It will be critical to appoint outside (non-City staff) members who will not have conflicts of interest in serving on the committee.

F. *Consider adopting related City policies that will support and leverage the City's investments in the Land Bank program.*

Such policies can include: establishing density bonus provisions that will allow users of Land Bank sites to increase their unit counts in exchange for increasing the number of affordable housing units or increasing the subsidy level of affordable units; prioritizing City capital improvement projects to enhance the development potential of Land Bank sites; establishing minimum density requirements on multifamily sites to ensure that they are not consumed by lower-density developments that are typically less affordable; exploring the feasibility of establishing a construction excise tax or impact fee on new market rate residential or commercial development to generate additional funds to invest in land banking activities.

G. *Pursue operational options that will serve to reduce the City's required investment to support the program and increase the net local economic benefits.*

These actions should include pursuing outside funding sources that can help to reduce the amount of local funding that must be used to purchase land or to reduce the need for annual cash flow investments. In addition, the Land Bank should pursue opportunities to acquire land or control land at reduced prices through such mechanisms as private donations, bargain sales, rolling options, affordability easements, etc.

APPENDIX A: OTHER EXISTING LAND BANK PROGRAMS

Appendix A: Existing Affordable Housing Land Bank Programs

Location	Name of Program	Contact Person/Phone	Source(s) of Funding for Land Purchase	Primary Acquisition Strategies	Primary Disposition Mechaniams	Comments
Oakland, California	Affordable Housing Site Acquisition Program	Roy Schweyer Director Housing and Community Development, 510-238-3501, rlschweyer@oaklandnet.com	Redevelopment Agency's Affordable Housing Bond of $10 M, combining with a NOFA for LIHTC.	Private developers acquire properties in City identified target areas in response to Notice of Funding Availability under a revolving loan program	30 year affordability restriction on developers	First NOFA issued in 2000. Property can be held no more than 3 years with returning to City Council for extension. A City Council member and their House Representative are working together with No. California Land Trust to start a new "West Oakland Land Trust"
Boulder, Colorado	Housing Fund Program	Jann Oldhamm, Housing/Community Dev. Manager, 303-441-3157, oldhamj@ci.boulder.co.us	$2 M annually, Community Housing Assistance Program (CHAP): local fund source from property tax and tax on new development or Cash In-Lieu (initiated 1997) plus Community Development block Grant (CDBG)(only option in 1980s) and HOME funds	Issue competitive RFP for developers to respond to	Low Income Housing Covenant	After initial efforts did housing needs assesment/gap analysis - found invaliable
Jackson Hole, Wyoming	Jackson Hole Community Housing Trust	Barbara Hauge Development Director 307-739-0685	$295,000, 66% Individual donations, 19% town and 15% other	Private donors have provided land for development of affordable or re-sale for acquisition of more appropriate land elsewhere in community in 2 cases and in one case partnered with County in JPA	CLT re-sale convenant keep land in CLT's ownership for perpetuity while limiting allowable return to owner of housing unit	Interests of donor constituency have resulted in program emphasis on scattered site single-family ownership units.
Atlanta, Georgia	City of Atlanta/Fulton County Landbank Authority	Jocelyn Ross Director Office of Grants Management City of Atlanta 404-330-6112 x2554	$320,000 funded by CDBG and local matching funds 1:1	Program facilities private developer acquisition of vacant land by waiving back taxes	Waiver of back taxes provided to developers willing to pass savings to homebuyers	Interlocal authority established nonprofit organization in 1991
Rock Hill, South Carolina	Rockhill Joint Venture for Affordable Housing	Kathy Cornett, Planner City of RockHill, 803-253-3922	No direct funding, land donated, HOME funds used at later date to subsidize interest and downpayment cost of new homebuyers.	City solicits owners of vacant parcels to donate land to city in exchange for tax breaks, consolidates adjacent parcels	City deeds property to non-profit developer who is funded by CDBG and HOME Investment Partnership program	

Appendix A: Existing Affordable Housing Land Bank Programs, continued

Location	Name of Program	Contact Person/Phone	Source(s) of Funding for Land Purchase	Primary Acquisition Strategies	Primary Disposition Mechanisms	Comments
Burlington, Vermont	Burlington Community Land Trust	Amy Demetrowitz, BCLT Project Developer, 802-862-6244	$200,000 seed grant from City of Burlington and on an ongoing basis receive private land donations, LIHTC on rental units constructed by Trust, HOME funds through City, and funds from Vermont Conservation.	CLT acquires scattered land and property for rehabilitation or new development	BCLT has both rental and homeownership CLT re-sale convenience keep land in CLT's ownership for perpetuity while limiting allowable return to owner of housing unit while providing down payment grants (averaging $12,500) to individual home buyers.	Started in 1983
Boston, Massachusetts	"Home Again"/ Ten Most Wanted/Residential Development Program	Homeownership Dev. 617 635-0397 Rental Housing Dev. 617-635-0362	Homeownership $4M Rental $5.8 M ($3 M in "linkage Funds") Sale of police headquarters planned to fund affordable housing opportunities	Utilize vacant city owned property, collaborate with police and code enforcement to acquire priority drug "dens" and abandoned properties, and solicit and subsidize for-profit and non-profit developers with separate homeownership and rental property RFPs	City's Neighborhood Housing Trust distributes funds to developers, Replaced auction process	Dollars for FY 2000
Redwood City, California	City Landbanking Program	Debbie Jones-Thomas, Housing Coordinator, 650-780-7290	$1.5 M from CDBG and Redevelopment funds.	City acquires land outright with council approval and subsequently selects developer	Additional $500,000 allocated to establish Second Mortgage Program for First Time Homebuyers w/ individual loans of $10 to $50 K	Developed program in 1999. Estimate per affordable unit cost of $20,000 as land subsidy to developer, seeking to lower unit cost with efficiency units to meet demand for senior housing
San Mateo, California	Neighborhood Improvement and Housing Division landbanking effort	Sandy Council, 650-522-7223, nih@ci.sanmateo.ca.us	20% set aside of CDBG funds for 3 years with intent , $1 M in redevelopment	Interdepartmental re-imbursement of purchase price rather than current fair market, first right of refusal on school property, direct acquisition from failed private development	Resale restrictions, initially assumed silent second loan sufficient to keep affordability capped but real estate boom in late 80's indicated need for price restriction, also used air rights lease	Began effort in 1989.

Source: BAE, 2000.

APPENDIX B: WORKSHEET PRINTOUTS FOR ALTERNATIVE SCENARIOS

Table 1: Land Bank Feasibility Study Key Assumptions

Initial City Investments (spread over Years 0 and 1)	$925,000			
Additional Annual City Investments	$0	per year, for 10 years		
Average Acres Acquired Per Year	3.5	acres		
Average Parcel Size	3.5	acres		
Average Purchase Transactions Per Year	1	transaction per year		
	At Purchase		**At Sale**	
Land Value	$2.25	per square foot	$3.01	per square foot
Interest Rate for Land Bank Borrowing (a)	6.25%	per year		
Number of Years Land Held Before Sale	5	years		
Land Value Appreciation Rate	6.00%	per year		
Land Purchase/Sale Transaction Costs	$5,000	per transaction		
General Inflation Rate	3.5%	per year		
Interim Use/Income Assumptions	$0.00	per acre, per year		
Interim Maintenance Cost Assumptions (b)	$275	per acre, per year		
Property Taxes	29% of value X mill rate (88.823) / 1,000			
Program Administration Costs				
Program Manager				
Salary & Benefits	$65,000	per year		
FTE	0.25	FTE assigned to program		
Program Assistant				
Salary & Benefits	$36,400	per year		
FTE	0.15	FTE assigned to program		
Sales Price Discount: Sales Price as Pct. of Market Value	90%	of future market value		

Notes:
(a) Assumes capital is obtained through internal borrowing. Interest rate is equal to City's normal return on investments, which was approximately 6.25 percent as of 9/27/00.
(b) Interim land maintenance cost is based on information from Finance Department indicating that maintenance costs are usually approximately 0.25 percent of property value each year. This assumes an approximately $2.50 per square foot land value.

Sources: City of Fort Collins; BAE, 2000.

Table 2: Land Acquisition

	Program Year (2000 = 0)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Number of Transactions	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Acres of Land Acquired	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Land Purchase Price	$363,617	$385,434	$408,560	$433,074	$459,058	$486,602	$515,798	$546,746	$579,550	$614,323	$651,183	$690,254	$731,669	$775,569	$822,103
Other Acquisition Costs	$5,175	$5,356	$5,544	$5,738	$5,938	$6,146	$6,361	$6,584	$6,814	$7,053	$7,300	$7,555	$7,820	$8,093	$8,377
Total Acquisition Costs	$368,792	$390,790	$414,104	$438,811	$464,997	$492,748	$522,159	$553,330	$586,365	$621,376	$658,483	$697,809	$739,489	$783,663	$830,480

Assumptions

Type of Land	**Current Value/ac.**	**Anticipated Price Increase /Year**
Vacant Residential Land, No Water	$86,010	6.0%
Estimated "Other" Costs	**Per Transaction** $5,000	**Cost inflation/year** 3.5%

Source: BAE, 2000.

Table 3: Acquisition Financing Assumptions

	Program Year (2000 = 0)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Starting Capital	$0	$425,000	$556,208	$165,418	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
New City General Revenues	$425,000	$500,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Proceeds from Sales	$0	$0	$0	$0	$0	$0	$431,795	$457,857	$485,487	$514,781	$545,838	$578,765	$613,673	$650,682	$689,919	$731,516
Sub-total Available Capital	$425,000	$925,000	$556,208	$165,418	$0	$0	$431,795	$457,857	$485,487	$514,781	$545,838	$578,765	$613,673	$650,682	$689,919	$731,516
Less Acquisition Costs	$0	$368,792	$390,790	$414,104	$438,811	$464,997	$492,748	$522,159	$553,330	$586,365	$621,376	$658,483	$697,809	$739,489	$783,663	$830,480
Sub-total	$425,000	$556,208	$165,418	($248,686)	($438,811)	($464,997)	($60,953)	($64,303)	($67,843)	($71,584)	($75,538)	($79,718)	($84,136)	($88,806)	($93,744)	($99,964)
Amount Available for Debt Paydown	$425,000	$556,208	$165,418	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Starting Debt	$0	$0	$0	$0	$249,686	$687,498	$1,152,494	$1,213,447	$1,277,749	$1,345,592	$1,417,176	$1,492,714	$1,572,432	$1,656,569	$1,745,375	$1,839,119
Increase Debt Balance	$0	$0	$0	$248,686	$438,811	$464,997	$60,953	$64,303	$67,843	$71,584	$75,538	$79,718	$84,136	$88,806	$93,744	$98,964
Debt Paydown	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Ending Debt	$0	$0	$0	$248,686	$687,498	$1,152,494	$1,213,447	$1,277,749	$1,345,592	$1,417,176	$1,492,714	$1,572,432	$1,656,569	$1,745,375	$1,839,119	$1,938,083
End of Year Capital	$425,000	$556,208	$165,418	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
End of Year Land Assets Value		*$363,617*	*$770,868*	*$1,225,681*	*$1,732,295*	*$2,295,291*	*$2,433,009*	*$2,578,989*	*$2,733,728*	*$2,897,752*	*$3,071,617*	*$3,255,914*	*$3,451,269*	*$3,658,345*	*$3,877,846*	*$4,110,517*
Debt to Land Assets Ratio	*#DIV/0!*	*0.00*	*0.00*	*0.20*	*0.40*	*0.50*	*0.50*	*0.50*	*0.49*	*0.49*	*0.49*	*0.48*	*0.48*	*0.48*	*0.47*	*0.47*

Source: BAE, 2000.

Table 4: Annual Operating Costs

Acres of Land Owned	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
New Acres Acquired	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Cumulative Acres Acquired	3.5	7	10.5	14	17.5	21	24.5	28	31.5	35	38.5	42	45.5	49	52.5
-Acres Sold	0	0	0	0	0	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5
Cumulative Acres Sold	0	0	0	0	0	-3.5	-7	-10.5	-14	-17.5	-21	-24.5	-28	-31.5	-35
Net Acres Owned	3.5	7	10.5	14	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
Annual Maintenance Costs (assessments, weed control, snowplow removal, etc.) (a)															
Vacant Land Owned	$996	$2,092	$3,201	$4,418	$5,716	$5,916	$6,123	$6,337	$6,559	$6,789	$7,026	$7,272	$7,527	$7,790	$8,063
Annual Property Taxes (b)															
Vacant Land Owned	$8,734	$18,515	$29,439	$41,607	$55,130	$58,439	$61,944	$65,661	$69,600	$73,776	$78,203	$82,895	$87,869	$93,141	$98,729
Annual Debt Service															
Annual Debt Outstanding	$0	$0	$248,886	$667,486	$1,152,494	$1,213,447	$1,277,749	$1,345,592	$1,417,176	$1,492,714	$1,572,432	$1,656,569	$1,745,375	$1,839,119	$1,938,083
Annual Interest Accrual (interest on prior year)	$0	$0	$0	$15,543	$42,969	$72,031	$75,840	$79,859	$84,100	$88,574	$93,295	$98,277	$103,536	$109,086	$114,948
Annual Program Administration															
Program Manager (c)	$16,819	$17,407	$18,017	$18,647	$19,300	$19,975	$20,675	$21,398	$22,147	$22,922	$23,725	$24,555	$25,414	$26,304	$27,224
Program Assistant (c)	$9,419	$9,748	$10,089	$10,442	$10,808	$11,186	$11,578	$11,983	$12,402	$12,836	$13,286	$13,751	$14,232	$14,730	$15,246
Total Annual Operating Costs	$36,967	$47,733	$93,747	$90,656	$133,922	$167,546	$176,159	$185,238	$194,808	$204,897	$215,534	$226,750	$238,577	$251,061	$264,207
Operating Costs as % of Land Assets	*9.9%*	*6.2%*	*6.0%*	*5.2%*	*5.8%*	*6.9%*	*6.9%*	*6.8%*	*6.7%*	*6.7%*	*6.6%*	*6.6%*	*6.5%*	*6.5%*	*6.4%*

Assumptions

	Maintenance Cost/acre	Inflation
Maintenance Costs for Vacant Land Owned	$275 (b)	3.0%
Debt Interest Rate	8.25%	

Notes:

(a) Based on Finance Department estimate that maintenance costs for vacant land are about 1/4 percent of property value per year. To simplify, this was calculated as a $/acre value based on a uniform property value of $2.50 per square foot.

(b) Property taxes calculated as 28% of land value X mill levy (82.823) /1000

(c) Year 0 program administration costs are estimated as follows:

Program Manager, .25 FTE @ $65,000/FTE cost for salary and benefits.

Program Assistant, .15 FTE @ $36,400/FTE cost for salary and benefits.

Sources: City of Fort Collins; SAE, 2000.

Table 5: Land Disposition

	Program Year														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Estimated Land Value Per Acre	$103,891	$110,124	$116,731	$123,735	$131,159	$139,029	$147,371	$156,213	$165,586	$175,521	$186,052	$197,215	$209,048	$221,591	$234,887
VALUE OF LAND ASSETS															
Purchased Year 1	$363,617	$385,434	$408,560	$433,074	$459,058										
Purchased Year 2		$385,434	$408,560	$433,074	$459,058	$486,602									
Purchased Year 3			$408,560	$433,074	$459,058	$486,602	$515,798								
Purchased Year 4				$433,074	$459,058	$486,602	$515,798	$546,746							
Purchased Year 5					$459,058	$486,602	$515,798	$546,746	$579,550						
Purchased Year 6						$486,602	$515,798	$546,746	$579,550	$614,323					
Purchased Year 7							$515,798	$546,746	$579,550	$614,323	$651,183				
Purchased Year 8								$546,746	$579,550	$614,323	$651,183	$690,254			
Purchased Year 9									$579,550	$614,323	$651,183	$690,254	$731,669		
Purchased Year 10										$614,323	$651,183	$690,254	$731,669	$775,569	
Purchased Year 11											$651,183	$690,254	$731,669	$775,569	$822,103
Purchased Year 12												$690,254	$731,669	$775,569	$822,103
Purchased Year 13													$731,669	$775,569	$822,103
Purchased Year 14														$775,569	$822,103
Purchased Year 15															$822,103
Purchased Year 16															
TOTAL VALUE OF LAND ASSETS	$363,617	$770,868	$1,225,681	$1,732,295	$2,296,291	$2,433,009	$2,578,989	$2,733,728	$2,897,752	$3,071,617	$3,255,914	$3,451,269	$3,658,345	$3,877,846	$4,110,517
Acres Sold (end of prior year)	0	0	0	0	0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Parcels Sold (end of prior year)	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1
Year Purchased						1	2	3	4	5	6	7	8	9	10
Total Market Value of Property Sold	$0	$0	$0	$0	$0	$486,602	$515,798	$546,746	$579,550	$614,323	$651,183	$690,254	$731,669	$775,569	$822,103
Land Sales Price (% of Market)	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Total Value of Sales	$0	$0	$0	$0	$0	$437,942	$464,218	$492,071	$521,595	$552,891	$586,065	$621,228	$658,502	$698,012	$739,893
Land Sales Expenses	$0	$0	$0	$0	$0	($6,146)	($6,361)	($6,584)	($6,814)	($7,053)	($7,300)	($7,555)	($7,820)	($8,093)	($8,377)
Net Sales Proceeds	$0	$0	$0	$0	$0	$431,795	$457,857	$485,487	$514,781	$545,838	$578,765	$613,673	$650,682	$689,919	$731,516
Land Sale Subsidy Provided	*$0*	*$0*	*$0*	*$0*	*$0*	*$48,660*	*$51,580*	*$54,675*	*$57,955*	*$61,432*	*$65,118*	*$69,025*	*$73,167*	*$77,557*	*$82,210*
Estimated Subsidy Per Unit	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*$1,159*	*$1,228*	*$1,302*	*$1,380*	*$1,463*	*$1,550*	*$1,643*	*$1,742*	*$1,847*	*$1,957*

Assumptions

Sales Price Appreciation	6.0%	per year.
Year 2000 Land Sales Expenses (per sale)	$5,000	
Sales Cost Inflation	3.5%	per year
Assumed Land Bank Project Density	12	units/acre

Source: BAE, 2000.

Table 6: Land Bank Cash Flow Summary

	Program Year (2000 = 0)														
Land Bank Inventory Summary	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Acres Acquired	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Acres Sold	0	0	0	0	0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Acres Owned	3.5	7	10.5	14	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
Annual Expenditures Summary															
Property Acquisition Costs	$368,792	$390,790	$414,104	$438,811	$464,997	$492,748	$522,159	$553,330	$586,365	$621,376	$658,483	$697,809	$739,489	$783,663	$830,480
Operations and Maintenance Costs	$35,967	$47,733	$60,747	$75,115	$90,953	$95,515	$100,319	$105,379	$110,709	$116,323	$122,239	$128,473	$135,041	$141,965	$149,262
Annual Interest Payments	$0	$0	$0	$15,543	$42,969	$72,031	$75,840	$79,869	$84,100	$88,574	$93,295	$98,277	$103,536	$109,086	$114,945
Debt Payoff (a)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal Expenditures	$404,759	$438,523	$474,850	$529,469	$598,919	$660,294	$698,319	$738,568	$781,173	$826,273	$874,016	$924,559	$978,066	$1,034,713	$1,094,687
Annual Income Summary															
General Fund Capital Investment	$925,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Prior Year Cash Flow	$0	$520,241	$114,233	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Debt Proceeds	$0	$0	$246,686	$438,811	$464,997	$60,953	$64,303	$67,843	$71,584	$75,536	$79,718	$84,136	$88,806	$93,744	$98,954
Interim Use Income	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Property Sales Proceeds	$0	$0	$0	$0	$0	$431,796	$457,857	$485,487	$514,781	$545,838	$578,765	$613,673	$650,682	$689,919	$731,516
Interest on Prior Year's Cash Bal.	$0	$32,515	$7,140	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal Income	$925,000	$552,756	$370,058	$438,811	$464,997	$492,748	$522,159	$553,330	$586,365	$621,376	$658,483	$697,809	$739,489	$783,663	$830,480
Cash Flow Retained in Program	$520,241	$114,233	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Land Bank Cash Flow	**$0**	**$0**	**($104,792)**	**($90,658)**	**($133,922)**	**($167,546)**	**($176,155)**	**($185,238)**	**($194,808)**	**($204,897)**	**($215,534)**	**($226,750)**	**($238,577)**	**($251,051)**	**($264,207)**
NPV of 15 yrs. Cash Flow (a)	*($1,370,306)*														
-or-															
Annual Investment (2000 $) (b)	*$0*	*$0*	*($97,824)*	*($81,788)*	*($116,705)*	*($141,049)*	*($143,306)*	*($145,595)*	*($147,939)*	*($150,339)*	*($152,796)*	*($155,311)*	*($157,886)*	*($160,523)*	*($163,222)*

NPV of Land Sale Subsidies Provided (15 yrs)	$334,662
NPV of Net Assets at Year 15	$975,009
Total Financial Returns (15 yrs)	**$1,309,671**
NPV of Initial General Fund Investments	($842,907)
NPV of Annual Program Subsidies (15 yrs)	($1,370,306)
Total NPV of Program Investments	**($2,213,212)**
NET PROGRAM COST	**$1,060,542**

Land Bank Acres Purchased	53

Notes:
(a) For purposes of this analysis, discount rate is set equal to the City's investment earnings rate.
(b) Future subsidy payments are deflated to 2000 $ using annual general inflation rate assumption from Table 1.

Source: BAE, 2000.

Table 1: Land Bank Feasibility Study Key Assumptions

Initial City Investments (spread over Years 0 and 1)	$925,000			
Additional Annual City Investments	$0	per year, for 10 years		
Average Acres Acquired Per Year	3.5	acres		
Average Parcel Size	3.5	acres		
Average Purchase Transactions Per Year	1	transaction per year		
	At Purchase		**At Sale**	
Land Value	$2.25	per square foot	$3.01	per square foot
Interest Rate for Land Bank Borrowing (a)	6.25%	per year		
Number of Years Land Held Before Sale	10	years		
Land Value Appreciation Rate	6.00%	per year		
Land Purchase/Sale Transaction Costs	$5,000	per transaction		
General Inflation Rate	3.5%	per year		
Interim Use/Income Assumptions	$0.00	per acre, per year		
Interim Maintenance Cost Assumptions (b)	$275	per acre, per year		
Program Administration Costs (Not Charged to Land Bank Program, Absorbed by General Fund)				
Program Manager				
Salary & Benefits	$65,000	per year		
FTE	0.25	FTE assigned to program		
Program Assistant				
Salary & Benefits	$36,400	per year		
FTE	0.15	FTE assigned to program		
Sales Price Discount: Sales Price as Pct. of Market Value	90%	of future market value		

Notes:
(a) Assumes capital is obtained through internal borrowing. Interest rate is equal to City's normal return on investments, which was approximately 6.25 percent as of 9/27/00.
(b) Interim land maintenance cost is based on information from Finance Department indicating that maintenance costs are usually approximately 0.25 percent of property value each year. This assumes an approximately $2.50 per square foot land value.

Sources: City of Fort Collins; BAE, 2000.

Table 2: Land Acquisition

	Program Year (2000 = 0)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Number of Transactions	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Acres of Land Acquired	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Land Purchase Price	$363,617	$385,434	$408,560	$433,074	$459,058	$486,602	$515,798	$546,746	$579,550	$614,323	$651,183	$690,254	$731,669	$775,569	$822,103
Other Acquisition Costs	$5,175	$5,356	$5,544	$5,738	$5,938	$6,146	$6,361	$6,584	$6,814	$7,053	$7,300	$7,555	$7,820	$8,093	$8,377
Total Acquisition Costs	$368,792	$390,790	$414,104	$438,811	$464,997	$492,748	$522,159	$553,330	$586,365	$621,376	$658,483	$697,809	$739,489	$783,663	$830,480

Assumptions

Type of Land	Current Value/ac.	Anticipated Price Increase /year
Vacant Residential Land, No Water	$98,010	6.0%
	Per Transaction	**Cost Inflation/year**
Estimated "Other" Costs	$5,000	3.5%

Sources: BAE, 2000.

Table 3: Acquisition Financing Assumptions

	Program Year (2000 = 0)															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Starting Capital	$0	$425,000	$556,208	$165,418	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
New City General Revenues	$425,000	$500,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Proceeds from Sales	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$578,765	$613,673	$650,682	$689,919	$731,516
Sub-total Available Capital	$425,000	$925,000	$556,208	$165,418	$0	$0	$0	$0	$0	$0	$0	$578,765	$613,673	$650,682	$689,919	$731,516
Less Acquisition Costs	$0	$368,792	$390,790	$414,104	$438,811	$464,997	$492,748	$522,159	$553,330	$586,365	$621,376	$658,483	$697,809	$739,489	$783,663	$830,480
Sub-total	$425,000	$556,208	$165,418	($248,686)	($438,811)	($464,997)	($492,748)	($522,159)	($553,330)	($586,365)	($621,376)	($79,718)	($84,136)	($88,806)	($93,744)	($98,964)
Amount Available for Debt Paydown	$425,000	$556,208	$165,418	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Starting Debt	$0	$0	$0	$0	$248,686	$687,498	$1,152,494	$1,645,242	$2,167,401	$2,720,731	$3,307,096	$3,928,472	$4,008,190	$4,092,326	$4,181,133	$4,274,877
Increase Debt Balance	$0	$0	$0	$248,686	$438,811	$464,997	$492,748	$522,159	$553,330	$586,365	$621,376	$79,718	$84,136	$88,806	$93,744	$98,964
Debt Paydown	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Ending Debt	$0	$0	$0	$248,686	$687,498	$1,152,494	$1,645,242	$2,167,401	$2,720,731	$3,307,096	$3,928,472	$4,008,190	$4,092,326	$4,181,133	$4,274,877	$4,373,841
End of Year Capital	$425,000	$556,208	$165,418	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
End of Year Land Assets Value		$363,617	$770,868	$1,225,681	$1,732,295	$2,295,291	$2,919,610	$3,610,595	$4,373,995	$5,215,964	$6,143,234	$6,511,828	$6,902,538	$7,316,690	$7,755,692	$8,221,033

Source: BAE, 2000.

Table 4: Annual Operating Costs

Acres of Land Owned	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
New Acres Acquired	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Cumulative Acres Acquired	3.5	7	10.5	14	17.5	21	24.5	28	31.5	35	38.5	42	45.5	49	52.5
-Acres Sold	0	0	0	0	0	0	0	0	0	0	-3.5	-3.5	-3.5	-3.5	-3.5
Cumulative Acres Sold	0	0	0	0	0	0	0	0	0	0	-3.5	-7	-10.5	-14	-17.5
Net Acres Owned	3.5	7	10.5	14	17.5	21	24.5	28	31.5	35	35	35	35	35	35
Annual Maintenance Costs (taxes, assessments, weed control, snow/ice removal, etc.)															
Vacant Land Owned	$996	$2,062	$3,201	$4,418	$5,716	$7,099	$8,572	$10,139	$11,806	$13,577	$14,052	$14,544	$15,053	$15,580	$16,125
Annual Debt Service															
Annual Debt Outstanding	$0	$0	$248,686	$687,498	$1,152,494	$1,645,242	$2,167,401	$2,720,731	$3,307,096	$3,928,472	$4,009,190	$4,092,326	$4,181,133	$4,274,877	$4,373,841
Annual Interest Accrual (interest on prior year)	$0	$0	$0	$16,543	$42,969	$72,031	$102,828	$135,463	$170,046	$206,693	$246,530	$250,512	$255,770	$261,321	$267,180
Total Annual Operating Costs (a)	$996	$2,062	$3,201	$19,961	$48,684	$79,130	$111,400	$145,602	$181,852	$220,271	$259,582	$265,056	$270,823	$276,901	$283,305
Operating Costs as % of Land Assets	*0.3%*	*0.3%*	*0.3%*	*1.2%*	*2.1%*	*2.7%*	*3.1%*	*3.3%*	*3.5%*	*3.6%*	*4.0%*	*3.8%*	*3.7%*	*3.6%*	*3.4%*

Assumptions

	Maintenance Cost/acre	Inflation
Maintenance Costs for Vacant Land Owned	$275 (b)	3.5%
Debt Interest Rate	6.25%	

Notes:
(a) Annual program administration costs are estimated at approximately $22,000, based on approximately 1/4 FTE program manager and .15 FTE program assistant. This assumes that the City would absorb program administration costs as a component of its over e
(b) Based on Finance Department estimate that maintenance costs for vacant land are about 1/4 percent of property value per year. To simplify, this was calculated as a $/acre value based on a uniform property value of $2.50 per square foot.

Source: BAE, 2000.

Table 5: Land Disposition

	Program Year															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Estimated Land Value Per Acre	$103,891	$110,124	$116,731	$123,735	$131,159	$139,029	$147,371	$156,213	$165,586	$175,521	$186,052	$197,215	$209,048	$221,591	$234,887	$248,980
VALUE OF LAND ASSETS																
Purchased Year 1	$363,617	$385,434	$408,560	$433,074	$459,058	$486,602	$515,798	$546,746	$579,550	$614,323						
Purchased Year 2		$385,434	$408,560	$433,074	$459,058	$486,602	$515,798	$546,746	$579,550	$614,323	$651,183					
Purchased Year 3			$408,560	$433,074	$459,058	$486,602	$515,798	$546,746	$579,550	$614,323	$651,183	$690,254				
Purchased Year 4				$433,074	$459,058	$486,602	$515,798	$546,746	$579,550	$614,323	$651,183	$690,254	$731,669			
Purchased Year 5					$459,058	$486,602	$515,798	$546,746	$579,550	$614,323	$651,183	$690,254	$731,669	$775,569		
Purchased Year 6						$486,602	$515,798	$546,746	$579,550	$614,323	$651,183	$690,254	$731,669	$775,569	$822,103	
Purchased Year 7							$515,798	$546,746	$579,550	$614,323	$651,183	$690,254	$731,669	$775,569	$822,103	$871,430
Purchased Year 8								$546,746	$579,550	$614,323	$651,183	$690,254	$731,669	$775,569	$822,103	$871,430
Purchased Year 9									$579,550	$614,323	$651,183	$690,254	$731,669	$775,569	$822,103	$871,430
Purchased Year 10										$614,323	$651,183	$690,254	$731,669	$775,569	$822,103	$871,430
Purchased Year 11											$651,183	$690,254	$731,669	$775,569	$822,103	$871,430
Purchased Year 12												$690,254	$731,669	$775,569	$822,103	$871,430
Purchased Year 13													$731,669	$775,569	$822,103	$871,430
Purchased Year 14														$775,569	$822,103	$871,430
Purchased Year 15															$822,103	$871,430
Purchased Year 16																$871,430
TOTAL VALUE OF LAND ASSETS	$363,617	$770,868	$1,225,681	$1,732,295	$2,295,291	$2,919,610	$3,610,585	$4,373,965	$5,215,954	$6,143,234	$6,511,828	$6,902,539	$7,316,690	$7,755,692	$8,221,033	$8,714,295
Acres Sold	0	0	0	0	0	0	0	0	0	0	3.5	3.5	3.5	3.5	3.5	3.5
Parcels Sold (end of prior year)	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
Year Purchased						(4)	(3)	(2)	(1)	-	1	2	3	4	5	6
Total Market Value of Property Sold	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$651,183	$690,254	$731,669	$775,569	$822,103	$871,430
Land Sales Price (% of Market)	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Total Value of Sales	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$586,065	$621,228	$658,502	$698,012	$739,893	$784,287
-Land Sales Expenses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	($7,300)	($7,555)	($7,820)	($8,093)	($8,377)	($8,670)
Net Sales Proceeds	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$578,765	$613,673	$650,682	$689,919	$731,516	$775,617
Land Sale Subsidy Provided	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$55,118*	*$69,026*	*$73,167*	*$77,557*	*$82,210*	*$87,143*
Estimated Subsidy Per Unit	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*$1,550*	*$1,843*	*$1,742*	*$1,847*	*$1,957*	*$2,075*

Assumptions

Sales Price Appreciation	6.0% per year.
Year 2000 Land Sales Expenses (per sale)	$5,000
Sales Cost Inflation	3.5% per year
Assumed Land Bank Project Density	12 units/acre

Source: BAE, 2000.

Table 6: Land Bank Cash Flow Summary

	Program Year (2000 = 0)														
Land Bank Inventory Summary	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Acres Acquired	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Acres Sold	0	0	0	0	0	0	0	0	0	0	3.5	3.5	3.5	3.5	3.5
Acres Owned	3.5	7	10.5	14	17.5	21	24.5	28	31.5	35	35	35	35	35	35
Annual Expenditures Summary															
Property Acquisition Costs	$368,792	$390,790	$414,104	$438,811	$464,997	$492,748	$522,159	$553,330	$586,365	$621,376	$658,483	$697,809	$739,489	$783,663	$830,480
Operations and Maintenance Costs	$996	$2,062	$3,201	$4,418	$5,716	$7,099	$8,572	$10,139	$11,806	$13,577	$14,062	$14,544	$15,053	$15,590	$16,125
Annual Interest Payments	$0	$0	$0	$15,543	$42,959	$72,031	$102,828	$135,463	$170,046	$206,693	$245,530	$250,512	$255,770	$261,321	$267,180
Debt Payoff (a)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal Expenditures	$369,788	$392,852	$417,305	$458,772	$513,661	$571,878	$633,559	$698,932	$768,217	$841,647	$918,064	$962,865	$1,010,312	$1,060,573	$1,113,785
Annual Income Summary															
General Fund Capital Investment	$925,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Prior Year Cash Flow	$0	$555,212	$197,060	$40,757	$23,344	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Debt Proceeds	$0	$0	$248,686	$438,811	$464,997	$492,748	$522,159	$553,330	$586,365	$621,376	$79,718	$84,136	$88,808	$93,744	$98,964
Interim Use Income	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Property Sales Proceeds	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$578,765	$613,673	$650,682	$689,919	$731,516
Interest on Prior Year's Cash Bal.	$0	$34,701	$12,316	$2,547	$1,459	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal Income	$925,000	$589,912	$458,062	$482,116	$489,799	$492,748	$522,159	$553,330	$586,365	$621,376	$658,483	$697,809	$739,489	$783,663	$830,480
Cash Flow Retained in Program	$555,212	$197,060	$40,757	$23,344	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Land Bank Cash Flow	**$0**	**$0**	**$0**	**$0**	**($23,862)**	**($79,130)**	**($111,400)**	**($145,602)**	**($181,852)**	**($220,271)**	**($259,582)**	**($265,056)**	**($270,823)**	**($276,901)**	**($283,305)**
NPV of 15 yrs. Cash Flow (a)	*($1,077,726)*														
-or-															
Annual Investment (2000 $) (b)	*$0*	*$0*	*$0*	*$0*	*($20,911)*	*($66,625)*	*($90,624)*	*($114,442)*	*($138,100)*	*($161,619)*	*($184,022)*	*($181,349)*	*($179,226)*	*($177,051)*	*($175,021)*

NPV of Land Sale Subsidies Provided (15 yrs)	$166,345
NPV of Net Assets at Year 15	$1,549,565
Total Financial Returns (15 yrs)	**$1,715,911**
NPV of Initial General Fund Investments	($842,907)
NPV of Annual Program Subsidies (15 yrs)	($1,077,726)
Total NPV of Program Investments	**($1,920,632)**
NET PROGRAM COST	**$204,722**

Land Bank Acres Purchased	53

Notes:
(a) For purposes of this analysis, discount rate is set equal to the City's investment earnings rate.
(b) Future subsidy payments are deflated to 2000 $ using annual general inflation rate assumption from Table 1.

Source: BAE, 2000.

Table 6: Land Bank Cash Flow Summary

	Program Year (2000 = 0)														
Land Bank Inventory Summary	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Acres Acquired	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Acres Sold	0	0	0	0	0	0	0	0	0	0	3.5	3.5	3.5	3.5	3.5
Acres Owned	3.5	7	10.5	14	17.5	21	24.5	28	31.5	35	35	35	35	35	35
Annual Expenditures Summary															
Property Acquisition Costs	$368,792	$390,790	$414,104	$438,811	$464,997	$492,748	$522,159	$553,330	$586,365	$621,376	$658,483	$697,809	$739,489	$783,663	$830,480
Operations and Maintenance Costs	$996	$2,062	$3,201	$4,418	$5,716	$7,099	$8,572	$10,139	$11,806	$13,577	$14,062	$14,544	$15,053	$15,560	$16,125
Annual Interest Payments	$0	$0	$0	$15,543	$42,959	$72,031	$102,828	$135,463	$170,046	$206,693	$245,530	$250,512	$255,770	$261,321	$267,180
Debt Payoff (a)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal Expenditures	$369,788	$392,852	$417,305	$458,772	$513,661	$571,878	$633,559	$698,932	$768,217	$841,647	$918,064	$962,865	$1,010,312	$1,060,543	$1,113,785
Annual Income Summary															
General Fund Capital Investment	$925,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Prior Year Cash Flow	$0	$555,212	$197,060	$40,757	$23,344	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Debt Proceeds	$0	$0	$248,686	$438,811	$464,997	$492,748	$522,159	$553,330	$586,365	$621,376	$79,718	$84,136	$88,808	$93,744	$98,964
Interim Use Income	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Property Sales Proceeds	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$578,765	$613,673	$650,682	$689,919	$731,516
Interest on Prior Year's Cash Bal.	$0	$34,701	$12,316	$2,547	$1,459	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal Income	$925,000	$589,912	$458,062	$482,116	$489,799	$492,748	$522,159	$553,330	$586,365	$621,376	$658,483	$697,809	$739,489	$783,663	$830,480
Cash Flow Retained in Program	$555,212	$197,060	$40,757	$23,344	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Land Bank Cash Flow	**$0**	**$0**	**$0**	**$0**	**($23,862)**	**($79,130)**	**($111,400)**	**($145,602)**	**($181,852)**	**($220,271)**	**($259,582)**	**($265,056)**	**($270,823)**	**($276,901)**	**($283,305)**
NPV of 15 yrs. Cash Flow (a)	*($1,077,726)*														
-or-															
Annual Investment (2000 $) (b)	*$0*	*$0*	*$0*	*$0*	*($20,911)*	*($66,625)*	*($90,624)*	*($114,442)*	*($138,100)*	*($161,619)*	*($184,022)*	*($181,349)*	*($179,226)*	*($177,051)*	*($175,021)*

NPV of Land Sale Subsidies Provided (15 yrs)	$166,345
NPV of Net Assets at Year 15	$1,549,565
Total Financial Returns (15 yrs)	**$1,715,911**
NPV of Initial General Fund Investments	($842,907)
NPV of Annual Program Subsidies (15 yrs)	($1,077,726)
Total NPV of Program Investments	**($1,920,632)**
NET PROGRAM COST	**$204,722**

Land Bank Acres Purchased	53

Notes:
(a) For purposes of this analysis, discount rate is set equal to the City's investment earnings rate.
(b) Future subsidy payments are deflated to 2000 $ using annual general inflation rate assumption from Table 1.

Source: BAE, 2000.

Table 1: Land Bank Feasibility Study Key Assumptions

Initial City Investments (spread over Years 0 and 1)	$925,000			
Additional Annual City Investments	$500,000	per year, for 10 years		
Average Acres Acquired Per Year	5.0	acres		
Average Parcel Size	3.5	acres		
Average Purchase Transactions Per Year	1.4	transaction per year		
	At Purchase		**At Sale**	
Land Value	$2.25	per square foot	$3.01	per square foot
Interest Rate for Land Bank Borrowing (a)	6.25%	per year		
Number of Years Land Held Before Sale	5	years		
Land Value Appreciation Rate	6.00%	per year		
Land Purchase/Sale Transaction Costs	$5,000	per transaction		
General Inflation Rate	3.5%	per year		
Interim Use/Income Assumptions	$0.00	per acre, per year		
Interim Maintenance Cost Assumptions (b)	$275	per acre, per year		
Program Administration Costs				
Program Manager				
Salary & Benefits	$65,000	per year		
FTE	0.25	FTE assigned to program		
Program Assistant				
Salary & Benefits	$36,400	per year		
FTE	0.15	FTE assigned to program		
Sales Price Discount: Sales Price as Pct. of Market Value	90%	of future market value		

Notes:
(a) Assumes capital is obtained through internal borrowing. Interest rate is equal to City's normal return on investments, which was approximately 6.25 percent as of 9/27/00.
(b) Interim land maintenance cost is based on information from Finance Department indicating that maintenance costs are usually approximately 0.25 percent of property value each year. This assumes an approximately $2.50 per square foot land value.

Sources: City of Fort Collins; BAE, 2000.

Table 2: Land Acquisition

	Program Year (2000 = 0)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Number of Transactions	1.4	1.4	1.4	1.4	1.4	1.7	2.0	2.3	2.0	2.0	1.7	1.7	2.0	1.7	1.7
Acres of Land Acquired	5	5	5	5	5	6	7	8	7	7	6	6	7	6	6
Land Purchase Price	$519,453	$550,620	$583,657	$618,677	$655,797	$834,174	$1,031,596	$1,249,704	$1,159,101	$1,228,647	$1,116,313	$1,183,292	$1,483,338	$1,329,547	$1,409,320
Other Acquisition Costs	$7,393	$7,652	$7,919	$8,197	$8,483	$10,538	$12,723	$15,049	$13,629	$14,106	$12,514	$12,952	$15,640	$13,875	$14,360
Total Acquisition Costs	$526,846	$558,272	$591,577	$626,873	$664,281	$844,711	$1,044,318	$1,264,754	$1,172,730	$1,242,753	$1,128,827	$1,196,244	$1,478,978	$1,343,422	$1,423,680

Assumptions

Type of Land	**Current Value/ac.**	**Anticipated Price Increase /year**
Vacant Residential Land, No Water	$98,010	6.0%
Estimated "Other" Costs	**Per Transaction** $5,000	**Cost Inflation/year** 3.5%

Source: BAE, 2000.

Table 3: Acquisition Financing Assumptions

	Program Year (2000 = 0)															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Starting Capital	$0	$425,000	$398,154	$339,882	$248,306	$121,432	$0	$229,291	$339,053	$267,853	$330,524	$367,540	$232,966	$268,385	$283,384	$324,425
New City General Revenues	$425,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$0	$0	$0	$0	$0
Net Proceeds from Sales	$0	$0	$0	$0	$0	$0	$616,850	$654,081	$693,553	$735,401	$779,799	$864,254	$1,231,664	$1,483,977	$1,384,462	$1,467,819
Sub-total Available Capital	$425,000	$925,000	$898,154	$839,882	$748,306	$621,432	$1,116,850	$1,383,372	$1,532,606	$1,503,254	$1,610,293	$1,361,794	$1,464,630	$1,752,362	$1,667,847	$1,792,244
Less Acquisition Costs	$0	$526,846	$558,272	$591,577	$626,873	$664,281	$844,711	$1,044,318	$1,264,754	$1,172,730	$1,242,753	$1,128,827	$1,196,244	$1,478,978	$1,343,422	$1,423,680
Sub-total	$425,000	$398,154	$339,882	$248,306	$121,432	($42,849)	$272,140	$339,053	$267,853	$330,524	$367,540	$232,966	$268,385	$283,384	$324,425	$368,564
Amount Available for Debt Paydown	$425,000	$398,154	$339,882	$248,306	$121,432	$0	$272,140	$339,053	$267,853	$330,524	$367,540	$232,966	$268,385	$283,384	$324,425	$368,564
Starting Debt	$0	$0	$0	$0	$0	$0	$42,849	$0	$0	$0	$0	$0	$0	$0	$0	$0
Increase Debt Balance	$0	$0	$0	$0	$0	$42,849	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Debt Paydown	$0	$0	$0	$0	$0	$0	($42,849)	$0	$0	$0	$0	$0	$0	$0	$0	$0
Ending Debt	$0	$0	$0	$0	$0	$42,849	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
End of Year Capital	$425,000	$398,154	$339,882	$248,306	$121,432	$0	$229,291	$339,053	$267,853	$330,524	$367,540	$232,966	$268,385	$283,384	$324,425	$368,564
End of Year Land Assets Value		$519,453	$1,101,240	$1,750,972	$2,474,707	$3,278,987	$3,614,756	$4,126,382	$4,842,605	$5,464,332	$6,143,234	$6,511,828	$6,705,323	$6,898,594	$7,090,918	$7,281,487

Source: BAE, 2000.

Table 4: Annual Operating Costs

Acres of Land Owned	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
New Acres Acquired	5	5	5	5	5	6	7	8	7	7	6	6	7	6	6
Cumulative Acres Acquired	5	10	15	20	25	31	38	46	53	60	66	72	79	85	91
-Acres Sold	0	0	0	0	0	-5	-5	-5	-5	-5	-6	-7	-8	-7	-7
Cumulative Acres Sold	0	0	0	0	0	-5	-10	-15	-20	-25	-31	-38	-46	-53	-60
Net Acres Owned	5	10	15	20	25	26	28	31	33	35	35	34	33	32	31
Annual Maintenance Costs (taxes, assessments, weed control, snowlice removal, etc.)															
Vacant Land Owned	$1,423	$2,846	$4,573	$6,311	$8,165	$8,759	$9,797	$11,226	$12,368	$13,577	$14,052	$14,128	$14,193	$14,245	$14,282
Annual Debt Service															
Annual Debt Outstanding	$0	$0	$0	$0	$42,849	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Annual Interest Accrual (interest on prior year)	$0	$0	$0	$0	$0	$2,678	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Annual Operating Costs (a)	$1,423	$2,846	$4,573	$6,311	$8,165	$11,467	$9,797	$11,226	$12,368	$13,577	$14,052	$14,128	$14,193	$14,245	$14,282
Operating Costs as % of Land Assets	*0.3%*	*0.3%*	*0.3%*	*0.3%*	*0.3%*	*0.3%*	*0.2%*	*0.2%*	*0.2%*	*0.2%*	*0.2%*	*0.2%*	*0.2%*	*0.2%*	*0.2%*

Assumptions

	Maintenance Costs/acre	**Inflation**
Maintenance Costs for Vacant Land Owned	$275 (b)	3.5%
Debt Interest Rate	6.25%	

Notes:

(a) Annual program administration costs are estimated at approximately $22,000, based on approximately 1/4 FTE program manager and .15 FTE program assistant. This assumes that the City would absorb program administration costs as a component of its overall community development expenditures.

(b) Based on Finance Department estimate that maintenance costs for vacant land are about 1/4 percent of property value per year. To simplify, this was calculated as a $/acre value based on a uniform property value of $2.50 per square foot.

Source: BAE, 2000.

Table 5: Land Disposition

	Program Year															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Estimated Land Value Per Acre	$103,891	$110,124	$116,731	$123,735	$131,159	$139,029	$147,371	$156,213	$165,586	$175,521	$186,052	$197,215	$209,048	$221,591	$234,887	$248,980
VALUE OF LAND ASSETS																
Purchased Year 1	$519,453	$550,620	$583,657	$618,677	$655,797											
Purchased Year 2		$550,620	$583,657	$618,677	$655,797	$695,145										
Purchased Year 3			$583,657	$618,677	$655,797	$695,145	$736,854									
Purchased Year 4				$618,677	$655,797	$695,145	$736,854	$781,065								
Purchased Year 5					$655,797	$695,145	$736,854	$781,065	$827,929							
Purchased Year 6						$834,174	$884,225	$937,278	$993,515	$1,053,126						
Purchased Year 7							$1,031,596	$1,093,491	$1,159,101	$1,228,647	$1,302,366					
Purchased Year 8								$1,249,704	$1,324,687	$1,404,168	$1,488,418	$1,577,723				
Purchased Year 9									$1,159,101	$1,228,647	$1,302,366	$1,380,508	$1,463,339			
Purchased Year 10										$1,228,647	$1,302,366	$1,380,508	$1,463,339	$1,551,138		
Purchased Year 11											$1,116,313	$1,183,292	$1,254,290	$1,329,547	$1,409,320	
Purchased Year 12												$1,183,292	$1,254,290	$1,329,547	$1,409,320	$1,493,879
Purchased Year 13													$1,463,339	$1,551,138	$1,644,207	$1,742,859
Purchased Year 14														$1,329,547	$1,409,320	$1,493,879
Purchased Year 15															$1,409,320	$1,493,879
Purchased Year 16																$1,244,899
TOTAL VALUE OF LAND ASSETS	$519,453	$1,101,240	$1,750,972	$2,474,707	$3,278,987	$3,614,756	$4,126,382	$4,842,695	$5,464,332	$6,143,234	$6,511,828	$6,705,323	$6,896,594	$7,090,818	$7,281,487	$7,469,396
Acres Sold (end of prior year)	0	0	0	0	0	5	5	5	5	5	6	7	8	7	7	8
Parcels Sold (end of prior year)	0	0	0	0	0	1.42857143	1.42857143	1.42857143	1.42857143	1.42857143	1.42857143	1.42857143	1.42857143	1.42857143	1.42857143	1.42857143
Year Purchased						1	2	3	4	5	6	7	8	9	10	11
Total Market Value of Property Sold	$0	$0	$0	$0	$0	$695,145	$736,854	$781,065	$827,929	$877,605	$1,116,313	$1,380,508	$1,672,386	$1,551,138	$1,644,207	$1,493,879
Land Sales Price (% of Market)	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Total Value of Sales	$0	$0	$0	$0	$0	$625,631	$663,169	$702,959	$745,136	$789,844	$1,004,682	$1,242,457	$1,505,148	$1,396,025	$1,479,786	$1,344,491
-Land Sales Expenses	$0	$0	$0	$0	$0	($8,780)	($9,086)	($9,406)	($9,735)	($10,076)	($10,428)	($10,793)	($11,171)	($11,562)	($11,967)	($12,386)
Net Sales Proceeds	$0	$0	$0	$0	$0	$616,850	$654,081	$693,553	$735,401	$779,769	$994,254	$1,231,664	$1,493,977	$1,384,462	$1,467,819	$1,332,106
Land Sale Subsidy Provided	*$0*	*$0*	*$0*	*$0*	*$0*	*$80,515*	*$73,685*	*$78,107*	*$82,793*	*$87,760*	*$111,631*	*$138,051*	*$167,239*	*$155,114*	*$164,421*	*$149,388*
Estimated Subsidy Per Unit	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*$1,159*	*$1,238*	*$1,302*	*$1,380*	*$1,463*	*$1,550*	*$1,643*	*$1,742*	*$1,847*	*$1,957*	*$2,075*

Assumptions

Sales Price Appreciation	6.0%	per year.
Year 2000 Land Sales Expenses (per sale)	$5,000	
Sales Cost Inflation	3.5%	per year
Assumed Land Bank Project Density	12	units/acre

Source: BAE, 2000.

Table 6: Land Bank Cash Flow Summary

	Program Year (2000 = 0)														
Land Bank Inventory Summary	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Acres Acquired	5	5	5	5	5	6	7	6	7	7	6	6	7	6	6
Acres Sold	0	0	0	0	0	5	5	5	5	5	6	7	8	7	7
Acres Owned	5	10	15	20	25	26	28	31	33	35	35	34	33	32	31
Annual Expenditures Summary															
Property Acquisition Costs	$526,846	$558,272	$591,577	$626,873	$664,281	$844,711	$1,044,318	$1,264,754	$1,172,730	$1,242,753	$1,128,827	$1,196,244	$1,478,979	$1,343,422	$1,423,680
Operations and Maintenance Costs	$1,423	$2,946	$4,573	$6,311	$8,165	$8,789	$9,797	$11,226	$12,368	$13,577	$14,052	$14,128	$14,193	$14,245	$14,282
Annual Interest Payments	$0	$0	$0	$0	$0	$2,578	$0	$0	$0	$0	$0	$0	$0	$0	$0
Debt Payoff (a)	$0	$0	$0	$0	$0	$42,849	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal Expenditures	$528,269	$561,218	$596,150	$633,185	$672,446	$899,027	$1,054,115	$1,275,979	$1,185,098	$1,256,330	$1,142,880	$1,210,373	$1,493,171	$1,357,666	$1,437,962
Annual Income Summary															
General Fund Capital Investment	$925,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$0	$0	$0	$0	$0
Prior Year Cash Flow	$0	$396,731	$360,309	$286,678	$171,411	$52,526	$273,633	$390,701	$332,693	$403,790	$452,465	$332,118	$374,167	$398,358	$450,052
Debt Proceeds	$0	$0	$0	$0	$42,849	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Interim Use Income	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Property Sales Proceeds	$0	$0	$0	$0	$0	$616,850	$654,081	$693,553	$735,401	$779,769	$994,254	$1,231,994	$1,493,977	$1,384,482	$1,467,519
Interest on Prior Year's Cash Bal.	$0	$24,796	$22,519	$17,917	$10,713	$3,283	$17,102	$24,419	$20,793	$25,237	$28,279	$20,757	$23,385	$24,897	$28,129
Subtotal Income	$925,000	$921,527	$882,828	$804,595	$724,973	$1,172,659	$1,444,816	$1,608,673	$1,588,886	$1,708,796	$1,474,998	$1,584,869	$1,891,529	$1,807,718	$1,945,699
Cash Flow Retained in Program	$396,731	$360,309	$286,678	$171,411	$52,526	$273,633	$390,701	$332,693	$403,790	$452,465	$332,118	$374,167	$398,358	$450,052	$508,037
Net Land Bank Cash Flow	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
NPV of 15 yrs. Cash Flow (a)	*$0*														
-or-															
Annual Investment (2000 $) (b)	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*

NPV of Land Sale Subsidies Provided (15 yrs)	$573,088
NPV of Net Assets at Year 15	$3,137,460
Total Financial Returns (15 yrs)	**$3,710,548**
NPV of Initial General Fund Investments	($3,822,913)
NPV of Annual Program Subsidies (15 yrs)	$0
Total NPV of Program Investments	**($3,822,913)**
NET PROGRAM COST	**$112,366**

Land Bank Acres Purchased	91

Notes:
(a) For purposes of this analysis, discount rate is set equal to the City's investment earnings rate.
(b) Future subsidy payments are deflated to 2000 $ using annual general inflation rate assumption from Table 1.

Source: BAE, 2000.

Table 1: Land Bank Feasibility Study Key Assumptions

Initial City Investments (spread over Years 0 and 1)	$925,000	
Additional Annual City Investments	$500,000 per year, for 10 years	
Average Acres Acquired Per Year	5.0 acres	
Average Parcel Size	3.5 acres	
Average Purchase Transactions Per Year	1.4 transaction per year	
	At Purchase	**At Sale**
Land Value	$2.25 per square foot	$3.01 per square foot
Interest Rate for Land Bank Borrowing (a)	6.25% per year	
Number of Years Land Held Before Sale	10 years	
Land Value Appreciation Rate	6.00% per year	
Land Purchase/Sale Transaction Costs	$5,000 per transaction	
General Inflation Rate	3.5% per year	
Interim Use/Income Assumptions	$0.00 per acre, per year	
Interim Maintenance Cost Assumptions (b)	$275 per acre, per year	
Program Administration Costs (Not Charged to Land Bank Program, Absorbed by General Fund)		
Program Manager		
Salary & Benefits	$65,000 per year	
FTE	0.25 FTE assigned to program	
Program Assistant		
Salary & Benefits	$36,400 per year	
FTE	0.15 FTE assigned to program	
Sales Price Discount: Sales Price as Pct. of Market Value	90% of future market value	

Notes:
(a) Assumes capital is obtained through internal borrowing. Interest rate is equal to City's normal return on investments, which was approximately 6.25 percent as of 9/27/00.
(b) Interim land maintenance cost is based on information from Finance Department indicating that maintenance costs are usually approximately 0.25 percent of property value each year. This assumes an approximately $2.50 per square foot land value.

Sources: City of Fort Collins; BAE, 2000.

Table 2: Land Acquisition

	Program Year (2000 = 0)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Number of Transactions	1.4	1.4	1.4	1.4	1.4	1.7	2.0	2.3	2.0	2.0	1.7	1.7	2.0	1.7	1.7
Acres of Land Acquired	5	5	5	5	5	6	7	8	7	7	6	6	7	6	6
Land Purchase Price	$519,453	$550,620	$583,657	$618,677	$655,797	$834,174	$1,031,596	$1,249,704	$1,159,101	$1,228,647	$1,116,313	$1,183,292	$1,463,398	$1,329,547	$1,409,320
Other Acquisition Costs	$7,393	$7,552	$7,919	$8,197	$8,483	$10,536	$12,723	$15,049	$13,629	$14,106	$12,514	$12,952	$15,840	$13,875	$14,390
Total Acquisition Costs	$526,846	$558,272	$591,577	$626,873	$664,281	$844,711	$1,044,318	$1,264,754	$1,172,730	$1,242,753	$1,128,827	$1,196,244	$1,479,378	$1,343,422	$1,423,680

Assumptions

Type of Land	Current Value/ac.	Anticipated Price Increase /year
Vacant Residential Land, No Water	$98,010	6.0%
Estimated "Other" Costs	**Per Transaction**	**Cost Inflation/year**
	$5,000	3.5%

Source: BAE, 2000.

Table 3: Acquisition Financing Assumptions

	Program Year (2000 = 0)															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Starting Capital	$0	$425,000	$396,154	$339,882	$248,306	$121,432	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
New City General Revenues	$425,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$0	$0	$0	$0
Net Proceeds from Sales	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$575,836	$810,435	$947,331	$688,450	$727,926
Sub-total Available Capital	$425,000	$925,000	$896,154	$839,882	$748,306	$621,432	$500,000	$500,000	$500,000	$500,000	$500,000	$1,075,836	$810,435	$947,331	$688,450	$727,926
Less Acquisition Costs	$0	$526,846	$558,272	$591,577	$626,873	$664,281	$844,711	$1,044,318	$1,264,754	$1,172,730	$1,242,753	$1,128,827	$1,196,244	$1,479,378	$1,343,422	$1,423,680
Sub-total	$425,000	$398,154	$339,882	$248,306	$121,432	($42,849)	($344,711)	($544,318)	($764,754)	($672,730)	($742,753)	($53,191)	($385,809)	($531,947)	($654,972)	($695,754)
Amount Available for Debt Paydown	$425,000	$398,154	$339,882	$248,306	$121,432	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Starting Debt	$0	$0	$0	$0	$0	$0	$42,849	$387,560	$931,878	$1,696,632	$2,369,361	$3,112,114	$3,166,306	$3,751,115	$4,582,761	$5,239,733
Increase Debt Balance	$0	$0	$0	$0	$0	$42,849	$344,711	$544,318	$764,754	$672,730	$742,753	$53,191	$585,809	$831,647	$656,972	$695,754
Debt Paydown	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Ending Debt	$0	$0	$0	$0	$0	$42,849	$387,560	$931,878	$1,696,632	$2,369,361	$3,112,114	$3,166,306	$3,751,115	$4,582,761	$5,239,733	$5,935,487
End of Year Capital	$425,000	$398,154	$339,882	$248,306	$121,432	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
End of Year Land Assets Value		$519,453	$1,101,240	$1,750,972	$2,474,707	$3,278,987	$4,209,961	$5,600,000	$7,185,800	$8,770,048	$10,531,259	$11,348,167	$12,227,353	$13,379,091	$14,400,426	$15,592,520

Source: BAE, 2000.

Table 4: Annual Operating Costs

Acres of Land Owned	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
New Acres Acquired	5	5	5	5	5	6	7	8	7	7	6	6	7	6	6
Cumulative Acres Acquired	5	10	15	20	25	31	38	46	53	60	66	72	79	85	91
-Acres Sold	0	0	0	0	0	0	0	0	0	0	-3.5	-3.5	-3.5	-3.5	-3.5
Cumulative Acres Sold	0	0	0	0	0	0	0	0	0	0	-3.5	-7	-10.5	-14	-17.5
Net Acres Owned	5	10	15	20	25	31	38	46	53	60	62.5	65	68.5	71	73.5
Annual Maintenance Costs (taxes, assessments, weed control, snow/ice removal, etc.)															
Vacant Land Owned	$1,423	$2,946	$4,573	$6,311	$8,165	$10,479	$13,295	$16,658	$19,864	$23,275	$25,093	$27,010	$29,461	$31,606	$33,863
Annual Debt Service															
Annual Debt Outstanding	$0	$0	$0	$0	$42,849	$387,560	$931,878	$1,696,632	$2,369,361	$3,112,114	$3,165,306	$3,751,115	$4,582,761	$5,239,733	$6,005,487
Annual Interest Accrual (interest on prior year)	$0	$0	$0	$0	$0	$2,678	$24,222	$68,242	$106,039	$148,085	$194,507	$197,832	$234,445	$299,423	$327,483
Total Annual Operating Costs (a)	$1,423	$2,946	$4,573	$6,311	$8,165	$13,157	$37,518	$74,900	$125,904	$171,360	$219,600	$224,842	$263,906	$318,028	$361,346
Operating Costs as % of Land Assets	*0.3%*	*0.3%*	*0.3%*	*0.3%*	*0.2%*	*0.3%*	*0.7%*	*1.0%*	*1.4%*	*1.6%*	*1.9%*	*1.8%*	*2.0%*	*2.2%*	*2.3%*

Assumptions

	Maintenance Cost/acre	Inflation
Maintenance Costs for Vacant Land Owned	$275 (b)	3.5%
Debt Interest Rate	6.25%	

Notes:
(a) Annual program administration costs are estimated at approximately $22,000, based on approximately 1/4 FTE program manager and .15 FTE program assistant. This assumes that the City would absorb program administration costs as a component of its own
(b) Based on Finance Department estimate that maintenance costs for vacant land are about 1/4 percent of property value per year. To simplify, this was calculated as a $/acre value based on a uniform property value of $2.50 per square foot.

Source: BAE, 2000.

Table 5: Land Disposition

	Program Year															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Estimated Land Value Per Acre	$103,591	$110,124	$116,731	$123,735	$131,159	$139,029	$147,371	$156,213	$165,586	$175,521	$186,052	$197,215	$209,048	$221,591	$234,887	$248,980
VALUE OF LAND ASSETS																
Purchased Year 1	$519,453	$550,620	$583,657	$618,677	$655,797	$695,145	$736,854	$781,065	$827,929	$877,605						
Purchased Year 2		$550,620	$583,657	$618,677	$655,797	$695,145	$736,854	$781,065	$827,929	$877,605	$930,261					
Purchased Year 3			$583,657	$618,677	$655,797	$695,145	$736,854	$781,065	$827,929	$877,605	$930,261	$986,077				
Purchased Year 4				$618,677	$655,797	$695,145	$736,854	$781,065	$827,929	$877,605	$930,261	$986,077	$1,045,241			
Purchased Year 5					$655,797	$695,145	$736,854	$781,065	$827,929	$877,605	$930,261	$986,077	$1,045,241	$1,107,956		
Purchased Year 6						$834,174	$884,225	$937,278	$993,515	$1,053,126	$1,116,313	$1,183,292	$1,254,290	$1,329,547	$1,409,320	
Purchased Year 7							$1,031,596	$1,083,491	$1,159,101	$1,228,647	$1,302,366	$1,380,508	$1,463,338	$1,551,138	$1,644,207	$1,742,859
Purchased Year 8								$1,249,704	$1,324,687	$1,404,168	$1,488,418	$1,577,723	$1,672,386	$1,772,730	$1,879,093	$1,991,839
Purchased Year 9									$1,158,101	$1,228,647	$1,302,366	$1,380,508	$1,463,338	$1,551,138	$1,644,207	$1,742,859
Purchased Year 10										$1,228,647	$1,302,366	$1,380,508	$1,463,338	$1,551,138	$1,644,207	$1,742,859
Purchased Year 11											$1,116,313	$1,183,292	$1,254,290	$1,329,547	$1,409,320	$1,493,879
Purchased Year 12												$1,183,292	$1,254,290	$1,329,547	$1,409,320	$1,493,879
Purchased Year 13													$1,463,338	$1,551,138	$1,644,207	$1,742,859
Purchased Year 14														$1,329,547	$1,409,320	$1,493,879
Purchased Year 15															$1,409,320	$1,493,879
Purchased Year 16																$1,493,879
TOTAL VALUE OF LAND ASSETS	$519,453	$1,101,240	$1,750,972	$2,474,707	$3,278,987	$4,309,901	$5,600,080	$7,185,800	$8,776,049	##########	##########	##########	##########	##########	##########	##########
Acres Sold	0	0	0	0	0	0	0	0	0	0	3.5	3.5	3.5	3.5	3.5	3.5
Parcels Sold (end of prior year)	0	0	0	0	0	0	0	0	0	0	1.42857143	1.42857143	1.42857143	1.42857143	1.42857143	1.42857143
Year Purchased						(4)	(3)	(2)	(1)	-	1	2	3	4	5	6
Total Market Value of Property Sold	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$551,183	$690,254	$731,669	$775,569	$822,103	$871,430
Land Sales Price (% of Market)	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Total Value of Sales	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$496,065	$621,228	$658,502	$698,012	$739,893	$784,287
-Land Sales Expenses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	($10,428)	($10,793)	($11,171)	($11,562)	($11,967)	($12,386)
Net Sales Proceeds	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$575,636	$610,435	$647,331	$686,450	$727,926	$771,901
Land Sale Subsidy Provided	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$65,118*	*$69,025*	*$73,167*	*$77,557*	*$82,210*	*$87,143*
Estimated Subsidy Per Unit	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*$1,550*	*$1,643*	*$1,742*	*$1,847*	*$1,957*	*$2,075*

Assumptions

Sales Price Appreciation	6.0% per year.
Year 2000 Land Sales Expenses (per sale)	$5,000
Sales Cost Inflation	3.5% per year
Assumed Land Bank Project Density	12 units/acre

Source: BAE, 2000.

Table 6: Land Bank Cash Flow Summary

	Program Year (2000 = 0)														
Land Bank Inventory Summary	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Acres Acquired	5	5	5	5	5	6	7	8	7	7	6	6	7	6	6
Acres Sold	0	0	0	0	0	0	0	0	0	0	3.5	3.5	3.5	3.5	3.5
Acres Owned	5	10	15	20	25	31	38	46	53	60	62.5	65	68.5	71	73.5
Annual Expenditures Summary															
Property Acquisition Costs	$526,846	$558,272	$591,577	$626,873	$664,281	$844,711	$1,044,318	$1,264,754	$1,172,730	$1,242,753	$1,128,827	$1,196,244	$1,478,978	$1,343,422	$1,423,660
Operations and Maintenance Costs	$1,423	$2,946	$4,573	$6,311	$8,165	$10,479	$13,295	$16,656	$19,864	$23,275	$25,093	$27,010	$29,461	$31,605	$33,863
Annual Interest Payments	$0	$0	$0	$0	$0	$2,579	$24,222	$58,242	$106,039	$148,085	$194,507	$197,832	$234,445	$286,423	$327,483
Debt Payoff (a)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal Expenditures	$528,269	$561,218	$596,150	$633,185	$672,446	$857,868	$1,081,836	$1,339,654	$1,298,634	$1,414,113	$1,348,428	$1,421,086	$1,742,883	$1,661,449	$1,785,026
Annual Income Summary															
General Fund Capital Investment	$925,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$0	$0	$0	$0
Prior Year Cash Flow	$0	$396,731	$360,309	$296,678	$171,411	$52,526	$42,652	$7,800	$0	$0	$0	$0	$0	$0	$0
Debt Proceeds	$0	$0	$0	$0	$42,849	$344,711	$544,318	$764,754	$672,730	$742,753	$53,191	$585,809	$831,647	$656,972	$695,754
Interim Use Income	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Property Sales Proceeds	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$575,636	$610,435	$647,331	$686,450	$727,909
Interest on Prior Year's Cash Bal.	$0	$24,796	$22,519	$17,917	$10,713	$3,283	$2,668	$487	$0	$0	$0	$0	$0	$0	$0
Subtotal Income	$925,000	$921,527	$882,828	$804,595	$724,973	$900,520	$1,089,638	$1,273,041	$1,172,730	$1,242,753	$1,128,827	$1,196,244	$1,478,978	$1,343,422	$1,423,660
Cash Flow Retained in Program	$396,731	$360,309	$296,678	$171,411	$52,526	$42,652	$7,800	$0	$0	$0	$0	$0	$0	$0	$0
Net Land Bank Cash Flow	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**($66,613)**	**($125,904)**	**($171,360)**	**($219,600)**	**($224,842)**	**($263,906)**	**($318,028)**	**($361,366)**
NPV of 15 yrs. Cash Flow (a)	($830,420)														
-or-															
Annual Investment (2000 $) (b)	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*($52,357)*	*($95,613)*	*($125,732)*	*($155,679)*	*($154,005)*	*($174,648)*	*($203,348)*	*($223,239)*

NPV of Land Sale Subsidies Provided (15 yrs)	$166,345
NPV of Net Assets at Year 15	$3,853,392
Total Financial Returns (15 yrs)	**$4,019,738**
NPV of Initial General Fund Investments	($4,064,472)
NPV of Annual Program Subsidies (15 yrs)	($830,420)
Total NPV of Program Investments	**($4,894,892)**
NET PROGRAM COST	**$875,155**

Land Bank Acres Purchased	91

Notes:

(a) For purposes of this analysis, discount rate is set equal to the City's investment earnings rate.

(b) Future subsidy payments are deflated to 2000 $ using annual general inflation rate assumption from Table 1.

Source: BAE, 2000.

Table 6: Land Bank Cash Flow Summary

	Program Year (2000 = 0)														
Land Bank Inventory Summary	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Acres Acquired	5	5	5	5	5	6	7	8	7	7	6	6	7	6	6
Acres Sold	0	0	0	0	0	0	0	0	0	0	3.5	3.5	3.5	3.5	3.5
Acres Owned	5	10	15	20	25	31	38	46	53	60	62.5	65	68.5	71	73.5
Annual Expenditures Summary															
Property Acquisition Costs	$526,846	$558,272	$591,577	$626,873	$664,281	$844,711	$1,044,318	$1,264,754	$1,172,730	$1,242,753	$1,128,827	$1,196,244	$1,478,978	$1,343,422	$1,423,660
Operations and Maintenance Costs	$1,423	$2,946	$4,573	$6,311	$8,165	$10,479	$13,295	$16,656	$19,864	$23,275	$25,093	$27,010	$29,461	$31,605	$33,863
Annual Interest Payments	$0	$0	$0	$0	$0	$2,579	$24,222	$58,242	$106,039	$148,085	$194,507	$197,832	$234,445	$286,423	$327,483
Debt Payoff (a)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal Expenditures	$528,269	$561,218	$596,150	$633,185	$672,446	$857,868	$1,081,836	$1,339,654	$1,298,634	$1,414,113	$1,348,428	$1,421,086	$1,742,883	$1,661,449	$1,785,026
Annual Income Summary															
General Fund Capital Investment	$925,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$0	$0	$0	$0
Prior Year Cash Flow	$0	$396,731	$360,309	$296,678	$171,411	$52,526	$42,652	$7,800	$0	$0	$0	$0	$0	$0	$0
Debt Proceeds	$0	$0	$0	$0	$42,849	$344,711	$544,318	$764,754	$672,730	$742,753	$53,191	$586,809	$831,647	$656,972	$695,754
Interim Use Income	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Property Sales Proceeds	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$575,636	$610,435	$647,331	$686,450	$727,909
Interest on Prior Year's Cash Bal.	$0	$24,796	$22,519	$17,917	$10,713	$3,283	$2,668	$487	$0	$0	$0	$0	$0	$0	$0
Subtotal Income	$925,000	$921,527	$882,828	$804,595	$724,973	$900,520	$1,089,638	$1,273,041	$1,172,730	$1,242,753	$1,128,827	$1,196,244	$1,478,978	$1,343,422	$1,423,660
Cash Flow Retained in Program	$396,731	$360,309	$296,678	$171,411	$52,526	$42,652	$7,800	$0	$0	$0	$0	$0	$0	$0	$0
Net Land Bank Cash Flow	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**($66,613)**	**($125,904)**	**($171,360)**	**($219,600)**	**($224,842)**	**($263,906)**	**($318,028)**	**($361,366)**
NPV of 15 yrs. Cash Flow (a)	($830,420)														
-or-															
Annual Investment (2000 $) (b)	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*($52,357)*	*($95,613)*	*($125,732)*	*($155,679)*	*($154,005)*	*($174,648)*	*($203,348)*	*($223,239)*

NPV of Land Sale Subsidies Provided (15 yrs)	$166,345
NPV of Net Assets at Year 15	$3,853,392
Total Financial Returns (15 yrs)	**$4,019,738**
NPV of Initial General Fund Investments	($4,064,472)
NPV of Annual Program Subsidies (15 yrs)	($830,420)
Total NPV of Program Investments	**($4,894,892)**
NET PROGRAM COST	**$875,155**

Land Bank Acres Purchased	91

Notes:

(a) For purposes of this analysis, discount rate is set equal to the City's investment earnings rate.

(b) Future subsidy payments are deflated to 2000 $ using annual general inflation rate assumption from Table 1.

Source: BAE, 2000.

Table 1: Land Bank Feasibility Study Key Assumptions

Initial City Investments (spread over Years 0 and 1)	$925,000			
Additional Annual City Investments	$0	per year, for 10 years		
Average Acres Acquired Per Year	3.5	acres		
Average Parcel Size	3.5	acres		
Average Purchase Transactions Per Year	1	transaction per year		
	At Purchase		**At Sale**	
Land Value	$2.25	per square foot	$3.01	per square foot
Interest Rate for Land Bank Borrowing (a)	13.50%	per year		
Number of Years Land Held Before Sale	5	years		
Land Value Appreciation Rate	6.00%	per year		
Land Purchase/Sale Transaction Costs	$5,000	per transaction		
General Inflation Rate	3.5%	per year		
Interim Use/Income Assumptions	$0.00	per acre, per year		
Interim Maintenance Cost Assumptions (b)	$275	per acre, per year		
Program Administration Costs				
Program Manager				
Salary & Benefits	$65,000	per year		
FTE	0.25	FTE assigned to program		
Program Assistant				
Salary & Benefits	$36,400	per year		
FTE	0.15	FTE assigned to program		
Sales Price Discount: Sales Price as Pct. of Market Value	90%	of future market value		

Notes:
(a) Assumes capital is obtained from a commercial lender at a rate of prime plus 4%.
(b) Interim land maintenance cost is based on information from Finance Department indicating that maintenance costs are usually approximately 0.25 percent of property value each year. This assumes an approximately $2.50 per square foot land value.

Sources: City of Fort Collins; BAE, 2000.

Table 2: Land Acquisition

	Program Year (2000 = 0)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Number of Transactions	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Acres of Land Acquired	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Land Purchase Price	$363,617	$385,434	$408,560	$433,074	$459,058	$486,602	$515,798	$546,746	$579,550	$614,323	$651,183	$690,254	$731,669	$775,569	$822,103
Other Acquisition Costs	$5,175	$5,356	$5,544	$5,739	$5,938	$6,146	$6,361	$6,584	$6,814	$7,053	$7,300	$7,555	$7,820	$8,093	$8,377
Total Acquisition Costs	$368,792	$390,790	$414,104	$438,811	$464,997	$492,748	$522,159	$553,330	$586,365	$621,376	$658,483	$697,809	$739,489	$783,663	$830,480

Assumptions

Type of Land	Current Value/ac.	Anticipated Price Increase /Year
Vacant Residential Land, No Water	$98,010	6.0%
Estimated "Other" Costs	**Per Transaction** $5,000	**Cost Inflation/year** 3.5%

Source: BAE, 2000.

Table 3: Acquisition Financing Assumptions

	Program Year (2000 = 0)															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Starting Capital	$0	$425,000	$556,208	$165,418	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
New City General Revenues	$425,000	$500,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Proceeds from Sales	$0	$0	$0	$0	$0	$0	$431,795	$457,857	$485,487	$514,781	$545,838	$578,765	$613,673	$650,682	$689,919	$731,516
Sub-total Available Capital	$425,000	$925,000	$556,208	$165,418	$0	$0	$431,795	$457,857	$485,487	$514,781	$545,838	$578,765	$613,673	$650,682	$689,919	$731,516
Less Acquisition Costs	$0	$368,792	$390,790	$414,104	$438,811	$464,997	$492,748	$522,159	$553,330	$586,365	$621,376	$658,483	$697,809	$739,489	$783,663	$830,480
Sub-total	$425,000	$556,208	$165,418	($248,686)	($438,811)	($464,997)	($60,953)	($64,303)	($67,843)	($71,584)	($75,538)	($79,718)	($84,136)	($88,806)	($93,744)	($98,964)
Amount Available for Debt Paydown	$425,000	$556,208	$165,418	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Starting Debt	$0	$0	$0	$0	$248,686	$687,498	$1,152,494	$1,213,447	$1,277,749	$1,345,592	$1,417,176	$1,492,714	$1,572,432	$1,656,569	$1,745,375	$1,839,119
Increase Debt Balance	$0	$0	$0	$248,686	$438,811	$464,997	$60,953	$64,303	$67,843	$71,584	$75,538	$79,718	$84,136	$88,806	$93,744	$98,964
Debt Paydown	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Ending Debt	$0	$0	$0	$248,686	$687,498	$1,152,494	$1,213,447	$1,277,749	$1,345,592	$1,417,176	$1,492,714	$1,572,432	$1,656,569	$1,745,375	$1,839,119	$1,938,083
End of Year Capital	$425,000	$556,208	$165,418	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
End of Year Land Assets Value		*$363,617*	*$770,868*	*$1,225,681*	*$1,732,295*	*$2,295,291*	*$2,433,009*	*$2,579,989*	*$2,733,729*	*$2,897,752*	*$3,071,617*	*$3,255,914*	*$3,451,269*	*$3,658,345*	*$3,877,846*	*$4,110,517*

Source: BAE, 2000.

Table 4: Annual Operating Costs

Acres of Land Owned	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
New Acres Acquired	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Cumulative Acres Acquired	3.5	7	10.5	14	17.5	21	24.5	28	31.5	35	38.5	42	45.5	49	52.5
-Acres Sold	0	0	0	0	0	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5
Cumulative Acres Sold	0	0	0	0	0	-3.5	-7	-10.5	-14	-17.5	-21	-24.5	-28	-31.5	-35
Net Acres Owned	3.5	7	10.5	14	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
Annual Maintenance Costs (taxes, assessments, weed control, snowplow removal, etc.)															
Vacant Land Owned	$696	$2,062	$3,201	$4,418	$5,716	$5,916	$6,123	$6,337	$6,559	$6,789	$7,026	$7,272	$7,527	$7,790	$8,063
Annual Debt Service															
Annual Debt Outstanding	$0	$0	$248,686	$667,498	$1,152,494	$1,213,447	$1,277,749	$1,345,592	$1,417,176	$1,492,714	$1,572,432	$1,656,593	$1,745,375	$1,839,119	$1,938,083
Annual Interest Accrual (interest on prior year)	$0	$0	$0	$33,573	$92,612	$155,567	$163,815	$172,496	$181,655	$191,319	$201,516	$212,278	$223,637	$235,628	$248,281
Total Annual Operating Costs (a)	$696	$2,062	$3,201	$37,991	$98,328	$161,503	$169,938	$178,833	$188,214	$198,107	$208,543	$219,550	$231,163	$243,418	$256,344
Operating Costs as % of Land Assets	*0.3%*	*0.3%*	*0.3%*	*2.2%*	*4.3%*	*6.8%*	*6.6%*	*6.5%*	*6.5%*	*6.4%*	*6.4%*	*6.4%*	*6.3%*	*6.3%*	*6.2%*

Assumptions

	Maintenance Cost/acre	Inflation
Maintenance Costs for Vacant Land Owned	$275 (b)	3.5%
Debt Interest Rate	13.50%	

Notes:
(a) Annual program administration costs are estimated at approximately $22,000, based on approximately 1/4 FTE program manager and .15 FTE program assistant. This assumes that the City would absorb program administration costs as a component of its over
(b) Based on Finance Department estimate that maintenance costs for vacant land are about 1/4 percent of property value per year. To simplify, this was calculated as a $/acre value based on a uniform property value of $2.50 per square foot.

Source: BAE, 2000.

Table 5: Land Disposition

	Program Year														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Estimated Land Value Per Acre	$103,891	$110,124	$116,731	$123,735	$131,159	$139,029	$147,371	$156,213	$165,586	$175,521	$186,052	$197,215	$209,048	$221,591	$234,887
VALUE OF LAND ASSETS															
Purchased Year 1	$363,617	$385,434	$408,560	$433,074	$459,058										
Purchased Year 2		$385,434	$408,560	$433,074	$459,058	$486,602									
Purchased Year 3			$408,560	$433,074	$459,058	$486,602	$515,798								
Purchased Year 4				$433,074	$459,058	$486,602	$515,798	$546,746							
Purchased Year 5					$459,058	$486,602	$515,798	$546,746	$579,550						
Purchased Year 6						$486,602	$515,798	$546,746	$579,550	$614,323					
Purchased Year 7							$515,798	$546,746	$579,550	$614,323	$651,183				
Purchased Year 8								$546,746	$579,550	$614,323	$651,183	$690,254			
Purchased Year 9									$579,550	$614,323	$651,183	$690,254	$731,669		
Purchased Year 10										$614,323	$651,183	$690,254	$731,669	$775,569	
Purchased Year 11											$651,183	$690,254	$731,669	$775,569	$822,103
Purchased Year 12												$690,254	$731,669	$775,569	$822,103
Purchased Year 13													$731,669	$775,569	$822,103
Purchased Year 14														$775,569	$822,103
Purchased Year 15															$822,103
Purchased Year 16															
TOTAL VALUE OF LAND ASSETS	$363,617	$770,868	$1,225,681	$1,732,295	$2,295,291	$2,433,009	$2,579,989	$2,733,728	$2,897,752	$3,071,617	$3,255,914	$3,451,269	$3,658,345	$3,877,846	$4,110,517
Acres Sold (end of prior year)	0	0	0	0	0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Parcels Sold (end of prior year)	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1
Year Purchased						1	2	3	4	5	6	7	8	9	10
Total Market Value of Property Sold	$0	$0	$0	$0	$0	$486,602	$515,798	$546,746	$579,550	$614,323	$651,183	$690,254	$731,669	$775,569	$822,103
Land Sales Price (% of Market)	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Total Value of Sales	$0	$0	$0	$0	$0	$437,942	$464,218	$492,071	$521,595	$552,891	$586,065	$621,229	$658,502	$698,012	$739,893
-Land Sales Expenses	$0	$0	$0	$0	$0	($6,146)	($6,361)	($6,584)	($6,814)	($7,053)	($7,300)	($7,555)	($7,820)	($8,093)	($8,377)
Net Sales Proceeds	$0	$0	$0	$0	$0	$431,795	$457,857	$485,487	$514,781	$545,838	$578,765	$613,673	$650,682	$689,919	$731,516
Land Sale Subsidy Provided	*$0*	*$0*	*$0*	*$0*	*$0*	*$48,660*	*$51,580*	*$54,675*	*$57,955*	*$61,432*	*$65,118*	*$69,025*	*$73,167*	*$77,557*	*$82,210*
Estimated Subsidy Per Unit	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*#DIV/0!*	*$1,159*	*$1,228*	*$1,302*	*$1,380*	*$1,463*	*$1,550*	*$1,643*	*$1,742*	*$1,847*	*$1,957*

Assumptions		
Sales Price Appreciation	6.0%	per year.
Year 2000 Land Sales Expenses (per sale)	$5,000	
Sales Cost Inflation	3.5%	per year
Assumed Land Bank Project Density	12	units/acre

Source: BAE, 2000.

Table 6: Land Bank Cash Flow Summary

	Program Year (2000 = 0)														
Land Bank Inventory Summary	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Acres Acquired	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Acres Sold	0	0	0	0	0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Acres Owned	3.5	7	10.5	14	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
Annual Expenditures Summary															
Property Acquisition Costs	$368,792	$390,790	$414,104	$438,811	$464,997	$492,748	$522,159	$553,330	$586,365	$621,376	$658,483	$697,809	$739,469	$783,663	$830,480
Operations and Maintenance Costs	$936	$2,062	$3,201	$4,418	$5,716	$5,916	$6,123	$6,337	$6,559	$6,789	$7,026	$7,272	$7,527	$7,790	$8,063
Annual Interest Payments	$0	$0	$0	$33,573	$82,812	$155,587	$163,815	$172,496	$181,655	$191,319	$201,518	$212,278	$223,617	$235,626	$248,281
Debt Payoff (a)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal Expenditures	$369,788	$392,852	$417,305	$476,802	$553,525	$654,250	$692,097	$732,163	$774,579	$819,484	$867,025	$917,360	$970,652	$1,027,078	$1,086,824
Annual Income Summary															
General Fund Capital Investment	$925,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Prior Year Cash Flow	$0	$555,212	$237,313	$100,731	$76,339	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Debt Proceeds	$0	$0	$248,686	$438,811	$464,997	$80,953	$84,303	$87,843	$71,584	$75,538	$79,718	$84,136	$88,806	$93,744	$98,964
Interim Use Income	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Property Sales Proceeds	$0	$0	$0	$0	$0	$431,795	$457,857	$485,487	$514,781	$545,838	$578,765	$613,673	$650,692	$689,919	$731,516
Interest on Prior Year's Cash Bal.	$0	$74,954	$32,037	$13,599	$10,306	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal Income	$925,000	$630,165	$518,036	$553,141	$551,642	$492,748	$522,159	$553,330	$586,365	$621,376	$658,483	$697,809	$739,499	$783,663	$830,480
Cash Flow Retained in Program	$555,212	$237,313	$100,731	$76,339	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Land Bank Cash Flow	**$0**	**$0**	**$0**	**$0**	**($11,883)**	**($161,503)**	**($169,938)**	**($178,833)**	**($188,214)**	**($198,107)**	**($208,543)**	**($219,550)**	**($231,163)**	**($243,416)**	**($256,344)**
NPV of 15 yrs. Cash Flow (a)	*($556,971)*														
Annual Investment (2000 $) (b)	*$0*	*$0*	*$0*	*$0*	*($10,355)*	*($135,981)*	*($138,245)*	*($140,561)*	*($142,932)*	*($145,357)*	*($147,840)*	*($150,380)*	*($152,980)*	*($155,641)*	*($158,364)*

NPV of Land Sale Subsidies Provided (15 yrs)	$304,982
NPV of Net Assets at Year 15	$325,094
Total Financial Returns (15 yrs)	**$659,758**
NPV of Initial General Fund Investments	($762,580)
NPV of Annual Program Subsidies (15 yrs)	($556,971)
Total NPV of Program Investments	**($1,319,551)**
NET PROGRAM COST	**$659,796**

Land Bank Acres Purchased	53

Notes:
(a) For purposes of this analysis, discount rate is set equal to the City's investment earnings rate.
(b) Future subsidy payments are deflated to 2000 $ using annual general inflation rate assumption from Table 1.

Source: BAE, 2000.

APPENDIX C: LAND BANK PROGRAM CONTACTS

Potential Federal Funding Sources

HUD:
Paul Caoutte, 303-672-5443 x1418
Community Development
HUD Denver Office
633 17th Street
Denver, CO 80202
303-672-5440
Fax: 303-672-5004
paul_a._caoutte@hud.gov

HOME, GDBG, EDI, BEDI,

Potential State Funding Sources

State Department of Local Affairs, Division of Housing
Tom Hart, Director, 303-866-2033
Melissa Stirdivant, Region 2 Staff Contact, 303-866-4964, Fax 303-866-4077
melissa.stirdivant@state.co.us

State Treasurer's Office
Michael Coffman, Treasurer
303-894-2443 Staff 303-894-2448

Mike Tervieski, CULHIP Coordinator
303-866-2327

State Department of Housing and Finance
Missy Peterson 303-297-7340

Note: Ms. Peterson referred for rental housing

Potential Private/Charitable Funding Sources.

Housing Assistance Council
Victor Hernandez
1025 Vermont Avenue, NW, Ste. 606
Washington, D. C. 20005
202-842-8600

Neighborhood Reinvestment Corporation
Grace Buckley Rocky Mountain District Director
1776 So. Jackson St Suite 810
Denver CO 80210
303-782-0299
FAX 303-782-5568
Mdavis@nw.org

Notes: NRC is primary funder of mutual housing throughout United States

Funding Partners for Housing Solutions
Karen Gerard
Director
PO Box 2731
Loveland, CO 80539
970-204-1400
FAX 970-204-1475

Note: Expertise in utilizing CDFI funds and in CRA partnering and latest state legislation facilitating such partnering

Existing Housing Land Bank Programs

City of Redwood City, California
Debbie Jones-Thomas, Housing Coordinator
P.O. Box 391
Redwood City, CA 94064
650-7807290
FAX 650-780-0128

City of San Mateo, California
Sandy Council, 650-522-7223
Neighborhood Improvement and Housing Division
650- 522-7220
nih@ci.sanmateo.ca.us.

City of Boulder, Colorado
John Pollak, Housing Director, 303-441-4144 pollakj@ci.boulder.co.us
Jann Oldham, Housing/Community Dev. Manager oldhamj@ci.boulder.co.us
1101 Arapahoe 2nd Fl.
Boulder, CO 80306
303-441-3157
FAX 303-441-4368
Notes: Very effective at attaining set asides from Col. Div. of Housing.

City of Oakland
Roy Schweyer Director, Housing & Community Development, 510-238-3501
Community and Economic Development Agency
250 Frank Ogawa Plaza 5th Fl.
Oakland, CA 94612

Notes: Property can be held no more than 3 years with returning to City Council for extension. City issued a $10 M bond for supporting land acquisition, and is combining with a NOFA for LIHTC. A City Council member and their House Representative are working together with No. California Land Trust to start a new "West Oakland Land Trust"

Model/Local Housing Land Trust Programs

Burlington Community Land Trust
Amy Demetrowitz
Project Developer
PO Box 523
Burlington, VT 05402
802-862-6244

Jackson Hole Community Housing Trust
PO Box 4498
225 S. Cache Street, Room 209
(School Administration Building, 2nd floor)
Jackson, WY 83001
Contact: Sara Carroll, Manager of Project Development, or
Barbara Hauge, Development Director
307-739-0665
FAX 307-739-0922

Thistle Community Housing Trust
Etta Habegger, CLT Coordinator
Roger Lewis, Asset Manager
PO Box 17430
Boulder, CO 80308
303-442-8418
FAX 303-938-9447

Land Bank Technical Assistance Providers

Institute for Community Economics
Julie Orvis 413-746-8660x118, JorvisICE@aol.com
Affiliate Program Coordinator
57 School Street
Springfield, MA 01105-1371
413-746-8660
FAX 413-746-8862
http://www.iceclt.org/

ICE's Annual conference is being held November 9-11 in Albuquerque NM

Publish:
- "The Community Land Trust Handbook"
- "The Community Land Trust Legal Manual"

Other Resources

Fannie Mae
Steve Allen, Community Lending Manager 202-752-4810
3900 Wisconsin Avenue, NW
Washington, D. C. 20016-2899

Tony Hernandez Denver Partnership Office Director, 303-675-0006
Stefanie Harmon, Denver Partnership Office Deputy Director
Sue Price, Portland Partnership Office 503-224-1354

Notes: In 1993 Fannie Mae created a secondary market for private lender loans to CLTs. Denver Partnership Office is researching CLTs now – risk office approved Thistles CLT's lease document, would automatically approve any other CLT utilizing same document. Portland Partnership office worked proactively through out Oregon to fund CLTs.

Denver School District Corporate Leasing Board
Velma Rose Denver Public Schools 303-764-3230
Craig Cook, Denver Public Schools 303-764-3316
Lynn Coleman, Private Consultant, 303-321-7493
Lee White, George K. Bomb 303-292-1600

Notes: Denver school district utilized certificate of participation to issue local bonds secured by specific asset base determined by Board, may be useful model for financing affordable housing landbanking.

Housing Authority of Boulder
Cindy Brown, Co-Executive Director, 303-441-1966

Housing Vermont
Donnie Brodrick 802-863-8424

Note: Provided LIHTC syndication expertise to Burlington CLT to provide rental opportunities within Land trust context

ARCH
http://www.weown.net/OwnershipModels.htm

Note: Provides resource on alternative ownership models

Peninsula Heritage land Trust
http:www.harbornet.com/phlt/options.html

Note: Provides resource on Conservation options and income and estate tax reductions