

DRAFT

February 24, 1998

Memorandum**Report to Pima County Board of Supervisors on
Urban Growth and Development in Eastern Pima County****Introduction**

The Board will, at the study session of February 24, 1998, discuss Urban Growth issues in Eastern Pima County. These issues are often controversial and divisive. Although debate on urban growth continues, the only thing that is certain is that Pima County has and will continue to grow each and every year. The debate should not focus on growth itself, but on how Pima County can grow in a manner that maximizes the benefits of growth to existing residents, and at the same time minimizes future tax costs while attaining community and environmental goals. These are difficult and debatable issues and there are probably no right nor wrong answers.

The attached report is intended to provide the Board with a historical perspective of regional land use planning in Pima County, some of the tools and actions being used by other communities in growth management, and to provide a framework for future Board policy study and direction.

Comprehensive Planning

Much of the work and study to develop a desirable land use plan for eastern Pima County has been completed through years of public study and debate. Many of the issues regarding growth control, urban sprawl, and environmental protection, that other communities are dealing with today, have been studied in the past within Pima County. Independent professional and citizen groups have compiled reports on these issues, such as the Findings of the Urban Design Commission, the Urban Land Institute/American Institute of Architects advisory report and the Goals for Tucson project. The County's Conceptual Land Use Element, Comprehensive Plan and Strategic Action Plan, all have been completed. They now require consistent and sustained implementation.

Planning and Implementation Contradictions

All adopted planning documents recognize the importance of the higher urban density and mixed uses (jobs and shopping near home) to develop a more compact urban form. These planning outcomes are often the subject of protest by existing residents. Further, market demand for larger lot sizes and lower density further frustrates the goal of urban containment. These market forces and opposition to higher density and mixed uses are problematic for Pima County to achieve ideal urban form. Overcoming these problems may be difficult and will require understanding and compromise.

Fragmented Land Use Decision Making

Pima County currently has six (and potentially eight) jurisdictions making land use decisions. A regional interjurisdictional approach is needed for land use decisions because of the potential adverse affects of independent decisions may have on the balance of the region. Cooperative in regional land use planning remains difficult, given the fragmentation of land use decision making without common regional goals. If this region is to be successful in achieving the goals expressed by historical land use planning studies, a much more cooperative and comprehensive approach for jurisdictional land use decision making must

be found.

Transportation Impact Fees, Sewer Connection Fees, and Building Permit Fees to Promote Infill

Given the medium price of new housing in eastern Pima County of \$130,000 it is unlikely that any variation in sewer connection fees, transportation impact fees, or waiving of building permit fees will sufficiently encourage infill development. Substantial cost incentives that approach or even exceed ten percent of market value will be necessary in order to significantly alter infill development patterns. This simply means that waiving of all fees, including construction sales taxes, will be necessary in order to create such a market value differential. Varying the sewer connection fee within the urban area or waiving such fees in the City of Tucson will do little to create infill development incentives.

Using Public Infrastructure Investment to Create Market Incentives for Growth Guidance

Perhaps the single largest tool that is available to local governments in guiding growth is public infrastructure investment. To date, almost all public infrastructure investment has followed growth. There has not been any conscious policy effort to use infrastructure investment to restrict or guide urban development. In the past, roads have been widened when existing traffic grew large enough to require such investments. Sewer and water infrastructure have also been constructed as a result of prior land use and development decisions. Providing and subsidizing public infrastructure in specific areas is probably the most powerful economic incentive for shaping urban form available to the Board.

Availability of Low Resource Value State Trust Lands for Urban Development

In the past, the creation of public property reserves such as forests, monuments, and parks has done more to shape urban form in eastern Pima County than most other actions of state, federal, and local governments. Given large areas of state trust lands with low environmental resource value in close proximity to existing urban development, it is possible to use public infrastructure investment and these lands to significantly alter urban growth and development patterns. Such is consistent with achieving the goals of the comprehensive plan for creating a more compact urban area that fosters mixed use development.

Recommendations

Given all the previous discussion as well as the attached report and to begin initial Board policy discussion, I have outlined a number of recommendations below that I believe are consistent with Board discussion on this matter.

1) Provide a Zoning Framework for Rural Open Space Land Uses

The County zoning code does not have a low enough residential density zoning classification to promote urban area containment separated by rural open spaces. The Board should consider adding a "ranch" zoning classification to the County zoning code which would promote large acreage residential uses consistent with open space preservation. The classification would carry a minimum lot size of ten to twenty acres, with a restriction that a majority of the property should remain natural open space. Such a new zoning classification could be assigned to present rural areas through rezoning process, similar to what occurred when general rural zoning (GR) was changed to rural homestead (RH). Such is likely to be controversial; however, if there is a desire to confine urban sprawl, it will be necessary.

2) Strengthen the Urban/Rural Boundary

For all practical purposes there is no real separation, other than on paper, between the urban and rural boundary identified in the comprehensive plan. This is primarily because of uncontrolled lot splitting where subdivision standards are not met and very little infrastructure exists. State Legislation in the past has lessened standards for subdivisions thereby inadvertently facilitating unwise and costly sprawl. To better strengthen the urban edge and to differentiate between rural and urban areas, I would recommend that Board support actions to stop uncontrolled lot splitting.

Further, there should be no public subsidization of infrastructure investments in areas prone to unregulated lot splitting. This simply means that the County, by policy, should not use public funds to pave roads or extend sewers to such areas. To avoid placing a hardship on existing County residents who have moved to such areas, certain areas should be grand-fathered as of a specific date selected by the Board. These areas would still be eligible for such publicly subsidized County infrastructure investment.

3) Use Public Infrastructure Investment As a Tool to Guide Urban Development

Historically, County public infrastructure investment has followed growth. Almost all past investment has been in reaction to where urban growth has occurred and not used as a policy tool to guide urban development. The County should determine where urban growth should occur with the least environmental, public, and economic cost and make infrastructure investments designed to encourage development of specific geographic areas of the County.

4) Develop Ecologically Based Buffers around Public Preserves and Parks

The National Forest, National Monuments, and County parks are located where they are for a reason. They were originally designed to protect specific environmentally sensitive lands in eastern Pima County. Their boundaries follow the geographic or public land survey boundaries, not ecological boundaries. The present County buffer overlay zoning ordinance is insufficient to protect environmentally and ecologically sensitive lands adjacent to public preserves. Additional action is necessary, it is recommended the Board adopt the principal of establishing ecologically based buffers around public lands.

5) Promote Urban Infill Based on Sound Engineering and Economic Standards

Urban infill is an often misused phrase that has become a buzz word for solving a variety of urban ills. Infill is valuable, but it must be measured and deliberately directed. I would recommend the Board support Urban Infill that occurs in areas where:

- 1) There is a demonstrated surplus or availability of public infrastructure capacity in either sewer, water, street, or school capacity and;
- 2) Where segments of the community are economically depressed based on national standards of income.

By using these two measurable standards, it is probable that if infill occurs in said areas it will provide public tax benefits. Therefore, public subsidy in the form of waiving connection fees, building permit and inspection fees, as well as construction sales tax revenues will be justified.

6) Increased Interjurisdictional Cooperation on Urban Growth

Each of the six municipal jurisdictions in Pima County (Tucson, South Tucson, Marana, Oro Valley, Sahuarita, and Pima County) independently determines land use policy within their boundaries. There needs to be increased regional cooperation in land use decisions. The Pima Association of Governments (PAG), the metropolitan planning organization, provides framework for these discussions to occur. The primary purpose of these discussions should be for each jurisdiction to define areas within their boundaries where urban growth can occur which accomplishes minimal environmental and public cost as well as promotes infill in areas with surplus public infrastructure capacity or economic distress.

7) Strengthen Development Standards

Development standards in certain areas should be strengthened to protect the natural environment. Increased grading restrictions should be inserted in the grading ordinance. Native plant protection should be established through a new ordinance and zoning code dealing specific with protection of native plants. Natural washes should also be protected from encroachment or the removal of riparian vegetation. Both the work of the County Urban Design Commission as well as the Urban Land Institute/American Institute of Architects needs to be reviewed to create development standards consistent with Pima County southwestern heritage. Of importance from both studies of using the concept of placing underground overhead utilities to remove the visual clutter from the urban environment as well as to improve mountain vistas.

8) Become a Development Partner with the State Land Department

The State Land Department and controls significant continuous properties in Pima County. (For example, there are 40 square miles of state trust land presently within the boundary of the City of Tucson.) Some prime for urban development. Many of these properties have lower environmental resource values than other developing private properties. These properties should be encouraged to enter the development market through rezoning, planning, and infrastructure investment. Pima County should do whatever is necessary to encourage the State Land Department to allow development of low resource value state trust lands while reserving and protecting environmentally sensitive state trust lands for exchange or preservation.

Respectfully submitted,

C.H. Huckelberry

County Administrator

Attachment :

Report to Pima County Board of Supervisors
on Urban Growth and Development in Eastern Pima County

Report to Pima County Board of Supervisors
on Urban Growth and Development in Eastern Pima County

I. Metropolitan and Regional Planning History in Pima County

Land use planning for the Tucson area can be traced back to 1930 when the first city zoning ordinance was adopted. In the late 1930's, a group of local citizens united for the purpose of promoting regional planning and fostered the development of a comprehensive, long-range plan. Upon completion in 1943, sections of the Regional Plan (Segoe Plan) were adopted.

After years of citizen effort, in 1949 a state enabling act permitted counties to plan and zone the same as cities, allowing a county planning and zoning commission. In 1952, the first county zoning code was adopted, and area or zoning plans such as the Rincon and Catalina Foothills plans were developed in the late 1950's.

In 1950, the Tucson Urban Land Use Study was developed which provided the foundation for the General Land Use Plan (GLUP). The GLUP (Attachment 1) was adopted in 1960, and projected a population of 1.4 million by the year 2000. Records of platted subdivisions between 1955 to 1959 that are referenced in the GLUP reveal early regional land use patterns beginning to take shape. Large subdivisions, located in what is today the Rincon Valley and Oro Valley areas, were already beginning to define the geographic extent of the urban area. Together with an amalgamation of area, community, neighborhood, and zoning plans, the GLUP served as the long range land use plan for unincorporated Pima County for many years.

During the 1970's, a major effort to update and expand on the GLUP was made jointly by the City of Tucson and Pima County. The draft 1975 Comprehensive Plan took three years to prepare, followed by another four years of public review. The process provided an opportunity for community dialogue on issues that became focal in comprehensive planning. The extensive document proposed policies for a wide range of local concerns. The effort resulted in a policy plan with no map which the city adopted (in a modified form), but the county did not.

After the initial construction of Interstate 10 through the urban portion of Tucson between 1956 and 1965, few major transportation improvements were built in the community until 1980. Transportation corridor planning began about that time, resulting in improvements to Valencia Road (Alvernon to Kolb), Golf Links Road (Alvernon to Craycroft) Alvernon (Golf Links to Valencia), east Tanque Verde Road, and Kolb Road (Valencia to Irvington, I-19 to Valencia), as well as Kino Boulevard and the Aviation Corridor.

Using a community survey program, in 1983, a private, non-profit group called "Goals for Tucson" identified local goals and priorities. The following year, a panel comprising members of the Urban Land Institute and the American Institute of Architects produced an advisory report (Attachment 2) which represented an independent, outside perspective on metropolitan Tucson, its environment and urban setting. The report's recommendations included an increased importance attributed to city and county planning and zoning, encouragement of "mixed-use activity nodes" to bring residential uses closer to employment

centers and further protection of dry washes, rivers, and floodplains. The report also stressed the need for a comprehensive, regional perspective to guide land use. Another report that identifies urban form policies and actions was produced by the Urban Design Commission (Attachment 3) and adopted in principle by the Board of Supervisors.

In 1985, the Board of Supervisors appointed an Open Space Committee to inventory and classify open space and recommend methods of preservation. Draft findings emphasized a network of dedicated and linked open space, urban open space corridors, and the protection of public preserves.

The same year, the Board of Supervisors formed a comprehensive plan working committee to achieve a regional perspective on goals, objectives and policies. The Regional Vision of Eastern Pima County and several individual vision statements were early results of the committee's efforts. Pima County's vision statement is defined by the Conceptual Land Use Element (CLUE) which was adopted by the Board of Supervisors in 1989 (Attachment 4). The CLUE document supplemented the GLUP and provided the goals for the development of the Comprehensive Plan that was adopted in 1992 by the Board.

II. Current Regulatory Land Use Actions and Pima County Comprehensive Plan

Comprehensive Plan -The Pima County Comprehensive Plan covers approximately 1,300 square miles in the unincorporated portion of eastern Pima County. The plan is divided into six sub-regions, and contains three elements: a) Land Use Intensity Legend which assigns a land use designation for all property in the plan area. Rezoning requests must comply with the plan by requesting a zoning district and residential density permitted in the land use category for the subject property; b) Regional and Special Area Policies which are implemented through the rezoning process by identifying development and other guidelines that should be applied to individual requests; and c) Strategic Action Plan which identifies eight programs designed to implement quality of life objectives identified in the Conceptual Land Use Element (CLUE).

Five years of rezoning activity under the guidance of the land use intensity legend indicates that the County may not be achieving a fundamental goal of the plan which is to create a more compact urban form. Analysis of rezoning requests indicates they have been approved at the low end of the expected density ranges for the land use designations, especially in the Medium Intensity Urban category (many rezoning cases would not have conformed to the plan if the minimum densities were included). This means that if the population capacity of the Plan is reduced by accommodating lower density in designations that were originally designed to support higher densities, future population increases will be pushed further from the existing urban area. In other words, the land consumption rate per capita may be higher than expected, causing expansion of the urban area earlier than planned.

Staff also recognizes the need for more effective mitigation measures in order to alleviate neighborhood concerns about the impact of new development. Additional mitigation measures may include more effective buffers, requirements for maintaining existing views, providing open space, and possibly even traffic calming measures to reduce vehicular travel through neighborhoods. Until such measures are in place, it is unlikely that existing residents will support higher densities contained in the Plan.

Another problem identified in Plan implementation has been the issue of adequate public facilities to support new development. The adoption of a development impact fee for roadways has addressed this to some extent. However, much more coordination is needed between the land use approval process and the assurance of adequate infrastructure.

Finally, the Strategic Action Plan is an underutilized element of the Plan that could be revised to reflect a clearer relationship between recommended programs and the annual budget adoption process. Currently, the action plan contains tools that may be useful in adding a timing element and adequate public facility requirement into the land use approval process. However the action plan is very vague in its relationship with budget process and implementation procedures.

Zoning Code - The Pima County Zoning Code provides a very traditional regulatory framework for new development with standards on use, intensity, design, as well as procedural requirements. The code provides mitigation measures for development in the form of setbacks, height, open space requirements, landscaping and bufferyards, and numerous other standards.

However, the code does not address issues such as the timing of development with the provision of adequate public facilities. The provision of adequate infrastructure is evaluated on an individual case basis at the time of rezoning, resulting in a fragmented review process that often does not take into consideration previous approvals (but unbuilt projects) in an area. For instance, in the northwest portion of the region, numerous rezoning requests were approved in the 1980's which did not develop immediately. When the market for such projects improved, a significant number of housing units were developed in the 1990's, causing transportation impacts that the county is still attempting to address. In total, over 330 rezoning cases still exist that have yet to be developed. Few if any of these cases require as a condition of approval that adequate public facilities be in place prior to development.

The County also has four zoning plans in effect, three which have experienced a significant amount of development activity (Catalina Foothills, Agua-Caliente/Sabino Creek, and Lago del Oro). However, the fourth (Vail-Posta Quemada) remains dormant although it is possible to develop up to 40,000 dwelling units along with commercial and industrial uses in the approved plan. The plan is situated south and east of the town site of Vail. To implement land uses in a Zoning Plan traditional public hearing processes are not necessary.

III. Rezoning and Comprehensive Plan Amendment Activity

Rezoning Activity - Since 1990, there have been 451 rezoning cases filed in unincorporated Pima County. Nearly 78 percent (354) of the cases were approved; about 9 percent (42) were denied, and 12 percent (55) were withdrawn. A total of about 11,500 residential dwelling units were approved through the rezoning process since 1990. Of the approved rezonings, the CR-1 zone was the most requested district (2,080 units were approved on about 2,040 acres). Over 4,300 units on 425 acres were approved for the TR zone. Commercial rezonings to the CB-1 and CB-2 zone resulted in about 225 acres.

The Canada del Oro sub-region (as defined in the Comprehensive Plan) experienced the most rezoning activity in terms of dwelling units approved. Since 1990, over 3,600 residential units were approved through the rezoning process in this area. In the Catalina

Foothills sub-region, over 2,200 residential units have been approved. Land within the Upper Santa Cruz Valley sub-region was rezoned for about 1,600 units since 1990. In the Tucson Mountains and Avra Valley/Tortolitas sub-regions, over 1,300 units were approved in each area.

Comprehensive Plan Amendment Activity - Since 1993, a total of 100 plan amendment cases have been filed in unincorporated Pima County; 58 were approved, and 42 were denied or withdrawn. A total of about 10,400 acres were approved and 10,200 acres were denied or withdrawn from consideration (these totals do not include Pima County-initiated plan amendments and minor revisions). Over 3,100 acres were approved for the Low Intensity Urban-3.0 land use category, which allows rezoning requests for densities up to three residences per acre. Over 2,000 acres were approved for Medium Intensity Urban (which allows the rezoning requests to TR and residential densities that usually receive approval around three residences per acre). Over 1,000 acres were approved for the Multifunctional Corridor category, which allows commercial and higher density residential rezonings.

Also, over 3,100 acres were converted from rural land use designation to urban land use designations. An additional 3,300 acres were removed from the Development Reserve category, which is considered a type of holding zone where urban development may occur when the supply of other vacant land planned for urban use begins to build out.

IV. Population and Housing Unit Growth in Pima County

The following table describes the 1980, 1990, and 1997 population and housing unit count for each jurisdiction in Pima County (based on existing jurisdictional boundaries). Also included are the adopted population projections to the year 2020.

Table 1

Population and Jurisdiction in Pima County

Population Housing Units

Jurisdiction	1980	1990	1997	2020	1990	1997
Tucson	330,537	405,390	452,836	589,899	183,338	197,060
Oro Valley	1,489	6,670	22,543	59,388	3,576	11,055
Marana	1,647	2,187	6,831	76,553	850	2,402
South Tucson	6,554	5,093	5,565	7,151	1,870	2,070
Sahuarita		1,629	2,445	10,564	584	894
Unincorp Pima County	191,216	247,540	299,430	462,689	107,989	128,851

Total Pima County	531,443	668,509	789,650	1,206,244	298,207	342,332
--------------------------	----------------	----------------	----------------	------------------	----------------	----------------

The current regional population is approximately 790,000, located in about 342,000 housing units. Since 1990, the region grew by about 121,500 new residents and 44,000 new housing units. This translates into about 17,000 new residents each year, and about 6,000 new units annually.

Population projections to the year 2020 indicate the region will grow roughly 2 percent annually, which translates into about 416,000 new residents and 180,000 additional dwelling units regionally. This equates to about 15,000 to 18,000 new residents per year, and about 5,000 to 7,000 new housing units annually. At an average density of two residential housing units per area and considering streets and other support services, 7000 new residential units per year will consume approximately 7.2 square miles of land.

For unincorporated Pima County, the current estimated population is 300,000, and is expected to increase by about 162,000 in the year 2020 (for a total of 462,000). Unincorporated Pima County currently contains about 129,000 dwelling units, and to accommodate the projected population increase, an additional 70,000 units may be needed (for a total of 199,000 units). If present low residential density trends continue approximately 70 square miles of urban area will be needed to accommodate this unincorporated population growth.

It is important to keep in mind that these numbers are only projections of what may occur regionally in terms of future growth rates. It is obviously difficult to determine if the projections to the 2020 horizon will occur sooner or later than projected. However, it seems unlikely that Pima County and the other jurisdictions would be able to significantly control regional population growth. Pima County will continue to grow requiring approximately 7,000 housing units and 7 square miles of urban area each year.

V. Population Capacity of Unincorporated and All of Pima County under Existing Zoning

Staff conducted an analysis of the population capacity of vacant, uncommitted land in eastern Pima County if such land develops based on existing zoning (hard zoning, conditionally-approved zoning, or pursuant to one of the four adopted zoning plans). The potential population that could be accommodated based on existing zoning forecasted at the low end of allowable density is between 275,000 and 310,000 residents.

Within the City of Tucson, approximately 30 percent of the land area is vacant or 79 square miles. If fully developed, it may be possible to accommodate up to 250,000 additional residents. In the Town of Marana, staff has estimated that an additional 40,000 housing units have been approved in the adopted specific plans within the Town. These plans include Acacia Hills in the Linda Vista/Interstate 10 area, Continental Ranch (along Silverbell Road), and Dove Mountain (north of Tangerine). In the Town of Sahuarita, the Rancho Sahuarita specific plan has been approved for over 10,000 dwelling units.

There appears to be sufficient development capacity based on existing or planned zoning to accommodate almost twice the planned population increase in the next 20 years.

VI. Growth Management Techniques and Strategies

Growth management is generally defined as a coordinated set of regulations and policies that guide the location, intensity, design, and timing of development. Unlike traditional land use regulations like zoning and subdivision review, growth management often emphasizes the element of timing of development with the provision of adequate infrastructure, and the location of development with respect to urban limit lines or defined infrastructure service areas.

Growth management has also evolved over the past three decades. The first wave of growth management programs addressed the concern of how much growth would be allowed. The second wave shifted to where and when growth should be permitted, and who would pay for it. The third and current trend is to emphasize the type growth that is allowed, with an increasing emphasis on quality development and livable neighborhoods and communities.

The specific elements of a growth management strategy will vary according to what the jurisdiction (or region) intends to accomplish. The intended goals may include: prevent continued expansion of the urban area (namely urban sprawl), ensure adequate level-of-service standards for public services will be available with approved development, ensure that new development pays closer the real cost of infrastructure, regulate the rate of development with public services, reduce vehicle-miles-traveled, and preserve open space and critical resources.

Growth management techniques used in metropolitan areas throughout the United States are described in two categories: urban containment strategies and adequate public facility and timing standards.

Urban containment strategies are designed to control the spatial pattern of development. Their purpose is to promote compact and contiguous development patterns that can be more cost-effectively served with infrastructure and to preserve open space and environmentally-sensitive lands. As a result, they tend to encourage infill and a mix of land uses, and also attempt to provide greater predictability in the development process by identifying where more intense development will be allowed. The two primary types of containment strategies are urban growth boundaries and urban service boundaries. An urban growth boundary is a geographic limit that clearly defines the extent of planned urban development over a given period of time (generally 20 years). Land outside of the boundary is reserved for agricultural and very low density residential use (usually much lower than Pima County's Rural Homestead zone which requires just over 4 acres per parcel). Growth boundaries establish goals for accommodating a certain amount of population and generally attempt to reduce the amount of land consumption per capita in an effort to prevent continued expansion of the urban area. The process for determining the location of growth boundaries generally involves making population projections and density estimations, determining how much vacant land is needed to accommodate growth, and subtracting this figure from the available vacant land inside the designated boundary to determine the amount of urbanized land needed for future growth. Urban service boundaries are based more directly on defined limits where infrastructure will be provided to support urban intensities. They differ from urban growth boundaries in that they are somewhat more flexible in expansion since they are established consistently with the service area of planned public facilities which change

with added capacity. Urban growth boundaries tend to remain fixed over a longer time period based on long term population projections. However, service boundaries are generally found in regions that contain adopted urban growth boundaries, as the service areas provide an intermediate measure to further shape growth patterns. The intent is to incorporate service capacity and previous investment in infrastructure into the land use decision-making process.

Adequate Public Facility and Timing Standards - The second broad category of growth management techniques involves adequate public facilities and timing standards. In addition to meeting applicable zoning and subdivision standards, new development must also demonstrate that sufficient infrastructure capacity will be able to serve the project when it comes on line. They are typically based on adopted level-of-service standards for each type facility under review. Although they do not regulate the location of new development, they are often combined with some type of urban growth or service boundary. Once level of service standards are established and an ordinance adopted, the approval process tends to become self-administering since it is based on clear criteria for approval or denial based on adequate capacity at the time of development.

Two of the more common types of such strategies include adequate public facilities ordinances (also known as concurrency) and growth phasing systems. Concurrency ordinances condition all proposed development on the adequacy of infrastructure and public service capacity, regardless of location. However, they may use a tiered approach with increasingly stringent controls or level-of-service standards from the urban area out to outlying, exurban areas. The services under review in a concurrency ordinance may include transportation, water, sewer, schools, and others (sometimes as defined by state law).

Growth phasing systems limit the amount of new development that may be approved within a service area, usually on an annual basis, and are based on the capacity of large-scale public facilities that require significant capital investment such as wastewater treatment plants. Growth phasing is designed to spread remaining capacity over a long period of time between the present and probable future date of expansion.

VII. Growth Management Techniques in Practice

California - In 1991, a survey was conducted by the State of California Governor's Office of Planning and Research (Governor's Interagency Council on Growth Management, September 1991) of all cities and counties in the State to determine the frequency and type of growth management programs. The study revealed that 43 percent of the counties in the State had adopted growth management programs 25 percent of the cities. Growth management activity was found in more heavily populated areas of the State. The study further indicated that the four most popular techniques for the counties with growth management were: establish urban limit or growth limit lines (used by 84 percent of the growth management counties); adopt level of service standards (44 percent); develop goals and policies relating to a jobs/housing balance (32 percent); and adopt a phased schedule of community growth (28 percent). The study indicates that counties tend to take a regional view in growth management, emphasizing resource conservation and cooperation between jurisdictions. They tend to develop policies to direct growth to existing urban areas, and use level of service standards as scientific measures of quality of life concerns such as traffic congestion and open space. Also, 92 percent of the California counties with growth management programs used their comprehensive plans to define the goals and policies of the management strategy. It is possible for Pima County may be able to use existing

Comprehensive Plan in this manner, as described later.

The City of Petaluma, California enacted, in the early 1970's, one of the nation's first building permit allocation systems. Since then, growth management programs have become common within urban and urbanizing portions of the State of California. They are most common in San Diego, Santa Barbara, and San Luis Obispo counties and in the San Francisco Bay Area. Unlike city programs, which are more likely to utilize building permit allocation systems, counties with growth management programs have tended to adopt urban limit lines and policies to encourage a jobs/housing balance.

Growth management is on the increase at the local level as a result of State and regional requirements such as Congestion Management Plans (CMP's) and local transportation sales tax authorities. Transportation is one of the key elements that make up the mix of issues known as growth management. Under the 1990 Proposition 111 fuel tax measure, cities and counties were required to adopt programs to control traffic congestion as a condition of receiving a share of the new fuel tax revenues. In both Contra Costa and Orange Counties, city and county eligibility for a share of county transportation sales tax revenues is based on having a local growth management element. These elements must be certified by the county transportation authority created under the sales tax measure. Other congestion management programs include level of service standards, commercial development limits, and traffic-related changes in land use plans. Regulating the rate of commercial growth is another approach to meeting traffic congestion ceilings set by County CMP's. Contra Costa County, for example, was the first county to incorporate congestion management rules in its general plan, which limits development in areas where traffic levels of service requirements are not met.

Although growth management is not a statutory requirement for placing a county transportation sales tax on the ballot in California, it is a popular strategy for attempting to win support for such measures from local anti-growth forces. In 1990, both Sonoma and Marin Counties included growth management requirements as part of transportation sales tax proposals. Both the Orange and Contra Costa County sales tax measures were defeated when first placed on the ballot. Their eventual passage has been credited to the inclusion of growth management as part of the measures.

In the Contra Costa region, residents passed a half-cent sales tax increase in 1988 for roadway and transit improvements which was also tied to a commitment from the 18 cities and the county to establish growth management plans in their jurisdictions. The overall goal was to establish a cooperative process for growth management on a county-wide basis while maintaining local control over land use decisions. The measure also created a transportation authority to collect and disperse funds which were dependent on the jurisdictions' compliance with the regional goals. The goals included the development of adopted traffic level of service standards, and participation in a cooperative interjurisdictional planning process to reduce the cumulative regional traffic impacts of development.

It has been reported that some cities were reluctant to participate in cooperative planning efforts; however, the incentive of receiving new revenue generated by the increased sales tax appeared to provide the momentum to encourage their participation.

Portland - The State of Oregon initiated a growth management program in the 1970's with the intent of preserving farmland from increased development pressures. The state legislature identified a need for properly prepared and coordinated comprehensive plans for

cities, counties, regions, and the state as a whole. A basic requirement in the program is that jurisdictions must collectively delineate urban growth boundaries beyond which only rural densities are allowed. The program also requires minimum densities for new development within planned urban areas (minimum densities range from 6 to 10 residences per acre).

Reported benefits from Oregon's first 15 years of experience include: holding down the costs of public services and facilities, preservation of farmland, better coordination of city and county land use planning, and greater certainty for those who own, use, or invest in land at the city's edge. More than 90 percent of the state's population growth in the 1980's occurred inside the urban growth boundaries.

The most notable example in the State involves the Portland metropolitan area, which establishes a regional urban growth boundary intended to provide a 20 year supply of developable urban land. In the 1980's, the city's population grew by 14 percent while its consumption of new land increased only 11 percent, an indication that the growth boundary was in fact developing in a more compact pattern. Also, a central component of the Portland program is to attempt to provide a much wider range of housing types, particularly an increase in multi-family and small lot single-family dwellings. The program also calls for focusing growth along transit corridors, preserving open space, and creating compact business areas.

The Portland program is guided by a regionally-elected entity known as Metro Portland which has oversight authority over comprehensive planning activity in the region. The Metro Portland 2040 Plan is now underway, and the growth boundary is being evaluated for possible expansion due to expected growth demands over the next 50 years. Where, when, how much, and how the boundary will be expanded are still under review.

San Diego - In the 1970's, San Diego unveiled a growth management strategy to slow growth in the far fringes of the city and to accommodate new development within the urbanized area. An ordinance was adopted in 1970 requiring adequate public facilities concurrent with proposed development; and in 1979 they adopted a three-tiered planning area: urban, planned urban, and future urban development. To encourage development in the urban tier, capital improvements are targeted in this area, and development incentives are provided (such as waiving development impact fees). In the planned urban area, impact fees and public facility improvements are required for new development (a "pay as you go" policy). The future urban area is considered a holding zone and is off limits for urban development for a 20 year period (the area originally allowed one home per 10 acres).

Early on, the program was deemed successful as two-thirds of the population growth in a five year period occurred in the central urban tier, and the population growth in the outer area was only one-third of what was originally projected. Also, numerous requests to re-classify land in the future urban area for urban use were denied.

However, more recently, problems have surfaced in the implementation of the program. The San Diego City Council began to approve higher densities in the future urban area (the holding zone), which ultimately led to a 1985 proposition that requires voter approval for any higher density urban development in the third tier. Another problem surfaced in the late 1980's where, following years as rapid growth, it became clear there was a shortfall of over \$1 billion in infrastructure costs within the urban tier (where impact fees were not charged and capital improvements were not able to keep with rapid growth). And more recently, it has become clear that a loophole exists with the allowable density in the future urban zone

where 4 acre lots are permitted. The area has been developing at very low densities mostly by upper income households who can afford the land costs in the outer tier. This is similar to the problem Pima County faces with unregulated lot splitting in rural-designated areas.

Another growth management effort was initiated in San Diego in the late 1980's with a proposition that was passed in the county (Proposition C) as an advisory measure for regional growth controls. A Regional Planning and Growth Management Review Board was established with representation from the county and 18 cities with authority given to the San Diego Association of Governments (SANDAG) for development of a plan. The plan contains measurable quality of life standards relating to air quality, transportation, water, sewer, solid waste, housing, economy, open space, and growth forecasting.

However, it is important to note that the regional planning goals are carried out by the local jurisdictions. The cities and county "self-certify" their individual plans for consistency with the regional plan, a process that has provided a balance between regional cooperation and local control. It has been reported that the strategies used in the San Diego area have limited some of the degree of urban expansion and encouraged growth to occur in the urban area. However, it remains to be seen if past troubles in the implementation of the San Diego program will be overcome.

Sacramento County - The County has implemented an urban service boundary based on the availability of water and sewer service. Land within the urban tier is designed to accommodate residential development for 18 years, and the second tier is an agriculture-urban reserve which is to be maintained as farmland until the County population reaches 880,000. However, it has been reported that planned densities inside the urban tier have been decreased due to neighborhood opposition, thus potentially decreasing the population potential of the urban area and possibly causing pressure to expand into the second tier sooner than originally expected (a problem similar to that of Pima County).

San Jose - The City of San Jose established an urban service boundary in 1976 to discourage development in rural areas and encourage infill. The program has been successful on both accounts, reducing the number of rural acres converted to urban use by 33 percent and increasing the percentage of development in the existing urban area from 32 percent to 58 percent.

Thurston County, Washington - The cities of Olympia, Tumwater and Lacey entered into a non-binding agreement to create a two-tiered boundary: one is a short-term, 10 year allotment, and the second is a long-term 25 year boundary. The boundaries are coordinated with 25 year wastewater and water service boundaries. Only rural uses are permitted outside the urban area, a Memorandum of Understanding between the County and the cities requires joint meetings of the individual planning commissions. Although the agreement is voluntary it has been deemed successful.

Boulder, Colorado - The City of Boulder along with the County, through an intergovernmental agreement, has adopted the urban service area approach to limit extensions of water and sewer service outside of the corporate limits into unincorporated areas of the county. The intent of the Boulder initiative was to create a direct link between land use and infrastructure planning by sending the message that land outside the service boundary is not likely to become urbanized in the near future. Land in the unincorporated area is very rural, averaging about 1 unit per 35 acres. However, there is no requirement that a certain amount of land be contained within the service area (unlike the Portland urban

growth boundary which must define enough land for 20 years). The measure has been successful in lessening land speculation for urban development and has allowed the community to continue with an open space acquisition program. The city has developed a 27,000 acre greenbelt system that serves to define the urban edge. The city has further adopted a phased growth initiative with a limit on the building permits issued annually.

Fort Collins and Larimar County, Colorado - A joint city-county program to establish an urban growth area was established in 1980, with a review board appointed by the city and county to address land use issues outside the city but within the county. The board makes recommendations to the county for development approvals, with guidance provided by a county-prepared and city-reviewed plan with common development standards for both entities. It has been reported that the arrangement has resulted in improved relations between the two entities.

Florida - In 1985, the State of Florida enacted the Local Government Comprehensive Planning and Land Development Act which mandated the adoption of concurrency requirements for public facilities (including roads, transit, sewers, water, solid waste, drainage, and parks). The act requires infrastructure at an adopted level of service to be in place to accommodate approved developments, usually at the subdivision platting stage although this may vary by jurisdiction. Although there is no specific enabling authority for urban containment boundaries, many Florida jurisdictions have created such boundaries in practice since the state requires local governments to encourage more compact urban development patterns, discourage urban sprawl, and provide efficient infrastructure. Adopted concurrency ordinances operate in conjunction with such de facto boundaries. The Florida Act also contains a requirement where expansion of service areas cannot result in reducing or eliminating infrastructure capacity that will be needed by infill and redevelopment projects (and therefore potentially avoid some of the problems San Diego faced with lack of infrastructure in the urban area since no fees and no reservation of capacity was in place).

Broward County, Florida - The Broward County concurrency management system, adopted in 1989, requires compliance with 10 adequate public facility requirements (including water, sewer, drainage, fire and police protection, and school sites and buildings). However, inadequate roadway capacity has posed the greatest constraint to new development. Proposed development must meet two roadway concurrency standards: (1) level-of-service must be met for a 1 mile area on either side of an overcapacity roadway, and for one half mile beyond the end of the link from the development to the roadway; (2) adequacy requirements must be met for all system wide overcapacity roadways that will be impacted by the proposed development. This second requirement is generally met through an impact fee assessment.

The County adopted a level-of-service standard of "D" for all arterial roads in the system, and their concurrency model is continually updated to reflect new development applications as well as proposed roadway construction. A roadway project is considered to be on-line if the project is no further out than 1 year in the capital improvement program.

Montgomery County, Maryland - Montgomery County combines a concurrency ordinance with a two-tiered service area based on different levels-of-service. For example, a lower level-of-service is identified for areas where transit is available on the premise that when roadways become congested, travelers may shift to transit or forgo certain trips. The county further uses a rather sophisticated system to allocate the total amount of growth that

may occur annually (a type of growth phasing). The amount of development activity is separated by residential (based on the number of new units allowed per year) and non-residential (based on job creation). This distinction allows the county to attempt to achieve a geographic jobs-housing balance.

City of Sedona, Arizona - In May 1996, Sedona adopted a Sustainable Growth Ordinance (SGO) that attempted to limit the number of building permits issued annually based on a formula designed to return the rate of growth to historic levels and to allow the city time to address critical wastewater treatment and other infrastructure needs. However, the ordinance was invalidated by the Yavapai County Superior Court as impermissible zoning by initiative (the ordinance was adopted in a citywide referendum). Since then, the Arizona legislature enacted a statute which empowers Arizona cities and towns to adopt development moratoria, an act that may allow cities and towns to adopt building permit limits as a growth control measure.

VIII. Draft Growth Management Legislation by Arizona Center for the Law in the Public Interest

The Arizona Center for the Law in the Public Interest has created draft public initiative to be considered by the voters in Arizona to create an Urban Growth Management Act. The draft legislation contains eleven sections. The key provisions include the following:

Each Arizona jurisdiction must adopt a mandatory growth management plan;

The plan must establish clearly defined boundaries in which ten years worth of urban population growth must be accommodated;

No rezoning or extension of public service may occur outside the growth boundary to accommodate an increase in density or intensity of development without a specific exception;

The growth management plan shall include effective measures to limit urban sprawl outside growth areas including density limits, large lot or special zoning, transfer of development rights, and limits on issuance of new building permits;

The governing body of the jurisdiction may not amend or adopt a growth management plan without holding a public hearing. Further, all growth management plans and amendments must be referred to the voters for approval except for very small acreage changes and police and emergency service items;

A growth management plan may be adopted or amended by voter initiative at any election;

A growth management plan cannot be written or understood to cause a taking of property that violates the United States or Arizona Constitutions; and

A growth management plan may include subdivision regulations that comply with the intent of the provisions of the plan.

Status of the petition drive is not known at this time. If the petition is placed before the voters of Arizona, it is certain that the measure will be controversial.

IX. Use of Fees and Exactions for Growth Policy Guidance

Transportation and Growth Management - As can be seen in California, transportation is a central element to growth management. The notion that transportation services and facilities have had an effect on land use seems to be self-evident. In metropolitan Tucson, the historical development of low-density housing often far from existing or cost-efficient urban services encourages automobile use. Low land prices and minimal infrastructure fees along with consumer demand generated housing miles from schools, jobs, and commercial areas because of road accessibility. Traffic congestion, air quality concerns, and energy demand are increased by such land use and transportation patterns.

While transportation investments are often viewed as growth generators, the fact that conventional transportation planning begins with a fixed land use forecast tends to shift the responsibility for growth toward the population forecasters who predetermine population distribution. These population assumptions (including other socioeconomic variables) are then used as a basis for predicting future traffic demand, which guides the decision-making process for transportation infrastructure. Nevertheless, it is a widely held conviction that transportation investments are able to shape or influence urban structure. Obviously, the magnitude, geographic scale, and geographic context of the transportation investment will determine the effect on urban structure.

The common tendency is to associate all traffic growth with new development, without realizing the contribution of increasing individual mobility. Even during periods of rapid suburban growth, traffic has grown faster than development. In Pima County between 1990 and 1995, automobile travel grew by 30 percent while population grew by only 12 percent, employment by 20 percent, and the number of registered vehicles by 8 percent. This has occurred, despite continuing efforts to reduce automobile travel and expansions in public transit. If these trends are to be changed, new and coordinated transportation and land use policies will have to be considered which result in more efficient transportation systems and patterns of land use.

Historically, major Pima County transportation investment has followed growth not the other way around. By having transportation investment lead growth, it is possible to help shape urban form. Attachment 5 is a more detailed discussion of the interrelationship between land use and transportation planning. This attachment is a summary of a PAG Regional Workshop on landuse and transportation planning.

Transportation Impact Fees - Transportation impact fees are not so much a means of controlling growth, as defined earlier in this report, as much as they are a fair and equitable method of distributing the cost of transportation improvements. As a method of paying for transportation improvements, roadway development impact fees differ from property taxes in that new development rather than existing development pays for needed improvements. Pima County's development impact fee ordinance, adopted in 1996, established a mechanism by which new residential construction is assessed a standardized fee (approximately \$1550) which represents a proportionate share of the cost of improving and expanding the roadway system and facilities to accommodate new development. Commercial development is not assessed, and fees can be waived for affordable housing. The ordinance is further limited in that funds collected may only be spent within a limited time period on certain roadways that have been designated as needing improvements.

Arizona state statutes allow for variable fees to be assessed, using an "incremental cost method" rather than the adopted "average cost method". However, opposition from the Southern Arizona Homebuilder's Association (SAHBA) to the incremental cost method in 1994 yielded the average cost method adopted in Pima County. The incremental cost method, however, has been used in Marin County, California.

Sewers and Connection Fees - Provision of sewer systems influences urban form and density. Under current Pima County ordinances, areas without public sewer service must rely on individual waste disposal systems (septic tanks) and are limited in density to no less than one residential unit per acre. Growth management techniques used by various states or jurisdictions include public sewers as an element of helping shape urban form. Sewer service is usually critical in defining a rural and urban boundary. Within an urban boundary sewers are provided outside of such a boundary sewers may be prohibited.

Historically, the connection fees or variation of connection fees, has not been used to guide urban form. Some jurisdictions have a differential sewer connection fee, depending upon location. However, the differential in the fee is not large enough to dramatically influence residential growth location decisions.

Sewer Connection Fees have been charged in Pima County since at least 1974, possibly earlier. At that time the three user classes in effect today were established including the participating and nonparticipating rate structure. The single family participating fee was \$250, today it is \$1,050. Currently, connection fees are 18 percent of the total revenue generated through wastewater services.

Table 2

Sewer Connection Fee Revenues

Fiscal Year	Participating	Non-Participating	Total
1987-88	\$3,481,254	\$1,829,314	\$ 5,310,568
1988-89	\$2,498,076	\$1,410,031	\$ 3,908,107
1989-90	\$2,188,117	\$1,153,969	\$ 3,342,086
1990-91			\$ 3,796,422
1991-92			\$ 4,451,998
1992-93			\$ 6,158,706
1993-94			\$ 8,753,422
1994-95	\$6,465,172	\$3,675,961	\$10,141,133
1995-96	\$5,541,994	\$3,784,056	\$ 9,326,051
1996-97	\$5,458,846	\$3,552,035	\$ 9,010,881

Many communities charge connection fees for new connections to the sewer system. Pima County contacted the Association of Metropolitan Sewerage Agencies for a list of jurisdictions that are similar to Pima County. AMSA provided a list of seven jurisdictions which were surveyed regarding their connection fees. All of the jurisdictions surveyed charge sewer connection fees. They vary from as little at \$100 in Little Rock, Arkansas to \$2,500 in Laughlin, Nevada. Some cities also implement measures that promote low income, affordable housing or in fill and encourage redevelopment.

The **City of Albuquerque** operates a regional water and sewer agency that serves the areas within the city limits as well as areas outside the incorporated limits. A one-time connection fee of \$919 is charged for a single family home. This fee is the same regardless whether the property is inside or outside the city limits. Connection fee revenues are placed in a separate account and used to finance the expansion of the sewer system. Albuquerque can waive connection fees for residents whose income is less than 80 percent of the median income for their family size. This policy is in place to encourage low income homeowners to connect to the sewer system thereby protecting groundwater. Waivers are limited to the first 100 residents in each year and the applicant must qualify for the program.

The **City of Little Rock** operates a regional water and wastewater agency that serves the city as well as two surrounding suburbs. A sewer connection fee of \$100 is charged for new sewer connections from residential dwelling units. This fee is the same in the city limits as well as outside of the city limits. The connection fee revenue is combined with other sewer revenue and used for expenses including new development.

Orange County Sanitary District is a regional wastewater agency serving 23 cities in Orange County, California. There are two wastewater treatment facilities that serve more than 90 percent of the county's population. A sewer connection fee of \$2,360 is assessed on a residential dwelling unit. This fee is the same in all areas of the county. The revenue is collected from nine districts and is tracked separately, by district. These connection fee funds must be spent within that district for capital improvements.

The **City of San Antonio** has a water and wastewater agency that provides service inside the city limits and outside, up to the Baxter County boundary. A connection fee of \$427 is paid within an extraterritorial jurisdiction area (ETJ) and \$804 outside the ETJ. The ETJ is an area about five miles beyond the city limit and is about 360 square miles or about twice the size of the City of Tucson. Developers are required to build on-site sewer improvements as well as off-site sewer improvements. Within the ETJ, the city gives connection fee credits for off-site improvements. This is more generous than Pima County who does not give connection fee credits for off-site sewers. San Antonio's affordable housing policy is to rebate the water and sewer connection fees for developments where the home sells for \$75,000 or less. The homebuilder must apply for the waiver and must demonstrate that the selling price is within the target. The connection fees can be waived for non profit organizations and public housing providers. This program applies only within the city's target area. The objective of this program is to increase the number of affordable houses available in the city limits.

The **City of Phoenix** operates a combined water and sewer agency that provides retail wastewater service to the City of Phoenix and Paradise Valley. Wholesale service is

provided to the surrounding communities including Mesa, Scottsdale, Tempe and Glendale. These communities pay the city a negotiated rate (based on contributed wastewater flow) for the treatment and capital costs of delivering wastewater to the city's treatment facilities. The surrounding cities own and operate their conveyance systems and charge residents a portion of City of Phoenix's treatment costs. New development within designated areas identified in the General Plan pay a development impact fee based on the capital costs required to serve the area. The City of Phoenix also charges a \$600 sewer connection fee per single family residence which is called a development occupational fee. This fee is the same throughout the service area.

In the city limits, the development fees, including the sewer connection fee, can be waived if the property qualifies under the city's infill housing criteria. To qualify for the waiver, the parcel must be zoned for single family or multi family, must be single family, owner-occupied and on a previously vacant lot, must be within 1,000 feet of an existing residential development and the median age of residential development must be greater than 20 years within a 500-foot radius and not more than ten percent. The development also must be within an area served by the existing city water and sewer, must have public access and be within one-half mile of an existing major street and the character of the proposed development must contribute to long term neighborhood vitality.

Clark County Sanitation District is a regional wastewater agency serving five areas; Las Vegas Valley, Blue Diamond, Overton, Searchlight and Laughlin. Connection fees are currently \$1,500 per residence in four of the areas. Only Laughlin pays a connection fee of \$2,500 for a residential dwelling unit because capital costs are higher in that area.

The **City of Colorado Springs** has a water and sewer agency primarily serving the city. There is only one wastewater treatment facility serving the area. Connection fees are \$738 in the city limits and \$1,107 outside the city limits for a residential home. A single family residence included in the city's first time home buyer program is eligible for deferral of the connection fee. The connection fee is due, with accumulated interest, when the owner sells or refinances the residence. The number of residences allowed under this deferral program is limited to ten per year up to a maximum of 50 single family residences in total.

The agencies charging differing fees inside versus outside the city boundaries are water and sewer agencies operated by a city government. Clark County charges Laughlin a higher fee because the capital cost of the wastewater system is higher than in the other areas served. The agencies charging a consistent fee throughout the service area are operated as regional agencies, like Pima County.

Of the cities surveyed several have innovative methods for encouraging infill, affordable housing and redevelopment projects. These programs are implemented in agencies where the city operates the water and wastewater agency. These include waiving connection fees for low income residents or affordable housing projects or deferring fees for first time home buyers. These programs require that cities develop comprehensive criteria for low income applicants, low cost housing rules and development standards for qualifying infill housing projects. Otherwise, the waivers are perceived as a loophole for developers.

Building Permits and Construction Sales Tax - A common method of promoting infill has been to waive building permits and/or construction sales tax. Under the theory that these reduced costs will be passed along to the consumer, hence creating improved market demand for housing in a particular location. Given the medium price of a new home in

Tucson, is \$130,000, it is unlikely there would be significant economic incentives for infill unless a fee waiver incentives equal or exceed ten percent of the purchase price. Most consumers do not make housing market decisions based on only a few thousand dollars difference in purchase price. They make location decisions based on school or neighborhood quality or other factors.

X. Impact of Land Ownership by Federal and State Agencies in Guiding Growth

During the period of urban development in eastern Pima County specific land reservations were established by federal, state and local governments. These reservations established and set aside areas of eastern Pima County for resource conservation, open space and natural park preservation. These past reservations established a framework for future open space development that confined or shaped the present urban form.

In Pima County, federal, state and local governments own significant amounts of land. Table 3 lists land area by ownership for Pima County in its entirety, and for eastern Pima County, which is defined as all lands in Pima County east of the Tohono O'odham Indian Nation.

Table 3

Land Ownership Comparison

	Eastern Pima County		Pima County	
	Percent	Square Miles	Percent	Square Miles
Federal	25.7	1,003.10	24.50	2,268.60
Indian	2.8	109.50	42.40	3,921.50
State	37.5	1,467.00	16.00	1,474.30
City/County	1.9	74.10	0.80	74.20
Private	32.1	1,251.90	16.30	1,502.40
Total	100	3,905.60	100.00	9,241.00

At first glance, it would appear that governments own a majority of the land in Pima County, as well as in eastern Pima County. However, state trust lands are held in trust for specific public institutional beneficiaries. Because of the State Land Department's mandate to maximize revenue for its beneficiaries, state trust lands will eventually be sold or leased for private purposes.

Below is a description of some of the major open space reservations, followed by a

description of the State Land Department which has a substantial interest in regional development patterns.

Coronado National Forest - Approximately 294,000 acres in Pima County (the Forest ultimately extends into New Mexico) are managed for sustained multiple use of forest and rangeland resources including timber, grazing, recreation, and mining. It includes a wide range of habitats from Sonoran desert to alpine forest on several mountain ranges (Catalina, Rincon, Santa Rita and part of Whetstone). It includes Catalina State Park, which is owned by the Forest Service and managed by State Parks, and Mount Lemon Ski Valley, which is privately managed.

Saguaro National Park - contains 91,327 acres, with 71400 acres in Wilderness designation.

Saguaro National Monument was established 1933 "to preserve significant stand of saguaros."

In 1961 the West unit (Tucson Mountains) was established with 15,300 acres. Additions include 5,378 acres added to West Unit in 1976, 4,111 acres added to the Rincon Unit in 1991, and in 1994, another 3,460 acres were added to the West Unit. Also in 1994, the Monument status was upgraded to National Park to recognize multiple features of international significance.

Empire-Cienega Conservation Area - A majority of Pima County Bureau of Land Management property is in the Empire-Cienega Conservation Area planning unit located in southeast Pima County, and northern Santa Cruz County extending south nearly to Sonoita. It is ultimately planned to be the Las Cienegas National Conservation Area, with an expansion area connecting the existing Conservation area and Cienega Creek (County) Preserve. This could provide a multi-jurisdictional public lands connection from Santa Cruz County to Oracle through Saguaro National Park and Coronado National Forest. This area is also on the route of the proposed Arizona Trail.

Buenos Aires National Wildlife Refuge - is located at the southwest corner of the greater Eastern Pima County urban area. The refuge was created in 1985 to provide a reintroduction area for the endangered masked bobwhite quail, which had been eliminated from the United States by 1890. It is the largest ungrazed area in Arizona (approximately 120,000 acres). In addition to grasslands, the preserve includes high quality riparian areas, and the Arivaca Cienega in the town of Arivaca. Several endangered species and over 300 species of birds populate the refuge. Increased rural residential development and possible future resort development in the Arivaca area could create negative impacts on the preserve. There is currently a management plan update in process.

Santa Rita Experimental Range - is located on the east and north slopes of the Santa Rita Mountains east of Green Valley. It is 53,000 acres of desert grassland and oak upland habitats, established in 1903 as a research area by Bureau of Plant Industry and was taken over by the United States Forest Service as a Forest Preserve in 1907. In the 1920's the current research emphasis on grazing was established. In 1989 management of the Range was given to the University of Arizona (Department of Renewable Resources) as part of a land trade which established Catalina State Park. Recreational opportunities are limited to hunting and unorganized bird watching, there is some conflict between hunting and research

activities. Diverse research programs include grazing rotation/carrying capacity, plant succession, local climate, watershed/runoff, hanta virus, and public school educational programs. There are no plans for changes to its boundary.

Cienega Creek County Preserve - in the southeast portion of the County, was purchased with Flood Prone Land Acquisition Program bond money to reduce future downstream flood risk. It preserves two reaches of perennial riparian floodplain habitat (Cottonwood-Willow and Mesquite Bosque) and important historical resources. Jointly managed by the Flood Control District and Parks and Recreation, the Preserve provides recreational opportunities including bird watching and hiking.

Tortolita Mountain County Park - is located in the Tortolita Mountains at the northern edge of Pima County and Southern Pinal County, and is planned for future expansion and development of additional trails and trail heads.

Tucson Mountain County Park - abuts the southern edge of the West Unit of Saguaro National Park in the Tucson Mountains, established in the 1930's. It includes hiking trails, the Arizona-Sonora Desert Museum, and Old Tucson.

Arizona State Trust Land - State Trust Land is often perceived and represented to be public open space. In fact, it is considered private from a planning perspective, with value and use largely determined by market conditions. It is held in trust by the State of Arizona to maximize value of the trust and generate income for 14 beneficiaries, the majority of which are school related. The State Land Trust had its beginnings at the creation of the Arizona Territory in 1863, with a focus on education provided by the Northwest Ordinance of 1787. Two sections of every township were reserved for education. The Land Commission was created soon after statehood in 1912 with an additional grant of 10.75 million acres. Some states sold their land grants outright, but Arizona opted to create a sustainable program. The State Land Trust for years was allowed to participate in land swaps, but a mid 1980's court case testing condemnation of State Land by a school district eliminated this ability. Now, only the Federal Government can swap State Trust Lands through condemnation. Attempts to reinstate land swap authority have so far been unsuccessful. Land swaps may be useful for consolidation of non-continuous ownership patterns and promoting land acquisition for preservation. The State Land Department has a super-planning authority over local land use regulations. It has rarely exercised this power as it generally follows local zoning and planning processes. One criticism of State Trust Land utilization is the long and unfamiliar auction purchase process. The Land Commissioner ultimately decides if it is appropriate to release land to the private market.

Under the Urban Lands Act of 1980, the State Land Department can initiate and participate with purchasers in master planning of land within 3 miles of a jurisdiction. In eastern Pima County, this has been done several times, the most successful of which is Civano. Civano is a mixed use energy efficient development project, a partnership which includes the City of Tucson, the State Land Department, and the State Energy Commission. This process is being re-evaluated and new opportunities for applicants or jurisdictions to participate in the planning process may be created. There may be an opportunity for additional master-planned, mixed use communities that are pre-planned in conjunction with jurisdictional plans for infrastructure.

The Arizona Preservation Initiative of 1996 provides an opportunity for jurisdictions to reclassify State Trust Land into a new conservation category. Benefits of reclassification include removal of the land from the auction sale process, a potential eight year purchase period (at market prices), and potential enhancement of value of surrounding land. The first of three areas designated in the state is on Tumamoc Hill in Tucson, and 11 other areas are pending statewide.

From the previous list of public land reservations it is apparent that historical federal, state, or local decisions to create public reserves has had a significant influence on the present urban form of eastern Pima County. For example; County acquisition of Cienega Creek and Bureau of Land Management development of the Empire-Cienega Conservation Area along with Colossal Cave Mountain Park, has created a distinct urban boundary edge on the southeastern fringe of the metropolitan area. Similarity, formation on the Santa Rita experimental range also confined and becomes a Green Valley growth boundary. Similar actions occurred with the creation of Catalina State Park, Tortilita Mountain Park, and the continuing expansion of the long established Tucson Mountain Park. These public land acquisitions and conservation areas have played a very important role in shaping the urban form of eastern Pima County. While these actions today have historically withdrawn lands from development potential, potential development of certain public lands, specifically state trust lands, may play an equally important role in helping develop a more compact urban form for eastern Pima County.

Today over 40 square miles of state trust land lies within the Tucson city limits. Many of these lands have less environmental resource value than other private lands in Pima County that are eligible for urban development. To develop state trust lands with low environmental resource value in close proximity to urban services and within the limits of the City of Tucson may be a strategy that should be pursued in order to accomplish one of the goals of the comprehensive plan - to create a more compact urban form.

XI. Sustainable Development Patterns

There is an emerging theme in planning called sustainable development which attempts to achieve balance in the economy, physical environment, social environment, and other areas of concern.

An example of evaluating sustainable development practices in Pima County could involve a review of our development pattern and identify if is sustainable in the following areas:

Fiscal sustainability - Do the jurisdictions generate enough revenue to provide services and improvements necessary for our desired land use pattern? If not, are we willing to pay our "fair share" in terms of the services we use? Draft versions of the long-range transportation plan are showing a shortfall in revenue needed to provide the an adequate transportation system (roadway and transit) that will support the region's currently-adopted long range land use plans. Is there another physical distribution of future population and employment that is more efficient to serve?

Economic sustainability - Can the typical Tucson family afford the housing provided by our current pattern of development? In terms of regional mobility, are we providing equal access to employment opportunities? In other words, do

low and moderate income households have access to housing and employment opportunities?

Environmental sustainability - What is impact on air quality, water, open space, vegetation and wildlife habitat of this pattern of development?

XII. Strategic Action Plan

The Pima County Comprehensive Plan contains a Strategic Action Plan that may provide some guidance in implementing previously-adopted Board policy. The action plan suggests eight priority programs along with implementation strategies for each program. Some of the recommended actions may be useful in addressing some of the long-term problems defined in this report. For instance, the action plan recommends the following:

Establish a concurrency management system that requires adequate infrastructure capacity at the time of development. A review procedure could be established to allow the county to coordinate a determination of the individual and cumulative impacts that each development request will have on adopted level-of-service standards for the affected service area. In the event that a project would decrease service standards, the issuance of permits for the project may be contingent upon the developer making appropriate arrangements that would maintain the area's identified service levels.

Establish boundaries for development intensity zones, similar to urban service areas, where geographic limits on infrastructure provision are defined. In planned activity centers, higher intensity development may be encouraged by providing necessary infrastructure in those areas, and the extension of infrastructure into further-removed areas where development is not currently desirable would not be allowed.

In addition to these items, the action plan contains numerous other programs relating to open space and recreation, housing affordability, and possible regional planning programs (see Attachment 6).

The action plan has been an underutilized element of the Comprehensive Plan partly because it implies that funding will be needed to carry out many of the recommended strategies. However, it does not clearly define how it relates to the annual budget review and adoption process. The action plan could be revised to establish a clearer link with the budget if the Board believes it could be a useful tool.