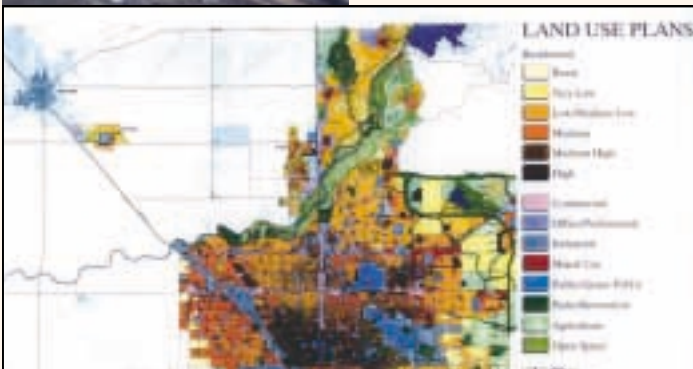


# WINNING THE DEVELOPMENT LOTTERY



A Landowner's Guide to Agricultural Conservation Easements and the Development Potential of Farmland in California's Central Valley



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# WINNING THE DEVELOPMENT LOTTERY

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A Landowner's Guide to Agricultural  
Conservation Easements and the  
Development Potential of Farmland in  
California's Central Valley

*By:*  
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*Sponsored by:*  
*Great Valley Center*



# EXECUTIVE SUMMARY

Planning for the future of the family farm is one of the most difficult challenges agricultural landowners will face over the next thirty years. In California's Central Valley, population growth, urbanization pressure and uncertainty over access to water have left many with the impression that the future of the Golden State's leading agricultural region is inevitably urban.

Few Central Valley farmers have developed concrete, long-term investment or retirement plans that fully tap their land's agricultural potential. Instead, many decisions regarding retirement or farm investments are being made – or avoided altogether – based on a vague sense that the push for urban development will provide a major financial windfall 20 or 25 years into the future.

Not every farm, however, is a winning ticket in the development "lottery." While some farmland is clearly in the path of urban development and will command high prices in the future, more than 75 percent of the Central Valley's agricultural land cannot realistically be expected to develop to urban uses within the next 40 years.

For farmers and ranchers who own land within or near the edge of their community's development horizon, selling an agricultural conservation easement offers another option to selling for development. By compensating landowners for the development value of their property, this tool can be an effective means of securing personal financial goals while also ensuring agriculture's future in the Central Valley.

The objective of this study is to evaluate whether selling an agricultural conservation easement is truly a market based alternative to selling land for

development. American Farmland Trust (AFT) gathered data concerning land markets and growth patterns in six Central Valley communities to develop an understanding of development potential over the next 40 years. AFT also developed an economic analysis tool for comparing the returns of investing proceeds from an easement sale against the speculative return that might be expected from selling land for development at some point in the future.

The results of this analysis were used to develop criteria for landowners to use in evaluating the development potential of their own property and planning for the future of the farm or ranch. Several case studies are presented that demonstrate circumstances in which selling agricultural conservation easements may be favorable to selling for development. These tools can be used by landowners as a guide for making individual decisions or as a means of working with a local land trust or conservation organization to develop a conservation strategy that meets landowner needs.

Making unreasonable assumptions regarding a farm's attractiveness for development may make poor use of a farm's equity. And as more Central Valley communities develop clear, publicly available land use plans, relying on those assumptions is an unnecessary risk.

By contrast, landowners that take the time to determine where their particular property fits within their community's long-range plans for growth will be ahead of the game. Acquiring this information takes some amount of initiative, but it will prepare farmers and ranchers to make informed investment decisions that maximize the potential of their most valuable asset.

## Key Findings

Evaluating land markets and growth in six Central Valley communities and running the economic analysis model revealed important findings for landowners to consider in preparing for the future. In many cases, there is a greater chance of winning the development lottery by choosing to sell an agricultural conservation easement rather than selling for development.

### **1. Net return on investment of easement proceeds can be equivalent to selling for development.**

When development is beyond a 10-year horizon, an easement, properly invested, provided returns equal to or greater than a future sale at development values.

### **2. Many Valley cities have sufficient development capacity to accommodate growth for 25 years or more.**

Evaluating historic growth patterns, building permit data and acreage assessments for six Central Valley communities revealed significant development capacity within existing planning boundaries even in the most rapidly growing cities.

### **3. Land Values drop precipitously one to two miles outside of a community's ultimate sphere-of-influence boundary.**

Examining land sales around the six study communities indicated little speculative activity beyond sphere-of-influence and other planning boundaries on land zoned for agricultural use.

### **4. Growth occurs in narrow vectors or hot spots within communities.**

Rapid increases in land sale prices were found in limited areas adjacent to current development where builders have had commercial success. Outside these growth areas, prices of land designated for future development were often only slightly higher than surrounding agricultural land.

### **5. Predicting where and when future growth will occur is highly uncertain.**

Analysis of building permit data and historic growth patterns indicates that residential development is highly cyclical and dependent on many physical, institutional, and socio-economic variables.



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# INTRODUCTION: THE DEVELOPMENT "LOTTERY"

Projections for rapid population growth in the Central Valley and the urbanization of agricultural valleys in northern and southern California over the last 50 years have created a sense that the development of San Joaquin Valley farmland is inevitable. This has led many valley farmers and ranchers to the conclusion that a developer will be waiting to purchase their farm when they are ready to retire.

While some farmland is clearly in the path of urban development and will command high prices in the future, more than 75 percent of the Central Valley's agricultural land cannot realistically be expected to develop to urban uses within the next 40 years. American Farmland Trust's 1995 study "Alternatives for Future Urban Growth in California's Central Valley" found that under present growth patterns, more than 1 million acres of farmland would be converted to urban uses to accommodate 8.2 million new residents. Even at this rate of conversion, approximately 5.6 million acres of the Valley's 6.7 million acres of irrigated farmland would remain in production.

Most San Joaquin Valley farmers and ranchers have limited choices when it comes to the future of their land. It can remain in agricultural use and be passed on to the next generation or sold to another farming operation. In some cases, it may be possible to develop the land to some type of rural residential or urban land use.

Gauging whether a parcel of land is suitable for development depends on a host of factors largely beyond the control of the average landowner. From zoning ordinances, to growth patterns, to public

policy, the ultimate price that can be expected in a sale is always subject to the unpredictable movement of the market.

## Selling an Agricultural Conservation Easement

The creation of the California Farmland Conservancy Program in 1995 and the availability of other public and private funds for the purchase of agricultural conservation easements now provide California farmers and ranchers an alternative to selling their land for development.

By compensating landowners for the development value of their property, agricultural conservation easements can be an effective means of securing personal financial goals while also ensuring agriculture's future in the Central Valley.

The decision to sell a conservation easement is generally based on one of two key factors:

- (1) a landowner's desire to see his property protected for agricultural use or;
- (2) the simple economic benefits of the transaction.

Instead of gambling that the market for development will increase the value of the property just in time for retirement, a farmer or rancher can unlock the land's potential financial value through investment of easement proceeds in traditional financial instruments such as stocks and bonds.

As one farmer who is presently in the process of selling an easement remarked, "There are only two ways to look at this thing. If you want to protect farmland, there is no question that you should sell an easement. If you're only interested in the money, then it becomes a business decision and you have to look at how it pencils out."

Another farmer selling an easement in San Joaquin County said, "We looked at the potential returns from the easement and felt that if development does not reach us for 20 years then selling the easement is a sound decision."

## Study Objectives

The objective of this study is to evaluate whether selling an agricultural conservation easement is truly a market-based alternative to selling for development by comparing the returns of investing today's proceeds from an easement sale against the speculative return expected from selling land for development at some point in the future. The critical questions are, how long will it be until urban development pressure causes land values to increase; and what are the consequences of pursuing a development strategy if growth pressure does not occur?

## Methods

American Farmland Trust developed a method to compare returns from investing easement proceeds to returns from future sales of development land. The research focused on three main areas: development of a simple economic model to compare returns from investment of easement and sale proceeds; analysis of growth and development trends in six Central Valley cities; and investigation of land values from sale transactions in the vicinity

of the six study communities. These factors are discussed in the context of current market conditions to give landowners an opportunity to evaluate the potential for future development in a realistic manner.

The economic analysis uses Excel spreadsheet simulations to compare overall financial returns from the sale of an easement with a sale for development. The spreadsheet allows the user to select different assumptions, including the timing of the land sale, the rates of return on different investments and the nature of the farming operation. Several of these scenarios are summarized in case studies that evaluate what might happen if a landowner pursues a particular course of action.

To make the economic model understandable, we made some basic assumptions regarding farm size, investment strategies and land values based upon our research and experience in completing easement transactions in the Central Valley (see Figure 1).

Five key growth characteristics were evaluated to produce a community profile for each of the six study communities and to explore their relationship to local land markets. These characteristics included: historical and projected population growth; historical and current development trends; general plan policies and land use designations; and long-range planning boundaries such as sphere of influence. Interviews were conducted with planners, appraisers and developers to better understand growth and market patterns. Data such as building permit issuance, annexations and farmland conversion was gathered from the period between 1986 and 1998 and analyzed by AFT staff.



Raw sales data from Metroscan, a commercial real estate database, was obtained to provide cursory information about land markets in the vicinity of each of the study communities. AFT collected sales data on all parcels larger than 18.5 acres located within five miles of the current development boundaries of the study communities occurring between January 1, 1990 and January 31, 2000. Each of the sales was plotted on parcel maps and a drive-by survey was performed for most of the indicated sales, especially those sales that were clearly in transitional areas.

Six Central Valley cities were selected for an in-depth study. Two cities each from three different size categories were selected: two large cities with populations greater than 150,000 (Fresno/Clovis and Bakersfield); two medium-size cities with a population of 50,000 to 150,000 (Turlock and Tracy); and two small cities with population less than 50,000 (Los Banos and Reedley). These cities were selected in part because they represent different growth pressures and growth management philosophies, and because they could be reasonably isolated from other cities for market analysis.

More detailed information regarding the study methods can be obtained in the technical appendix to this summary report by visiting AFT's website at [www.farmland.org](http://www.farmland.org).

## How to use this Report

The findings and conclusions of AFT's study are presented in three main sections. "Understanding the Big Picture" discusses the findings of the community profile and land market analysis

performed by AFT. These findings provide a context for understanding how communities in the Central Valley grow and how to evaluate development potential.

The second section, "Evaluating Development Potential", provides landowners with a guide for asking the essential questions when considering the development status of their property.

### Basic Assumptions of Economic Analysis Model

Farm Acreage	Net Return on Agricultural Land	Easement Values	Investment Returns	Proceeds from Development Sale (Year 2000 value)
Permanent Crop =40 acres	Permanent Crop =\$400 per acre	Low =\$2,000 per acre	Money Market = 5%	Low =\$25,000 per acre
Irrigated Field Crop =160 acres	Irrigated Field Crop =\$150 per acre	Medium =\$4,500 per acre	Higher-Risk Bonds =8%	High =\$35,000 per acre
		High =\$7,000 per acre	Aggressive Investment =10%	

Figure 1

"Planning for the Future of Your Farm" presents a set of questions designed to guide a landowner through the personal choices you and your family should consider in planning for the future of your farm. At the end of the day, landowners who can settle these questions will be well on their way to a more realistic understanding of their future options.

It is important to note that our findings are not intended to serve as recommendations for specific courses of action. In fact, the decision to pursue an agricultural conservation easement is best done in consultation with an attorney or financial advisor. Our hope is that by placing the easement sale discussion in perspective, Central Valley landowners will have an opportunity to evaluate the potential for future development in a realistic manner.

# AGRICULTURAL CONSERVATION EASEMENTS: A MARKET-BASED ALTERNATIVE TO SELLING FOR DEVELOPMENT

In recent years, several market-based alternatives to selling farmland for urban development have emerged, giving farmers and ranchers additional options for the future of their farms. The sale of agricultural conservation easements has allowed thousands of farmers and ranchers across the country to continue to own and operate their farms while being compensated for the speculative values for development that have accrued in their property.

landowner sells property, generally all the rights are transferred to the buyer. Purchase of agricultural conservation easement (PACE) programs enable landowners to separate their right to develop land from their other property rights to a non-profit land trust or governmental agency. After selling an easement, the landowner retains all other rights of ownership, including the right to farm the land, prevent trespass, sell, bequeath or otherwise transfer the land.

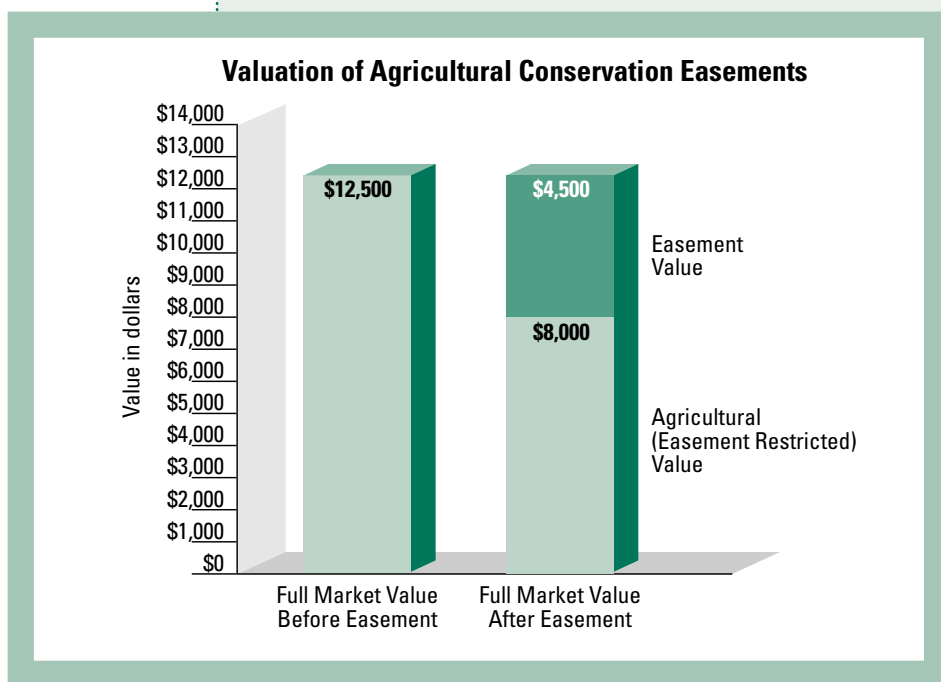


Figure 2

Conservation easements are based on the concept that property owners have a bundle of different rights including the right to use land; lease, sell and bequeath it; borrow money using it as security; construct buildings on it; mine it; or protect it from development, subject to reasonable local land use regulations. When a

Agricultural conservation easements are designed to keep land available for farming by restricting subdivision, non-farm development and other uses that are inconsistent with commercial agriculture. Agricultural conservation easements often permit limited commercial development related to the farm operation and the construction of farm buildings. Most agricultural conservation easements do not restrict farming practices. Some easement purchasers ask landowners to implement soil and

water conservation plans. Most easements allow development of a residence as long as the agricultural uses of the farm are not impaired.

California farmers and ranchers can now sell conservation easements funded by the California Farmland Conservancy Program. This state

agency was created in 1995 to: encourage voluntary, long-term private stewardship of agricultural lands by offering landowners financial incentives; encourage long-term conservation of productive agricultural lands in order to protect the agricultural economy of rural communities; and encourage local land use planning for orderly and efficient urban growth and conservation of agricultural land. The state Department of Conservation's Division of Land Resource Protection administers the program with oversight from the director of the Department of Conservation. Additional information about the California Farmland Conservancy program can be found at [www.consrv.ca.gov](http://www.consrv.ca.gov).

How much will the landowner receive for selling an easement? In California, easement value is determined by a professional appraisal of the difference between (1) the value of the land today as restricted for agricultural use versus (2) its unrestricted value today. For example, a property located near the edge of a growing community may have an unrestricted value of \$12,500 per acre. If the development potential is removed by selling an easement, the property might have a value of \$8,000 per acre, so the easement value would be \$4,500 per acre.

Local governments and land trusts that use PACE programs as tools for farmland conservation often seek to acquire easements in areas that are not imminently threatened with development. When the difference between the development value and the agricultural value exceeds \$7,000 per acre, it may not be cost-effective to purchase an easement. However, there must also be some measurable level of

development value for easements to have values that are attractive to landowners.

The reason an agricultural easement can be an economically viable alternative to selling land for development in the future is quite simple: time. Even a low easement value of \$2,000 per acre can earn a comparable return to a future sale for development if the easement proceeds are invested aggressively and given 30 or more years to mature.

The value of an agricultural conservation easement can also be donated to a governmental agency or a qualified land trust. The easement value is considered a charitable contribution and can become itemized deduction for income tax purposes and may qualify for additional tax credits through the Natural Heritage Preservation Tax Credit Act. Landowners can also receive a portion of easement proceeds in cash and donated value in a type of transaction called a bargain sale. Careful balancing of the cash and donated portions of the easement value can often produce the same net economic benefit as a total cash purchase by reducing capital gains.

# UNDERSTANDING THE BIG PICTURE

In order to develop the economic model and establish criteria for evaluating development potential, AFT gathered information about growth trends and land markets in the Central Valley.

Community profiles were developed for six valley communities selected to provide information about cities of varying sizes and growth rates: Fresno, Bakersfield, Turlock, Tracy, Reedley and Los Banos.

The profiles focus on major factors influencing patterns of growth around the edges of these

zoning ordinance designations, and growth management policies.

## Urban Boundaries

Almost all urban development in the Central Valley occurs within or adjacent to cities or well-defined rural communities. In planning for future development, cities establish a series of planning boundaries that begin to define future growth patterns. Creation of these boundaries is governed by Local Agency Formation Commissions (LAFCOs). These commission are made up of city and county representatives and a representative from the general public.

### Sphere of Influence Boundary:

Sphere-of-influence (SOI) boundaries are intended to define the ultimate planning boundary for a city's long range planning. Many valley cities have sought expansive SOI boundaries in order to give them some level of control over the decision-making authority of the county or an adjacent city.

In the meantime, the land within the boundary remains under the decision-making authority of the county and usually retains the county's general plan land use designation and zoning. In other words, if the property is designated and zoned for agricultural use, that zoning will continue to apply until the county's general plan is amended to change the designation or the property is annexed into the city.

Urban planning boundaries around a hypothetical community

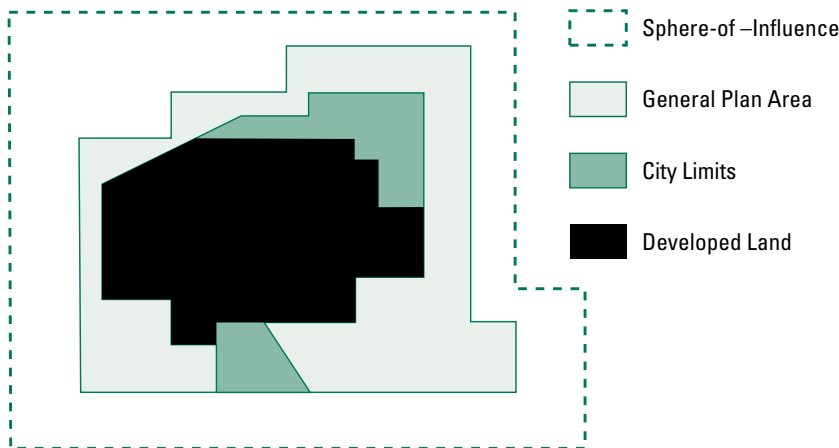


Figure 3

communities and the transitional relationship between agricultural land and urban development. These factors include population growth, location and availability of infrastructure, market demand for new single family residential housing, general plan and

## General Plan Boundary:

Land located within the SOI boundary will only move to the next step in the transition toward development when it is designated for urban growth in the city or county's General Plan. General Plans typically attempt to accommodate growth over a twenty-year period based upon better defined population growth projections, growth needs and the availability of land already designated for urban development. The objective is often to ensure that there is an adequate supply of land available to meet projected needs, to ensure adequate planning of major roads and circulation patterns, as well as major infrastructure such as water and sewer services.

This is the first true development designation that a property receives and can be found by reviewing the Land Use Element and accompanying maps of the General Plan. The maps typically state what type of use will be permitted on the property (residential, commercial, industrial, etc) and begins to establish the infrastructure framework of the community that will exist there in the future.

General Plans can be amended in one of two ways: through a regular update process that is generally undertaken every 10-15 years; or by obtaining an amendment from the local government agency with jurisdiction.

## City Limits

Incorporation into the city limits through annexation is probably the most critical step in the path toward urban development because this process transfers land use authority from the county to the city. Once this transition occurs, the focus on the land changes from resource protection to urban development.

Most LAFCOs require that a substantial portion of the land to be annexed be proposed for development in the near term. A tentative subdivision map or Specific Plan that describes how urban services will be provided and the specific land uses that will be developed on each parcel is often required as part of the annexation request. The city or community service district must also demonstrate that it has the capacity to

provide an adequate water supply and wastewater treatment services to land that is being annexed.

However, annexations also can include land that is not immediately planned for development, or that will require substantial investment by the city or urban service district to build infrastructure that cannot be provided immediately.

### POPULATION GROWTH IN STUDY COMMUNITIES

Cities	Actual and Projected Population							Annual Growth Rate
	1970	1980	1990	2000	2010	2020	2040	1980-2000
Fresno/Clovis	179,828	250,367	477,400	581,417	625,200	679,563	927,724	3.3%
Bakersfield Met.	na	227,000	332,000	396,000	515,891	644,249	974,203	2.8%
Tracy	14,742	18,428	33,558	54,240	68,957	84,015	118,808	5.5%
Turlock	13,992	26,287	42,198	53,481	70,848	89,782	120,867	3.6%
Reedley	8,131	11,071	15,791	20,940	27,173	31,760	43,359	3.2%
Los Banos	9,188	10,341	14,519	23,240	29,086	35,176	50,602	4.1%

Figure 4

## Growth within Profile Communities

### Population Growth

The six study communities have experienced moderate to rapid population growth over the last 20 years as is typical of the San Joaquin Valley as a whole (see Figure 4) Long-term growth rates have averaged 2.8 to 5.5 percent although the short-term rates have varied much more widely from year to year. The peaks in population growth appear to be closely related to fluctuations in net migration associated with

last 30 years. All of the study communities are expected to at least double in size by the year 2040 with the exception of the Fresno/Clovis Metropolitan Area.

### Urban Development Trends

Several key indicators of growth on the urban edge were examined to analyze the pace and pattern of growth around the six study communities. The data gathered for this analysis captures a period from 1986 to 1999. The wave of growth that occurred throughout the valley in the eighties peaked between 1988 and 1990, slowed dramatically in the early to mid 90's and has recovered significantly over the last few years (see Figure 5) The data gathered for the study include this entire business cycle and, therefore, the average rates of growth represented here should provide a good indicator of what might be expected over the long term.

**SINGLE FAMILY BUILDING PERMITS 1989-1999**

	Fresno/Clovis	Bakersfield	Tracy	Turlock	Reedley	Los Banos
1989	na	1224	1390	na	59	735
1990	2775	1416	714	624	103	171
1991	2447	1054	502	292	151	192
1992	3108	1429	650	222	74	481
1993	2735	1696	595	327	112	241
1994	2482	1435	386	252	112	233
1995	1996	1567	389	155	106	172
1996	1991	1336	346	136	88	161
1997	1619	1436	561	248	96	279
1998	1964	2044	1026	350	93	369
1999	1820	1869	1320	504	33	387
<b>Total</b>	<b>22937</b>	<b>16506</b>	<b>7879</b>	<b>3110</b>	<b>1027</b>	<b>3421</b>
<b>Average</b>	<b>2294</b>	<b>1501</b>	<b>718</b>	<b>311</b>	<b>93</b>	<b>311</b>

**Table 5**

tight housing markets in Southern California and the Bay Area. Bakersfield, Tracy and Los Banos have experienced higher than average growth rates over the last 30 years than the other study communities and the Central Valley as a whole. Fresno, Turlock and Reedley have experienced moderate rates of growth over the

and have experienced varying degrees of recovery from the bottom of the cycle in 1995 to 1996.

### Development Capacity

Analysis of development capacity is critical to

evaluating the development potential of a farm or ranch property. If the land within existing city boundaries is to be utilized before additional land is designated for urban development, it is possible to estimate how long it will be before land outside these boundaries might receive development entitlements and be converted to urban use.

Analysis of the six study communities revealed that there is significant development capacity within the General Plan and sphere-of-influence boundaries of all six cities (see Figure 6) Even a city that is growing very rapidly, like Tracy, can absorb growth for many years if it has large areas that are planned for future development within its boundaries. Tracy currently has enough land available within the incorporated city limits to accommodate growth for 10-12 years. The development capacity within the General Plan and SOI boundaries is estimated to be 50-65 years.

### **Growth Management Policies**

Many cities in the Central Valley are beginning to develop policies to address rapid urban growth or to protect important farmland or habitat resources. Some communities have adopted growth boundaries to direct urban growth away from these resources. The city of Turlock and Stanislaus County have jointly adopted a policy to halt the northward growth of the city at Taylor Road in order to protect prime farmland.

In some cases, citizens frustrated with rampant growth in their communities have taken control of urban planning at the ballot box. The recent adoption of a growth control initiative in Tracy

limits new residential construction to 600 units per year. Implementing this initiative could extend the development capacity within the city for another 15-20 years.

## **Land Market Analysis**

### **Agricultural Land Sales**

The Metroscan data indicates a range of values for irrigated field cropland of \$2,000 to \$6,000 per acre in the vicinity of the study communities. The differences in value appear to be based primarily on soil quality and water availability and reliability. Land with heavy, poorly drained soils that have less flexibility in crop type and/or less water reliability tends to sell at the lower end of the range. Irrigated cropland that has potential for orchard development or vegetable production along with a reliable water supply will command the higher end of the range.

Permanent crops such as vineyards and fruit and nut orchards command higher prices per acre due to the capital improvements to the property associated with the trees or vines. Values indicated by the Metroscan analysis range from \$5,000 to \$11,000 per acre for permanent crops in the vicinity of the study communities.

### **Transitional Land Sales**

Land values begin to increase above base agricultural values in a narrow band around existing communities or in outlying areas where some form of development designation has been granted by local government. Initially, transitional values are difficult to discern from underlying agricultural values, but become increasingly apparent as the proximity to development increases.

Transitional values range from as low as \$5,000 per acre at the outer edge of development transition to \$20,000 per acre adjacent to city limits. Generally, the shift in land values appears to occur as development entitlements are granted, major urban infrastructure becomes available and as market demand for available land increases.

The first step toward urban development in Central Valley cities is inclusion within sphere-of-influence and general plan boundaries. However, this designation, in and of itself, does not appear to trigger a significant increase in land values as indicated by the numerous sales

availability of urban infrastructure, these are areas where market demand by homebuyers has been recently expressed. There appears to be a strong tendency for developers to focus land acquisition on parcels that are proximate to these vectors of growth.

It is also important to map the Metroscan sales data to identify areas that are not experiencing transition of development values. In southwest Fresno, land designated for urban development in the General Plan, served with infrastructure, and incorporated into or adjacent to the city limits sells for \$7,000 to \$12,000 per acre. This appears to be due to a severe lack of market demand for new single-family residential development in this area.

### Development Land Sales

As the transition to urban development is completed, land values appear to plateau at values ranging from \$18,000 to \$40,000 per acre. The majority of development sales from the Metroscan data appear to range from \$23,000 to \$30,000 per acre and average approximately \$25,000 per acre. These parcels tend to be on the urban edge and annexed into incorporated

city or community service district boundaries. These properties probably do not have processed tentative parcel maps or infrastructure improvements in the case of industrial and commercial land. Another three to five years of permit and entitlement processing would probably be required before development of these parcels would be possible.

### DEVELOPMENT CAPACITY WITHIN STUDY COMMUNITIES

	Available Land and Estimated Buildout		
	City Limits	Gen. Plan	Sphere of Influence
Fresno/Clovis	5-9 years		25-40 years
Bakersfield	15-20 years	30-35 years	30-65 years
Tracy	12 years	60-65 years	50-55 years
Turlock	7-12 years	14-18 years	8-18 years
Reedley	2-5 years	35-37 years	30-50 years
Los Banos	10-20 years	60 years	40-60 years

Figure 6

of land at values less than \$10,000 per acre within the sphere boundaries of the study communities.

Escalation of land values appears to occur most markedly around pockets of recent urban development. Clusters of sales near the high end of the transitional range typically occur in the vicinity of recent urban development. In addition to development entitlements and the



The Metroscan Data also identified several sales in the \$30,000 to \$44,000 per acre range for land that appeared to have special attributes that would give them increased value in the marketplace. Several of the sales appeared to be properties zoned for commercial or office development in areas that have already been surrounded by existing residential development. Other sales in this range tended to be on smaller parcels in areas that could easily be subdivided into a manageable number of residential lots for development or that had an approved tentative parcel map.

A few outlying sales ranging in value from \$44,000 to \$72,000 per acre were also identified in the Metroscan data. These sales appeared to be vacant commercial and industrial properties with existing infrastructure improvements in established urban areas. These properties appear to have attributes that command significantly higher values than raw development land on the urban edge such as high traffic volumes and regional transportation.

# AN ILLUSTRATIVE EXAMPLE: COMMUNITY PROFILE OF TURLOCK, CALIFORNIA

Lying a little more than 100 miles east of San Francisco, the city of Turlock is the second largest city in one of the fastest growing counties in the state. In the span of twenty years, Turlock's population doubled from 26,000 (1980) to approximately 53,000 (2000). Like many Valley communities, its average annual 3.6 percent growth rate increase well outpaced the state average of 1.5 percent. The outlook for the future is even more growth. In fact, some demographers project that by 2040, Turlock will be home to well over 100,000 people.

## Where growth has occurred in Turlock

In general, Turlock's growth over the years has been to the north of the city's downtown area. Review of maps produced by the California Farmland Mapping and Monitoring Program between 1988 and 1998; revealed that new development occurred contiguous to the west,

southwest, north, and northeast borders of the urbanized area. Virtually no new development occurred in the southeast and very little to the south. Most recent development is concentrated at

the northern boundary of the city where new schools, a shopping center and sewer lines have been extended.

## General Plan suggests no new land will be needed until 2020

Turlock's General Plan accommodates a population of 87,600 based on a forecasted growth rate of 3.7

percent between 1990 and 2010. But between 1990 and 2000, population increased by 11,000, a rate of only 2.4 percent. Comparing the total annexed acres in 1998 to built-up land in 1998 reveals that there are 1,295 acres of undeveloped land within the existing city boundaries. Yet if population continues to grow at this more modest rate and if we factor in an average density of 3 dwellings per acre, buildout within the city limits will not occur until 2013. Within the 9,000 acre General Plan area buildout will not occur until well past 2020.

## Little speculative activity beyond the sphere-of-influence boundary

In the approximately 44 square-mile block encompassing the city of Turlock, AFT analyzed 47 land transactions that took place between 1990 and 2000. In general, very little sales activity took place outside the Turlock General Plan area, and sales prices show only moderate speculative influence.

For example, over the past three years, Stanislaus County cropland irrigated with well water generally sold for \$3,200 to \$5,000 per acre, cropland in the Turlock Irrigation District sold for \$5,000 to \$7,000 per acre, nut crop land sold for \$7,000 to \$11,000 per acre, and stone fruit acres sold for \$7,000 to \$10,000 per acre.

By looking at properties that sold above agricultural values, it was possible to evaluate how far out from the city developers are willing to speculate. Of the twelve parcels that sold in the \$10,000 to \$15,000 per acre range, two of the sales were inside the SOI and all but 2 of the remaining 10 parcels were within a mile of the SOI boundary.

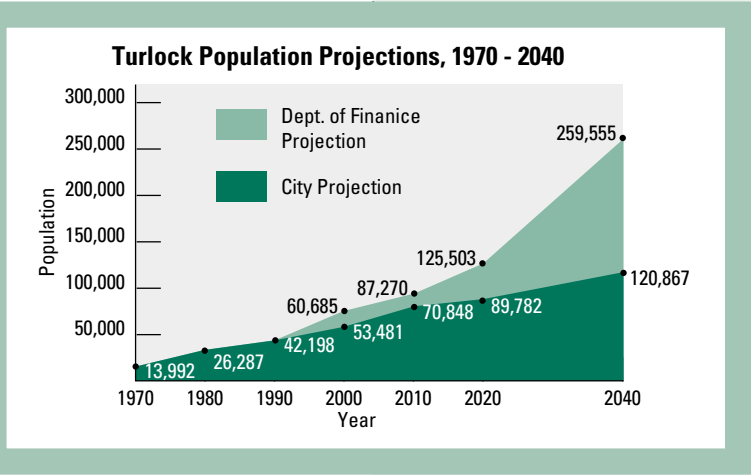


Figure 7

# CITY OF TURLOCK AREA, 1988-1998

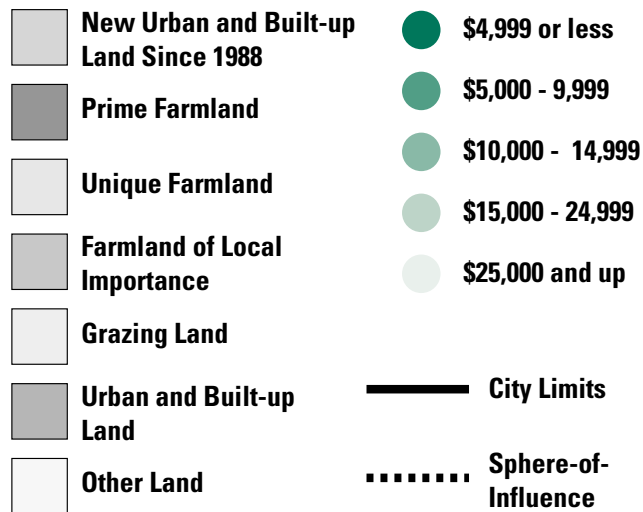
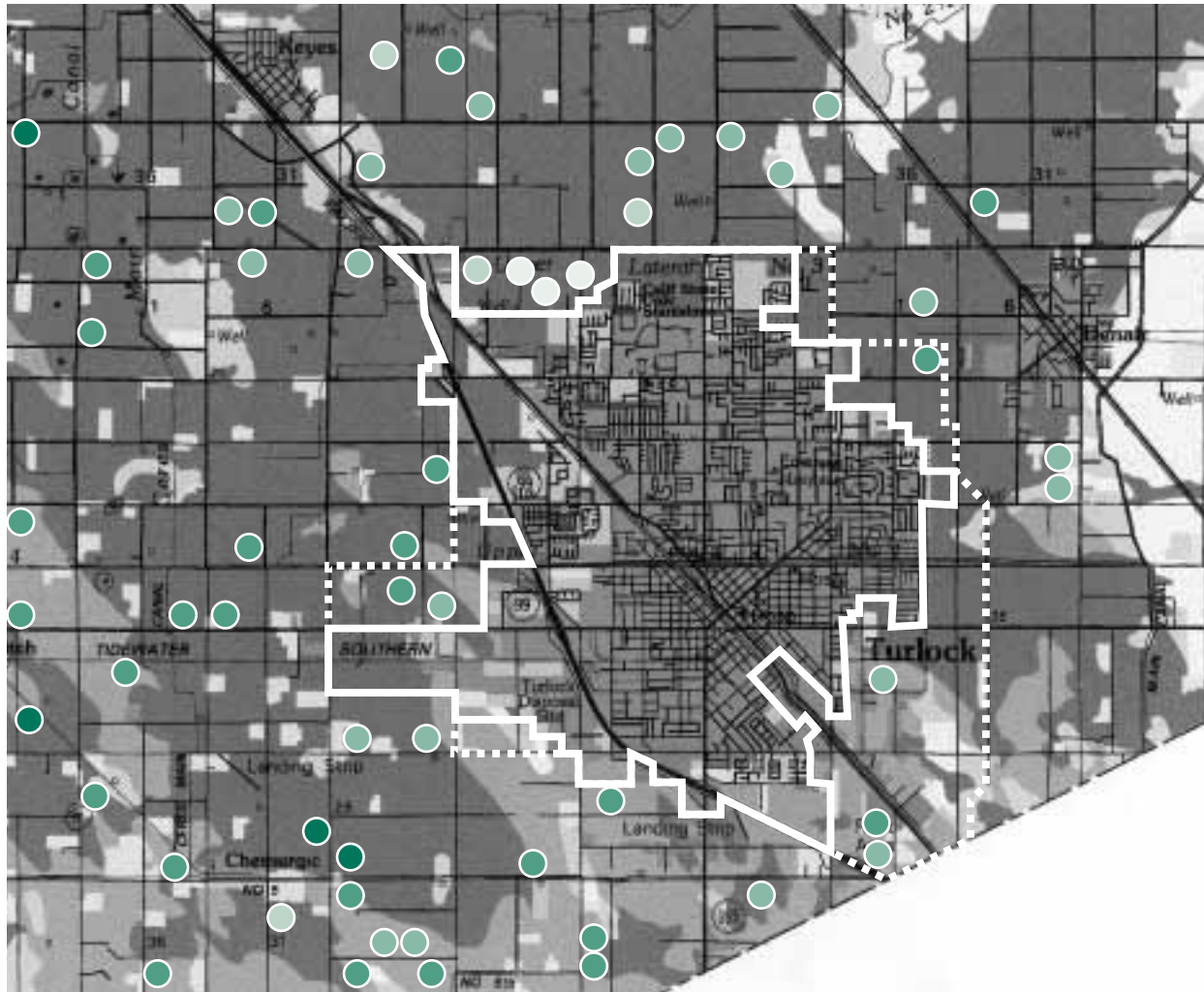


Figure 8

# EVALUATING DEVELOPMENT POTENTIAL

Understanding the local land use decision-making process and the forces that drive it are essential to farmers or ranchers trying to evaluate the development potential of their land. To do this, landowners must turn around and look at the parcel from a developer's point of view and ask the critical question of how long will it be before they can expect the property to convert to urban use.

This requires analysis of a community's growth characteristics and acquisition of as much information as possible about a city's planning and growth management policies. Like the developer, landowners who are considering a conservation easement from primarily an economic perspective must be able to evaluate how long it will be before development occurs.

To gain a better sense of what the development potential is, landowners should evaluate the development capacity of urban boundaries. Methods for undertaking this type of analysis are outlined in the discussion of community profiles and the technical appendix to this study. The basic question is how many people can the existing planning boundaries accommodate and how long will it take to reach these population levels?

The ability to predict when future development of a particular parcel will occur is an inexact science at best. Land and housing markets are cyclical in nature and buyers are often fickle in their preferences for particular communities and neighborhoods. In addition, planning and zoning decisions can shift course with new elected officials, infrastructure constraints can prevent

development, and increasingly, citizens are taking planning decisions into their own hands through growth-control initiatives.

One of the consequences of this unpredictability is that developers also are seeking to minimize their investment risk and are purchasing land that they can develop within five to 10 years. Consequently, growth is becoming concentrated in areas where developers know they can sell houses. As a result, land prices exact a premium in these areas and fall rapidly as one moves away from current growth corridors.

## Six Questions for Your Trip to City Hall

The first step in evaluating development potential is a to visit to your local city hall or office county seat. Once there, visit the city's planning department and ask the following questions, many of which can be answered by looking at the maps on file. The decision tree presented in Figure 9 can help organize the critical question for evaluating development potential. The square boxes present the questions in sequential order, while the diamond shaped boxes describe actions that must be taken to move from one box to the next.

### 1. Is my property located within a sphere-of-influence boundary?

Although the SOI may be little more than a line on a map, if the property is located within SOI or urban planning boundary, the first step of the transition to urban development has occurred.

Nevertheless, it still may be many years before the transition is completed. Additional information can be obtained by contacting the Local Agency Formation Commission to find out if reviews of SOI boundaries have been conducted recently or when future updates are being planned.

If the property is not within a SOI boundary, it is unlikely that there is significant development potential in the short term. Keep in mind that the development capacity within the SOI boundaries of the six profile communities is estimated to be 15 to 65 years. The exception may be on the edges of the sphere boundary that is adjacent to a rapidly developing area within a city.

The potential for urban development of land that lies more than two miles outside an existing sphere boundary is very remote. Under even the most optimistic growth scenarios, this land would not be considered for development for at least 30 years and it would probably be 40 to 50 years before construction of urban elements would begin.

To evaluate the development potential of land located within the SOI boundary, the development capacity within the city's general plan area should be evaluated and the city should be consulted on the status of its General Plan update process.

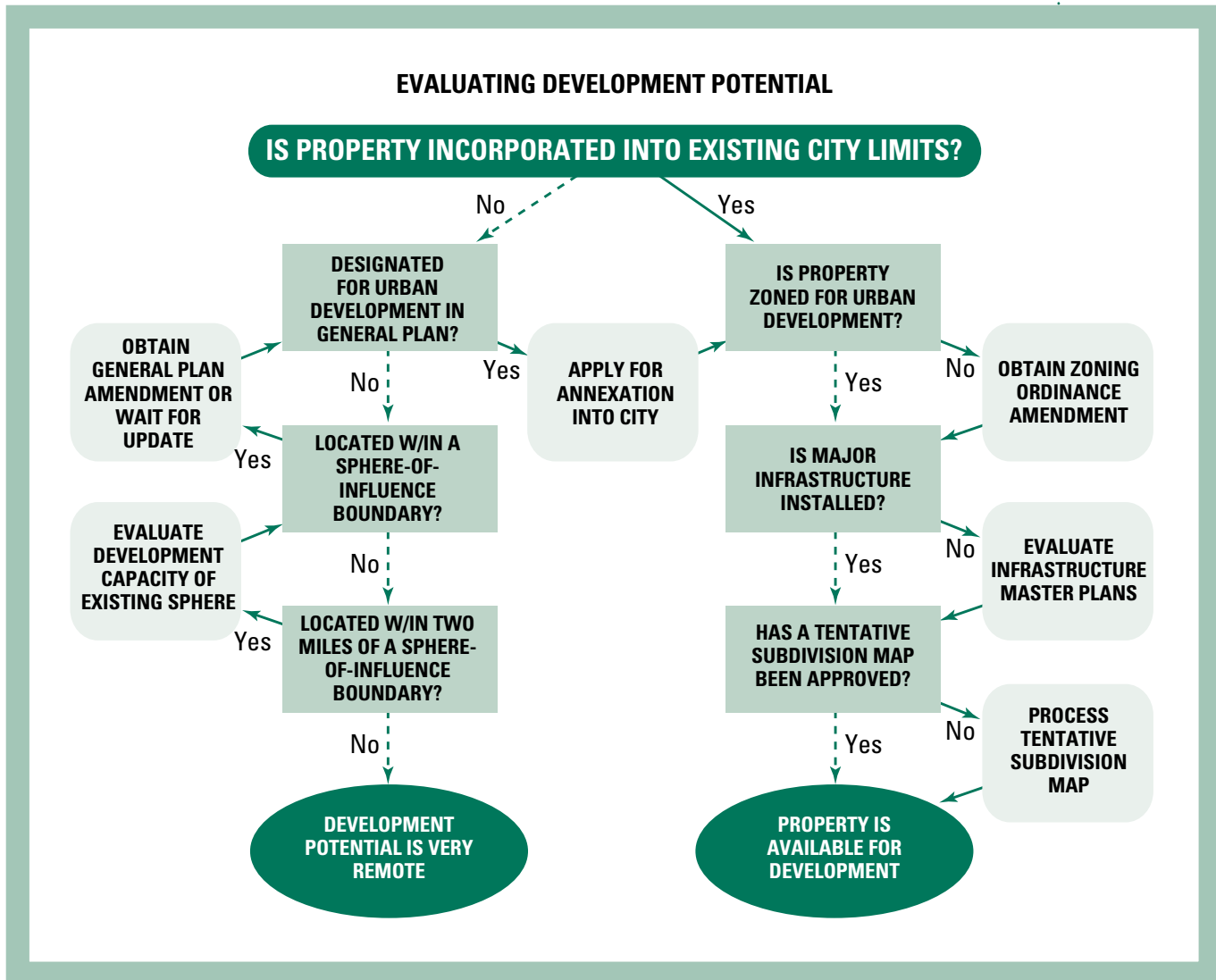


Figure 9

## **2. Is my property designated for urban growth in a General Plan?**

If a property has been designated for urban uses in a General Plan, the next step toward urban development has occurred. Since General Plans typically attempt to plan for growth over a 20-25 year period, much of the land designated for development still won't be developed for many years. Many cities often overestimate their growth projections and the amount of land needed to accommodate growth in order to ensure an adequate supply of land is available to meet their needs.

General Plans can be amended in one of two ways: through a regular update process that is generally undertaken every 10-15 years; or by obtaining an amendment from the local government agency with jurisdiction. In either case, amending the plan for urban development requires significant review and processing time to conduct engineering studies and environmental reviews.

## **3. Is my land located within the city limits?**

Even if your land is designated for urban use by the general plan, it will often not move toward urban development until it has been incorporated into the city limits through annexation.

Once land is annexed into a city, the question changes from one of "if" the property will be developed to "when."

Again, you are trying to estimate the development capacity of land already within the city limits. This analysis should go deeper than dividing the available land for a particular use by a number of

persons per acre. Look at the number of existing lots available for development and the number of lots proposed under tentative parcel maps. Dividing this number by the number of building permits presently being issued per year can provide a more accurate analysis of near term growth capacity.

## **4. Is my land zoned for urban development?**

If land is not pre-zoned for urban development as part of the annexation process, or the zoned use will not allow the landowner to develop the use he wants to construct on the property, then a zoning change is required before development can proceed.

Zoning changes are discretionary decisions made by the planning commission and city council or board of supervisors with jurisdiction over the community in question. Zoning changes must be consistent with the General Plan and undergo environmental review under the California Environmental Quality Act.

## **5. Is my property served by major infrastructure?**

A city's ability to provide major urban services to a property can frequently cause a bottleneck in the development pathway. Sewer trunk lines, wells and mains for domestic water, stormwater drainage and arterial streets are very expensive to construct, and mechanisms for funding their construction must be in place before development occurs.

To better understand the availability of urban services, contact the city or county public works

department after you have finished talking to the local planner. Public works master plans can provide construction schedules for street widening or new freeways, or impact fees and potential bottlenecks that can give a landowner a better sense of the schedule for delivery of services to the property in question.

## **6. Has a tentative subdivision map been approved?**

Approval of a tentative subdivision map is usually the last discretionary approval required by local government before development occurs. The tentative subdivision describes how the property will finally be divided into individual lots and how local streets and utility services will be laid out within the subdivision. The map also usually describes phasing for completion of subdivision, particularly on larger parcels.

A development agreement is often entered when the tentative map is approved that vests the development rights to the landowner. Once a development agreement is executed, the local government cannot change their approval of the project or the development fees. Without vesting, the local government may change its decision on zoning, General Plan designation, or subdivision at any time, although instances of downzoning within incorporated areas are rare.

Filing of the final map is typically a ministerial process in which the lots are surveyed, the map is recorded, and development fees are paid. Many cities require that a final parcel map be filed within a set period of time after a tentative subdivision map is approved, typically within three to five years.

## **Take a Reality Check**

After considering these questions, landowners should ask one final question: If I put the property up for sale today, how much am I likely to receive for it? This question can be answered by looking at sales of neighboring properties with similar zoning and development potential characteristics or consulting with a local appraiser or realtor. Landowners who are seriously considering taking some type of action might want to test the market by listing the property for sale.

If the answer to the question of present value is lower than expected, particularly if the property is zoned for development, then you need to ask why and possibly re-evaluate your conclusions regarding development potential.

For example, property values may also be lower due to some form of physical constraint that may prohibit development of the property, or reduce the amount of development that can ultimately occur. These factors may include flooding potential, topography, utility easements, or the presence of wetlands or endangered species.

Urban development markets are affected by a number of subtle factors and socio-economic forces that are very difficult to evaluate and predict. Factors such as school performance, crime rates, or unquantifiable factors that can only be described as buyer perception or preference can strongly influence development investment.

# PLANNING THE FUTURE OF YOUR FARM

After visiting city hall and evaluating development potential, there are a number of important decisions to be made that are likely to require the involvement of family and business partners. Many farmers plan to continue working the land for the remainder of their lives and then leave their children with the decision of what to do with the farm.

If given the opportunity to sell land at values of \$25,000 to \$35,000 per acre, many farmers choose to sell their land for development. However, the ability to sell for these values is constrained by the property's development potential, which, as discussed earlier, is a function of growth pressure, market demand, land use, zoning regulations and availability of land.

If developers aren't exactly beating down the door to purchase your property at development prices, then you are left with two options: sell your property at agricultural or transitional values or wait until development potential increases as a city grows toward you.

The decision tree and case studies presented in this section are designed to help guide landowners in asking the right questions and considering a variety of alternatives in planning the future of their farm or ranch. Answering these questions now, when you have the luxury of time on your side, is smart planning.

## Comparing Returns on Investment

The economic analysis model developed for this study compares the returns from investment of proceeds from the sale of an easement to the returns that would be received from selling the property for development at some point in the future.

The critical issue in this analysis is predicting exactly when the development sale occurs. Given enough time, investment of even small sums of money in stocks or bonds can multiply greatly and provide a comparable return to selling land at development prices.

Several scenarios evaluated by the economic analysis model are presented as case studies in this section. Additional scenarios are evaluated in the technical appendix or you can test your own assumptions by obtaining the model and following the instructions on the back cover of this report.

The results of the case studies demonstrate that the sale of an agricultural conservation easement can be a viable alternative to selling for development, even when they are compared strictly from an economic perspective. Selling an easement can also provide other advantages that should be considered, particularly in the flexibility and certainty they provide when compared to the risks associated with trying to win the development lottery.



Easements can be purchased in a lump sum cash payment based on the appraised value as soon as funding is approved. There is no need to be exposed to the risk of market downturns, inaccurate growth projections and the potential of growth management policies or initiatives that are associated with speculating on future development.

The sale of an agricultural conservation easement converts equity that is locked up in the land into cash. These funds can then be invested in financial instruments that remain liquid and can be drawn upon when needed or held to build a retirement fund. These funds can also be used to reduce or eliminate farm debt or to make capital improvements that will improve farm profitability.

### Case Study 1: Unlocking Equity

This case study examines the retirement strategies of two farmers who own similar 160-acre farms, planted to row crops in an area that is not in the immediate path of development. Farmer Smith decides to sell a conservation easement and continue to farm the property for the next 30 years. He invests the proceeds from the easement in a stock portfolio that earns an average annual return of 10 percent and continues to invest his farm income in a money market fund that earns a 5 percent return. His neighbor, Farmer Jones, pursues a strategy to sell the land for development when he is ready to retire and, in the meantime, invests his farm income in a money market fund.

At the end of year 30, the total cumulative cash returns from following the easement strategy are \$3,337,224. In addition to this cash value, he still owns the land, which is worth \$3,000 per acre, or another \$480,000, for a total value after 30 years of \$3,817,224. However, if Farmer Smith also invests his net farm income on the 160 acres in his stock portfolio his accumulated investment income will be \$4,358,512 and he will retain ownership of the farm at its agricultural value of \$480,000 for a total worth of \$4,738, 512.

At the end of thirty years, Farmer Jones' land is adjacent to the city limits and he sells his land to a developer for \$25,000 per acre. At the end of year 29, the accumulated cash flows from investing the agricultural revenue are \$1,176,064. At the end of year 30, the total value of the strategy is \$4,316,066. At this point the simulation ends; all of the proceeds from following this strategy are held in cash or liquid investments, since the land has been

sold.

The return on investment from both retirement strategies are comparable; however, Farmer Smith has created much more flexibility by selling an easement. By converting equity in the farm into a liquid asset, Smith can quickly transfer these funds into another investment or access them in a time of need. If he waits for development values to continue to rise, he subjects his equity to the speculative risk of the local land market and may not be able to sell the land in a timely manner if a need for cash arises.

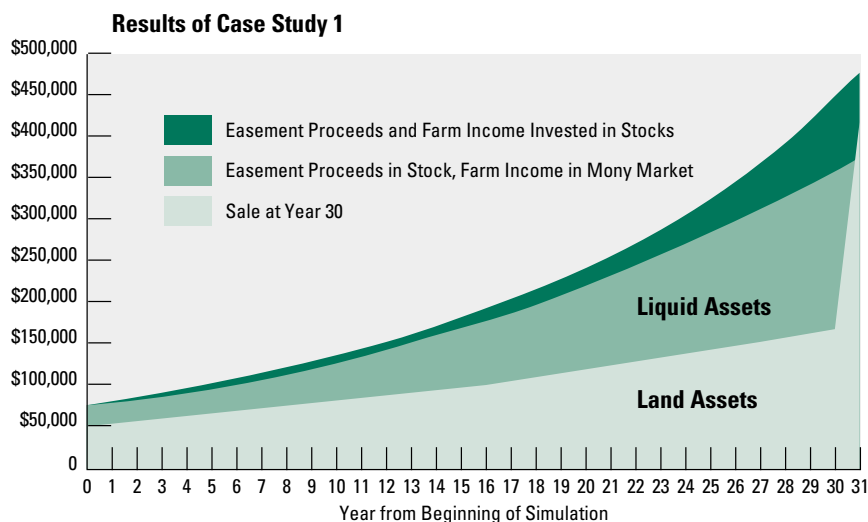


Table 10

Easement proceeds can also provide flexibility in estate planning. With careful planning and enough time, the cash received from the easement sale can be transferred to heirs under the gift provisions in the tax code, thereby reducing the value of the estate at the time of death. Easement proceeds can also be used to purchase a life insurance policy that will be paid to heirs without being subject to estate tax.

## **The Final Analysis**

If this report has achieved its objectives, you are now equipped to answer a final set of questions regarding the future of your farm or ranch. Answering these questions frankly and honestly should help guide you in taking actions to maximize the performance of your land assets now and in the future.

Farmers or ranchers considering the future of their land must evaluate the question of development potential rationally and reasonably in making these decisions and, since the impact of these decisions is likely to carry over into the next generation, should include consultation with heirs.

### **Does my property have development potential?**

The answer to this question can only be reached by considering and carefully evaluating the questions and information posed in the previous section. Being overly optimistic about a farm's development potential may lead to serious consequences if development values do not materialize. If a landowner ceases to make capital improvements in the farm anticipating future

development, then the farm's income earning potential may become greatly impaired.

If it appears that there is a reasonable likelihood that urban development will encroach upon your farm within 25-30 years, you should consider the questions along the right side of the decision tree presented in Figure 11.

If there is little or no development potential for the farm within the next 30 years, then it would be prudent to maintain the productive capability of the farm or consider other alternatives to urban development. These alternatives can be considered by moving down the left side of the decision tree.

### **Can my property be sold for development within the next five to 10 years?**

If the property under consideration is within the city limits and likely to be developed in the near term, then the best strategy for the landowner may be to make preparations to sell the property for development.

Of course, landowners still have the option of keeping the land in production; however, it is unlikely that easement funding programs will be willing to pay cash for very high easement values unless the purchase of this easement would be part of a broader strategy.

### **Do I want to see my land remain in agricultural production?**

If your evaluation of development potential indicates that it will be more than 10 years before the property can be sold at development

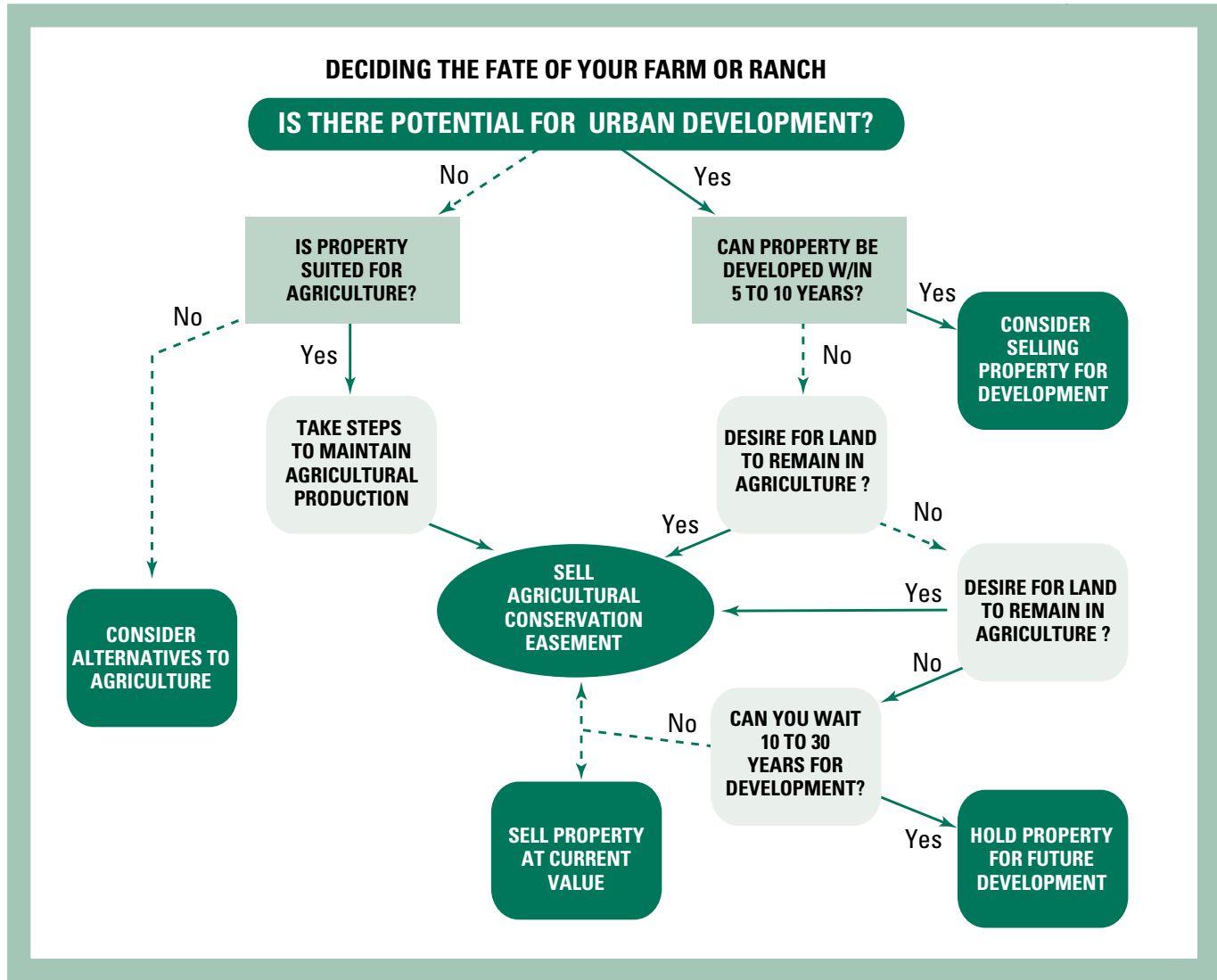


Figure 11

values, then the sale of an agricultural conservation easement should be considered as an alternative to selling the property for development.

If you have a personal, emotional desire to see the land remain in agricultural production, then sale of an agricultural conservation easement should be pursued to the fullest extent possible. Conservation organizations should be contacted as well as the California Department of Conservation to determine if easement funding is available and to learn more about the easement transaction process.

**Can I wait 10 to 30 years to sell the land for development?**

If you have little concern about the future use of your property or simply wish to see your land provide the highest economic return, you may wish to pursue sale of the land for urban development.

However, if your evaluation of the development potential of the property indicated that it would be at least 10 years or more before the property could be sold at development values, you must decide if you can wait for the value to increase as development moves closer. Another choice would be to sell an option to a developer and

## Case Study 2: Eliminating Uncertainty

This case study begins to elucidate the potential cost to the landowner from the uncertainty of the time of a development sale. The ability to sell land for urban development value is more likely to be determined by market conditions and the city's planning and zoning decisions, rather than the choice of the landowner. If sale of the property is delayed for even a few years, the return from selling an easement can outperform a future development sale. By selling the easement the landowner achieves a greater degree of control over the performance of his assets.

Farmer Brown owns a 40-acre farm planted to peaches and almonds located just outside the sphere-of-influence

boundary of an adjacent city. The value of an agricultural conservation easement on the property has been appraised at \$4,500 per acre. Based on the current rate of growth it will probably be 20 years before most of the land within the existing sphere-of-influence is developed. Mr. Brown must make a decision between selling an easement today or selling for development in the future at \$25,000 per acre. Mr. Brown intends to invest the proceeds from the easement or the sale aggressively in stocks with an average return of 10 percent.

If the property can be sold at year 15, the sale strategy performs better over the life of the simulation than the easement sale scenario, with a total value of \$3,540,000 at the end of 30 years. If the property is sold for development in 20 years, the total value is \$2,962,705 at the end of the simulation and if the property is sold at year 25 the total return is only \$2,540,000.

The sale of an easement at a value of \$4,500 per acre produces a total value of \$2,940,138 at the end of the 30-year simulation. This is comparable to the returns from the sale for development 20 years in the future.

If development occurs more rapidly than anticipated and the property is sold at year 15 rather than year 20, the landowner would receive \$577,000 more over the 30-year life of the simulation than if he sold for development at year 20. However, if the sale for development occurs at year 25, the cost to the landowner would have been over \$430,000 compared to the sale of the property at year 20 and approximately \$410,000 less than the return from selling the easement.

Results of Case Study 2

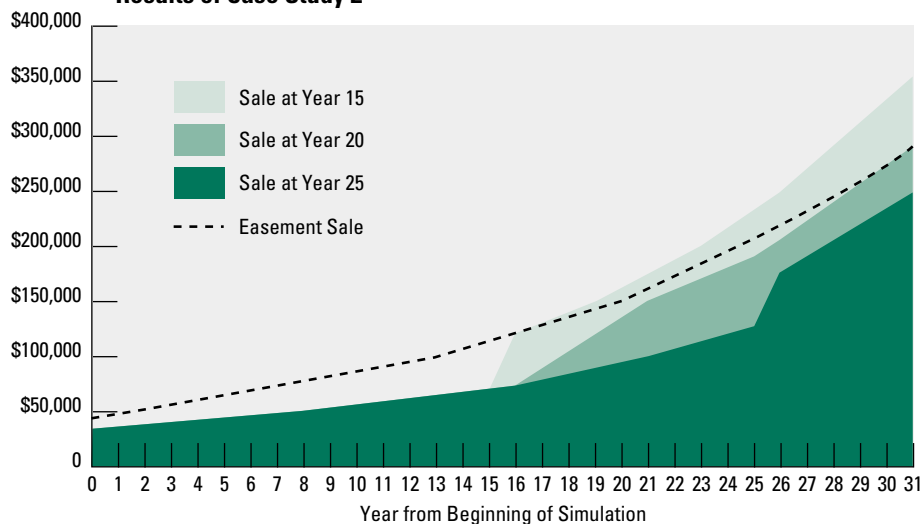


Figure 12

continue to wait with no guarantee of when, or if, the option will be closed through a final purchase.

If you cannot or do not wish to wait for development value to increase, your only option is to sell the land at the present fair market value. If this is the case, you may still want to consider selling an easement.

The net return from selling the farm at fair market value would be the same as selling a conservation easement and the easement-restricted farm to another farmer. Several ag realtors have advised their clients that it may be easier to sell the easement-restricted farm than to sell to a long-term speculator, since the pool of potential agricultural buyers is likely to be much greater.

## **Is my property suited for long-term agricultural production?**

Even if a property currently has little or no development potential, there are still a number of actions a farmer should consider taking to optimize return on his land assets. However, before moving on a course to maintain the viability of a farm operation, a property should be evaluated for its ability to sustain long-term agricultural production.

In order to do this, a number of questions should be asked: Can a reliable and affordable supply of good quality water be obtained; are the soils productive and capable of growing a wide variety of crops; is the property free of constraints to future production such as salinization, flooding or groundwater overdraft; and is the property in a stable farming area protected by agricultural exclusive zoning?

If the answer to one or more of these questions is no, then it may be prudent to consider other alternatives to agricultural production.

If the property has significant habitat or open space values, there may be opportunities to sell the land for habitat restoration or to earn income through the establishment of a mitigation bank or leasing hunting rights. Selling floodway easements, participating in the wetland or conservation reserve programs, or retiring land with poorly drained soils might also be considered. In the long run, these alternatives may produce better returns than attempting to maintain marginal land in agricultural production.

If the property is well suited for agriculture, but has little or no development potential, then the most prudent course of action would be to maintain the economic viability of the farmland and take steps to protect its productivity.

Steps that could be taken include: forming agricultural districts with neighboring landowners to promote and protect agriculture; soliciting the support of the community and local government to recognize the importance of agriculture to the local economy and promote agricultural economic development, protecting and maintaining water resources; participating in government incentive programs to reduce taxes such as the Farmland Security Zone program; investing in capital improvements that support the long term viability of the farm (i.e. replanting aging trees or vines, rehabilitating groundwater wells, etc.).

If development pressure begins to mount at some point in the future, then an agricultural conservation easement can be sold as unrestricted land values begin to rise. At that point modest easement values should then be able to provide an equivalent return on investment when compared to waiting for land values to increase over many years.

## **Making the Best Choice**

Making decisions concerning the fate of a farm or ranch are never easy. These decisions are often complicated by family and succession issues or concerns of adjacent landowners. Yet even with all these factors to consider, the basic choices for the future use of the land itself are limited. The property can remain in agricultural production or it can be converted

## Case Study 3: Easements in the Path of Development

Even when properties are under significant development pressure, aggressive investment of easement proceeds can produce comparable returns to selling for development. Since easement values are higher as development pressure increases, proceeds from investment accumulate quickly and can be equivalent to selling for development within 10-15 years.

Farmer Young is in his 50's and is beginning to make plans for retirement. One of the 40-acre almond orchards he owns is

located in an area that is under significant development pressure adjacent to a city. The parcel is strategically important to the farmland protection objectives of the local land trust and they are willing to pay the appraised easement value of \$7,000 per acre. He has had offers from speculators to sell the property for \$15,000 per acre, but wants to continue farming the property for now. Mr. Young is considering two retirement strategies: sell an easement now and invest the after-tax proceeds aggressively at a 10 percent rate of return, or wait 10 to 15 years and sell the property for development and invest the proceeds in bonds with a return of 8 percent.

As shown in Figure 13, the value of the property and the cash from the easement grows from \$532,960 to \$3,596,749 at the end of the simulation. At year 10 the total worth of the easement, investment income and land is \$1,043,763 and at year 15 the total worth is \$1,434,988.

At the end of the simulation, selling for development for \$25,000 per acre at year 10 yields a total value of \$3,258,158. This is almost \$340,000 lower than the total return from the easement strategy. Even if Mr. Young waits another five years and sells the land for a higher development value of \$35,000 per acre, the net return at the end of the simulation is virtually the same as the net return from the easement strategy at \$3,593,452.

Results of Case Study 3

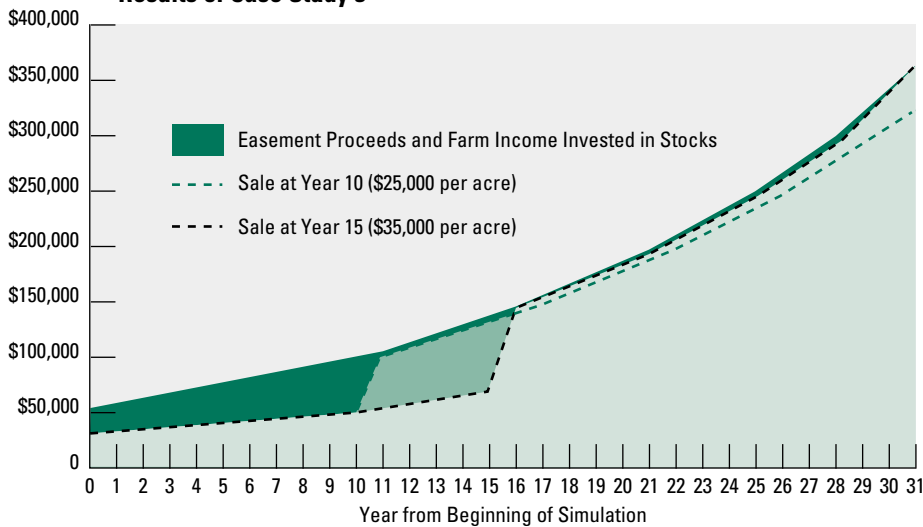


Figure 13

to a non-agricultural use. If the land is to remain in agricultural production, it will eventually be transferred to another family member(s), other business partners or sold to another farming operation.

The most important thing you can do as a landowner is make your decision an informed one. Gathering the necessary information and taking a realistic look at all of the options and choices available will earn you a winning ticket in the development lottery. Deciding not to act

is also a choice you can make; but, by choosing inaction, you give control of the decision to someone else.

Fortunately for most farmers and ranchers, this decision does not need to be made immediately. You should discuss the options with your family, business partners, and even your neighbors. If conservation easements seem to be an option worthy of consideration, contact American Farmland Trust, the Great Valley Center or your local land trust for more information.

# Customize the Economic Analysis Model

The economic analysis model used to produce the case study scenarios presented in this study is available as a Microsoft Excel file. The model variables and assumptions can be customized to consider almost any sale or easement scenario or to adjust the rates of return on various types of investment. Detailed discussion of the application of the model and the rationale for each assumption is contained in the method section of the technical appendix to this report.

Both the model and the technical appendix can be obtained at the American Farmland Trust and Great Valley Center web sites, [www.farmland.org](http://www.farmland.org) and [www.greatvalley.org](http://www.greatvalley.org), respectively. For assistance in running the economic analysis model, interpreting the results of the analysis, or obtaining a disk copy of the model, contact one of AFT's California field offices, the Great Valley Center, or your local land trust.

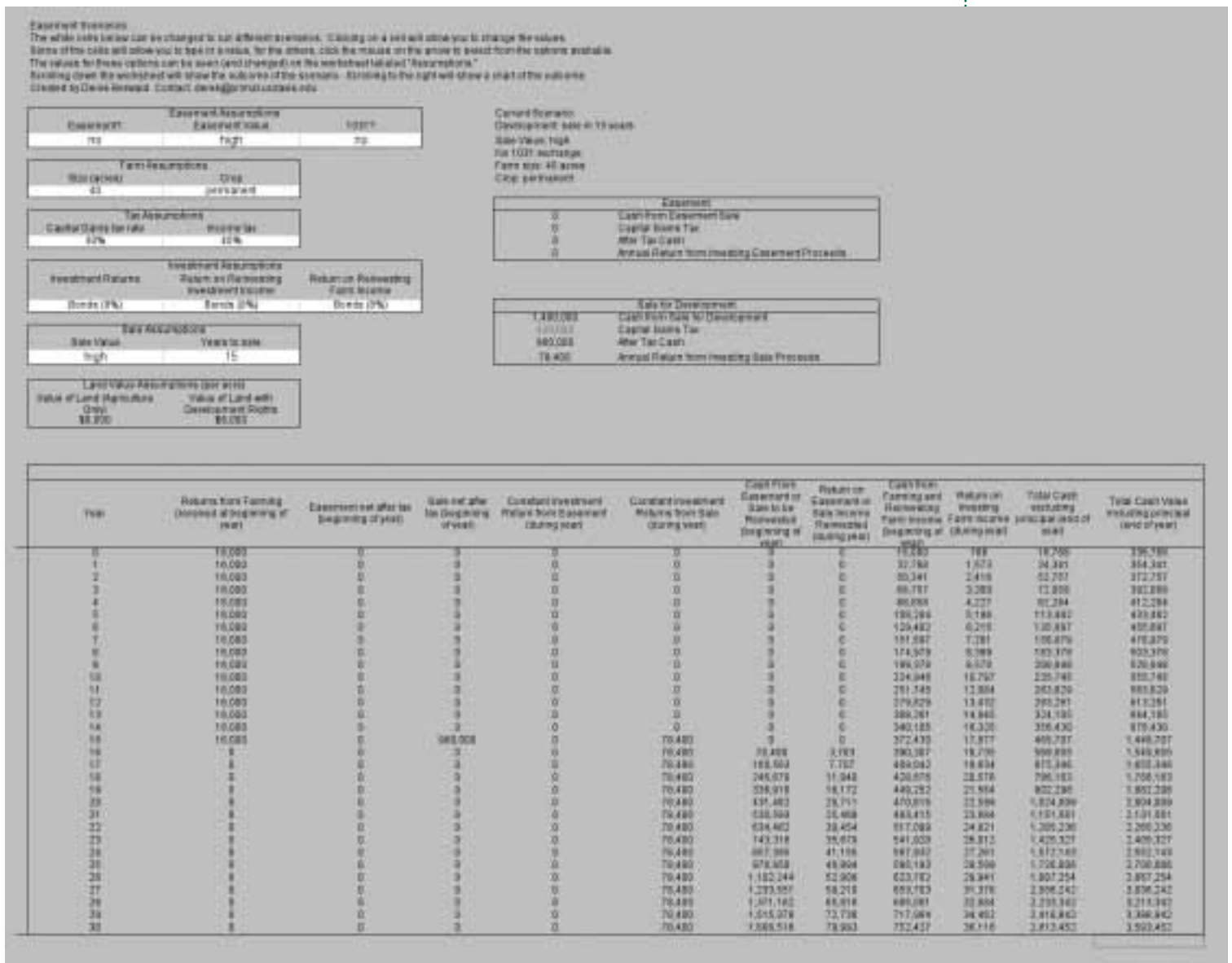


Figure 14

# AMERICAN FARMLAND TRUST

American Farmland Trust is a private, nonprofit organization founded in 1980 to protect our nation's farmland. AFT works to stop the loss of productive farmland and to promote farming practices that lead to a healthy environment.

Its action-oriented programs include public education, technical assistance in policy development and demonstration farmland protection projects.

AFT provides a variety of professional services to state and local governments and public agencies, private organizations, land trusts and individual landowners. Services include customized information products and workshops on farmland protection and estate planning; policy research, development and evaluation; farmland protection program implementation; and conservation real estate consulting.

For membership information or for more information on farmland protection activities in California, contact ATF's California Offices or connect to AFT's website at [www.farmland.org](http://www.farmland.org).

To find out more about AFT publications, products and services, call (800) 370-4879

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