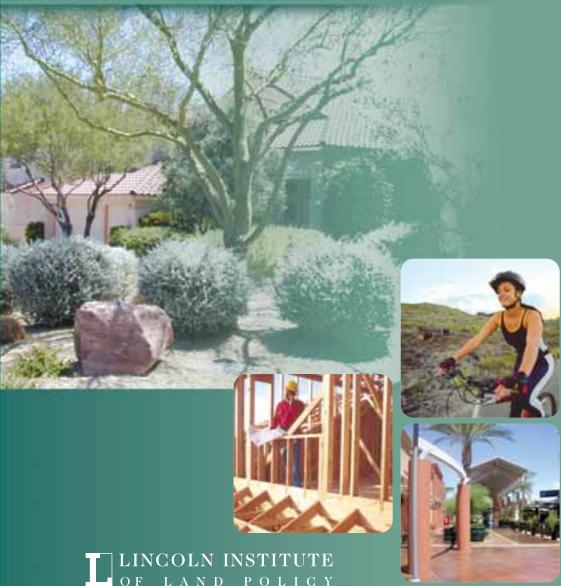
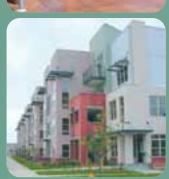
GROWING SMARTER AT THE EDGE



LINCOLN INSTITUTE
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ACKNOWLEDGEMENTS

The Lincoln Institute of Land Policy and the Sonoran Institute partnered with the City of Tucson to provide funding for this project. The case study report was prepared by Clarion Associates and Economic Research Associates to assist the City of Tucson Urban Planning and Design Department develop the 10,000 acre Houghton Area Master Plan project (HAMP).

Much of the land area included within the planning area is owned by the Arizona State Land Department which manages the land as a trustee on behalf of the public school system. Revenues from the sale or lease of these lands provide funding in support of Arizona's Classroom Site Fund. We thank the Arizona State Land Department and their planning and asset management staff who provided encouragement and support for this study effort and whose commitment will help make the City of Tucson's planning effort a success.

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INTRODUCTION

Over the next 25 years, it is estimated that the United States will grow by another 50 million residents. The American West, with its wide open spaces and desirable lifestyle, is predicted to absorb a large share of that growth, with some projections indicating that the West could increase by as many as 25 million people. Rapidly expanding metro areas like Phoenix, Arizona can anticipate three million new residents in addition to its existing three million. By all accounts, the West can expect much of the explosive growth that has characterized the last 20 years to extend to the next 20 years.

Advocates of smart growth point to the need to encourage infill and redevelopment within our existing developed areas. This ameliorates the impacts of a rapidly growing society on our natural landscapes and conserves limited resources—such as fossil fuels—more responsibly. However, it is becoming apparent that even the most optimistic infill or redevelopment scenarios will accommodate less than half of the projected increase in households over the next 25 years.

Development at the edge of urban areas will continue to be the predominant aspect of our future growth.

While development at the edge is frequently consigned by critics to the "sprawl" category and dismissed as undesirable, a number of encouraging trends in master-planned communities suggest that development at the edge is growing smarter. In a variety of communities across the West, the following basic elements of smart growth are being accommodated within master-planned communities (Heid 2004) and are increasingly seen as factors which provide a market advantage:

- Integrated, accessible, natural open space;
- Mixed public, commercial, and residential uses;
- Pedestrian orientation and other mobility options; and
- A range of housing densities and prices.

The above are some of the core aspects of these new communities and they are pointing the way to smarter growth at the edge.

This report examines specific case studies both from a private and public sector perspective to glean lessons that can foster similar development at the edge of our rapidly growing metro areas. It is our hope that with proper attention to infill and redevelopment as well as smarter growth at the edge, we can help sustain and improve the livability and economic vitality of our communities, while helping to keep the West and its natural landscapes a defining element of our nation's heritage.

Heid, J. Greenfield Development Without Sprawl: The Role of Planned Communities, Washington, D.C.: ULI-the Urban Land Institute. 2004









The Lincoln Institute of Land Policy and the Sonoran Institute worked with the City of Tucson, Arizona, to retain Clarion Associates and **Economics Research Associates to** provide planning assistance for the preparation of the Houghton Area Master Plan (HAMP), one of the largest areas of undeveloped land remaining within Tucson city limits. The area encompasses nearly 10,800 acres on the City's southeastern edge, with 7,750 acres under the control of the Arizona State Land Department.

This comprehensive case study, Growing Smarter at the Edge, is designed to review and evaluate the best of urban edge development associated with master-planned communities. The case studies will assist with the development of HAMP, an area plan that is intended to provide the implementation framework for the Desert Village concept established in the City of Tucson's 2002 General Plan.

The Desert Village concept is a large-scale development comprised of multiple master-planned communities, neighborhoods, and a Desert Village Center. Key considerations have been a blend of factors including:

- Preservation and integration of natural desert spaces and vegetation with ease of accessibility for people and vehicles:
- An appropriate mix of commercial and residential development; and
- A range of housing density, styles, sizes, and prices.

There is little doubt that the aspects of today's newer community concepts lead to smarter city growth while retaining maximum value for property owners.

CASE STUDY OBJECTIVES

Prior to initiating the detailed research of the case studies, the project team developed a list of

representative projects from the Western United States to help focus its efforts. These recommendations were gleaned from planners and developers as well as extensive Internet and literature reviews.

LAND USE OBJECTIVES

From a land use standpoint, targeted case study projects included:

- Western edge city locations;
- Contemporary models of progressive master-planned development; and
- Desert Village model elements as defined in the City of Tucson General Plan.



MARKET PERFORMANCE OBJECTIVES

From a market performance standpoint, targeted case study projects identified and documented:

- Market performance of progressive master-planned development in urban edge environments;
- Successful examples of projects that balance the competing interests of the differing scales of commercial centers;
- Successful examples of planning models and development patterns that maximize and preserve long-term value and have a positive impact on the cost of providing public services, including public schools.

STUDY CATEGORIES

Three categories of case studies targeted include:

CATEGORY 1: LARGE-SCALE MASTER-PLANNED COMMUNITIES

- Range of size and scale (1,500-10,000 acres);
- Open space preservation component;
- Urban edge location;
- Western location:
- Progressive urban form
- Mix of housing types and price ranges;
- Mix of land use types (residential, commercial, employment, open space).

CATEGORY 2: MIXED-USE CENTERS

- Part of master-planned communities;
- Progressive examples of regional commercial centers as well as neighborhood and community-scale development;
- Projects that plan for and integrate public/civic spaces effectively.

CATEGORY 3: PUBLIC SECTOR AREA PLANS

• Examples of public sector planning frameworks (e.g., City's General Plan, Area Plan, or other planning frameworks) that encourage/foster progressive master-planned communities that might be appropriate for the study area.

REPRESENTATIVE PROJECTS

The team developed a focused list of case study projects for further research and analysis, based on land use, market performance objectives, and other criteria. The projects, which span five western states, include:

New Mexico

Rancho Viejo • Mesa del Sol Arizona

Verrado • Vistancia DC Ranch • Rancho Sahuarita Nevada Summerlin

CALIFORNIA

Otay Ranch • San Elijo Hills North City Future Urbanizing

IDAHO

Hidden Springs









CASE STUDY HIGHLIGHTS

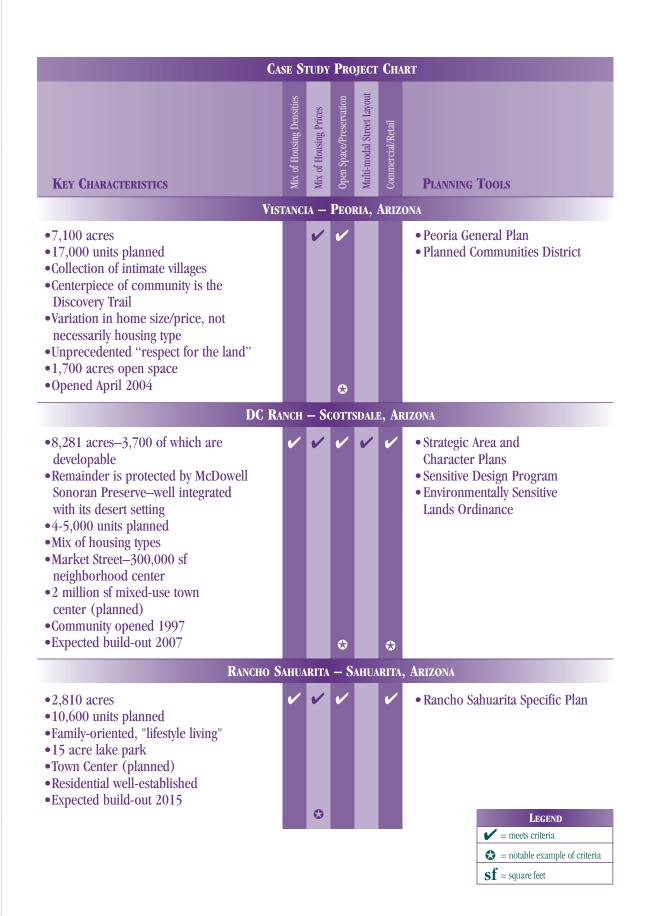
The following information is a matrix summarizing key characteristics and planning tools used in implementing each of these projects. It highlights projects that have successfully accomplished one or more key master-planned community criteria, such as a mix of housing densities, a mix of housing prices, open space and natural resource protection, a multi-modal street layout and the incorporation of commercial and retail. Particularly notable examples of these criteria are indicated by a .

This matrix can be used as a tool in locating the case studies most applicable to a particular issue related to the implementation of the Desert Village concept or master-planned communities in general.















CASE STUDY PROJECT CHART Wilder of Housing Prices Mix of Housing

- 2,500 acres
- Collection of villages/village centers
- 50% open space
- Promotes "living amid nature"
- Construction began in 1998, two villages under construction
- 500+ occupied homes
- Affordable housing component



- Santa Fe County Growth Management Plan
- Santa Fe Community College District Plan
- Community College Land Use and Zoning District Regulations

MESA DEL SOL – ALBUQUERQUE, NEW MEXICO

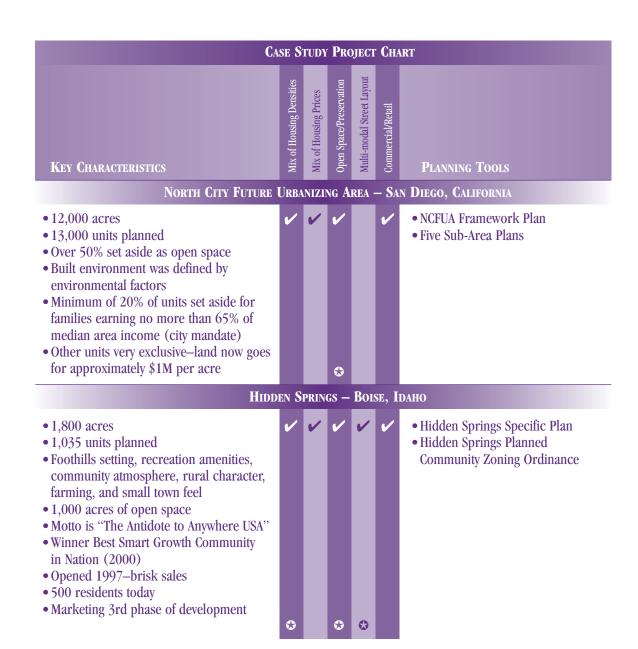
- •12,400 acres-State Trust Land
- •39,000 units planned
- Affordable, mixed-use, pedestrianfriendly
- Combination of urban and rural villages
- Incorporates employment, neighborhood, village and community centers
- •3,000-4,000 acres open space
- •Water Conservation Component
- Forest City Covington Master Developer
- Anticipated 70 year build-out
- •Construction has not begun

- Albuque County (
 - Albuquerque/Bernalillo County Comprehensive Plan
 - Planned Communities Criteria
 - Level A master-plan (First in 3-step process)

Verrado – Buckeye, Arizona

- 8,800 acres
- 9,500 units planned
- Built amenities before homes
- Neighborhoods range from urban to rural
- Town center constructed up front
- Village center/model homes complete
- Planned for up to 4 million sf of commercial space
- Phase I includes 2,040 homes
- Buckeye General Development Plan
- Community master-plan



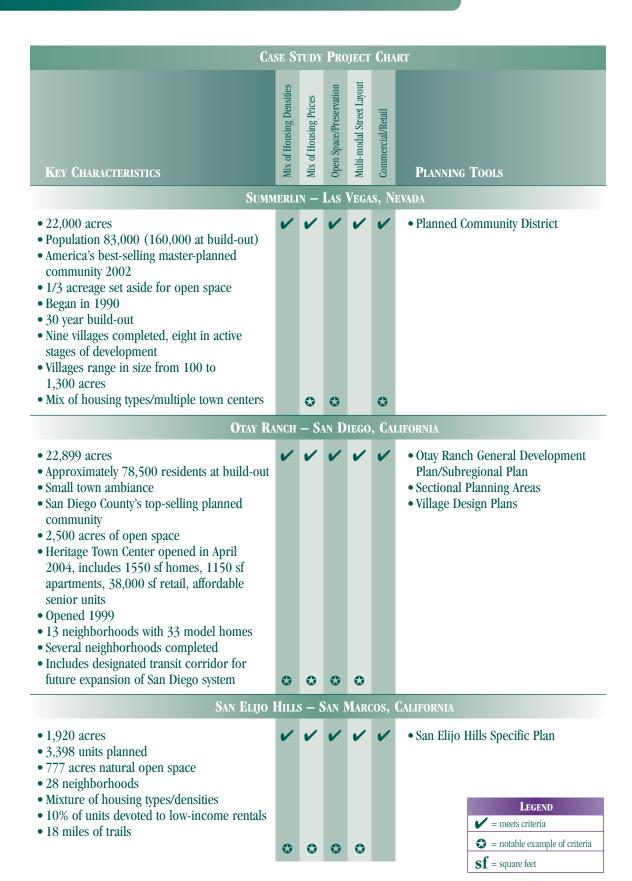












LESSONS LEARNED

Introduction

Each case study project offers a number of lessons learned from a design, planning process, and development program standpoint. While the significance of these lessons may vary between projects depending upon the reader's primary objectives, day-to-day role in the design, development, and oversight of master-planned communities, there are a number of noteworthy common themes. These themes are organized into three categories:

- Planning Lessons: What's working from a planning standpoint in most or all of the projects reviewed?
- Planning Challenges: What are the most common or difficult issues that have arisen during the planning and development of master-planned communities around the West?
- Market Lessons: What are important market lessons in the planning of large-scale masterplanned communities?

PLANNING LESSONS

Provide clear direction at the General/Comprehensive Plan level.

Each of the master-planned communities reviewed was required to meet a detailed set of policy objectives as set forth by the adopted community plan for the city/county in which it is located. Typically, community plans contain a variety of elements such as parks and open space, land use, growth management, housing and neighborhoods, and other categories based upon applicable state legislation and community needs. Although these documents are usually advisory in nature, by setting a clear direction at a broad level, communities are better equipped to enforce the implementation of their goals and objectives as they review more specific plans for master-planned communities. Some states, such as California, go one step further and require that zoning must be consistent with the adopted plan.

In Arizona, Growing Smarter legislation in 1998 and 2000 (Growing Smarter Plus) required all communities to update their General Plans, add four new elements (Open Space, Growth Areas, Environmental Planning, and Cost of Development) and set a deadline for completion of the update (December 2001). As a result, Arizona communities researched were fairly consistent at

the General/Comprehensive plan level on their policies in these areas, sending a clear message to developers and property owners regarding the expectations for plans submitted for master-planned communities. Many planners indicated these policies were relied upon heavily during the preparation of specific area plans and negotiation of development agreements for individual properties.

Other states, such as Nevada, have similar legislative requirements that ensure communities incorporate mandatory elements into their city or county plans. In some cases, the master-planned community was subject to the adopted policies of both the city and county plans.

Although the nomenclature varies, many communities also utilize sub-area plans, specific plans, framework plans, community plans, or similar, more detailed documents to supplement their general or comprehensive plans. This is common when a particular area or property has unique issues and characteristics, either due to existing development patterns,





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notable natural features, or other factors and requires an additional layer of discussion.

Provide a clear process to guide the development of masterplanned communities.

Many of the municipalities reviewed have established processes specifically for the development of master-planned communities. While the processes vary in their formality and level of detail—some representing a lengthy chapter in city's zoning ordinance and others summarized in a brief memo on the city's Web site—they all play a key role in clearly defining what the city's expectations will be for each master plan submittal. Common specifications include:

- A minimum size for masterplanned communities (ranging from 600 acres in Peoria, Arizona, to 3,000 acres in Las Vegas, Nevada);
- Minimum open space or environmental protection requirements (ranging from 10% in Buckeye, Arizona, to 50% in Santa Fe, New Mexico); and
- Desired and/or required development characteristics, such as a mix of uses, inclusionary housing, varied housing types, protection of natural features, or an integrated open space network. In most cases, these

are characteristics that must be addressed in subsequent phases of the process.

Establishing a straightforward process for the development of master-planned communities helps ensure that specific requirements applied to master-planned communities are applied consistently across the board and ensure that the city's planning staff and elected officials are working and reviewing project submittals with the same set of objectives in mind.

Equally important is the need to establish flexibility within the master-planned community framework to encourage creativity and innovation in design. In fact, planners and developers acknowledge that many of the more innovative projects would simply not have been possible if required to follow every aspect of the city's traditional zoning districts, as the issues associated with a 10,000 acre master-planned community are simply not the same as those associated with a 200-acre subdivision. Working within various master-planned community

processes, new zone districts and standards were crafted in many cases to allow for variations in housing types, increased densities, mixed uses, flexible lot depths, reduced street widths, and naturalized street cross sections, to name a few. Planners indicated that these often hefty "custom" standards far exceeded basic standards set forth by the city. Close coordination with city engineering and public works staff was required in order to gain approval for narrow streets or other features that must meet accessibility standards for emergency vehicles.

In some cases, cities have developed detailed design guidelines to help clarify their expectations for new development and have used them as a tool for reviewing individual components of proposed master-planned communities (Scottsdale, Arizona, is one good example). Development review boards were also used in several instances as a means of ensuring high quality development, while allowing a more flexible approach.



Do not budge on the basics.

Despite clear distinctions in density, architectural character, types of amenities, and other features, each project evaluated has a common theme—a mix of housing types, a mix of land uses, and an integrated open space and pedestrian system. The presence of these characteristics is truly what turns a typical production subdivision into something more:

- Inviting to live in;
- Sensitive to the environment and the community; and
- Better able to retain their value in the long-term.

City or county-level policies that provide a framework for the protection of open space, parks, and natural features and the accessibility of these features are a must for any community, regardless of the size and composition of the masterplanned communities it contains. Some level of citywide or countywide environmental protection and open space policies exist in each of the communities evaluated, and while it could be argued that any good developer would preserve the best natural features of the site regardless of whether there was policy direction to do so, the general consensus among communities that deal with this issue on a daily basis is that it is better not to leave it to chance.

Take advantage of available mechanisms for infrastructure financing.

The immense scale and fringe locations of many master-planned communities can make the cost of providing basic infrastructure, such as roadways, drainage systems, schools, and other public facilities extremely costly. Rarely are municipalitiesparticularly smaller communitiesequipped to pay for such improvements upfront. In 1988, the Arizona Community Facilities District Act became effective, which allows municipalities to form special districts for the purpose of financing the installation, operation, and/or maintenance of public infrastructure. Homeowners are then assessed for the costs over time and in most cases completed facilities are turned over to the municipality.

Community Facilities Districts (CFDs) were the most common tool used to meet the basic infrastructure needs of master-planned communities in the Phoenix region. This was the case with the Verrado project in Buckeye, Arizona, where a CFD was used to build a freeway interchange and a 3-mile access road. CFDs are also being used successfully in the Tucson area by the community of Marana, Arizona. According to Marana's planners, they have helped facilitate a more coordinated approach to the development of the Northwest Marana

area by allowing infrastructure improvements to be made upfront, regardless of whether all of the affected properties were being developed in the short term. CFDs can also be used to cover ongoing costs such as maintenance or operating costs, allowing them to be paid back over time.

To help level the playing field between large and small developers and property owners, Marana has also recently begun investigating the use of impact fees for parks and roadway improvements. Typically, impact fees do not cover operating and maintenance costs once the facilities are established, so additional sources of funding may ultimately need to be identified.

Other tools common in the western states include the use of Special Assessment Districts, which operate under a similar premise. This was the case with Summerlin, located within the City of Las Vegas, where seven districts have been used to pay for parks, roadways, and other improvements during the project's history.

Some of the case study projects, including Otay Ranch and the North City Future Urbanizing Area, were required to submit Public Facility Financing Plans upfront to illustrate how each community's infrastructure needs would be met. These plans were then approved concurrent with the master-plan.







PLANNING CHALLENGES

Maintain a region perspective.

Regional coordination between local jurisdictions and other public agencies is especially critical when dealing with emerging development areas likely to attract larger masterplanned communities. With many master-planned communities locating on the fringes of a larger metropolitan area, local jurisdictions have struggled to pay for and implement urban services, such as roadway widening, regional drainage systems, and other improvements necessary to support growth. Regardless of the ultimate funding source, whether public, private, or a combination of the two, communication and coordination must occur on an ongoing basis to ensure improvements being made meet the needs of not only the planned development, but are also compatible with existing and planned regional systems.

Driving through the semi-rural, but quickly growing areas in the East Valley of Phoenix, it quickly becomes apparent that the existing transportation network is woefully inadequate to handle the increased travel demands of thousands of new residents. According to county planners, in more than one instance, annexations have occurred that stop short of adjacent roadways, or

improvements have occurred in a piecemeal fashion with a "one-mile-here-one-mile-there" approach. This is highly inefficient and results in roadways that are unsafe and inadequate. In another instance, a roadway has been barricaded by one community to accommodate a planned development, and as a result has cut off a major east/west route for the neighboring community. Clearly, both the design and review of master-planned communities must occur with a strong sense of the broader region in mind.

Take the "standard" out of design standards.

As discussed above, many masterplanned communities have devoted considerable time and effort into the preparation of detailed design standards in order to ensure that each phase of the project maintains a similar level of quality and is visually compatible with existing and future phases. However, even with the best of intentions, this approach can occasionally backfire-resulting in homogeneous neighborhoods that are virtually indistinguishable from one to the other. Design standards, whether applied at a community-wide level or limited to a specific community master-plan, should encourage creativity and variety in design. Each standard should be carefully considered to

assess its effectiveness applied over several thousand acres, or even citywide.

Although homebuilders have in the past relied upon repetition for speed and cost effectiveness and as a result have been reluctant to increase the diversity of residential streetscapes, attitudes are beginning to change. Both planners and developers surveyed acknowledged an initial resistance to these types of requirements from the homebuilder community, but also stressed that through persistence and the consistent application of standards, they ultimately achieved their objectives. Diversity requirements were in many cases applied by design at the master-plan level and were used as a major selling point—as was the case with Verrado and Otay Ranch, among others. In some cases, however, basic diversity requirements were already codified and were simply exceeded by the subsequent master-planned community's standards. In Buckeye, Arizona (home of Verrado), for example, the city's zoning ordinance contains a "3x3" variety provision for housing types (floor plans, colors, and facades) to ensure that a quantifiable level of variety is provided in all masterplanned communities but allows for flexibility in developing an alternative approach.

RESPOND TO THE MARKET

The review of the case studies' market characteristics and project performance reveal several lessons that may apply to other planning efforts:

Timing of development is dependent on regional growth trends and patterns.

A growing regional market, in terms of jobs, population, and housing, though not a prerequisite, is a common condition of all of the case studies reviewed. For those areas that are not growing as rapidly as most of the case study markets, the rate of development will be related to regional growth trends and patterns. This means that the implementation of some plan elements, such as multi-family residential, commercial, and industrial uses (which may not be feasible today) will need to be paced in order to allow the market to build over time.

Deliver housing at a variety of price-points.

Building programs for masterplanned communities need to deliver housing at price-points that are affordable to different market segments, consistent with household incomes and characteristics in the market area.

Develop a strategy of providing affordable amenities.

The case studies illustrate that master-planned communities often obtain premium pricing relative to their markets because of the amenities they offer and their strategic market-orientation. However, larger communities that by design provide a broad range of housing types, either as a strategy or as a regulatory requirement, obtain average prices that are comparable to their regional markets because of this additional responsibility.

While amenities often command price premiums, these premiums are limited by the buying-power and depth of the target markets. In areas with relatively low land costs compared to some of the case study markets, there is less room for land to absorb expensive amenities. Therefore, projects in these areas must develop a strategy of providing amenities affordably through design and economies-of-scale. Preserved open space that is set-aside and integrated with development is a lower cost way of providing amenity value than, for example, more expensive recreational facilities.

Responding to the market without losing sight of the early vision.

As voiced by planners and developers alike, one of the greatest chal-

lenges in successfully implementing master-planned communities is maintaining the project's overall vision over an extended period of time. While it is generally expected that there will be some "shifting" of densities and land uses within a master-planned community between phases, some master-planned communities have gone astray when mechanisms were not built into their master-planned community processes to ensure that adjustments to the adopted master-plan did not result in the outright loss of important elements of the plan, such as commercial uses or housing variety.

To prevent this, many of the municipalities surveyed categorize amendments to master-plans as "major" or "minor" and provide detailed specifications as to what types of changes may be made at each level. Typically, minor amendments are defined as not significantly altering the overall vision of the master-plan as adopted and can be approved administratively. Major amendments often involve land use changes or adjustments in density that require further discussion and are required to go through a public hearing process and be approved by elected officials.

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THE PARTNERSHIP

TRUST LAND—A LAND LEGACY FOR THE AMERICAN WEST: BALANCING PUBLIC VALUES WITH FIDUCIARY RESPONSIBILITY.

In June 2003 the Lincoln Institute of Land Policy and the Sonoran Institute established a joint venture project to improve State Trust Land administration in the American West. The goal of the partnership is to ensure that conservation, collaborative land use planning, and efficient and effective management on behalf of trust land beneficiaries are integral elements of how these lands are managed. The efforts of the partnership are intended to assist diverse audiences broaden the range of information and policy options to improve state trust land management throughout the West.

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The Lincoln Institute of Land Policy is a nonprofit and tax-exempt educational institution established in 1974 to study and teach land policy, including land economics and land taxation. The Institute is supported primarily by the Lincoln Foundation, which was established in 1947 by Cleveland industrialist John C. Lincoln, who drew

inspiration from the ideas of Henry George, the nineteenth-century American political economist and social philosopher.

The Institute's goals are to integrate theory and practice to better shape land policy decisions and to share understanding about the multidisciplinary forces that influence public policy. The Institute seeks to improve the quality of debate and disseminate knowledge of critical issues in land policy by bringing together scholars, policy makers, practitioners and citizens with diverse backgrounds and experience in planning, development and property taxation, both in the United States and internationally.

THE SONORAN INSTITUTE

A nonprofit organization established in 1990, the Sonoran Institute brings diverse people together to accomplish our shared conservation goals.

The Sonoran Institute works with communities to conserve and restore important natural landscapes in Western North America, including the wildlife and cultural values of these lands. The lasting benefits of the Sonoran Institute's work are healthy landscapes and vibrant, livable

communities that embrace conservation as an integral element of their quality of life and economic vitality.

Through our approach, the Sonoran Institute contributes to a day when:

- Healthy landscapes, including native plants and wildlife, diverse habitat, open spaces, clean air and water, extend from northern Mexico to Western Canada:
- People embrace stewardship as a fundamental value by caring for their communities, economies and natural landscapes;
- Resilient economies support strong communities, diverse opportunities for residents, productive working landscapes, and stewardship of the natural world.



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