

LIMITS TO GROWTH AND QUALITY OF LIFE IN OXNARD, CALIFORNIA

An Evolving Set of Indicators
of a City's Sustainability
Reflecting the SOAR Ordinances



A COOPERATIVE EFFORT BETWEEN
The Urban Studies and Planning Program
and Department of Health Sciences of
California State University, Northridge
and
The Sustainability Council of Ventura County

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INTRODUCTION

This report was prepared by the faculty and students from the California State University at Northridge Urban Studies & Planning Program and Department of Health Sciences with assistance and guidance from the Sustainability Council of Ventura County. A summary of this report was subsequently prepared by the Sustainability Council. The study was funded by a “Partnership Grant” from the California Urban and Environmental Resource Education Center.

Readers will undoubtedly find some indicators more relevant than others. This is natural given different people’s perspective. However, it is equally true that some indicators are simply superior to others as measuring instruments. Therefore, one should take away from this study an appreciation for what makes a good indicator as well as what short-comings should be avoided when developing indicators. It is hoped that readers can apply such lessons as they undertake the development of sustainability indicators in their own communities and as the indicators for the City of Oxnard are tracked into the future.

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I. EXECUTIVE SUMMARY

Ventura County has a population of some 753,000 (January 2000) and sits on the edge of the Los Angeles metropolitan area. The County's urban areas are generally separated by agricultural or open-space land, so they have not grown together into an amorphous sprawl of development that is common in the Los Angeles basin. Although Ventura County was not the direct target of as much growth pressure as neighboring counties, it nevertheless took several steps to insulate itself through voter-approved limitations on land use. Voters passed the Save Open Space and Agricultural Resources (SOAR) initiatives in 1998, which require a vote of the electorate for the expansion of urban services beyond a City Urban Restriction Boundary (CURB) in the cities and the remaining unincorporated areas for the next 20-30 years.

This project concentrated on measuring quality of life issues such as urban density, health, and civic engagement in the City of Oxnard and in the context of SOAR. A set of indicators was compiled to measure sensitive features of the city's economy, social well-being, and environmental health near the beginning of the SOAR ordinance timeline of twenty years. These indicators emerged from a lengthy process involving attendance at meetings and conferences on sustainable development and "smart growth," a stakeholder survey about SOAR and its efficacy, focus groups, and other community forums. As part of the indicator development process, existing sustainable development indicators from around the nation were reviewed.

Development in Ventura County may proceed, as it has in most parts of the country, with construction of more residential and industrial areas connected by more streets and freeways that diminish farmland, recreational and open space. SOAR offers the possibility of an alternative future that preserves more open space, encourages mixed-use development and in-fill construction, and promotes more public transportation and pedestrian-friendly areas. Civic engagement is crucial to those decisions and integral to the measured density and health outcomes. The idea that development choices have many ramifications for health and quality of life is one that should engage active public debate and further participation in revising or adding to the suggested sustainability indicators. The revision process (and data collection) is one of the key civic engagement issues that will ultimately determine the usefulness of the indicators and the baseline indicator data obtained thus far.

To this end, a set of recommendations was derived from the indicator development process itself and community-based considerations:

Indicator-Driven Recommendations

- Continue ongoing data collection and dissemination of indicators.
- Continue revision of indicators based on evolving community needs.
- Continue monitoring indicators.
- Expand educational effort to inform the public about sustainable development indicators.
- Involve government agencies in new forms of data collection that will foster the development of indicators.
- Use indicators as a foundation for shaping public policies.
- Promote indicator development by community-based organizations.
- Develop an inventory of sustainable development projects in Ventura County.

Community-Based Recommendations

- Continue to seek feedback from the community about quality of life issues.
- Encourage local stewardship of the indicator process.



- Continue collaborative efforts in the indicator process.
- Continue university-community partnership on behalf of sustainable development activities in Ventura County, particularly the development of a sustainability studies center at California State University Channel Islands, and a general education requirement in high schools, community colleges, and universities.
- Establish sustainable development indicator demonstration projects in urban-agricultural land use, especially concerning the design of livable communities.

II. DISCUSSION OF SUSTAINABILITY

The triad of “Social Equity, a Sound Economy and a Healthy Environment” in the motto of the Sustainability Council of Ventura County points to the interconnections among these three areas; they need to be understood as interdependent variables. What happens in the area of social justice affects the economy and the environment, just as the health of the environment determines the well-being of the economy and society.

Consider, as an example, that social inequities in income and educational opportunities produce effects on the economy and the environment. Low-income communities have few ways to avoid the degradation of local soils and water. Polluters exploit the lack of awareness and legal redress for such toxic effects, while operating some of the most dangerous and environmentally damaging businesses. An impoverished community is by definition a poor watchdog of environmental health. While “doing with less” may be an appropriate guideline for reaching true sustainability, it needs to be a voluntary decision of informed consumers, not the survival strategy of an underclass. Increased buying power for everyone, for the purchase of goods produced by sustainable enterprises is the best long-term strategy for economic health. Disparities in income, which are increasing in the United States each year, threaten the security of society itself, as well as the economic strength of consumers and the productivity of workers. The economic, social and environmental systems are interlocked.

In order to monitor the interactive changes among these three systems, one would like to have a reliable method of measuring the impact of air quality, say, on public health and economic productivity. For years we have seen solid studies linking air quality and respiratory disease, but more recently studies have made the link between respiratory disease and reduced job productivity. Such studies clearly establish the interdependence among healthy environmental, economic and societal systems. However, we cannot wait until we have completely reliable measurements of the interaction between systems before acting to address an unsustainable system. It is the Council’s hope that the sustainability indicators developed for this project will be monitored into the future to determine if trends are towards or away from an improved quality of life in Oxnard and Ventura County, that is an equitable society, sound economy and healthy environment.

Sustainability Indicators as “Quality of Life” Indicators: Definition and Operation

A perfect sustainability indicator would be an interactive measure of how long and how well a certain standard of living could be maintained. Such a measure would require a clear definition of the limits or carrying capacity of a system, region, or community, to continue on without degrading the environment or decreasing biodiversity, while sustaining human and biological life at a certain healthy level. Such indicators are complex devices that go beyond the standard measures of single factors such as air quality, or morbidity, or new business start-ups. True sustainability indicators will have to wait until both social and environmental sciences give us better and measurable models of the operation of interacting systems and until economic measurements can be accurately correlated with social and environmental factors.

While the interactions and shared effects of economic activity, human society, and the environment can not be precisely measured, they can be carefully assessed to understand how they improve or degrade each other over time. To



understand these interactions, it is necessary to tailor measures of local systems within a city and stipulate, from a values-perspective, what effects are desirable or undesirable; this requires a combination of artfully designed measurement devices and human-defined goals.

The sustainability indicators project concentrated on measuring quality of life issues that were defined for each indicator as a desired effect for the City of Oxnard in the context of voter-approved limitations on land use. The project focused on how Oxnard will fare as a growing and dynamic city given these new limits on growth and development, and that the City can no longer expand its borders easily into surrounding areas now subject to the SOAR initiative. As a result, the project indicators are referred to as “quality of life” indicators and are intended as a snapshot of conditions in Oxnard near the beginning of the SOAR initiative timeline.

The indicators establish baseline factors and attempt to measure sensitive features of the City’s economy, social well-being, and environmental health. They were designed to measure these factors and their inter-relationships as well as establish whether Oxnard’s urban growth activities are consistent with sustainable practices. We expect, for example, that if Oxnard continues to build vast tracts of single-family dwellings rather than mixed-use development and “livable” communities, residents may show unfortunate signs of social disengagement, see no reason or opportunity to engage, and be left without places for active social engagement, all of which undermine the quality of community life. The indicators attempt to measure human influenced factors in the areas of public health, the economy and local environment with the intention of determining whether its quality of life will improve or degrade.

III. BACKGROUND OF THE PROJECT

Land Use Control Measures Unique to Ventura County

Ventura County’s growing population enjoys an idyllic location bordering the Pacific Ocean and the Los Angeles metropolis. There are ten incorporated cities within the County and a few small, unincorporated, enclaves. These urban areas are generally separated by agricultural or open-space land, so they have not grown together into an amorphous sprawl of development that is common in the Los Angeles basin. The County is one of the most productive agricultural counties in the state. It is also the corporate headquarters of many national and international companies (e.g. Amgen and Patagonia) and is expanding its high-tech industries.

In spite of Ventura County’s proximity to the Los Angeles metropolitan area, its strong agricultural economy and general absence of sprawl are testaments to a number of unique efforts and circumstances. While historically Ventura County was not the direct target of the growth pressure focused on other Southern California counties, it nevertheless took several steps to insulate itself from the growth pressures that it did experience.

Beginning in the late 1960s and early 1970s, the County established numerous Agricultural Preserves under the State’s Williamson Act. These preserves were comprised of scores of separate Land Conservation Act (LCA) contracts with individual landowners (farmers and ranchers) who committed to remain in agriculture for a rolling ten-year period in exchange for reduced property tax assessments. Large swaths of the agricultural land were, thus, removed from the pool of land immediately available for urban development. The demand for LCA contracts slackened after Proposition 13 was enacted in 1978 which drastically reduced property tax assessments. New contracts are still being created and, today, the majority of the County’s agricultural land is under contract.

At the same time the LCA program was commencing, a remarkable agreement was entered into by Ventura County, cities within the County and the Local Agency Formation Commission (LAFCO). This agreement, known as the “Guidelines for Orderly Development”, created Areas of Interest that divided the County into eleven sectors in which there is one incorporated city, or burgeoning urban area, that would incorporate at some future time. The Guidelines specified that no other city would be formed within a given Area of Interest. It further specified that the County would not engage in urban development within a given Area of Interest. This concept of “Urban is Incorporated” meant that there would not be competition between a given city and the County over the establishment of ur-



ban uses. This became particularly important after Proposition 13, which has led to “zoning for dollars” and land use decisions driven by the demand sales tax generating retail development. Implementation of the Guidelines also meant that urban services such as utilities, police and fire could be concentrated in the cities rather than being spread disjointedly between the County and the various cities.

Another concept embedded in the Guidelines related to Spheres of Influence within an Area of Interest. Before land is annexation to a city it must be located within the city’s Sphere and be approved by LAFCO. The Spheres around each city are generally drawn rather tightly, which means that a given city cannot annex large tracts of land. The City of Oxnard, which had previously annexed a large area outside its core, found this area outside its established Sphere and eventually detached the land, sending it back into the County’s jurisdiction. The overall result has been the development of relatively compact cities within separate Areas of Interest with intervening areas of agriculture or open space under the County’s control.

In addition to the County’s LCA contract program and the Guidelines for Orderly Development, several cities have entered into joint agreements with the County and LAFCO to establish a number of Greenbelts. These are, essentially, informal agreements reached by the respective cities that pledge not to annex land in the subject greenbelts. In turn, the County pledges not to allow any urban development within the greenbelts. The first greenbelt was established in 1969 and there are now six. The latest extends from Fillmore, eastward, to the Los Angeles County line. This agreement was established by ordinance rather than resolution, as the others have been, and is therefore thought to be more durable.

In 1995, the latest land use control mechanism was introduced – an urban limit boundary (ULB) around the City of Ventura for a period of 20 years. It was created by the initiative process, Save Our Agricultural Resources (SOAR). The SOAR measure requires a majority vote of the citizens of the City to amend its General Plan and zoning on a parcel designated “Agriculture” on the General Plan. In 1998, a variation on this same initiative was adopted in the County and most of the cities. While this second generation SOAR initiative was structured somewhat differently, the effect was to create ULB around each city that prevented it from developing outside that line without the approval of the voters during the succeeding 20 years. The County was similarly prevented from amending its General Plan to allow for new urban growth. So far, there have been three successful SOAR votes that have allowed specific deviations from the previously adopted General Plans of the County and the City of Ventura.

It is clear, the cities and the County are now very limited in how they respond to ongoing demands for additional development. The traditional approach, of simply expanding outward, is no longer a ready option. As the population increases, primarily through births, local jurisdictions will be faced with the prospect of breaking the SOAR boundaries to expand outward, or altering past development patterns and expanding “up-ward” to accommodate higher densities within the ULBs.

Studies are continuing to determine the “holding capacity” of cities given the existing low-density development patterns and the ULBs. Each entity clearly has a finite holding capacity, but exactly what it is has not been agreed to. Given these circumstances, most people agree that County and the cities are in a pivotal period where they must decide if the constraints of SOAR will cause them to alter their past patterns of development. As an alternative, they may adopt new policies that emphasize “Smart Growth” concepts, including higher densities and transit-oriented development patterns which would accommodate more growth without expanding beyond the ULBs. Therefore, now is the perfect time to devise baseline sustainability indicators that recognized past development practices and which can be monitored in to the future under new development patterns to see if quality of life factors improve or decline. Additionally, since the establishment of ULBs is an emerging trend, monitoring their effects on the quality of life in Ventura County and Oxnard will be useful for jurisdictions contemplating the establishment of growth control measures such as ULBs.



Background to SOAR: Ventura County Attributes of Land and People.

A more detailed profile of land and people in Ventura County is essential for understanding the setting for the approval of SOAR and the issues as perceived by voters. As a general characterization, the County can be viewed as having a significant amount of farmland in spite of its ranking among the top ten urbanizing counties within California. It should be noted that approximately one-third of the County is owned by the Federal government as the Los Padres National Forest. The following table shows the acreages of major land categories as of 1998 when the majority of the SOAR measures were enacted.

Land Use Category	Total Acreage
Prime farmland	51,817
Farmland of statewide importance	37,698
Unique farmland	22,644
Farmland of local importance	11,076
Grazing land	207,853
Urban built-up land	95,522
Other land	125,403
TOTAL	552,013

The socioeconomic characteristics of the County and as compared with the State as a whole are depicted in the table that follows. This is the composition of the County at the time most of the SOAR measures were approved. In general, the County statistics parallel many of the statewide trends, but the County deviates from the State profile in a number of ways.

Socioeconomic Facts		Ventura County	California
Population	(1999 estimate)	745,063	33,145,121
Percent change	(1990-1999 estimate)	11.4%	11.2%
Population < 18 years	(1998 estimate)	28.4%	27.3%
White population	(1998 estimate)	89.9%	79.5%
Hispanic population	(1998 estimate)	32.7%	31.0%
Black population	(1998 estimate)	2.4%	7.5%
Home ownership	(1990)	65.5%	55.6%
Persons per household	(1990)	3.01	2.79
Persons below poverty level	(1995 estimate)	9.8%	16.5%
Median household income	(1995 estimate)	\$46,955	\$36,767
College graduates >25 years	(1990)	23.0%	23.4%



Review of SOAR

As noted earlier, countywide trend to adopt SOAR measures began in 1995 after the citizens of the City of Ventura adopted a SOAR initiative. In 1998, the unincorporated portions of the County, along with the cities of Camarillo, Moorpark, Oxnard, Simi Valley, Oxnard and Thousand Oaks adopted SOAR measures by substantial majorities. In several cases the initiatives were placed on the ballot by city councils after negotiating UBLs with citizen-based SOAR committees.

While there has been much speculation as to why the SOAR measures were so broadly supported, most agree that public mistrust of elected officials' land use decisions was a key factor. This factor was captured in an editorial by the Los Angeles Times that noted:

The driving force of SOAR measures is public suspicion that elected officials lack the will to say no when well-financed developers come around seeking to replace orchards, cropland or scenic canyons with housing developments or shopping centers. Such development may (or may not) bring economic benefits to the target city, but to many voters that consideration is less important than the goal of maintaining the area's rural and relatively uncrowded atmosphere.

In short, voter dissatisfaction with the evolving urban landscape up-ended the land use decision making process, leaving major land use decisions squarely in the hands of voting residents. The arguments against this form of populist land use decision-making are well known, and do not require elucidation here except to note that opponents of SOAR commented on the displacement of professional planners and elected decision-makers in the process.

Content of SOAR Measures and Opposition

The County SOAR was brought to the voters in the form of Measure B, during the November election of 1998. The specific land-use policies embedded in SOAR included the following:

- The ordinance had to be approved by the majority of the voters who vote in favor of the ordinance.
- The ordinance would readopt the 1997 General Plan Agricultural, Open Space and Rural policies and land use designations.
- Changes to those policies and designations in the unincorporated areas could only be made by a majority vote of the people at a general election.
- The measure's provisions would remain in effect until the year 2021 or until an earlier repeal of the measure.
- The ordinance states that amendments to the General Plan could be made only after the board of supervisors conducts public hearings on any suggested amendment and places the suggested amendment on the ballot.
- The ordinance allows the board to make amendments without a vote under seven specified circumstances:
 1. To reorganize, reorder, or renumber individual provisions of the General Plan as part of updating required by State law.
 2. To redesignate Agricultural land to Open Space consistent with required findings.
 3. To redesignate Agricultural, Open Space, and Rural lands after making findings that the land is unsuitable for its current use and the redesignation is required to avoid taking.
 4. To amend provisions regarding Agricultural, Open Space, and Rural land designations to further protect and preserve General Plan resources.
 5. To redesignate lands within the Piru Community.
 6. To amend land use designations to any Existing Community designation where prior to the effective date of the measure, such lands are found to contain lawfully established urban buildings, or uses.

This SOAR measure was modeled after a similar one passed by Napa County, California voters in 1994. The thrust of the Ventura County measure was summarized by one of its authors when he observed succinctly:



“Our intention all along has been to stop urban sprawl and the way you stop urban sprawl is by protecting agriculture and open space.”

It is clear that the majority of the voters held views similar to the measure’s authors because it garnered 62.2% of the vote. The positive outcome for the Ventura measure was achieved in the face of well-organized opposition from the Coalition for Community Planning (CCP) comprised of a group of farmers, businesspeople, citizens, and politicians. The CCP was organized solely for the purpose of opposing SOAR at the county and municipal levels. The list of other groups that were decidedly opposed to SOAR included:

- The Ventura Chamber of Commerce
- The Ventura County Farm Bureau
- The Ventura County Agricultural Extension
- The Ventura County Economic Development Association
- The Ventura Coastal Association of Realtors
- The Ventura County Taxpayers Association
- The Camarillo Chamber of Commerce
- The Ventura County Agriculture Association
- The Oxnard Chamber of Commerce
- The Santa Paula Chamber of Commerce
- The Moorpark Chamber of Commerce
- The Simi Valley Chamber of Commerce
- The Thousand Oaks/Conejo Chamber of Commerce
- The Coastal Association of Realtors

Interestingly, while SOAR was depicted as a measure that would shut down economic growth in the County for the next 20 years, the present pattern of agricultural land and open space was credited to careful urban land-use planning and protective policies. Among the items currently in place and cited as protective mechanisms were:

- Citizens committee involvement
- Coordinated planning
- Environmental review
- Board of Supervisors participation
- Agreed upon regional land use plan
- Coordination of transportation, water, air, and growth boundaries
- Coordination of county, cities, special districts, and LAFCO
- Creation of city sphere lines – representing ultimate growth boundaries
- Countywide plan with population calculations
- Countywide planning program with citizen participation
- Government planning group to monitor plans

As an example of the line of thinking offered by opponents of SOAR, the president of the County Agriculture Association noted that:

“The measure implies that elected officials can’t be trusted to make such (land use) decisions.... Politicians have worked hard to protect what makes Ventura County a desirable place to live.”

Ironically, the majority of the voters seemingly regarded the above protective mechanisms as ineffectual since the changing urban landscape confirmed their worst fears about the diminution of agricultural land and open-space.



IV. COLLABORATIVE WORK AND PROJECT SEQUENCE

The CSUN - Sustainability Council partnership worked effectively to carry out all aspects of the project. Faculty members, Council members, and students attended joint meetings to make presentations to the public, answer questions, and to consider constructive comments useful in identifying and modifying the indicators. In order to understand the nature of the cooperative work a project timeline that documents the work effort is offered on the following page.

Sustainability Council Contributions to the Project

- Designing the project, writing the proposal and final report.
- Meeting with faculty and students to conceive, test and refine indicators.
- Introducing and providing access for students to project stakeholders.
- Providing mailing lists, contacts and background for reaching conference participants.
- Organizing and conducting community conferences.
- Locating and sponsoring local and national consultants and experts on sustainability indicators (Monty Hemphill at Cal Poly Pomona, Dean Kubani at the City of Santa Monica Environmental Agency, and Maureen Hart, a leader in sustainable indicators design).
- Networking with leaders in business, environmental and social sectors in Ventura County.
- Contacting and providing access to Ventura County government and elected officials.

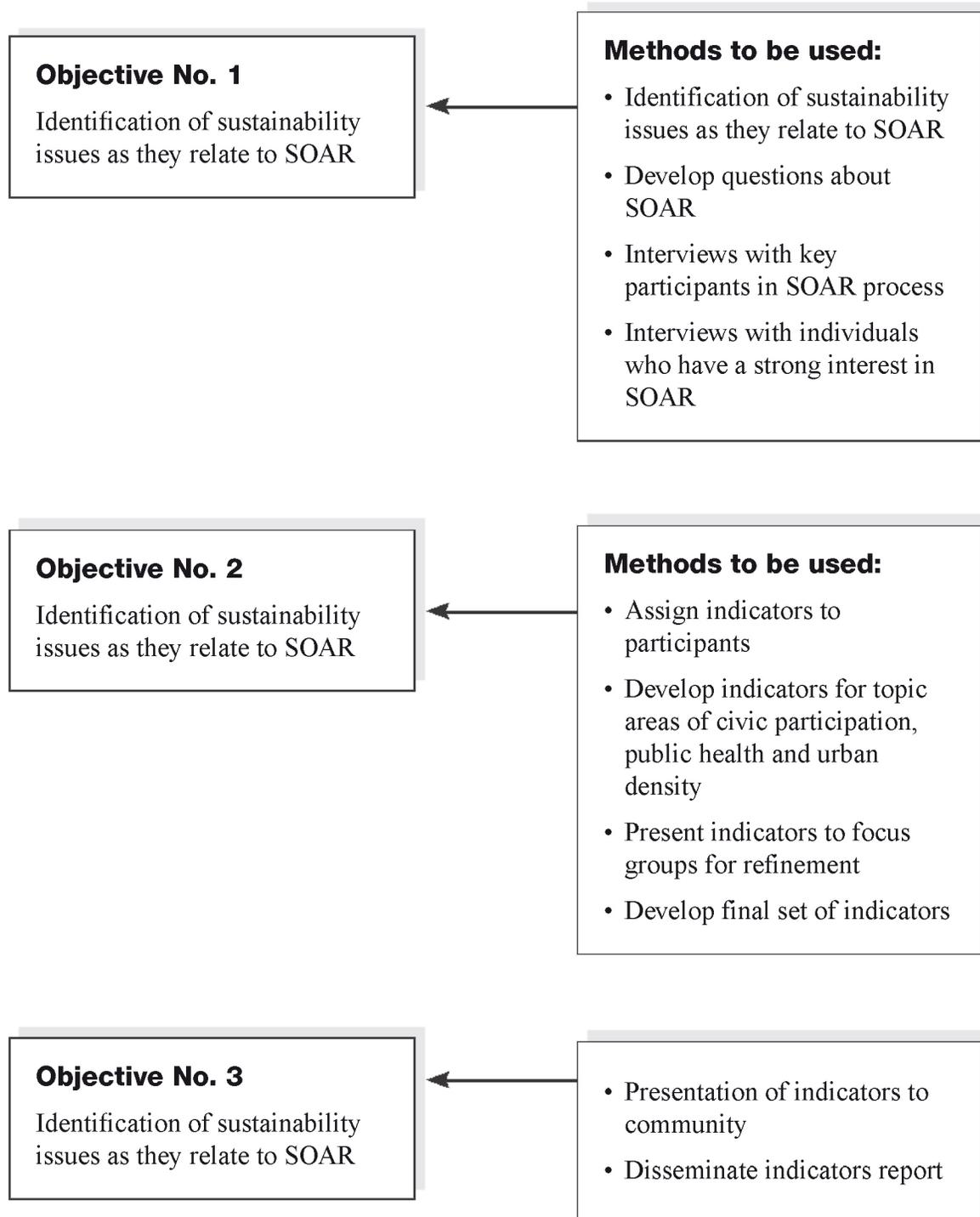
University Contributions to the Project

- Convening meetings among students, faculty members and members of the Sustainability Council to assist in defining a process to accomplish the project.
- Identifying and surveying stakeholders about key SOAR issues.
- Analyzing the results of the stakeholders survey and presenting findings at community meetings.
- Reviewing literature and related source information on the nature of sustainability indicators.
- Sponsoring guest lectures on indicators and growth control techniques.
- Co-sponsoring regional meetings on “Smart Growth”.
- Identifying local sources of information useful to the formulation of indicators.
- Analyzing different indicators for their potential application to Ventura County.
- Developing indicators specific to the Oxnard case application.
- Developing a common format for indicators.
- Developing a PowerPoint presentation of selected indicators.
- Presenting findings at a community workshop.
- Preparing presentation graphics, posters, and brochures for public dissemination.



CUEREC Grant to Sustainability Council of Ventura County and the Urban Studies and Planning Program, CSUN

Sequence of Objectives





IV. IDENTIFYING AND SELECTING SUSTAINABILITY INDICATORS

This section deals with the processes of identifying sustainability indicators relevant to the project's objectives, formulating indicators and identifying the degree to which the indicators are interdependent. The rationale for each set of the resulting indicators will also be treated.

Development Issues Indicators

A set of fourteen indicators were initially identified, but only eleven were ultimately used to address significant issues connected with develop issues. These indicators emerged from a lengthy process involving attendance at a series of meetings and conferences dealing with key issues such as sustainable development and "smart growth." Students in the Urban Studies and Planning 490 Fieldwork class were charged with identifying issues.

Students ultimately made use of lists of attendees at conferences and meetings who were identified as stakeholders. All of these stakeholders were residents of Ventura County and all were familiar with the SOAR initiative. A survey consisting of questions about the SOAR initiative and its efficacy was administered to stakeholders in person, via internet, or by telephone.

The responses to the survey permitted the identification of key issues relating to the agricultural land and open space conversion process and the need for some type of assessment of SOAR as a major growth control tool. A broad concern emerged with urban development as it would be affected by SOAR.

As part of the indicator development process, existing sustainable development indicators from around the nation were reviewed and discussed in a graduate geography seminar on urban research methods. Indicators were examined from a variety of sources that ranged from certain cities concerned with growth control mechanisms to local, non-profit organizations whose focus was on maintaining the overall quality of life. These various sources provided considerable insight into the composition of indicators and their inherent advantages and liabilities.

Indicators were formulated consistent with operational criteria that included the following:

- Indicators must be simple and easily understood by all residents of a community.
- Indicators must be premised on readily accessible information that requires little in the way of transformation or processing.
- Indicators must be valid measures that can be replicated periodically so as to gauge the direction of movement.
- Indicators must be accurate depictions of conditions in Ventura County and especially for Oxnard since it is the City experiencing the greatest conversion of agricultural land and open space.

Consistent with the results of the stakeholder survey and the operational criteria, 16 potential development issues indicators were initially identified, but only 11 were finally included. These are shown on the following pages in a format that notes the goal, how the indicator is measured, findings, and the context. In all cases an objective indicator was sought that could be represented in graphic or quantitative format. The 16 initial indicators include the following with an asterisk noting those that were not formally included in the study:

- Ratio of Total Farmland Acreage to Population
- Population Density: Number of People Per Household
- Multi-family Housing Units
- Subsidized Housing: Section 8 Applicants
- Ease of Traffic Flow at Major Intersections (LOS)
- Redevelopment: Number of Mixed-use Communities
- Miles of Newly Paved Roads*



- Parks and Open Space Acreage to Population
- Water Usage: Gallons per Day per Person
- Housing: Average Square Footage per Residence
- Travel to Medical Services*
- High Density Zone Changes and Permits
- Ratio of Farmland to Urbanized Land
- Neighborhood Population Density*
- Total Miles of Bike Paths per Person*
- Economic Diversity*

Civic Engagement Indicators

Civic engagement was a common, but important, theme in indicators available from across the nation and similarly emerged in discussions with stakeholders and within the working group. Public participation is clearly one of the most important of the variables that relates to social equity and environmental justice matters. These indicators were, by far, the most difficult to agree on by everyone connected with the project because they had to have a SOAR connection. If this constraint did not exist a broader array of Civic Engagement indicators could have been formulated. A further difficulty was finding data that was conveniently accessible and at the same time provided a reliable depiction of community involvement with quality of life issues. The two indicators that were formulated, based on these concerns, are:

- Total Persons per Year Responding to Environmental Impact Reports for Development Projects
- Public Comments about SOAR Issues at City Council Meetings

Development of Health Indicators

Students under the direction of Dr. Schillinger assembled a list of possible indicators from internet-based data sets and sustainability publications. That list was narrowed down to 6 infectious disease indicators, 6 infant mortality related indicators, 12 morbidity/mortality indicators, 8 crime-related indicators, and 8 environmental quality indicators. After considerable discussions and consultation with the Sustainability Council it was decided to consider 13 indicators that addressed community and environmental health. These are listed below. Of these 13, 11 were fully developed while the other two (identified with an asterisk) received limited review, but are candidates for further study. As with the Development related indicators those focused on were chosen in large part because the data are available through accessible internet sites.

- Peak Stream flow*
- Pesticide Use in Pounds per Year
- Number of Endangered or Rare Species
- Air Quality: Days Over Ozone Standard per Year
- Beach Closures: Number of Days
- Childhood Obesity*
- Cardiovascular Disease: Heart Attack Deaths per 100,000
- Diabetes Deaths per Year
- Health: Pedestrian Deaths per Year
- Community Hygiene: Shigellosis Incidence per Year
- Social Health: Alcohol-Related Vehicle Deaths per Year
- Social Health: Juvenile Felony Arrests per Year
- Social Health: Hate Crimes per Year



Sample Correlations Between Indicators

While it is possible to identify specific indicators for different topical areas such as “Development” and “Health”, it is difficult to cross correlate such indicators. Spirited discussions about such correlations occurred during this study, but a thorough study of them was beyond the scope of this study. Nevertheless, the following outline and limited discussion thereafter suggests the potential correlations that might occur and which deserve further study. Note that these issues were not fully developed in this study, but were identified for possible inclusion in future indicator studies.

Development Issues	Resulting Urban Effects	Health Consequences
Paved Roads, Traffic Miles	Average Ozone Conc. Carbon Monoxide, PM ₁₀ , Traffic alerts	Asthma, Pneumonia, Cardio-pulmonary, Highway Deaths and Pedestrian Accidents
Impervious Surfaces	Peak Stream Flow Suspended Solids Fecal Coliforms and Enterococci	Shellfish, Food-borne Poisonings and Infections, Hep A, Norwalk virus
Parks & Recreation Areas	Vandalism, Graffiti Gang Membership DUI	Assaults, Homicides Narcotic Deaths Highway Deaths
Walkways, Pedestrian Malls,	Obesity, Diabetes	Cardiovascular/Stroke
Bike Paths	High Blood Pressure	Clinical Depression
Substandard Housing	Domestic Violence Calls Nuisance Complaints	Assaults, Homicides, Asthma, Clinical Depression, Elevated Lead Levels in Children, Electrocutions, Carbon Monoxide Poisoning
Economic status	% High School Grads % Medically Uninsured Crime index	Age adjusted deaths Infant mortality rate



Correlation of Development Issues, Health, and Civic Engagement Indicators

Urban development in Ventura County may proceed as it has in most parts of the country with construction of more residential and industrial areas connected by more streets and freeways and diminishing farmland, recreational areas and open space. The SOAR initiative could prompt an alternative future with more open space, mixed-use development, in-fill construction, public transportation, and public pedestrian-friendly areas. Civic engagement is crucial in any shift away from the past development patterns and reviews of development impacts on community and environmental health. For example, measures of public safety (e.g. crime indicators) should be monitored to see to what degree these indicators reflect changes in the physical environment such as more parks, recreational facilities and public spaces.

Indicators linked to development issues such as the amount of impervious surfaces added to a watershed should be monitored relative to health indicators because more impervious area leads to a loss of habitat for maintaining species diversity and more urban runoff and associated pollutants which impact community health. Additionally, more paved streets lead to more airborne auto pollution.

Of special concern to public health officials is the epidemic of obesity and diabetes in California and the nation, especially among young people. Civic engagement on this issue is integral to creating development that includes readily accessible and safe bikeways and walkways. Such development patterns should correlate with reduced levels of obesity and diabetes due to more outdoor physical activity in the community.

There are many other examples of interconnections between indicators. The idea that development choices have many ramifications for health and quality of life is one that should prompt active public debate and further participation in revising or adding to the suggested sustainability indicators. That revision process (and data collection) is one of the key civic engagement issues which ultimately determines the usefulness of the indicators and the baseline indicator data obtained thus far.

VI. SPECIFIC SUSTAINABILITY INDICATORS

Introduction: The specific indicators selected for this project are grouped into three categories: Development Issues, Environmental and Community Health, and Civic Engagement. Other indicators that were identified, but not formally included in the report are grouped at the end of this section. They are listed because they provide additional ideas for the reader interested in applying the principles of this study to another community.

Development Issues

RATIO OF TOTAL FARMLAND ACREAGE TO POPULATION

Goal: To promote a viable and diverse economy, environment, and society by establishing equilibrium between land uses and the number of County residents, and to maintain an appropriate balance between the amount of farmland and the County population.

Measured by: The ratio or acres of County farmland per County resident.

Findings: Between 1990 and 1999 it is estimated that the County population increased from about 660,016 to 745,063. This represents an increase of 11.4%. During the same time, the number of persons per square mile increased from about 362.4 to 403.6. As of 1998 the County had 123,235 acres of farmland. Based upon these figures, for every acre of farmland there are 6.045 County residents. This converts into a ratio of about 1 to 6. In 1992 this ratio was 5.27 people per acre of farmland, but by 1998 2063 acres of farmland had been lost while the population increased.

Context: Data Sources: Current data on County population may be obtained from the United States Census Bureau, Washington D.C., 20233, (301) 457-4608. Although a full census is only taken every 10 years, the Bureau estimates



current population figures. Information may be easily accessed through its web site at <http://quickfacts.census.gov/cgi-bin/county>. Also, Oregon State University, Corvallis, Or. 97331-4501, (541) 737-1000, maintains a “Government Information Sharing Project” containing current County population data through its web site at <http://govinfo.library.orst.edu/cgi-bin>. Farmland acreage data may be obtained from the California Department of Conservation.

Basis as a Sustainability Indicator: This indicator tracks how well additional population is accommodated relative to farmland acreage and therefore food production for the local population. Given world-wide trading markets, reliance on local food sources is less critical than in past times, but it remains a strategic consideration.

MULTI-FAMILY HOUSING UNITS

Goal: Increase housing stock and affordability by developing more multi-family units, including owner occupied, to improve housing choices for all income levels and provide diversity and social equity for the community.

Measured by: Dividing the number of multi-family unit building permits issued per year by the total number of new residential permits.

Findings: In 1998, the City of Oxnard issued a total of 394 new residential permits. Of those permits, 5 were for Multi-Family Residences (MFRs), approximately 1.3%, and 389 were for Single-Family Residences (SFRs), roughly 98.7%. There was an increase in residential permits during 1999. Specifically, of the 710 new units, 30 (4.3%) were MFRs, and 680 (95.7%) were SFRs. While small in absolute numbers there was a 600% increase in the number of multi-family housing units.

While the number of Multi-Family Residences has increased since 1998, the amount of land and choices for development are now limited following the passage of S.O.A.R. Thus, Oxnard will need to consider housing development options carefully, especially the number of units per acre, to assure its capacity to meet current and future housing demands. The City should encourage development of units that are not only affordable, but are also easily integrated into the community’s predominately single-family development pattern.

Context: The passage of S.O.A.R. will constrain future development in Oxnard for beneficial reasons. These constraints will require planning future housing needs to assure diversity in type, availability, and affordability. As the price of single-family units increases and exceeds the affordability range of singles, young families, and elderly residents, the demand for multi-family housing will grow. Lack of affordable housing encourages people to live in sub-standard and crowded conditions and, historically, such conditions have been associated with community health problems. When good housing is not available to all income levels, the effect is a less diverse community, more workers commuting into the City, reduced air quality due to additional traffic, and reduced quality of life overall.

Compact and higher density developments, with efficient and thoughtfully planned spaces, permit more units to exist in less space and lower costs for developers. If mandated, by local ordinance, developers could be directed to dedicate savings and remaining unbuilt area as park, recreation, or public garden space within the development. This would make multi-family developments an aesthetically pleasing option. This kind of development can stretch land resources through efficient use, require less infrastructure investment (e.g., sewers, utility lines, roads, etc.), and permit taxpayer savings to be applied to other community needs. While well planned multi-family developments have added benefits of common walls and areas that reduce energy consumption (electricity and natural gas) and use of natural resources (wood, sheetrock, etc.), their greatest potential benefit to the community, aside from quality affordable housing, is more open space.

Finally, providing more owner occupied multi-family housing will encourage a more diverse population base, stimulate the local economy, and increase property tax revenues which pay for services currently rendered to non-owner residents. Should the City of Oxnard find ways to increase ownership of multi-family units, it would likely see an increase in community pride associated with home ownership.

Source: City of Oxnard Planning Department



SUBSIDIZED HOUSING: SECTION 8 APPLICATIONS

Goal: To provide all people with the basic human need of housing, while ensuring that low-income community members are able to receive assistance allowing them to reside in adequate housing.

Measured by: Annually tallying of the number of Section 8 applicants to The City of Oxnard Housing Authority.

Findings: Oxnard is home to more than 160,035 people. Of that population, there are currently 1,584 people living with Section 8 housing assistance, that is 4.7 percent of Oxnard’s population. The federal government allots a specific amount of Section 8 vouchers to each city and each city distributes the vouchers to those applicants who qualify.

Currently, 790 City of Oxnard landlords accept Section 8 residents. Each year the number of landlords accepting Section 8 varies slightly but remains between 700 to 790 landlords.

Annual applicant numbers are tallied every October. In October 1998, 795 applicants had applied for Section 8 assistance. The following year, 1999, tallies indicated that the number had risen to 2,313 applicants, a 291% increase from 1998. As of October 2000, 2,174 individuals had submitted Section 8 applications. The applicants are now on a waiting list, and the wait is approximately four to five years.

Context: Using annual tallies of Section 8 applications as an indicator is important in measuring sustainability because it allows the public, as well as city departments, to measure progress in providing housing to the city’s economically challenged residents. With respect to the SOAR initiative, Section 8 housing typically does not promote sprawl because it generally utilizes already existing housing. Also, Section 8 housing does not require the city to spend money on new infrastructure projects, which are very costly. Furthermore, Section 8 housing promotes social equity by facilitating housing for those who might not otherwise be able to live and work in the community. The City of Oxnard’s Housing Administration can be contacted for more information.

Source: City of Oxnard

EASE OF TRAFFIC FLOW AT MAJOR INTERSECTIONS

Goal: For the City of Oxnard to have traffic flow at Levels of Service (LOS) “C” or better.

Measured by: Level of Service (LOS) ratings for 24 frequently traveled intersections in the City of Oxnard, charting P.M. (evening) peak LOS findings.

Findings: This indicator portrays actual LOS ratings for 24 frequently traveled intersections in the City of Oxnard, charting P.M. (evening) peak LOS findings for the years 1991, 1994, 1996, 1998 & 2000. The bar graph demonstrates the findings, which range from LOS “A”- LOS “F”, with Standard LOS ratios demonstrated below:

Level Of Service	1991	1994	1996	1998	2000
A	4	5	7	5	6
B	8	12	5	9	8
C	5	0	7	6	4
D	3	1	5	4	4
E	2	5	0	0	1
F	1	1	0	0	1
Total # of Intersections	23	24	24	24	24

Overall, LOS levels have remained relatively constant over the last 10 years. 1998 was the best year, with 20 of the 24 intersections at LOS “C” or better, and no LOS “E” or “F” intersections. It appears 2000 may mark a reversal in



a trend of improvements dating from 1994. Nevertheless, the fact that the City’s population (and therefore traffic volumes) has continually increased over the years, while LOS levels at key intersections have generally remained at level “C” or above, is noteworthy. (Data provided by Ventura County Transportation Commission -VCTC).

Context: Level of Service, commonly referred to as “LOS”, is a qualitative measure of roadway and intersection performance stated on a scale from “A” to “F”, with LOS “A” representing free flow traffic and LOS “F” representing severe traffic congestion. LOS is a ratio of traffic volume to the carrying capacity of the roadway in question and is measured based on the amount of wait time that automobile driver’s experience when stopped at controlled traffic intersections. Standard LOS ratios are demonstrated below:

Levels Of Service	Volume/ Capacity Ratio	Driving Conditions
LOS “A”	Traffic flows at 0 –0.60	Free flow conditions. No motorist waits longer than one signal.
LOS “B”	Traffic flows at 0.61-0.70	Stable traffic flow. Motorists rarely wait through more than one signal.
LOS “C”	Traffic flows at 0.71-0.80	Stable and acceptable flow but speed and maneuverability somewhat restricted due to higher volumes. Motorists intermittently wait through more than one signal. Occasional backups behind left turning vehicles.
LOS “D”	Traffic flows at 0.81-0.90	Extensive delays at times. Some motorists, primarily those making left turns, may wait through one or more signals but there are no excessive backups at intersections. Maneuverability restricted.
LOS “E”	Traffic flows at 0.91-1.00	Very long lines may create lengthy delay, especially for left turns. Volume at or near carrying capacity of roadway. Unstable flow.
LOS “F”	Traffic flows at 1.01-above	Backups from locations downstream restrict movement at intersection approaches. Forced flow conditions. Stoppage for long periods due to congestion. Volumes drop to zero in extreme cases.

The LOS ratios of intersections provide base level traffic information used by transportation engineers and local decision-makers, aided by specific traffic analysis and research of a City’s traffic movements and congestion problems.



This indicator provides information that will enable the City of Oxnard to monitor their existing Levels of Service so, in the future, efforts can be made to maintain LOS and avoid noticeable increases in congestion and commuting time. When LOS ratios are at acceptable levels, LOS “C” or better, fewer auto-related emissions are released into the environment. As congestion increases as measured by a drop in LOS levels, auto pollution increases. Economically, unhindered intersections allow the movement of goods and services much more efficiently than clogged intersections, and free-flowing movement of goods and services enhances the economy. Free flowing traffic permits citizens equitable access, to move about the community unhindered, and makes for a less stressful and safer environment than is found in areas plagued by traffic congestion.

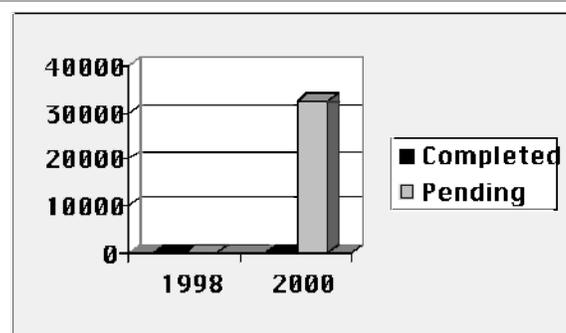
REDEVELOPMENT: NUMBER OF MIXED-USE COMMUNITIES

Goal: Dwellings will be within walking distance to commercial districts and/or jobs.

Measured by: Square feet of mixed-use development per year, indicated by building permits issued.

Findings: Oxnard currently lacks any mixed-use zoning. By contrast, Camarillo has zoning regulations for Old Town that allow for mixed residential and commercial uses. In October 2000, Camarillo approved permits for nine 2,800 square-foot buildings. Each will contain an 1800 square-foot single-family residence on the top floors (three bedrooms, 2.5 bathrooms) and a 1000 square-foot commercial space below. All residences will possess a backyard and garage. The project includes four additional 1,800 square-foot residences without commercial space. This development will provide a model of mixed-use development for cities across Ventura County.

Square feet of Mixed-Use Development in Camarillo:



Context: In Ventura County, the preservation of agricultural land benefits the environment but limits the space available for new dwellings. Future economic growth and associated population increase will require new housing. Through higher density rates, mixed-use districts help maintain open space while accommodating population growth. For example, the Old Town Camarillo development will have a density of approximately 15 dwellings per acre, compared to typical detached single-family housing density of 5 dwellings per acre. Mixed-use districts also benefit the environment through more efficient rates of energy consumption and reduced traffic pollution. Mixed-use communities can decrease cost of living expenses; the delivery of public services (garbage collection and recycling, sewage collection, water provision, and street and landscape maintenance) is more efficient in mixed-use areas. Redevelopment of non-residential, single-use areas may entail the preservation and reuse of existing buildings, decreasing investment in building materials and costly infrastructure construction. With less reliance on cars, mixed-use districts increase pedestrian activity and foster social interaction and strong communities.



PARKS & OPEN SPACE ACREAGE PER POPULATION

Goal: For the City of Oxnard to have ample amounts of parkland which meet or exceed the National Recreation and Park Association recommendation of 39.6 acres of parks and open space per 1,000 residents.

Measured by: Amounts of existing publicly accessible open parkland space in acres per 1,000 residents within the City of Oxnard.

Findings: The City of Oxnard contains 425 total acres of Publicly Accessible Parkland within the City limits. Oxnard has four (4) various classes or types of parkland:

Mini-Parks: Classified as and acre pocket parks usually located on vacant in-fill properties located in a developed urban setting;

Neighborhood Parks: A medium sized parks 1-5 acres; generally attached to or in close proximity to single family neighborhoods;

Community Parks: Large sized parks 5+ acres; generally centrally located for the use and enjoyment of the entire community;

Regional Parks: Large sized parks; generally centrally located for the use and enjoyment of the entire community, but with the potential to serve residents outside the City as well. Two examples of regional parks are: a 62-acre park at the beach, and a 75-acre park recently acquired from Ventura County (known as College Park, it is where the Strawberry Festival is held).

The population of Oxnard in the year 2000 is projected to be 160,305 and the ratio of parkland to population is as follows: 2.65 acres of parkland per 1,000 persons within the City of Oxnard

Context: The primary objective of the Parks and Open Space Indicator for the City of Oxnard is to allow the City the ability to monitor existing amounts of publicly accessible open space. By monitoring existing park acreage, the City can analyze how much parkland exists and calculate whether there is an adequate amount of park space available for the use and enjoyment of all residents of the City of Oxnard.

Economically, it is important for Oxnard to inventory its existing parkland as this will help the community assure a suitable amount of open space/park area is maintained prior to fully developing the community with residential, commercial and industrial uses.

Environmentally, it is important to maintain an appropriate balance between hardscape (developed property) and softscape (natural areas or developed parkland) within an urban setting. Creating and preserving natural areas and parkland is essential to maintaining an adequate amount of open space for Oxnard's growing urban community. It is important to provide Oxnard residents with accessible public open space where they can enjoy the outdoors and relieve stress. An urban environment that lacks accessible open space is a less appealing place for residents and typically lower quality of life for them.

WATER USAGE: GALLONS PER DAY PER PERSON

Goal: The City of Oxnard has sufficient water resources to support the growing population as well as commercial and industrial activities.

Measured by: The trend in per capita water usage, expressed as gallons per day per person.

Findings: Per capita water usage for the City of Oxnard has decreased modestly over the past twenty years (7.8%) and is attributable in large part to conservation programs initiated during that period. In general, the usage rates in Oxnard (152 gallons per day, per person) are less than Los Angeles (165 gpd) and San Diego (185 gpd). Although trends and consumption comparatives are favorable, projected population growth will increase overall water demand by over 50% between 2000 and 2020. To cope with escalating demand the City will need to develop new conservation programs, including increased wastewater recycling, and increase the amount of water available to it.

Context: Higher population density should lead to improved efficiency of all utilities, including municipal water.



As a general rule, higher density residential developments require less water for landscaping. In addition, new construction will comply with building code conservation requirements for flow restrictors and low flush toilets. Therefore, new construction should help maintain or reduce per capita water consumption, even as the population within Oxnard's city limits increases.

Regardless of per capita usage, more water will be required for the growing population as well as the business and industry that are essential to an economy supporting this population. Affordable, high quality water is a requirement of residents as well as business and industry, but increasing the supply at the expense of the general environment and agriculture is undesirable. This is why conservation is so important – it can help meet increased demands without the damaging consequences.

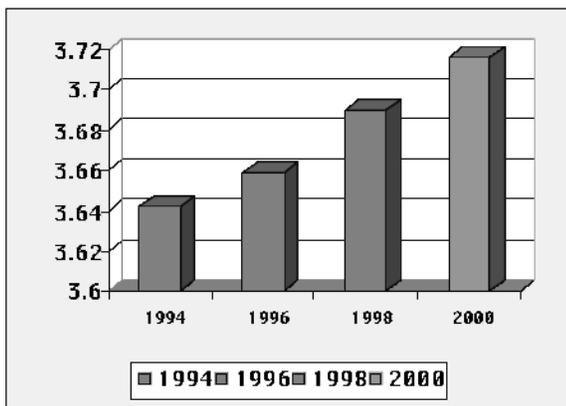
POPULATION DENSITY: NUMBER OF PEOPLE PER HOUSEHOLD

Goal: Preserve open and agricultural space while accommodating population growth.

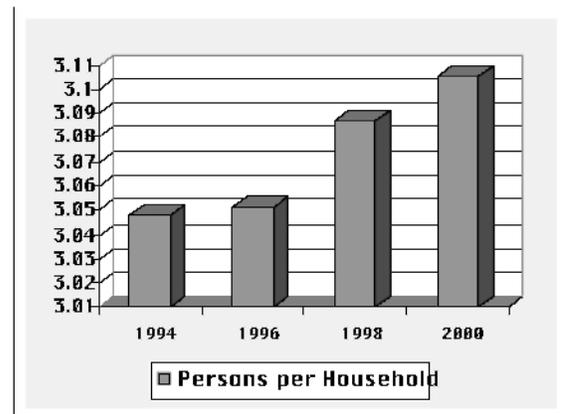
Measured by: Average number of people per household.

Findings: In Oxnard, the average number of people per household increased from 3.64 in 1994 to 3.72 in 2000 (+2.2%). In Ventura County, the average rose from 3.05 in 1994 to 3.11 currently.

Persons per Household in Oxnard



Persons per Household in Ventura County



Context: While SOAR will help preserve open and agricultural lands in Ventura County, it limits the space available for housing construction. Future increases in population will therefore require higher population density rates, unless the SOAR boundaries are amended. Moderate and high residential density rates not only help maintain open space but also reduce energy and water consumption. Higher density also leads to more efficient provision of public services (garbage collection and recycling, sewage collection, water provision, and street and landscape maintenance) and decreased investment in infrastructure. The average number of people per household, however, should be analyzed with regard to other factors such as housing types and size, and family size so that the indicator does not simply register overcrowding of dwellings.

Source: California Department of Finance, Demographic Unit.
www.dof.ca.gov/html/Demoga.htm



HOUSING: AVERAGE SQUARE FOOTAGE PER RESIDENCE

Goal: Provide new residences that are livable but have a smaller “footprint”, e.g., less square footage, to lessen environmental impacts and assure more land is available for a greater mixture of residence types.

Measured by: Comparing average square footage of new residences in a given year to 1998 values, the base year for S.O.A.R., using City of Oxnard Permit Office records.

Findings: In the City of Oxnard, in 1997, as a comparison for pre-S.O.A.R. development, there were 69 new residences built with an average square footage of 1,539 square feet per home. There were 33 new homes built in the base year of 1998, with an average of 1,955 square feet per home, a 21% increase in size. In 1999, there were 385 new homes built, and 67 apartments. Average square footage for 1999 has not been established. The City of Oxnard was not able to determine square footage of new residences because they could not be distinguished from values for apartment units.

Context: Communities are seeing the development of large houses on very small lots. While this leads to increased housing densities, which is arguably positive, there may not be a corresponding increase in the number of occupants for these larger dwellings. As such these increasingly large residences may not be helping to address the need for affordable housing for the average family.

These residences with large “footprints” impact not only the city in which they are built, but the global environment as well. Larger houses typically use more land and definitely use more materials and energy in the construction phase than smaller homes. Once built, they take more water and energy to maintain. In general, larger homes consume land that might otherwise be more intensely used for multi-family dwellings and mixed use complexes.

HIGH DENSITY ZONE CHANGES AND PERMITS

Goal: Increase the density of housing so that future population increases can be accommodated within the present SOAR boundaries and thus minimize the conversion of agricultural land and open space to developed land.

Measured by: The number of permits or requests approved for high-density development and or zone changes requesting higher density since the inception of the soar initiative.

Findings: Since the inception of the SOAR initiative, there have only been three requests for higher density development in the City of Oxnard. All the requests were located on land within the built up area on the city. One was the conversion of three hotels to apartments; the developer receives a density bonus for affordable housing. The second was the expansion of three privately owned single-family dwellings to multi-family dwellings; this was granted by standard development amendments such as reduced lot lines. The third was the El Paseo development, 190 multi-family units granted through a Specific Plan amendment based on affordable housing. According to the City planning department all requests for higher density development have been granted and they do not feel the City will be affected by the SOAR initiative for at least 8 to 10 years due to large amounts of vacant land within the city.

Context: This data should be used as a baseline to determine if the City is actively encouraging higher density development as a way of accommodating population growth without amending its SOAR boundaries.

Source: Gary Sugano, Planning, City of Oxnard.

RATIO OF TOTAL FARMLAND ACREAGE TO URBANIZED LAND

Goal: To retain sufficient farmland to allow the agricultural industry to prosper while accommodating future population growth within the SOAR boundaries.

Measured by: The ratio of farmland to built/developed land.

Findings: As of 1998 Ventura County was among the top 10 urbanizing counties in the State of California. Also, as of that year the County had 123,235 acres of farmland as compared to 95,522 acres of urban / built-up land, or a ratio of 1.29 acres of farmland to 1 acre of urban land. Between 1992 and 1998, 2,063 acres of farmland were lost. Of



this amount 1,483 acres were classified as “prime farmland”, that is farmland “which has the best combination of physical and chemical characteristics for the production of crops”, including “soil quality, growing season, and moisture supply needed to produce sustained high yields of crops” (Calif. Dept. of Conservation 1998). In contrast, between 1992 and 1998, urban / built-up land increased in the County by 6,404 acres, from 89,118 to 95,522 acres. The leading crop in the County in 1998 was lemons, with a value of \$178,700,000. Total 1998 County lemon acreage was 27,707 acres. The 1998 value of all County agricultural products was \$937,139,000.

Context: Data Source: Current data on amounts of farmland and urban land in the County may be obtained from the California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, 801 K Street, MS 13-71, Sacramento, Ca. 95814-3528, (916) 324-0859. Information may be easily accessed through the Department’s web site at <http://www.consrv.ca.gov/dlrp/fmmp>. The County’s annual agricultural production may be obtained from the Agricultural Commissioner, 815 East Santa Barbara Street, Santa Paula, Ca. 93061, (805) 933-3165. Attached hereto are examples of the data available.

From the environmental standpoint, Ventura County’s farmland must be viewed as a nonrenewable resource. Once the farmland is built upon it is unlikely that it will ever be returned to agricultural use. Further, it is essential to balance farmland with urban land so that other environmental factors such as groundwater recharge can occur and storm water runoff minimized. Economically, the existence of local farmland provides a diversified tax base and a wide range of employment opportunities. The farmland also provides open space and greenbelts between the cities. While past trends suggest an accelerating loss of farmland due to urbanization, the losses should stop once the farmland within the cities’ SOAR boundaries has been developed. Thereafter, any losses should be viewed carefully to determine if they are occurring because SOAR has failed to halt the past trends towards sprawl.

CIVIC ENGAGEMENT

TOTAL PERSONS PER YEAR RESPONDING TO EIRs FOR DEVELOPMENT PROJECTS

Goal: To increase public participation in decision making with regard to projects that may significantly impact the local environment.

Measured by: Annual number of comments, responses, letters, or other communications from residents at public hearings or recorded in Environmental Impact Reports prepared for projects in the City of Oxnard and its sphere of influence that were SOAR related.

Findings: Between 1998-2000, six Environmental Impact Reports (EIR) were completed for projects in the City of Oxnard, a rate of two per year. Public response appears to be issue driven. In May 1999, the Juan Laguna Soria Elementary School EIR was re-circulated and it interfaced directly with SOAR Ordinances. Of the thirty-two persons who commented on this EIR, five stated concerns related to SOAR. In addition to the Juan Laguna Soria Elementary School EIR, there was the Northshore at Mandalay Bay EIR, which received comments from 15 persons. Three persons commented on SOAR related issues, e.g., not converting open space or agricultural land for development and preventing urban sprawl. In 1998, the Northwest Golf Course Community Specific Plan EIR and the Lombard/Levy Development EIR received comments from ten persons, six commenting on SOAR-related issues, again, conversion of open space or agricultural land for development and preventing urban sprawl were raised.

In 2000, citizen participation was lower than in previous years. For the Wesport at Mandalay Bay EIR, there were two public comments, neither of which were SOAR related. As for the Wagon Wheel Specific Plan EIR, three citizens commented, again, comments were not SOAR-related.

Context: The importance of stakeholder participation in the Environmental Impact Report process for development projects cannot be understated. California law requires the preparation of Environmental Impact Reports (EIR) to assess whether a new project will significantly impact the physical or social environment and community resources. For example, will the additional traffic associated with a project cause traffic levels of service (LOS) to be exceeded or impair local air quality? Or will the project impact biological resources such as rare or endangered plants or ani-



als? Environmental Impact Reports are intended to identify impacts and mitigation measures, as well as alternatives to the proposed project. As such they inform decisions makers and the general public of a project's impacts and thus allow people to decide before a project is commenced whether it is compatible with community goals and the local environment.

Encouraging public interest and comment on these documents has various benefits, not least of which is avoiding legal entanglements and public contempt which occurs when projects are later determined to be contrary to community goals. An aluminum manufacturing plant is a good example. If activities or certain practices will be engaged in, such as storage of waste in an important wetlands/inter-tidal area, the community would learn about this "negative impact" during the EIR process and have an opportunity to request that those impacts be mitigated before the project may proceed. The community could review alternatives suggested in the EIR, and, if no acceptable alternative is available, the project would be prevented from moving forward, unless a Statement of Overriding Considerations was made by the decision makers at the time the project is approved. Public awareness and participation in the EIR process allows residents oversight of their community's growth and development.

PUBLIC COMMENTS ABOUT SOAR ISSUES AT CITY COUNCIL MEETING

Goal: To encourage citizen participation at City Council meetings to assure decisions reflect the goals of the SOAR initiative.

Measured by: Annual number of residents attending City Council meetings and number of recorded comments, including verbal, written, petitions, or other communication from residents relative to SOAR.

Findings: There are numerous opportunities for public comments at each City Council meeting. Comment cards, letters, oral testimony and petitions are recorded at City Council meetings. Between 1998-2000, the year 2000 had the highest average citizen participation. Of thirty-five meetings, 632 persons participated. Average participation was 18.05 persons per meeting. SOAR was not a specific topic, but it was referenced at three different meetings (Jan 25, May 23, July 25) where "in-fill" development incentives (increasing housing density) were discussed. SOAR was noted as having the potential to encourage "in-fill".

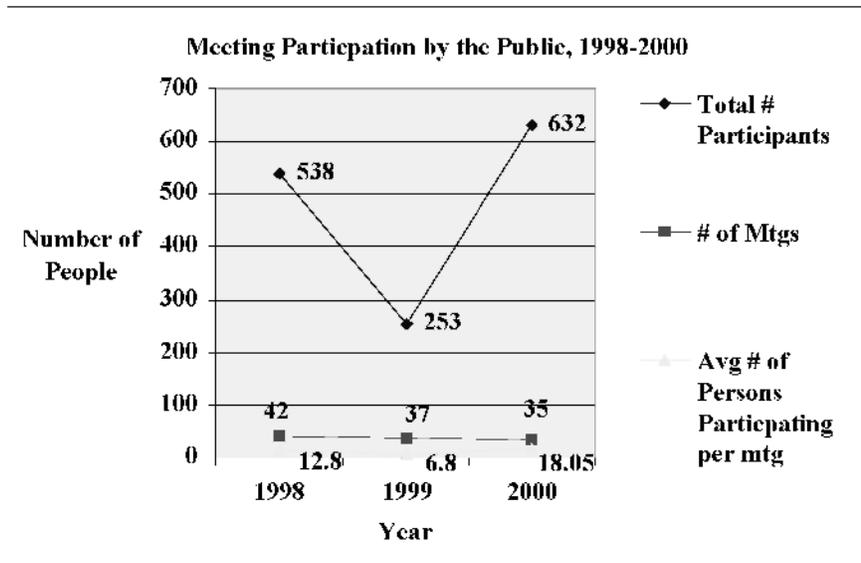
Citizen participation was the lowest in 1999. An average of 6.8 persons spoke at each meeting. SOAR was mentioned in the discussion of the Juan Soria Elementary School project (November 30th, 45 comments). Other comments in 1999 relating to SOAR included comments on the greenbelt issues (November 16) and a Density Bonus Ordinance and resolution (Oct 5).

In 1998, 42 Council meetings enjoyed the participation of 538 persons with an average attendance of 12.8 persons per meeting. However, the March 3rd meeting skewed results as a result of 202 comment cards and 16 letters being submitted at that meeting, which had no SOAR related issues on the agenda. SOAR was adopted in 1998 and was a discussion topic at five Council meetings. There were few public comments on SOAR at those meetings. At seven other meetings, 72 comments pertaining to SOAR were recorded.

In general, while the number of SOAR related comments during City Council meetings have declined since the adoption of the measure, the level of citizen participation at Council meetings has increased in the year 2,000 over the two prior years.

Context: The goal of increased citizen participation or civic engagement at City Council meetings is to assure Council awareness of resident concerns so they can be addressed before committing to a certain course of action that the community may find disagreeable. Citizen participation in these meetings assures the exchange of ideas, permits Council members to avoid guessing what is important to the community, and allows the council to take advantage of community member expertise and familiarity with problems in specific areas.

Civic engagement encourages civic pride and in communities where engagement levels are high, there are a number of benefits observed that could be correlated with participation. More specifically, where engagement is high, communities tend to have higher quality physical environments and innovative programs. Additionally, when community members participate in the civic process, they become educated about the fiscal issues associated with providing services. This makes them better informed voters who are inclined to vote in a manner that ultimately benefits their community.



ENVIRONMENTAL & COMMUNITY HEALTH

PESTICIDES IN USE IN POUNDS PER YEAR

Desired Goal: Pest control practices that favor non-toxic methods over Proposition 65 compounds in agriculture, private, and public spaces (including non-reported residential, commercial, school, and government facilities) to preserve soil, air and water resources for future generations.

Measured by: The volume of pesticides used in the county as reported to the State Department of Pesticide Regulation.

Findings: Pesticide applications in Ventura County increased 27% between 1991-1999.

Pesticide use in Ventura County exceeded 6.5 million pounds in 1999, ranking it 10th out of 58 California counties. While the majority of applications reported were to agricultural areas (97%), termite control and right-of-way uses are included because of the potential toxicity of compounds used. Applications in private, non-agricultural (residential and smaller retail/commercial gardens) areas are “not reported” to the Department of Pesticide Regulation. However, they should be monitored locally as these applications are usually administered by persons lacking knowledge of potential risks and may be applied in densities as much as 10 times higher, per acre, than agricultural applications. Use trends often correlate with weather and crop values (higher value crops are often treated with more pesticides/acre) to minimize losses. Non-toxic alternatives, such as Clandosan (derived from crab/shrimp shells and used to control nematodes in high value crops), are available and being employed to minimize losses and reduce environmental impacts, but use of such alternatives has been minimal (0.02% statewide).

Some of the highest per acre pesticide applications were to strawberry, lemon, celery, pepper, and cilantro/parsley crops. While some applicators are embracing non-toxic methods, use of Proposition 65 compounds (identified by the State of California and Environmental Protection Agency as potentially carcinogenic/mutagenic/toxic), such as methyl bromide, metam-sodium, simazine, chlorpyrifos (Dursban), and mancozeb is widespread, with methyl bromide and metam-sodium use increasing steadily since 1991. These compounds pose potentially significant health risks, depending on exposure, to sensitive populations (especially children), as well as avian and aquatic species. These compounds are associated with diminution of water, air, and soil quality.

Context: Pesticide applications in Ventura County increased 27% between 1991-1999 with the amount of applications since 1991 as follows:



Pesticide use (pounds) reported by Department of Pesticide Regulation between 1991-1999:

Year	Pounds	Year	Pounds
1999	6,589,411	1994	5,050,636
1998	6,614,896	1993	5,360,062
1997	6,767,974	1992	6,018,877
1996	5,905,551	1991	5,168,536
1995	5,836,134		

Pesticides are susceptible to “drift” and may contaminate untreated crops and resources. Out-gassing can also be problematic in densely populated areas. A study by the State Air Resources Board noted unacceptable out-gas levels 72 hours following a metam-sodium application test, but use of this chemical has increased despite its association with severe health effects.

Metam-Sodium applied to County agricultural lands 1991-1999 (yr./lbs.):

Year	Pounds	Year	Pounds
1999	165,483	1994	215,022
1998	104,405	1993	193,328
1997	197,314	1992	190,900
1996	187,143	1991	99,241
1995	197,612		

Compounds that bind with soil particles may become airborne during farming and construction activities long after application and impact air quality, surface waters, and community health. While cities have traditionally relied on the State to regulate pesticide use, the growing population living in close proximity to areas where these compounds are applied necessitates that Oxnard stakeholders (residents, farmers, business owners, and local agencies) create local policies that encourage use of alternative pest control methods. Encouraging least-toxic pest control methods and innovative land management techniques (alternating beneficial crops between plantings, using non-toxic compounds such as Clandosan, discouraging calendar/broad area fumigation when infestation is lacking or minimal, etc.) through tax credits, grants, locally subsidized crop insurance, and community education and partnership with local agencies will move the community toward SOAR’s goal of protecting the area’s natural resources and assure a high quality living environment.

*Sources: State of California, Department of Pesticide Regulation
County of Ventura, Agricultural Commissioner’s Office
(See master document bibliography for additional resources)*

NUMBER OF ENDANGERED OR RARE SPECIES

Goal: Development that provides natural habitat areas for native species and wildlife corridors for their movement.

Measured by: The Ventura County Plan data from the California Natural Diversity Data Base listing State designated endangered and rare species as well as federal designated threatened and candidate species.

Findings: The County Plan data for 1987 listed 8 extinct species in the county and 34 species on one of the lists mentioned above. Of the 34 listed, 11 were in the Oxnard area and 3 were in the Ventura area.



Context: Loss of natural wildlife and native plant habitat to farming and urban development is the major cause of the loss of biodiversity. The loss of species poses unknown risks to the natural stability of ecosystems and to their pest-control functions. The loss also results in an impoverished environment from an aesthetic point of view.

Development and farming that destroy large areas of natural habitat will increase the number of plants and animal species considered threatened, rare or endangered. Development that preserves green spaces and encourages wildlife movement by providing safe travel corridors, prevents loss of species, and the loss of their genetic diversity (an indirect threat to their long term survival).

*Sources: <http://www.ventura.org/vcrma/rma.htm>
<http://www.dfg.ca.gov/whdab/html>*

AIR POLLUTION: DAYS OVER OZONE STANDARD PER YEAR

Goal: Reduce ozone pollution with corresponding aesthetic, health, and economic benefits and encourage development that promotes less vehicle-generated air pollution and particulates.

Measured by: Monitoring air for ozone and fine particle (PM₁₀) concentrations.

Findings: The Ventura County Air Pollution Control District monitoring data show large reductions in the number of days when ozone levels exceeded the California 1-Hour standard of 0.09 ppm. The PM₁₀ data show significant reductions in the early 1990s.

Context: Much of the poor air quality (“smog”) in Southern California is caused by vehicle emissions. Oxidants in smog are generally measured by testing for ozone and the particulate component is measured by the volume of particles less than 10 microns in size. These are measured because particulates of this size are known to enter the lungs where they can cause damage. Both pollutants are harmful to health at higher concentrations. Urban development that minimizes vehicle traffic or promotes mass transportation will help prevent smog formation. Encouraging carpooling, pedestrian and bicycle use and reducing travel through increased mixed-use development is useful as is the use of low or zero-emission vehicles.

BEACH CLOSURES: NUMBER OF DAYS

Goal: Minimize ocean water pollution through development that reduces the amount of impervious surfaces which increases storm water runoff that carries bacteria, viruses, and other pollution to the ocean. Improved bacteriological quality of storm water is also desired.

Measured by: Monitoring of ocean water pollution is done by testing for indicators of fecal contamination, namely fecal coliforms and enterococci.

Findings: A large number of beach closures result from storm water at Ventura County beaches with an apparent increase in the last year.

Context: The indicators fecal coliforms and enterococci are harmless but do indicate the presence of fecal matter that could contain disease-causing bacteria and viruses. Sources of feces include livestock, birds, pets, sewage leaks which in turn are typically carried to the ocean as a result of storm water runoff. Weekly testing of the beaches and after rainfall events is done to determine whether the beach areas should be closed to swimming. The State swimming water standards are single values of 400 fecal coliforms/100 ml and 104 enterococci /100 ml. (Geometric monthly means of 200 and 35/100 ml respectively). Urban development that minimizes impervious surfaces and provides for areas for storm water to settle out before reaching the ocean will reduce the amount of pollution reaching the ocean. Vegetated areas that intercept runoff allow infiltration of rainfall as do temporary catchment basins. Street cleaning and care with pet droppings are also useful.

CARDIOVASCULAR DISEASE: HEART ATTACK DEATHS PER 100,000

Goal: Development which promotes a healthy lifestyle especially physical activities such as walking and bicycling. Such physical activity should improved health and longevity of the population.



Measured by: Death statistics for cardiovascular diseases (heart attacks) and cerebro-vascular diseases (strokes or brain attacks).

Findings: Rates for these two causes of death in Ventura County are lower than California rates but still remain the number one and number two causes of death for county residents.

Context: Recent trends have been downward for cardiovascular deaths but an ominous cultural shift toward sedentary activities and high-fat foods has created a more overweight population especially among the young. These are significant risk factors for premature deaths. Development that encourages pedestrian activity, bicycling and outdoor recreation opportunities can counteract the rising sedentary trend.

Heart Attack Death Rates (Age-Adjusted / 100,000):

	Ventura County	California
1993-1996	82.2	
1996-1998	75.62	93.9

Stroke Death Rates (Age-Adjusted / 100,000):

	Ventura County	California
1993-1996	24.5	
1996-1998	22.9	25.3

Source: <http://www.dhs.cahwnet.gov/hisp/chs/phwceh/cprofile2000/htm>

DIABETES DEATHS PER YEAR

Goal: Development which promotes a more active lifestyle such as walking and bicycling, and outdoor recreation to help prevent obesity which is a major risk factor for type II diabetes. Such activities can help reduce morbidity and mortality from diabetes especially type II diabetes (adult onset diabetes).

Measured by: Reported death rates for diabetes.

Findings: Diabetes deaths for Ventura County were reported as 168 for 1998. Diabetes is the number 7 cause of death in California and is responsible for 2.6% of all fatalities.

Context: Risk factors for adult onset diabetes appear similar to those for cardiovascular disease: sedentary lifestyle and obesity. An epidemic of this form of diabetes is occurring among children. Diabetes causes many health problems and disabilities, and probably contributes to many more deaths than those listed. Development that encourages walking and outdoor recreation can help prevent obesity and greatly reduce the risks for type II diabetes.

PEDESTRIAN DEATHS PER YEAR

Goal: Development which provides safe sidewalks and walkways, safe crosswalks and lower traffic speeds, etc., for a pedestrian friendly environment.

Measured by: Statistics on the numbers of pedestrians killed or injured annually.

Findings: Ventura County ranked in the top 10 Counties in the state for the first time in 1999 with 13 pedestrian fatalities and 243 injuries. There were 10 deaths and 224 injuries in the County in 1998. In that year 2 of the fatalities were in Ventura and 3 in Oxnard.



Context: There are predictable hazards for pedestrians and they include poor or missing sidewalks, wider boulevards and faster traffic, poor placement of stop signs, poor visibility and short stop lights among other things.

Development must be carefully planned to encourage safe pedestrian travel. According to a recent study, so few people are walking that pedestrians are becoming “an endangered species”.

Source: <http://www.chp.ca.gov/>
<http://www.dhs.cahwnet.gov/hisp/chs/OHIR/1998countyleadingcausedeath.htm>
<http://www.dof.ca.gov/>

COMMUNITY HYGIENE: SHIGELLOSIS INCIDENCE PER YEAR

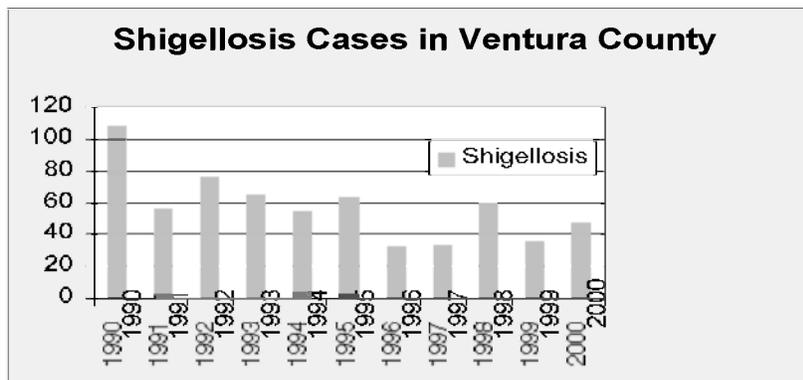
Goal: Development that provides housing that has hot running water and safe sewage disposal and assures that homes and restaurants are safe from the spread of human intestinal diseases.

Measured by: Rates of reported Shigellosis which is a serious disease caused by a human intestinal bacterium.

Findings: Shigellosis has been declining somewhat in Ventura County in the last few years. There were 47 cases reported in the County in 2000 compared to 108 in 1990.

Context: Because Shigellosis is almost exclusively a disease caused by human fecal contamination and is serious enough to warrant medical attention and reporting in most cases, it is a good indicator of the degree of sanitation and hygiene in a community. Development that provides safe sewage disposal and proper indoor toilet and hand washing facilities helps reduce the risk of human intestinal diseases such as Shigellosis and Hepatitis A. Likewise, overcrowded dwellings with inadequate facilities have been shown in the past to contribute to high rates of intestinal disease transmission.

Shigellosis Cases in Ventura County



Source: California Department of Health Services, Division of Communicable Disease Control, Surveillance and Statistics Section

HATE CRIMES PER YEAR

Goal: Development that minimizes social inequities, or perceived inequities, and promotes cultural, racial, and ethnic diversity to achieve community social justice and tolerance for diverse cultural, racial and ethnic groups and expression.

Measured By: FBI statistics on hate crimes based on bias motivation regarding race, religion, sexual orientation, ethnicity, or disability.

Findings: Ventura has experienced more hate crimes, as defined by federal law, than Oxnard for the reporting periods 1996-1998. This may be due the fact that Oxnard is more racially mixed and so its population is more tolerant of diversity. There is no discernable trend in hate crimes for Oxnard.



Context: Segregation and visible economic disparity are two factors involved in hate crimes. Tolerance of diverse peoples and customs can be taught and encouraged. Making communities as mixed as possible and promoting diverse community cultural events are important steps in the evolution of communities that respect and value diversity. Such communities seldom experience hate crimes.

Reported Hate Crimes

Source: <http://www.fbi.gov/ucr.htm>

		Oxnard	Ventura
1996	Race	1	7
1996	Religion	0	1
1996	Sex.Orient	0	1
1996	Ethnicity	0	2
1997	Race	2	14
1997	Religion	0	2
1997	Sex.Orient	0	4
1997	Ethnicity	0	1
1998	Race	1	10
1998	Religion	0	1
1998	Sex.Orient	0	3
1998	Ethnicity	0	3

SOCIAL HEALTH: ALCOHOL-RELATED VEHICULAR DEATHS

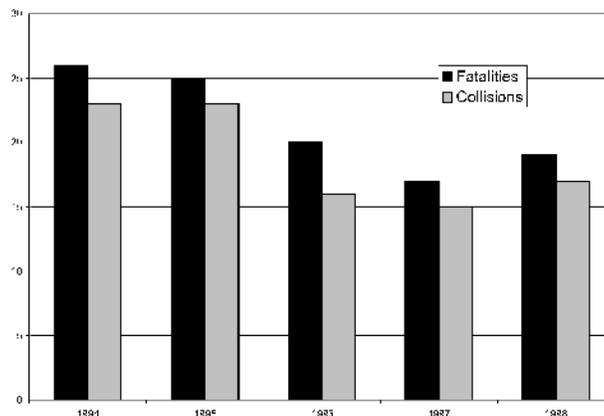
Goal: Development that promotes public transportation, pedestrian-friendly social interaction, and alcohol free public recreation opportunities.

Measured by: Statistics on alcohol-related vehicle collisions and associated fatalities.

Findings: The number of alcohol-related vehicle deaths in Ventura County has shown a decreasing trend since 1994. The 1998 number of deaths was 19 which was down 27% from the 26 deaths reported in 1994.

Context: To prevent alcohol-related automobile accidents and deaths, ideally alternatives to automobile transit would be available in a community near alcohol-serving establishments. Young people are at special risk and alcohol free recreational opportunities and pedestrian accessible social areas could be useful in decreasing their probability of driving while impaired. Guard rails and center dividers, well marked intersections, and proper lighting also lower risks. Data for the City of Oxnard should be collected.

Alcohol-Related Collisions & Fatalities in Ventura County





SOCIAL HEALTH: JUVENILE FELONY ARRESTS

Goal: Development that provides learning and recreational opportunities for teens and which minimizes social conflict and substance abuse.

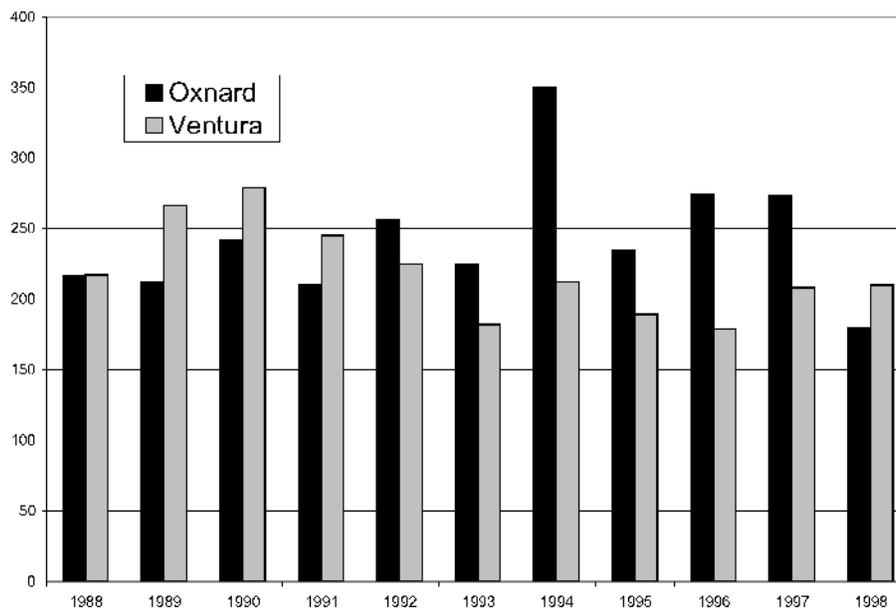
Measured by: Statistics for total juvenile felony arrests by year.

Findings: The number of juvenile felony arrests in 1998 was 180 for Oxnard which was a 17% decrease from the 1988 level of 216. The high for the ten-year period was 350 in 1994. The decrease in Ventura during the same period was 3% (from 210 to 217). The high in Ventura occurred in 1990 with 279 juvenile felony arrests. It appears that the trend may be downward, but higher arrests in recent years make that difficult to determine with certainty.

Context: To prevent juvenile crime, the family and community support that teens experience is critical. Economic opportunities are an important element of that support. Development that provides safe and wholesome recreational, social and learning environments for youth contributes to their collective well-being and decreases the risk of criminal behavior. Development that provides more opportunities for families and neighbors to spend quality social time together also can contribute to the healthy development of teens. For example, less stress and more family time could be benefits of reducing time spent in traffic.

Source: http://justice.hdcdojnet.state.ca.us/cjsc_stats/prof99/index.htm

Alcohol-Related Collisions & Fatalities in Ventura County



OTHER INDICATORS, NOT FORMALLY INCLUDED IN THE STUDY, BUT WORTHY OF CONSIDERATION IN FUTURE INDICATOR STUDIES

The following indicators were reviewed as part of this study, but were not formally included. These indicators individually touch on important issues, but they need to be constructively integrated with the full set of indicators and time did not permit this assessment. Some of the indicators may fit well into the full set, while others may not. Because of their uncertain application, there is no “Goal” statement for these indicators. Future studies may wish to assess their applicability.



POPULATION DENSITY TRENDS BY NEIGHBORHOOS

Measured by: Average number of people per occupied housing unit.

Findings:

Rank Neighborhood	People/ Dwelling Unit	Dwelling Units/ Population	Census Tract
Rose Park	6.23	5,543/890	4900
La Colonia	5.59	8,098/1,449	3200
Bartolo Square	4.66	5,583/1,197	3700
Commercial/Lemonwood/Diamond Bar	4.61	10,605/2,301	4701
Kamal/Valley Park	4.42	7,513/1,700	3800
Pleasant Valley Estates/Cypress	4.31	7,195/1,671	4502
Pleasant Valley Village/Southwinds	4.27	7,136/1,671	4501
South J Street Border Tract	4.26	281/66	4200
Rio Lindo	4.06	4,215/1,037	3100
Cal-Gisler	3.99	5,112/1,287	3900
Redwood/Bryce Canyon	3.99	7,922/1,985	4100
MacMillan Manor/Blackstock	3.94	5,301/1,347	4000
Sea Air/Marina West	3.72	7,152/1,922	3606
Oxnard: Citywide Average	3.64		
Oxnard College/Petit Park	3.55	(7,372:2,079)	4703
Villa Capri/Tierra Vista	3.46	3,497/1,010	4702
Wilson/Fremont South	3.39	4,873/1,437)	3401
Neland Acres Border Tract	3.37	(219:65)	5002
Hobson Park	3.35	(5,109/1,524	3401
River Ridge/Winsor North	3.22	6,970/2,165	2900
Hueneme Border Tract	3.19	315/43	4400
Sierra Linda/Orchard	3.05	7,526/2,464	3002
Bard Road Block Tract	3.04	350/115	4500
West Hemlock Border Tract	3.00	120/40	4302
Fremont/Carriage Square	2.93	6,313/2,156	3300
Sea View Estates/Via Marina	2.91	6,791/2,332	3605
California Statewide Average	2.79		
U. S. Nationwide Average	2.65		
El Rio West	2.54	1,319/520	5001
Oxnard Shores	2.18	4,844/2,226	3605
South Bank/Wagon Wheel	2.15	2,559/1,191	3001
Central City	1.90	830/436	3500
Channel Islands Harbor	1.75	1,543/880	36

Source: 1990 Census Data provided by Oxnard Housing Authority



Context: While SOAR will help preserve open and agricultural lands in Ventura County, it limits the space available for housing construction. Population increases will necessitate higher density rates. Moderate and high-density rates help maintain open space and are typically a more cost effective means of providing housing than single family detached dwellings. Currently, however, high-density rates in Oxnard are disproportionately centered in lower income neighborhoods. A citywide increase in density is a requisite step toward sustainable development but this must not veil overcrowding in lower income neighborhoods. Density rates must be analyzed not only in terms of benefit to the environment and cost savings but also in terms of social justice.

MILES OF NEWLY PAVED ROADS

Measured by: Annual tally of the linear miles of newly paved roadway within the City of Oxnard.

Findings: Currently, Oxnard has 380 linear miles of paved roadway. Since January 1998, The City of Oxnard has constructed 8.1 miles of new roadway. This is an average of 2.7 linear miles of new roadway per year from January 1998 to December 2000. Most of the new roads are in new residential tracts.

Context: The creation of new roads reflects the inherent auto dependant nature of our communities. As a practical matter they consume valuable land, often agricultural land. Once dedicated as a road the land cannot be used for other productive purposes such as housing, parks, businesses, etc. They require significant public expenditures for construction and ongoing maintenance (unless paid for by the developer and subsequent land owners). New roads are nevertheless an essential component of our cities and so should be dismissed out of hand. This indicator, however may reveal trends toward in-fill development along existing roads; a transition to more mass transit and less auto traffic; and perhaps smaller scale roads which are inherently less costly in the long run.

TRAVEL TO MEDICAL SERVICES USING PUBLIC TRANSPORTATION

Measured by: Distance traveled by transit (South Coast Area Transit) to St. Johns Regional Medical Center in Oxnard, by service area.

Findings: Of all trips taken using available public transportation, 16% is used for medical purposes. Additional information shows that 82% of the population travels an average of 6.4 miles to a major medical facility while the remaining 18% must travel an average of 13.1 miles.

Context: A significant portion of public transportation resources are associated with health care services. If such services are reduced through centralization, trips will lengthen. Demographic trends may suggest shifting demands for such medical transportation services. The distribution of health care services and residential uses will effect the overall demand for medically related public transportation services.

*Source: Margaret Heath, Marketing SCAT.
No transportation services are provided for patients by St. John's nor is any data collected on the subject.*

PEAK STREAM FLOW-SANTA CLARA RIVER

Measured by: Monitoring the peak flows of the Santa Clara River relative to up-stream development

Findings: No analysis conducted.

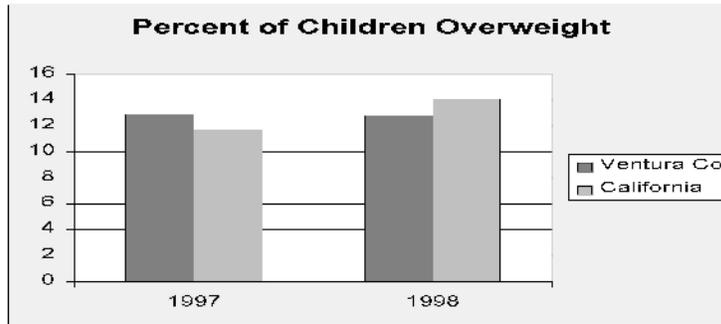
Context: The maximum volumes of runoff produced by rainfall events increases when a water shed experiences traditional urbanization. This occurs because much of the watershed area is built on or paved and water that formerly infiltrated into the soil quickly flows into channels and into the river. The increased flows create a number of impacts. They can be very damaging to riverbanks and adjoining agricultural land. Ecosystems associated with natural stream beds can be dramatically altered. Recharge of aquifers is diminished. And constructing and maintaining flood control improvements like levees, dams, desilting basins, etc. to accommodate peak flows is very expensive. Development that minimizes impervious areas and incorporates catchment basins and ponds will reduce peak flows and the attendant damage. Because Oxnard is at the terminus of the Santa Clara River, the City receives the brunt of up-stream development activities. Monitoring peak flows on a large watershed will perhaps indicate the success of new development practices as well as the degree of cooperation between different entities on a regional issue.



CHILDHOOD OBESITY

Measured by: proportion of children who exceed the 95th percentile for body weight.

findings: ventura county children had a higher rate of obesity in 1997 than california as a whole, but that was reversed in 1998. The proportion of overweight county children is still more than twice the national goal.



Context: children have been experiencing an increase in obesity largely because of more passive lifestyles associated with television and computer games, and high calorie and fat diets. Unfortunately, obesity is something that tends to stay in adulthood and health problems such as diabetes are increased. Development that promotes physical activity among children and teenagers would help stop the trend toward overweight americans and a host of related health problems. Places for roller skating, skate boarding, bicycling, etc., Should be encouraged as well as safe, well-equipped play-grounds. Failure to address this latent health problem will result in significant public costs health care in the future.

Source: erika takada, california project lean, chdp pediatric nutrition surveillance children's medical service branch

TOTAL MILES OF BIKE PATHS PER PERSON

Measured by: The number of people per miles of bike paths.

Findings: A total number of bike path miles in the county were noted, but not for the City of Oxnard specifically.

Context: The number of miles of bike paths servicing a given population would indicate the relative value placed on bicycle usage in the community and the usefulness of such a system of paths. Too few miles would likely mean that such facilities are so limited to be useful as an alternative to automobile based transportation. They may nevertheless provide recreational opportunities that promote a more active lifestyle that is more healthy than a sedentary one.

ECONOMIC DIVERSITY

Measured by: The total number of different types of business compared to the total number of businesses issued business licenses by the city.

Findings: No analysis conducted.

Context: in nature, the healthiest ecological systems are typically the most diverse in terms of the number of species interacting within the system. This simple analogy is commonly used when investing. A diversified portfolio is strongly recommended because reliance on too few investments can be devastating if only a few of them fail. This analogy carries over to the local economy as well. A more broadly based economy is able to weather a downturn in any one sector than an economy that is highly reliant on just a few business sectors.



VII. DISSEMINATION ACTIVITIES

The following activities helped to promote dialogue and reflection upon sustainability issues raised by the SOAR initiative, and facilitated community-based education in indicator design and/or dissemination:

March 5, 2000 - Workshop on Designing Sustainability Indicators with Maureen Hart held at CSUN focused on establishing linkages between faculty, students, and the Council. At the meeting, we discussed the usefulness of indicators within and between communities for land use decision-making: to raise awareness and inform people; to inform decisions; and to track progress. We also discussed how to facilitate a community-based process for indicator design that would include both those who own the data and those who make decisions based on the data.

March 13, 2000 - A Kickoff Meeting of CSUN faculty and students, and the Sustainability Council was held at a restaurant in Camarillo to further define the scope of the project. It became clear at the meeting that the dissemination and community education phase would begin after members of the academic team interviewed key informants from the Faulkner House group, along with a few others who opposed SOAR, and design a first set of indicators. At the meeting, participants suggested a number of ways to disseminate findings: 1) the Sustainability Council as a “sounding board” as we design/implement the project; 2) the Faulkner House group (and a few SOAR opponents) as a “reflective” cohort of “decision-makers”; 3) a focus group of members of League of Women Voters and other community-based policy advocates as a “reflective” cohort of “ordinary citizens”, and 4) an internet-based dissemination/feedback strategy, including brief policy statements and quick response surveys that would provide us with “feedback” on our efforts to reach the wider community. After the meeting, “The Bellagio Principles: Guidelines for the Practical Assessment of Progress Towards Sustainable Development” were sent to faculty and Sustainability Council members via e-mail. These principles serve as guidelines for the whole of the assessment process including the choice and design of indicators, their interpretation and communication of the results.

August 23, 2000 - “Gauging Our Future - Indicators and Measures of Quality of Life in Ventura County”, in Ventura, California. The conference goals were:

- To promote the accurate tracking of various indicators that will inform the public and decision-makers if we are moving towards or away from a sustainable future;
- To increase awareness of the various studies that measure the quality of life so that the public may learn that such studies can influence our quality of life, and may then come to expect a more coherent and integrated approach to measuring quality of life factors;
- To suggest that researchers may form working groups that improve the quality of their individual projects and avoid duplication of effort; and
- To serve as a follow-up to an August, 1999, conference, where the Sustainability Council solicited comments from a panel and audience, of nearly 100 people, on identifying quality of life indicators. This input was used by the faculty and students of CSUN in the current indicators study.

At the conference, three reports were presented: 1) CSUN Quality of Life Indicators, Cassandra Rutherford (student); 2) Public Health — “Community Health Status Report & Program Review 2000, Barbara Spraktes-Wilkins (research epidemiologist); 3) Ventura County Council Of Governments — “Benchmark Studies” Toni Young (Councilwoman, City of Port Hueneme).

From the meeting came the suggestion that a sustainability indicator should focus on civic engagement, and that the Council should take the lead in its design as members have unique ways of addressing it. This indicator would include such things as voter participation, attendance at civic organizations, volunteer time, attendance at public events such a street fairs, use of parks, libraries, public places, and the general use of the community as a resource for personal enrichment and community connection. Here is where polling might be useful, and the design of that poll should necessarily try to establish linkages between social issues and the environment and the economy.

The process of developing an Oxnard-specific civic engagement indicator around SOAR impacts subsequently proved difficult and consumed much of the Council’s and the project’s time. What finally resulted has been included



in the set of indicators, though we may have discovered that this part of our experiment at defining such indicators will prove less than useful in this particular case.

January 8, 2001 - Focus Group on Sustainability Indicators with the Ventura County League of Women Voters/Sustainability Committee, Ventura. Tim Dagodag provided an introduction to the project and, together with two California State University students, Lisa Overly and Monique Wilber, presented selected indicators (*Pesticide Use, Housing Density, Multi-Family Residences, Water: Self-Sufficiency, Zone Changes and Permits: Higher Density, Travel Distance to Necessary Medical Services, Traffic Flow: Levels of Service, Redevelopment: Mixed Use Communities*) and invited discussion by the eight participants from the League of Women Voters.

January 31, 2001 - A New Look At Our Future: Indicators of Sustainability Point the Way, Knights of Columbus Hall, Oxnard, California. The first public presentation of the “Quality of Life” indicators focused on the City of Oxnard and the effects of land control measures in three related areas: Land Use and Density, Public Health, Community Involvement. Over 40 people attended the forum, with a welcome by Oxnard Mayor, Hon. Manuel Lopez, and Robert Chianese mediated. The indicators were presented to the audience by W. Tim Dagodag, the principal investigator and supervisor of the student developed Urban and Civic Indicators; researcher and faculty member, John Shillinger; researchers and students Lisa Overly and Gwynneth Doyle. Dean Kubani, Sustainable City Director from the City of Santa Monica, offered discussion that enabled the audience to understand the complex process of sustainability indicator development and to appreciate the difficulties of measuring such intangible concepts as “quality of life”, as well as how indicators can be used effectively in various forums. The discussion produced many suggestions for additional indicators and as well as formatting or conceptualizing the indicators. This was the first showing of the indicators to the public, and their reaction was very positive. Mayor Lopez offered the Oxnard City Council meeting as a forum for showing the indicators on cable television.

As a result of the meeting, the Sustainability Council began to think about shorter versions of the program that could be presented to various groups and organizations, and to list forums of access available for civic engagement around SOAR issues. It is important to engage special interest groups that have a regional focus. This would include open forums, boards of public agencies, other public organizations, local chapters of national organizations, community-based organizations, and emergent groups. The group also noted the “audiences” and public venues for civic engagement including: the internet, phone trees, community cable-TV, school-based forums, public radio station KCLU, newsletters/publications of local organizations, and print media. Another discussion centered upon an internet-based dissemination/feedback strategy, including brief policy statements and quick response surveys that would provide rapid-response “feedback” on the project’s efforts to reach the wider community. The “wired” consensus panel may include selected members of neighborhood watch and councils, advocates, activists, clergy, elected officials, and interested residents who have responded to draft Environmental Impact Reports.

March 29, 2001 - Moving Ahead: Plains, Terrains & Automobiles II - 2001 Smart Growth Conference, Oxnard, California. Sponsored by the California Air Resources Board, Southern California Edison, The Gas Company, Ventura County Air Pollution Control District, and a number of co-sponsors, including the Sustainability Council and the CSUN Urban Studies and Planning Program. Speakers included Manuel Lopez, Mayor of Oxnard; Dean Kubani, City of Santa Monica; and Doug Adrianson, Los Angeles Times. This was the first public distribution of a selection from the set of Sustainable Development indicators. A poster and pamphlet of selected draft indicators titled, “Indicators of Sustainable Development Project: Goals for Improving Quality of Life In Ventura County,” were produced and made available to 300 professionals in attendance.

June 17-20, 2001 - Annual Meeting of the Pacific Division of the American Association for the Advancement of Science, University of California, Irvine. The Council plans to distribute the Executive Summary section of this report along with the indicators, developed and authored by W. T. Dagodag, John Schillinger, and the CSUN student researchers, at the annual meeting of the American Association for the Advancement of Science, the Pacific Division, and its affiliated societies, including the Pacific Coast Entomological Society, Western Society of Soil Science, the regional chapters of the American Society for Horticultural Science, Botanical Society of America, Ecological Society of America.



The design and dissemination process has yielded a set of indicators with deep roots in community life, with the potential for promoting local autonomy and a sense of uniqueness, as each community develops its own set of indicators. To this end, we will continue to invite public participation in the refinement of indicators through mailings, website viewing, and surveys to determine support, critique, and validation for the indicator concept. The completed indicator study has been passed to the Sustainability Council which will post the report on its website. The Council also intends to advise those parties that have participated in the preceding events to the availability of the report on the website and invite comments. These efforts are intended to promote the idea of ongoing monitoring, tracking, and interpretation as a follow-up procedure. Other forms of dissemination and feedback will be accomplished through a press kit, posters, Power Point presentations, and on the website maintained by the Urban Studies and Planning Program at California State University, Northridge.

As a result of education and dissemination efforts, it is anticipated that the residents of Ventura County and political decision-makers will be better informed about quality of life strategies and have a better idea about how to assess the problems of urban sprawl. Publicity from the project will enhance the visibility and effectiveness of the Sustainability Council. The baseline assessment of sustainability indicators will also establish a sound basis for a broader effort to measure changes in quality of life throughout Ventura County. The publications resulting from the project will be of value to other communities around the nation in search of similar solutions.

The set of indicators are also well suited as a discussion piece for neighborhood groups and non-governmental organizations as a way to foster dialogue on the usefulness of sustainability as a perspective on change after SOAR, and perhaps civic engagement. In Lamont Hempel's words:

Perhaps the most critical constraint on the development and use of sustainability indicators involves the role of ordinary citizens in their selection and interpretation. Deliberative democracy is, in many eyes, both a means and an end of the sustainable community movement. If deliberative democracy is conducive to the process of sustainability, and vice versa, it is important that citizens participate in the selection of indicators that will be used to evaluate their community and region. Although such involvement will sometimes lead to the inclusion of indicators that so-called "experts" regard as unscientific, irrelevant, or unreliable, to exclude such grass-roots involvement may reveal, as clearly as any indicator, a basic cause of unsustainability — lack of civic engagement (from *Sustainable Communities: From Vision To Action*).

VIII. RECOMMENDATIONS

The following recommendations are derived from the collaborative effort of the Sustainability Council, CSUN faculty and students, and stakeholders in Ventura County. These recommendations are ones derived from the indicator development process itself and community-based considerations.

Indicator-Driven Recommendations

- Continue ongoing data collection and dissemination of indicators.
- Continue revision of indicators based on evolving community needs.
- Continue monitoring indicators.
- Expand educational efforts to inform the public about sustainable development indicators.
- Involve government agencies in new forms of data collection that will foster the development of indicators.
- Use indicators as a foundation for shaping public policies.
- Promote indicator development by community-based organizations.
- Develop an inventory of sustainable development projects in Ventura County.



Community-Based Recommendations

- Continue to seek feedback from the community about quality of life issues.
- Encourage local stewardship of the indicator process.
- Continue collaborative efforts in the indicator process.
- Continue university-community partnerships on behalf of sustainable development activities in Ventura County, particularly the development of a sustainability studies center at California State University Channel Islands and as a general education requirement in high schools, community colleges, and universities.
- Establish sustainable development indicator demonstration projects in urban-agricultural land use, especially concerning the design of livable communities

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