City of Santa Monica

An Oregon Natural Step Network Case Study
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Overview

The City of Santa Monica is located on the western edge of the Los Angeles Basin in southern California. It is a small city of 88,000 people within 8.3 square miles that faces Santa Monica Bay and the Pacific Ocean to the west and is surrounded by other urban areas to the north, east, and south.

The City is defined largely by its relationship to the beach and ocean. Not surprisingly, it was degradation of Santa Monica Bay in the early 1980s that first galvanized citizens and community leaders into action on behalf of the environment.

Santa Monica has generally affluent citizens, high property values, and a strong economy based on high technology, entertainment, tourism, and retail. These factors mean that City government has a strong tax base with which to design and implement programs. The City government has approximately 1800 permanent employees in 13 different departments and an annual budget of $365,000,000.

Background of Santa Monica's Sustainable City Program

Santa Monica's Sustainable City Program (SCP) grew out of a Task Force on the Environment appointed by the City Council in 1991 to review the city's environmental policies and programs. Seeing the concept of sustainability as a unifying theme, the Task Force recommended a program to define what sustainability means for the city, develop a plan to get there, and then implement the plan. After substantial public involvement, the city council adopted the SCP in 1994.

The Role of The Natural Step in Santa Monica's Sustainable City Program

As part of the general land-use planning process required under California state law, Santa Monica began a review and revision of the conservation element of its general plan in 1998. (The conservation element is one of seven state-required general plan elements.) The city used this update as an opportunity to incorporate the systems-oriented, holistic approach of the SCP and to codify the SCP into the conservation element. This strategy would strengthen the environmental components of the City's general plan because all elements of the plan are required by state law to be internally consistent with each other.

The company hired to help re-write the conservation element, Rincon Consulting, proposed using The Natural Step's (TNS) system conditions as a unifying framework for the document. This was accomplished by developing four core objectives for the conservation element modeled

after the TNS system conditions. Each objective was followed by a set of policies, which were taken from the SCP. The objectives in the conservation element read as follows:

> Objective 1: Strive for the sustainable use of nonrenewable and limited resources such as fossil fuels, metals, minerals, and water. Related policy topics include energy, water, and others.
>
> Objective 2: Minimize the accumulation of human-made substances in the water, air, and earth. Related policy topics include water, air, waste, and others.
>
> Objective 3: Preserve the productivity and diversity of nature. Related policy topics include Santa Monica Bay, habitat, and others.
>
> Objective 4: Seek to provide for the range of human needs in a fair and efficient manner, with a priority on meeting basic human needs. Related policy topics include environmental health risks to disadvantaged communities, promoting mixed use development, affordable housing, and others.

Attachment 1 is a sample page of the conservation element; showing Objective 1 and specific energy policies. The conservation element charges the SCP with translating these policies into action.

During the revision of Santa Monica's conservation element, both the City's Planning Commission and its Task Force on the Environment received presentations about The Natural Step and discussed using it as the unifying framework. Both bodies enthusiastically approved this approach. City staff have not received any specific training in TNS framework, although several of them attended a city and Chamber of Commerce workshop open to the general public.

TNS framework itself did not play a role in the city's sustainability effort until after the latter was well underway. The primary role of TNS has been to provide a conceptual framework that gives clarity, elegance, and unity to what was once a complicated SCP. TNS framework is mentioned only as a footnote in the written conservation element, and there are no explicit references to the framework in any SCP communications or marketing materials.

The Sustainable City Program Today

As stated above, the SCP is responsible for implementing the policies of the conservation element of the City's general plan. It includes the following key elements:

1. **Guiding principles** (adopted in 1994):

    A. The concept of sustainability guides city policy.
    B. Protection, preservation, and restoration of the natural environment is a high priority for the City.
    C. Environmental quality and economic health are mutually dependent.
    D. All decisions have environmental implications.

E. Community awareness, responsibility, involvement, and education are key elements of successful programs/policies.
F. Santa Monica recognizes its linkages with the regional, national, and global community.
G. Environmental issues that are most important to the community should be addressed first, and the most cost-effective program and policies should be selected.
H. The City is committed to procurement decisions which minimize negative environmental and social impacts.

2. **Goals in four main areas**: resource conservation, transportation, pollution prevention and public health protection, and community and economic development.

3. **Targets and indicators for each goal area**. Eighteen targets and indicators spread among the four goal areas allow the City to measure progress. Attachment 2 is a copy of the resource conservation indicators and targets.

4. **Periodic review to determine program effectiveness**. A bi-annual review identifies accomplishments to-date and obstacles to future success.

Results

The SCP has achieved some impressive results:

Resource conservation

- Waste diverted from the landfill increased from 13.8% in 1990 to 55% in 2000.
- Citywide water use decreased 6.3% from 1990 to 2000.
- Greenhouse gas emissions decreased 5.2% citywide from 1990 to 2000.
- Santa Monica now purchases 100% of its energy from renewable sources, and all facilities have been retrofitted to improve energy efficiency and reduce costs.

Transportation

- Annual ridership on the City's Big Blue Bus increased 17% from 1990 to 2000. Big Blue was ranked the number one urban transit system in the US in 1997, 1998, 1999, and 2000 (based on a comparative study by the University of North Carolina's Center of Interdisciplinary Transportation Studies).
- The percentage of City fleet vehicles operating on reduced emissions (natural gas and electricity) increased from 10% in 1993 to 70% in 2000.

Pollution Prevention and Public Health Protection

- Untreated, dry-weather urban runoff entering Santa Monica Bay from City outfalls decreased by approximately 95% from 1990 to 2000.
- Citywide wastewater flows have been reduced more than 14% between 1990 and 1999.

- The City's Urban Runoff Reclamation Facility (SMURRF) came on-line in 2001. It treats up to 500,000 gallons per day of urban runoff that can be reused for landscape irrigation and indoor toilet flushing at various sites around the City.

Community and Economic Development

- The number of publicly assisted, affordable housing units in the City increased by 47% between 1990 and 1998.
- The total amount of open space in the City increased by 10% between 1990 and 2000.
- The number of trees in public spaces increased 8% between 1995 and 2000.

Lessons Learned

- **Bring TNS into the discussion as early as possible**. Had TNS framework been around when the SCP was developed, it would have helped Santa Monica's sustainability effort achieve a clarity of purpose and a simpler, more coherent organizing framework sooner. Because the framework is simple and easy to understand, it helps build consensus on the vision of where a sustainability effort is trying to go. It helps people understand the problem and defines a shared goal.

- **Start small**. The SCP did not try to solve every problem immediately. Instead, it focused on the obvious problems and the low-hanging fruit to demonstrate early success and then used those successes to help sell the next steps. The SCP often took a pilot project approach to an issue that began with a limited scope and resources. If successful, the pilot was then replicated on a larger scale, incorporating lessons learned from the pilot.

  Example: Toxics-Use Reduction Program. Santa Monica began its Toxics-Use Reduction Program as part of its effort to reduce its use of hazardous materials. It targeted custodial cleaning supplies because there was a clear risk to both employee health and public health as well as the environment. The process relied heavily on involvement of custodial staff and testing the effectiveness of alternative products. The project resulted in 1) replacement of 15 of 17 cleaning product categories with less-toxic but equally effective alternatives; 2) reduced hazardous materials use by approximately 3200 pounds per year and savings of approximately 5% in costs; 3) a set of procurement specifications for custodial cleaning products; and 4) improved morale of custodial staff. Equally important, the custodian pilot served as a successful model that has now been replicated in fleet maintenance, public facilities maintenance (painting, plumbing, and woodworking), printing, and pest management.

- **Start where the issues and conflicts are in your community**. Don't try to force people to pay attention to things that are not on their radar screen, especially in the beginning. This is especially true if there is a local environmental "crisis" of some sort: use the issue at the heart of the crisis to begin the process towards sustainability.

- **Set specific targets**. SCP staff believes that specific targets drove policy change and accelerated action. Targets make the effort more compelling to the public and elected officials. If elected officials adopt the targets, they feel responsible for achieving them. Targets also demand periodic performance reviews and set in motion continuous improvement.

  Example: Bus ridership. The initial target was to increase ridership by 10% between 1990 and 2000. By 1995, however, ridership had dropped by almost 8%. The City Council said this was not acceptable and tasked the Transportation Department to develop a strategy to meet the target. The department started a service improvement program that included hiring a technical consulting firm to review operations and survey riders on what they liked and disliked. This led to improved safety en route and at bus stops, route changes, smaller and larger buses on specific routes, and schedule changes. These changes were implemented in 1997, and ridership started increasing shortly thereafter. By 2000, the City had surpassed its target, with ridership 17% greater than in 1990, and it had been voted the number one urban transit service in the US four years in a row.

- **Support from the top matters**. SM received support from the top elected and appointed officials early on. The city manager incorporated meeting SCP goals into performance criteria for department heads. This level of support gets all players on board, especially those who may resist the concept of sustainability or change in general.

- **Respond to the public's specific needs.** Whenever possible, talk to public audiences about specific problems and the actions needed to fix those problems. People can relate to a polluted bay and the specific actions needed to clean it up; they cannot relate to vague terms like sustainability or The Natural Step.

The Future

City staff do not see any direct threat to the SCP because it has strong support among city leadership, and the city has a strong economic base. The program only has one staff person who coordinates activities with staff in other departments. This keeps program overhead low. Finally, the staff has developed a variety of partnerships with other cities and the business community in support of the program and several other general public outreach tools. The business partnerships include annual Sustainable Quality Awards for businesses that meet certain criteria as well as a Sustainable Works program that provides free technical assistance to local businesses. General public outreach tools include an environmental directory for all city residents; a "Green Map," which includes not only parks and green spaces but also electric vehicle stations, green buildings, green retailers, and other environmental resources; educational programs in schools taught by local nonprofits; a Web site; and publicity around its bi-annual progress reports.

The SCP faces three challenges in the future:

1. **Resource use in the City is increasing, both generally and on a per capita basis, despite the success of the SCP**. This is the result of a strong local economy and a high day-time occupancy rate, which is due to the strong tourism component to the economy and the large number of people who work but do not live in the City (often because they cannot afford to do so). The high day-time occupancy rate also leads to greater regional traffic congestion and pollution.

2. **Affordable housing is declining**. Teachers, service sector employees, and other middle income earners often cannot afford to live in the City due to high property values and high rental rates. The State of California recently passed a vacancy decontrol regulation that hampers local governments' ability to control rents.

3. **Social equity and economic development concerns should be included in the SCP**. The SCP initially focused on environmental concerns; the program is just now expanding to include social and economic concerns. The City has been doing significant work related to homelessness, seniors, and children and spends more per capita in these areas than neighboring cities. But it is just now starting to include these areas in the SCP by educating city staff who work on social and economic issues about their role in sustainability and involving them in development of new indicators and targets.

Source

Interviews with Dean Kubani, Sustainable City Program Coordinator, City of Santa Monica, in November and December 2001.

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Attachment 1

Conservation Element Objectives and Policies

Objective 1: Strive for the sustainable use of nonrenewable and limited resources such as fossil fuels, metals, minerals, and water.

Energy Resources

Policy 1.1: Maximize the energy efficiency of all new and existing buildings in the City.

Policy 1.2: Support efforts to increase energy efficiency standards contained in the state administrative code, and develop and implement appropriate methods to meet and exceed those standards throughout the City.

Policy 1.3: Support programs to heighten awareness and use of energy-saving technologies.

Policy 1.4: Develop all municipal facilities using cost-effective and technically feasible, energy-saving practices, and promote such facilities as demonstration projects for private and non-profit development.

Policy 1.5: Maximize the use of passive cooling and heating as a means of reducing energy consumption in buildings and facilities throughout the City.

Policy 1.6: Base City electric power purchase decisions, to the extent feasible, on how the power is generated, giving preference to electricity generated via environmentally benign, renewable methods.

Policy 1.7: Encourage and facilitate the purchasing of environmentally benign and renewable energy.

Policy 1.8: Support the development of and maximize the share of energy use from renewable, environmentally benign, and economically and technically feasible energy resources at the local and regional levels.

Water

Policy 1.9: Use and manage local groundwater resources in a manner that balances the City's desire to reduce dependency on imported water while protecting the integrity and long-term viability of local resources.

Policy 1.10: Minimize the use of imported water and local groundwater through water conservation and reuse programs.

Policy 1.11: Maximize the use of drought-tolerant vegetation in landscaped areas throughout the City.

Policy 1.12: Pursue creative, innovative, and environmentally preferable methods to capture and use stormwater, urban runoff, and wastewater for beneficial purposes.

Attachment 2

SANTA MONICA SUSTAINABLE CITY PROGRAM
SUMMARY OF INDICATORS, BASELINE DATA AND TARGETS

RESOURCE CONSERVATION

Sustainability Indicator	1990 Baseline	1993	1995	1997	1998	2000 Target
Landfilled Solid waste (citywide) (tons per year)[1]	124,000	105,400	93,178	88,082	111,636	62,000
Water usage (citywide)[2] (million gallons per day)	14.3	12.0	12.2	13.4	12.4	11.4
Energy Usage (citywide)[3] (million mBTUs per year)	6.45	5.10 (1994 data)	5.63	6.23	pending	pending
Average Postconsumer Recycled/Tree-Free Content[4]	unknown	22% (FY 93-94)	unknown	unknown	unknown	50%

[1] Target is mandated by state law and represents a 50% reduction from the 1990 baseline. The 1990 baseline figure set by the state represents the total amount of solid waste generated in Santa Monica that year. The actual amount of landfilled solid waste generated in Santa Monica in 1990 was 107,000 tons. Data for all other years represents the amount of landfilled solid waste for those years

[2] Target represents a 20% reduction in citywide potable water use from the 1990 baseline. This was felt to be aggressive yet achievable based on results of existing water conservation programs and anticipated impacts of planned programs.

[3] Refers to overall energy usage (electricity and natural gas) in Santa Monica from all non-mobile sources. Original baseline and target for this indicator were based on incorrect data. A new target is currently being developed.

[4] Data collection capability for this indicator only became available in July 1999. For more information please refer to the "Purchasing" section of this report.