

SUSTAINABLE CITY PROGRESS REPORT UPDATE

Updated Progress Report on Santa Monica's Sustainable City Program

October 1999

City of Santa Monica
Task Force on the Environment

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SUSTAINABLE CITY PROGRESS REPORT UPDATE EXECUTIVE SUMMARY

Introduction

The implementation plan for the Sustainable City Program calls for periodic assessment of the program to determine its effectiveness. In December 1996, City staff and the Task Force completed the first such assessment with the publication of the Sustainable City Progress Report. This report is an update of the December 1996 progress report and assesses progress made by the City towards meeting the program goals between December 1996 and September 1999, the fifth anniversary of program adoption.

Summary of Findings

During the first five years of program implementation, significant progress has been made towards meeting the program's goals. This progress is summarized below:

Resource Conservation

- The total percentage of solid waste diverted from the landfill has increased from 13.8% in 1990 to 35.7% in 1998.
- Citywide water usage was reduced by 13.3% between 1990 and 1998.
- Citywide greenhouse gas emissions were reduced by 5.2% between 1990 and 1997.
- In June 1999 the City began purchasing 100% renewable electricity for all city facilities. In addition, all facilities have been retrofitted to improve energy efficiency and reduce costs.
- Santa Monica has developed one of the most successful and comprehensive environmentally preferable purchasing programs in the United States.

Transportation

- Annual ridership on Santa Monica's Big Blue Bus increased by 9.5% between 1990 and 1998.
- Average vehicle ridership for employees of companies in Santa Monica with more than 50 employees increased from 1.13 persons per vehicle in 1993 to 1.37 in 1997.
- The percentage of City fleet vehicles operating on reduced emission fuels (natural gas and electricity) has increased from 10% in 1993 to 34% in 1999.

Pollution Prevention and Public Health Protection

- Santa Monica has developed a Toxics Use Reduction program for City operations that has significantly reduced environmental and human health impacts due to the use of hazardous chemicals in all areas of City operations. The program has become a nationwide model for use in other state and local agencies.
- The amount of untreated dry-weather urban runoff entering Santa Monica Bay from City outfalls has been reduced by approximately 92% since 1990. Construction of an urban runoff treatment facility (scheduled for completion early next year) will lead to further runoff reductions and water savings.
- Citywide wastewater flows have been reduced approximately 14% between 1990 and 1998.

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 public open space in the city increased by 10% between 1990 and 1998.
- A Community Forest Management Plan has been completed and the number of trees in public spaces in the city increased by 4.5% between 1995 and 1998.
- Organic vegetable and drought-tolerant gardens have been planted at every public school in Santa Monica and an organic salad bar program provides organic produce to students and teachers at six Santa Monica public elementary schools.
- Streetscape renovations to improve pedestrian safety and neighborhood quality are underway along Pico Boulevard.
- Renovations intended to improve the quality, accessibility and character of existing parks and open space are currently underway or planned throughout the city.

Program implementation has also greatly improved since the publication of the December 1996 Sustainable City Progress Report. This has resulted in: improved awareness and participation in the program among City staff, residents and businesses; incorporation of the goals and objectives of the Sustainable City Program into the City's General Plan; and collaboration with local organizations and agencies to broaden the reach of the program throughout the community.

However, while significant progress has been made as a result of the Sustainable City Program, several obstacles remain which must be addressed if Santa Monica is to achieve its goal of becoming a truly sustainable community. These obstacles are summarized below:

- In spite of significant reductions in resource use and waste diversion achieved since 1990, resource use and waste generation have been on the rise in recent years, likely due to impacts of the strengthening local economy. Since 1995, energy use, water use and waste generation have been increasing, largely as a result of increased construction and larger daytime populations resulting from higher occupancy rates in hotels and office buildings. Strong economic conditions contribute to increased consumption as well as increases in waste generation and pollution associated with that consumption.
- In spite of significant increases in development of new affordable housing units in the city, the availability of affordable housing in Santa Monica is actually *decreasing*, largely as a result of a statewide vacancy decontrol regulation that went into effect in 1995. The lack of affordable housing means that it is becoming increasingly more difficult for people to live and work in Santa Monica. This situation may impact the ability of local businesses, schools and organizations to attract employees and may contribute to increased regional traffic and pollution impacts related to longer employee commutes.
- As noted previously in the December 1996 Sustainable City Progress Report, the Santa Monica-Malibu Unified School District, one of the city's largest employers, has not made a coordinated effort to address sustainability issues within its operations and in the classroom.

City staff are currently working to address these obstacles and to build on the progress that has been made during the five years since the Sustainable City Program was adopted.

INTRODUCTION

Background

In September 1994 Santa Monica's City Council adopted the Santa Monica Sustainable City Program. This program was initiated two years earlier by the City's Task Force on the Environment "as a way to create the basis for a more sustainable way of life – one that safeguards and enhances our resources, prevents harm to the natural environment and human health, and sustains and benefits the community and local economy – for the sake of current and future generations."

With the help of local residents, through workshops, surveys, community meetings, and ongoing participation, the Task Force compiled a vision of sustainability for Santa Monica and developed a set of guiding principles and goals to help achieve that vision. The adopted program is intended to provide a decision making framework that addresses the underlying causes of environmental problems rather than the symptoms of those problems and places importance on long-term as well as short-term impacts of decisions. It includes internal and citywide goals in four main areas: Resource Conservation, Transportation, Pollution Prevention and Public Health Protection, and Community and Economic Development. Numerical sustainability indicators were developed as a means to measure progress towards meeting these goals.

The implementation plan for the Sustainable City Program calls for periodic assessment of the program to determine its effectiveness. In December 1996, City staff and the Task Force completed the first such assessment with the publication of the *Sustainable City Progress Report*. The progress report provides the City Council and the general public with an overview of current and planned sustainability efforts in Santa Monica as well as an assessment of progress made by the City towards meeting the program goals during the first two years of program implementation. This assessment process, which included a careful review of the indicators and targets, identified numerous accomplishments related to implementation of the program, but perhaps more importantly identified significant obstacles that need to be overcome if Santa Monica is to become a truly sustainable community. The process of systematically reviewing indicator targets and identifying obstacles has enabled the City to make policy adjustments that have resulted in significant progress since the publication of the December 1996 progress report. That progress, as well as ongoing and newly identified obstacles, is detailed in this progress report update.

Progress Report Update

This report is an update of the December 1996 progress report and assesses progress made by the City towards meeting the program goals between December 1996 and September 1999, the fifth anniversary of program adoption.

As in the previous progress report, this report includes: an assessment of program implementation, an updated table of indicator data, and chapters detailing achievements, obstacles and recommendations for eleven policy areas. The policy areas are divided among four sections, corresponding to the four main Sustainable City Program areas. The *Resource Conservation* section includes chapters on Solid Waste and Recycling, Water, Energy, Purchasing, and Construction and Development. A section on *Transportation* contains one chapter that includes information on City fleet vehicles, transportation management programs, and public transportation. A section covering *Pollution Prevention and Public Health Protection* includes chapters on Stormwater, Wastewater and Santa Monica Bay, and Hazardous Materials. The final section addresses *Community and Economic Development* and includes chapters on Community and Economic Development (which includes information on parks and open space, social services, and economic development), Education and Housing.

Each chapter contains a discussion of progress towards goals and a program and policy update relevant to the policy area being addressed. Recognizing that there are competing interests that must be balanced in order for the goals to be reached, each chapter also includes a discussion of obstacles that need to be addressed and resolved. Future plans developed to help achieve Sustainable City Program goals, and the recommendations of the Task Force on the Environment, are also discussed for each policy area. Unless otherwise noted, information provided in the chapters describes the current situation as of September 1999. Background information and an inventory of programs and policies related to each policy area are not included in this update, but can be found in the December 1996 progress report.

Implementation of the Sustainable City Program is an ongoing and evolving process that is shaped by public input and participation. The City and the Task Force welcome your thoughts and comments about the direction of the program. Written comments should be sent to the Task Force on the Environment, care of the City of Santa Monica, Environmental Programs Division, 200 Santa Monica Pier, Santa Monica, CA 90401. Comments can also be faxed to the Task Force at (310) 393-1279. To obtain additional copies of this progress report update, copies of the 1994 Sustainable City Program document and the December 1996 progress report, or for additional information please contact the Environmental Programs Division at (310) 458-2227. Sustainable City Program documents can also be viewed and downloaded from the City's website at <http://santa-monica.org/environment>

GENERAL FINDINGS

The Santa Monica Sustainable City Program was adopted by City Council in September 1994 with the goals of safeguarding and enhancing Santa Monica's resources, protecting human health and the environment, sustaining the local economy and improving the quality of life for all residents. Following five years of program implementation, the Sustainable City Program has resulted in significant progress towards meeting those goals. This progress is summarized below (For more details, please refer to the Policy Area chapters of this report):

Resource Conservation

- The total percentage of solid waste diverted from the landfill has increased from 13.8% in 1990 to 35.7% in 1998.
- Citywide water usage was reduced by 13.3% between 1990 and 1998.
- Citywide greenhouse gas emissions were reduced by 5.2% between 1990 and 1997.
- In June 1999 the City began purchasing 100% renewable electricity for all city facilities. In addition, all facilities have been retrofitted to improve energy efficiency and reduce costs.
- Santa Monica has developed one of the most successful and comprehensive environmentally preferable purchasing programs in the United States.

Transportation

- Annual ridership on Santa Monica's Big Blue Bus increased by 9.5% between 1990 and 1998.
- Average vehicle ridership for employees of companies in Santa Monica with more than 50 employees increased from 1.13 persons per vehicle in 1993 to 1.37 in 1997.
- The percentage of City fleet vehicles operating on reduced emission fuels (natural gas and electricity) has increased from 10% in 1993 to 34% in 1999.

Pollution Prevention and Public Health Protection

- Santa Monica has developed a Toxics Use Reduction program for City operations that has significantly reduced environmental and human health impacts due to the use of hazardous chemicals in all areas of City operations. The program has become a nationwide model for use in other state and local agencies.

- The amount of untreated dry-weather urban runoff entering Santa Monica Bay from City outfalls has been reduced by approximately 92% since 1990. Construction of an urban runoff treatment facility (scheduled for completion early next year) will lead to further runoff reductions and water savings.
- Citywide wastewater flows have been reduced approximately 14% between 1990 and 1998.

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 public open space in the city increased by 10% between 1990 and 1998.
- A Community Forest Management Plan has been completed and the number of trees in public spaces in the city increased by 4.5% between 1995 and 1998.
- Organic vegetable and drought-tolerant gardens have been planted at every public school in Santa Monica and an organic salad bar program provides organic produce to students and teachers at six Santa Monica public elementary schools.
- Streetscape renovations to improve pedestrian safety and neighborhood quality are underway along Pico Boulevard.
- Renovations intended to improve the quality, accessibility and character of existing parks are planned or in progress at Palisades Park, Virginia Avenue Park, and Douglas Park and playground renovations are underway at several other parks throughout the city. Renovations of the boardwalk and beach park area south of the Pier are also currently underway.

Program implementation has also significantly improved since the publication of the December 1996 Sustainable City Progress Report. This has resulted in improved awareness and participation in the program among City staff, residents and businesses; incorporation of the goals and objectives of the Sustainable City Program into the City's General Plan; and collaboration with local organizations and agencies to broaden the reach of the program throughout the community.

However, while significant progress has been made as a result of the Sustainable City Program, several obstacles remain which must be addressed if Santa Monica is to achieve its goal of becoming a truly sustainable community. These obstacles are summarized below:

- In spite of significant reductions in resource use and waste diversion achieved since 1990, resource use and waste generation have been on the rise in recent years, likely due to impacts of the strengthening local economy. Since 1995, energy use, water use and waste generation have been increasing, largely as a result of increased construction in the commercial sector and larger daytime populations resulting from higher occupancy rates in hotels and office buildings. Several obstacles to achieving the goals of the Sustainable City Program cited in this report are influenced by the growth of Santa Monica's economy. Although there have been many benefits from the strong local economy, it is becoming apparent that there are also environmental costs. Strong economic conditions have contributed to increased consumption as well as increases in waste generation and pollution associated with that consumption.

A sustainable community is one that prospers economically without harming the natural environment or the human community. Santa Monica needs to assess the effect of local economic growth on the City's natural resources and quality of life, focusing on the elements of the Sustainable City Program: 1) Resource Conservation, 2) Transportation, 3) Pollution Prevention and Public Health Protection, and 4) Community and Economic Development. This assessment should result in programs that engage all sectors of Santa Monica's economy, including hotels and tourism-oriented businesses, office buildings, health service facilities, retail businesses, and high-tech/media companies, in developing constructive recommendations and measurable goals that need to be reached to mitigate any negative environmental and community impacts related to their activities. These could include, but are not limited to, reducing water and energy use, mitigating traffic and air quality impacts, and adopting green building measures from the City's proposed Green Design and Construction Guidelines.

- In spite of significant increases in development of new affordable housing units in the city, the availability of affordable housing in Santa Monica is actually *decreasing*, largely as a result of a statewide vacancy decontrol regulation that went into effect in 1995. City Rent Control staff projections indicate that 2359 units (representing 10% of all units) affordable to very low and low income households (those earning between 50% and 80% of the LA County median household income) will be lost citywide by December 1999 following one year of full vacancy de-control. These are in addition to over 4675 affordable units that were lost between October 1995 (when vacancy increases began) and December 1998. This represents a total decrease in affordable housing units of more than 20% and the losses appear to be escalating. The lack of affordable housing means that it is becoming increasingly more difficult for people to live and work in Santa Monica. This situation may impact the ability of local businesses, schools and organizations to attract employees and may

contribute to increased regional traffic and pollution impacts related to longer employee commutes.

- As noted previously in the December 1996 Sustainable City Progress Report, the Santa Monica-Malibu Unified School District, one of the city's largest employers, has not made a coordinated effort to address sustainability issues within its operations and in the classroom. This is primarily due to current budget shortfalls as well as a large number of existing and proposed programs competing for staffing and funding. Implementation of a coordinated sustainability program within the district has the potential of significantly reducing resource use, waste generation, and costs while improving and safeguarding the health of employees and students, and educating the next generation of Santa Monica's leaders about the concepts of sustainability.

City staff are currently working to address these obstacles and to build on the progress that has been made during the five years since the Sustainable City Program was adopted.

SUSTAINABILITY INDICATORS

The Task Force on the Environment and City staff, with input from local residents, developed the sustainability indicators listed on the following pages to provide a basis for measuring the City's progress towards becoming a sustainable community. The indicators that were chosen had to meet the following criteria:

- The indicator reflects something fundamental to the long-term economic, environmental or social health of the community.
- The indicator is statistically measurable - either data exists or a practical method of data collection can be created.
- The indicator represents something that can be influenced by community or government actions.

The list developed is by no means exhaustive, nor does it cover every environmental, economic or social consideration in the city, but it does provide a starting point for evaluation of the program. City staff are currently investigating options for updating and expanding the Sustainable City Program indicators in order to provide a better overall picture of community sustainability. This will likely include the development of additional indicators to measure community and economic issues, as well as the addition of environmental indicators to provide more complete assessment of local environmental health.

For each indicator a 1990 baseline was developed and a target for the year 2000 was set. In some cases indicator targets were chosen to reflect existing adopted or mandated goals, such as the target for landfilled solid waste, which is mandated by state law. In other cases targets reflect council-adopted or administrative goals. And others were chosen that simply appeared to the Task Force and City staff to be aggressive yet realistic and achievable. In the coming year the Task Force plans to work with City staff to develop new indicator targets for 2010.

A summary of Sustainable City Program progress as measured by the indicators is presented on the following pages. Please refer to the indicator footnotes and to the policy area chapters of this report for more detailed analyses of indicator data and the programs and policies that influence them.

**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.

TRANSPORTATION

Sustainability Indicator	1990 Baseline	1993	1995	1997	1998	2000 Target
Annual Ridership on Santa Monica Municipal Bus Line ⁵ (including shuttles)	19.0 million	18.0 million	17.8 million	19.6 million	20.8 million	20.9 million
Average Vehicle Ridership (AVR) of Santa Monica Employers with over 50 Employees ⁶	unknown	1.13	1.29	1.37	pending	1.50
% of City Fleet Vehicles Using Reduced-Emission Fuels ⁷	unknown	10%	15%	26%	33%	75%

⁵ Target represents a 10% increase in bus ridership and reflects Transportation Dept. goals.

⁶ Target reflects Council-adopted ordinance requirements. No data is presented for 1990 because the City's Transportation Management Ordinance was not in place at that time. Data for 1998 is currently being compiled.

⁷ Target based on preliminary analysis of the overall potential within the City fleet. As of June 1999, 34% of City Fleet Vehicles operated on reduced-emission fuels.

POLLUTION PREVENTION AND PUBLIC HEALTH PROTECTION

Sustainability Indicator	1990 Baseline	1993	1995	1997	1998	2000 Target
Hazardous waste Generated by City Operations ⁸	N/A	N/A	N/A	pending	pending	10% reduction
City Purchases of Hazardous Materials ⁹	N/A	N/A	N/A	N/A	N/A	10% reduction
Known Underground Storage Tank Sites Requiring Clean-up ¹⁰	unknown	25	18	17	17	6
% Underground Storage Tanks in Compliance with Federal UST Standards ¹¹	N/A	N/A	N/A	43% (as of 10/98)	95% (as of 9/99)	100%
% Diversion or Treatment of Dry Weather Stormwater Runoff for All Santa Monica Stormdrains from March through November ¹²	N/A	N/A	N/A	92% (May thru October)	92% (May thru October)	100%
Wastewater Flows (citywide) ¹³ (million gallons per day)	10.4	8.5	8.85	8.98	9.05*	8.8

⁸ Baseline data for this indicator is currently being collected. Target is based on Environmental Programs Division staff recommendations. For more information please refer to the *Hazardous Materials* chapter of this report.

⁹ Baseline data for this indicator is currently being collected. Target is based on Environmental Programs Division staff recommendations. For more information please refer to the *Hazardous Materials* chapter of this report.

¹⁰ Target based on Environmental Programs Division staff recommendations. As of May 1999 there were 21 UST sites requiring cleanup. The increase is primarily due to contamination discovered at sites during the completion of upgrades to comply with new Federal UST standards. Please refer to the *Hazardous Materials* chapter of this report for more information.

¹¹ Target is mandated by federal law.

¹² Target is based on recommendations by the Task Force on the Environment.

¹³ Target represents a 15% reduction in city-wide wastewater flows relative to the 1990 baseline. This is consistent with the 20% reduction target for water usage (The two targets differ because approximately 25% of total water use is for exterior purposes and does not flow to the sewer).

COMMUNITY AND ECONOMIC DEVELOPMENT

Sustainability Indicator	1990 Baseline	1993	1995	1997	1998	2000 Target
Create and Implement Sustainable Schools Program at SMMUSD	N/A	N/A	Proposal developed	No Further Progress	No Further Progress	Full Implementation
Deed-Restricted (Public) Affordable Housing Units ¹⁴	1172	1313	1470	1603	1725	1903**
(Private)	N/A	N/A	N/A	652	661	928**
Public Open Space (acres)	164	164.8	179.5	180.6	180.6	180
Number of Community Gardens	2	2	2	2	2	5
Trees in Public Spaces ¹⁵	28,000*	28,000*	28,000*	28,907	29,263	31,263

* estimated

**Target year is 2003

¹⁴ Targets based on Council-adopted affordable housing targets as specified in the City's updated *Housing Element 1998-2003*. Data includes both publicly-assisted and privately developed affordable housing units. Targets are for the year 2003.

¹⁵ Original target of 28,350 trees was surpassed in 1997. New target reflects goals specified in the Community Forest Management Plan. For more information please refer to the *Community and Economic Development* chapter of this report.

PROGRAM IMPLEMENTATION

The December 1996 Sustainable City Progress Report identified the following two obstacles related to program implementation:

- *Despite the progress made towards meeting the various indicator targets, sustainable policies and programs are still being undertaken on a “piecemeal” basis within the City. Coordinated implementation of the Sustainable City Program within the City has not yet been achieved. Many City staff are currently not aware of the program, and most of those that are aware of it do not see it as a high priority. To date, little or no effort has been made to merge the goals and objectives of the Sustainable City Program with the goals and objectives presented in the elements of the City’s General Plan, Consolidated Plan, and various strategic plans for Human Services within the city. This situation is due to the fact that the implementation plan developed for the Sustainable City Program has not been systematically carried out, staff responsibility for implementing the program has never been adequately defined, and staffing and funding necessary to properly implement the program have not been identified.*
- *To date, little or no effort has been made to involve the Business Community, School District, Santa Monica College, Local Non-Profit Groups and residents in the program. As a result the program is not well known or understood in the community and thus, is not fully serving the community. This situation is also due to poor implementation and the lack of adequate staffing and funding to effectively implement the program.*

In the two and a half years since that report was released significant progress has been made to address these obstacles. Specific efforts have focused on improving awareness and participation in the program among City staff, residents and businesses; incorporation of the goals and objectives of the Sustainable City Program into the City’s General Plan; and collaboration with local organizations and agencies to broaden the reach of the program throughout the community. These efforts are summarized below:

City Staff Awareness

- **Performance Evaluations** - In an effort to improve City staff awareness about the Sustainable City Program, a working group from the Environmental and Public Works has developed Sustainable City Performance Evaluation Guidelines covering all job classifications in the department. The guidelines are educational in nature, illustrating concrete ways all employees can help the City to meet its Sustainable City Program goals. When finalized and approved, the guidelines will be used by supervisors during annual performance evaluations to highlight sustainable policies as they relate to each position and encourage employees to work on specific points before their next review. If the guidelines prove useful to supervisors and

employees, they may be adapted for use in other City departments. In addition to these guidelines, the City Manager includes effectiveness in meeting Sustainable City Program goals as one of the criteria for his annual performance evaluations of all City department heads. This has proved effective in raising awareness about the program among senior management staff.

- **Green Purchasing Group** – In May 1999, Environmental Programs Division staff initiated bi-monthly meetings of staff assistants from all City departments to raise awareness about the availability, effectiveness and benefits of environmentally preferable or “green” office products and to encourage their purchase.

General Plan Updates

The updated Housing Element (adopted by City Council in April 1998) and the draft updates of the Open Space and Conservation Elements of the General Plan have all incorporated goals and objectives of the Sustainable City Program as detailed below:

- **Housing Element Update 1998-2003** – The updated Housing Element includes updated targets for citywide increases in affordable housing units as well as sections on sustainable construction, energy efficiency, and preserving neighborhood character and livability. In conjunction with the City’s development of Green Building Design and Construction Guidelines (see “Construction and Development” chapter of this report for more information) staff from the Planning, Resource Management and the Environmental and Public Works Management departments are working to ensure that affordable housing projects are built in a sustainable manner. As part of this program, sustainable design and construction requirements are being incorporated in development agreements, and affordable housing projects will be designed to meet energy efficiency requirements as set forth in the Guidelines. Following adoption of the Guidelines later this year, staff plan to develop minimum requirements for sustainable performance of all publicly-financed affordable housing projects, educate developers in ways to create environmentally sustainable housing and develop incentives to promote sustainable design and construction in these projects.
- **Draft Open Space Element Update** - The updated draft Open Space Element includes goals, policies and implementation measures intended to increase the amount of public open space, the number of community gardens, and the number of public trees in the city. The Element has been conceptually approved by the City’s Planning Commission and City Council and is currently undergoing environmental review. It is scheduled for final approval in October 1999.

- **Draft Conservation Element Update** - Staff from the City's Planning Department have been working with Environmental Programs Division staff to incorporate sustainability concepts into the Conservation Element, which is currently in the process of being updated. The updated draft Conservation Element bases its four primary goals on the concept of sustainability and the guiding principles of the Sustainable City Program. The Element also incorporates Sustainable City Program policies, programs and projects as its major policies and implementation measures. The draft Element has been completed and is currently awaiting review and conceptual approval by the Planning Commission and City Council.

Sustainable City Program Coordinator

In July 1999 a Sustainable City Program Coordinator position was created in the Environmental Programs Division to provide consistent oversight of program implementation, outreach and evaluation, and to serve as program liaison to all City departments. Centralizing oversight of the program under the Sustainable City Program Coordinator has facilitated resolution of many of the obstacles to program implementation that were identified in the December 1996 progress report.

Sustainable City Program Communications Plan

Environmental Programs Division staff and members of the Task Force on the Environment have been working with a communications consultant to develop a long range communications plan to help raise awareness and understanding of sustainability internally within the City and in the community as a whole. The plan, which is scheduled for completion in September 1999, includes identification of target audiences, key messages, a campaign logo, short and mid-term outreach goals, and detailed strategies and tactics for achieving the goals.

Outreach and Collaborations

- **Business Outreach - Sustainable Business Workshop Series**

City staff are currently working with the Santa Monica Chamber of Commerce to develop a Sustainable Business Workshop series. The series is an outgrowth of the Chamber's Sustainable Quality Awards program and is intended to provide information to local businesses wishing to incorporate sustainable practices into their operations. The series will initially consist of three workshops addressing general sustainable business practices, energy efficiency and renewable energy, and green building concepts. The series is scheduled to begin in September 1999 and run through Spring 2000.

- **Residential Outreach – Green Team Program**

In March 1998 the Environmental Programs Division contracted with the non-profit Bay Area Green Team Project to develop and implement a neighborhood environmental outreach program on a pilot basis. The Green Team program is intended to raise public awareness and increase

participation among Santa Monica residents in meeting the Sustainable City Program goals. Green Teams are groups of six to eight neighbors who meet regularly over a three-month period to learn how to reduce environmental impacts and save money through actions taken at their homes. The first Green Teams began meeting in January 1999 and it is estimated that 25 to 40 teams will have formed by the end of 1999. This pilot program may be expanded in future years if it proves effective in helping meet the Sustainable City Program goals.

- **Santa Monica College - Environmental Education Center**

In 1998 the SMC administration designated an existing campus building to permanently house an Environmental Education Center. The center currently houses the staff of the Green Team Program (see above) and, when completed, will serve as a central repository of environmental resources for students, residents and businesses. SMC faculty, students and staff are currently working to identify funding sources to develop and staff the Center, and are working with City staff and others on plans to renovate the building using the latest green building technologies.

- **Santa Monica / Malibu Unified School District** – Environmental Programs Division staff continue to work with individual teachers in the District to implement a variety of environmental education programs, including the School Gardens Program and the Environmental Teachers Workshop series. In addition, City staff have reinitiated discussions with District administration staff regarding the development of a comprehensive Sustainable Schools Program in the District.

Future Plans

- **Outreach** - In the coming years, the Environmental Programs Division plans to focus its efforts in implementing the recommendations of the Sustainable City Program Communications Plan. Goals for the outreach effort include: Creating greater awareness and understanding of sustainability as a concept and practice among the residential and business community; increasing individual and group awareness of SCP goals and participation in its component programs; and further increasing City staff awareness and understanding of SCP and its goals.
- **Indicators** – Staff are currently investigating options for updating and expanding the Sustainable City Program indicators in order to provide a better overall picture of community sustainability. This will likely include the development of additional indicators to measure community and economic issues, as well as the addition of environmental indicators to provide more complete assessment of local environmental health. Development of new indicators will likely involve City staff from Community and Cultural Services,

Resource Management, Planning, and Environmental and Public Works Management departments as well as members of the Task Force on the Environment with the assistance of outside indicators consultants. In addition, in the coming year the Task Force plans to work with City staff to develop new targets for 2010 for all of the program indicators.

SOLID WASTE AND RECYCLING

Adopted Indicator and Target

Using 1990 as a baseline, reduce the volume of landfilled solid waste by 25% by 1995 and 50% by the year 2000.

Progress Towards Goal

Citywide Solid Waste Generation and Diversion

	1995	1996	1997*	1998
Total solid waste generated (tons)	126,571	160,858	135,960	173,817
Landfilled (tons)	93,178	102,778	88,082	111,636
Diverted (tons)	33,393	58,080	47,878	62,181
% of yearly total diverted	26.4%	36.1%	35.2%	35.7%
% diverted relative to 1990	24.9%	17.1%	28.9%	9.9%

*Amounts of total waste generated and landfilled for 1997 are off by approximately 20,000 tons due to underreporting by private waste haulers between June and December 1997.

Santa Monica's 1990 baseline is 124,000 tons of solid waste. The target for 1995 was that amount less 25% or 93,000 tons. The year 2000 target is 62,000 tons. In 1995 Santa Monica landfilled 93,178 tons of solid waste, representing a 24.9% reduction below the 1990 baseline. Over the 5-year period between 1990 and 1995, total waste generation in the city increased from 124,000 tons to 126,571 tons. In order to achieve the 25% reduction goal, the City would have had to divert 26.6% of its waste in 1995.

By 1998 total solid waste generation in Santa Monica increased to 173,817 tons. Although 35.7% of that waste was diverted from the landfill, the City's diversion rate relative to the 1990 baseline dropped to 9.9%. In order to achieve its 50% reduction goal in 1998, the City would have had to divert 64.3% of its total waste.

The reason for the large increase in solid waste generation in 1998 is unclear, however it is likely that it is related to Santa Monica's strong economy in recent years. This has led to more commercial and residential development in the city, increased personal consumption, increased daytime population and increases in associated waste generation.

Please Note: Compliance with State of California AB 939 targets for waste reduction is not measured by the simple method of comparing current reporting year volumes of landfilled solid waste to 1990 baseline numbers. In addition, the California Integrated Waste Management Board (CIWMB) factors in diversion credits according to a complicated formula that takes into account good faith efforts to implement source reduction and recycling programs, as well as local

population, employment, inflation and other parameters. Because of this, the figures in the table above do not reflect Santa Monica's compliance with AB 939. Using the CIWMB formula, Santa Monica's diversion rate for AB 939 compliance for 1997 was 36% relative to the 1990 baseline.

Program and Policy Update

The following solid waste reduction measures have been implemented or adopted since December 1996:

- **Green Waste Collection** – In June 1998 the City began weekly collection of green waste from 7500 single family residential customers. The green waste is currently used as daily cover at the landfill and is credited to the City's diversion total. Solid Waste Division staff are considering options to send the green waste to a composting facility in the future, when and if that option becomes economically feasible.
- **Metal Recycling** – In December 1997 began source separation of scrap metal from waste delivered to the transfer station. The metal is sorted according to type and then recycled.
- **Wood Recycling** – In March 1998 the City began a program to separate wood from waste delivered to the transfer station. Depending on its condition, the wood is either set aside for reuse or chipped for use as mulch or daily cover at the landfill.
- **Mixed Paper Recycling** – Under its contract with American Waste, the City has continued to expand its mixed paper recycling program. Over 250 new commercial and multi-family residential mixed paper recycling sites have been added in Santa Monica since 1994.
- **Telephone Book Recycling at Hotels** – In December 1997 the City began a program to collect and recycle telephone books from all Santa Monica hotels. In 1999 the City plans to expand this program to large office complexes such as RAND, Sony and MGM.
- **Toy Recycling Program** – In November 1998 the City held a special toy recycling event and collected 3.5 tons of broken toys. All serviceable toys collected were donated to the Salvation Army for repair and reuse. The remaining broken toys were recycled into plastic products such as film reels, car parts, clothes hangers and hoses. All metal toy parts were also separated and recycled and all batteries were collected for recycling or proper disposal. Due to the success of this program it is anticipated that it will be continued as an annual event.

- **Buy Recycled Conference** – In November 1998 the City hosted a “Closing the Loop: Buy Recycled” conference in conjunction with the Southern California Council on Environment and Development (SCCED). The conference was attended by 125 procurement officers, building and fleet maintenance managers, public works officials and recycling coordinators from throughout southern California who learned ways to purchase more recycled and environmentally-preferable products.
- **Street Maintenance Pilot Projects** – The City’s Street Maintenance Division is currently testing two new products, rubberized sidewalk tiles and ultrathin concrete whitetopping, designed to significantly reduce the amount of waste generated by their operations. The rubberized sidewalk tiles are made from recycled tires and are used to replace concrete sidewalks that are broken by tree roots. Because the tiles are reusable they can be removed in the future to work on problem roots and replaced, eliminating future concrete waste and reducing maintenance costs. The ultrathin concrete whitetopping is used as an overlay to repair asphalt street surfaces. The top few inches of the asphalt surface to be repaired is removed and recycled. The surface is then replaced with 2” to 4” of high strength, fiber-reinforced concrete, which is designed to last 30 to 50 years. This method of street repair significantly reduces demolition waste generation and long term maintenance costs, eliminates the use of petroleum-based asphalt products, and its light color helps to reduce street temperatures in the summer months by up to 10° F. The first pilot installation of ultrathin concrete whitetopping took place in October 1998 on 5th Street in Santa Monica. Future installations are planned in 1999 in other areas of the city.
- **Construction and Demolition Waste Reporting** – In 1998 the City’s Solid Waste and Engineering Divisions began implementing a pilot reporting program designed to reduce the generation of construction and demolition (C & D) waste. This pilot program applies to all contractors working on the Beach Improvement Group (BIG) project whose work generates C & D waste. Upon submittal of applications for progress payments for demolition work, the contractor must also submit a summary of solid waste generated by the work, quantifying all waste materials disposed in landfills, diverted from landfills through recycling, accepted at landfills for use as daily cover, or disposed in inert fills. Although no incentives or penalties are provided as part of this pilot, contractors are being encouraged to divert as much waste as possible from the landfills and are provided information about recycling and other disposal options. If this pilot proves successful, the City may implement a broader reporting requirement or similar measure aimed at reducing C & D waste as part of the Green Building and Development Guidelines (refer to the *Construction and Development* chapter of this report for more information).
- **Restaurant Beverage Container Recycling Pilot Program** – In February 1999 the City began daily collection of cans, glass and plastic from all

restaurants located on Third Street Promenade. As part of this pilot program, each restaurant received a 40-gallon recycling container to collect the recyclables. Prior to implementation of this pilot, restaurants wishing to recycle were required to transport their recyclable containers offsite to a centrally located recycling zone. Waste audits and interviews with restaurant employees indicate that providing restaurants with recycling containers and beginning daily collection will significantly increase recycling rates for beverage containers.

- **Street Sweeping Compost Program** – In March 1999 the City began transporting all material collected by street sweepers operating within the city limits to a composting facility for sorting. All organic material is composted and the remainder is recycled or properly disposed of. It is estimated that this will result in diversion from the landfill of over 2000 tons of debris collected by street sweepers each year
- **Small Electronic Appliance Recycling Pilot Program** - In April 1999 the City launched this one-day pilot at the Santa Monica Festival. Small appliances such as blenders, toasters, and steam irons were collected for recycling or repair and reuse.

Obstacles

Although the City moved away from its waste reduction goal in 1998 due to a significant increase in total waste generation, almost 36% of the waste generated during the year was diverted from the landfill. This indicates that waste *diversion* programs and policies currently in place are, for the most part, effective. However, the City has done little to address the issue of reducing waste *generation* and that is affecting its ability to meet the Sustainable City Program target set for the year 2000.

And although waste diversion programs are successful, there is still a lot of room for improvement, particularly in the commercial sector. While commercial waste diversion has increased since 1995 when the City began a targeted commercial recycling program, it still lags far behind residential diversion rates. To address this issue, the Solid Waste Division recently began implementation of a beverage container recycling program for restaurants and plans to increase marketing directed towards the commercial sector. Commercial recycling is complicated by the fact that the majority of commercial waste in the City is collected by private haulers who offer no incentives for businesses to recycle.

Plans for the Future

- **Single Sort Pilot Program** – In June 1999 the City launched a pilot program to provide collection of co-mingled recyclables for 500 single-family residential

customers as well as three large multi-family complexes. The residents participating in this pilot were supplied with one bin for all recyclables and will no longer be required to separate their cans, glass, plastic, newspapers and mixed paper. It is anticipated that this will increase residential recycling participation rates. If this proves to be the case the program will likely be expanded in the future.

- **Composting Demonstration Site** – A permanent Composting Demonstration Site to be used to educate interested residents about the benefits of composting is planned at Virginia Park as part of the park expansion. Construction on the project is scheduled to begin in late 2000 with completion scheduled for late 2001.

Recommendations

- 1.) Solid Waste Division staff should begin to develop programs and policies to reduce waste *generation*. Because C & D waste likely represents a significant portion of the of the total waste generation increase that occurred in 1998, development and incorporation of policies aimed at reducing C & D waste for inclusion in the Green Building Development Guidelines should be made a high priority for 1999.
- 2.) City staff should investigate the feasibility of obtaining a municipal franchise for City collection of all commercial waste within Santa Monica. This would allow the City to provided incentives to businesses for recycling and would also significantly improve the accuracy of collection, disposal and recycling data.

WATER

Adopted Indicator and Target

Using 1990 as a baseline, reduce citywide potable water usage by 20% by the year 2000.

Progress Towards Goal

Citywide Water Usage

	'90	'91	'92	'93	'94	'95	'96	'97	'98
Average daily water use (mgd)	14.3	11.2	11.8	12.0	12.2	12.2	12.8	13.4	12.4
% reduction relative to 1990	--	21.8	17.5	16.1	14.7	14.7	10.5	6.3	13.3

Water Consumption by Sector

	1995	1996	1997	1998
Single Family Residential	21%	22.4%	23.5%	22.9%
Multi-Family Residential	39.4%	42.5%	38.2%	40.2%
Commercial / Industrial	25.2%	31.6%	28%	28.8%
Other*	4.9%	1.3%	1.2%	1.0%
Unmetered**	9.5%	2.2%	9.1%	7.1%

* Other includes water used for landscape irrigation at schools, along the freeway and in City parks, and miscellaneous municipal use.

** Unmetered water includes leaks and water main breaks, illegal connections, and all water from fire hydrants for including water used for fire suppression, flow tests, and street sweeping.

Citywide Wastewater Flows

	1995	1996	1997	1998
Average daily wastewater flows (mgd)	8.85	8.97	8.98	9.05*
% reduction relative to 1990	14.9%	13.8%	13.7%	13%

*estimated

Santa Monica's 1990 baseline is 14.3 million gallons per day (mgd). The 20% reduction target for the year 2000 is 11.4 mgd. From 1990 to 1991 citywide water use dropped almost 22 percent, from 14.3 mgd to 11.2 mgd, in response to the City-mandated 20 percent cutback in water use instituted because of the drought. Since then, water use rose incrementally each year between 1992 and 1997, following the repeal of the mandatory cutbacks at the end of the drought in 1992. Water use in 1997 averaged 13.4 mgd, representing a reduction of 6.3 percent from 1990 levels but an increase of almost 20 percent since 1991. In 1998 water use dropped to 12.4 mgd. This was likely due to much higher than normal rainfall in 1998, which reduced the need for landscape irrigation. City Utility Division staff expect water demand to increase again in 1999.

Reasons for the increase in water use are likely twofold: The strong economy in Santa Monica and continued increases in outdoor water use. The strong economy contributes to increased commercial and residential development and higher occupancy rates in local hotels and commercial spaces, resulting in higher daytime populations and increased water demand.

Monthly water consumption data for the El Niño year of 1998 show significant differences in water use in wet and dry months. For single family residential properties, water use during the wet months of February and April was 60% to 75% lower than in dry months of that year. During the same period, water use at multi-family residential and commercial properties remained relatively constant. Since 1991 water consumption has increased much faster than wastewater generation, indicating that increased outdoor water use (for such things as landscape irrigation and washing down of hardscape) in the single family residential sector is primarily responsible for the increase. Continued increases in water use since 1996 indicate that the revised water and wastewater rate structure adopted by City Council in May 1996 has not been effective in helping the City meet its target for decreasing city-wide water use.

MTBE Update

Drinking water in Santa Monica is a blend of local ground water and imported surface water. The ground water is obtained from City-owned wells in the Charnock and Arcadia well fields located in the City of Los Angeles and the Olympic well field in Santa Monica. During 1994 and 1995 the City pumped between 65% and 70% of its water supply from local groundwater aquifers and purchased the balance from the Metropolitan Water District (MWD). In March 1996 the City began shutting down several of its groundwater wells following the discovery of the gasoline additive, MTBE, in the water at the Charnock and Arcadia well fields. To make up for this loss of well water, the City has increased its purchase of water from the MWD. In 1998 only 17% of the City's water came from local groundwater sources and the remaining 83% was purchased from MWD.

To address the MTBE contamination problem, a consortium of oil companies, City staff and state and federal regulators have been involved in testing of treatment technologies at a pilot plant set up at the Charnock well field in 1998. All five of the City's wells at Charnock remain off-line due to the contamination. Several technologies are being evaluated for feasibility and cost-effectiveness and are being funded under agreement by the participating oil companies. The data collected is expected to provide engineers with the information needed to design a full-scale treatment facility anticipated to be built at the same location.

Remediation work is also progressing at the Arcadia well field, where two City wells have been closed down. The gasoline station that was the suspected

source of the MTBE contamination has been torn down, the contaminated soil has been removed, and a remediation system has been installed to remove the MTBE from the shallow and deep groundwater. Water filtration systems utilizing granular activated carbon are planned for installation at the City's two wells in 1999. After the system is evaluated for long-term effectiveness and reliability, the wells will be put back into service, possibly by the end of 1999.

Program and Policy Update

Listed below are updates on water conservation programs implemented since December 1996.

- **Central Irrigation Controller** – In 1995 the City's Environmental Programs Division established a partnership with the City's Parks Division, Santa Monica-Malibu Unified School District, Woodlawn Cemetery and Santa Monica College in an effort to reduce landscape irrigation water use while maintaining the quality of the landscapes through the use a centralized irrigation management system. The centralized computer irrigation management system links 28 major sites covering 127 acres of landscaping and allows for easy manual or automated control of landscape irrigation at all sites from a centrally located controller. Prior to installation of the central controller, irrigation system audits and upgrades to field equipment were completed at all of the linked irrigation sites. Installation of the central controller was completed in March 1998. Between March 1998 and March 1999 use of the controller was responsible for 73 acre-feet of water savings (relative to average water use for the four years before the controller came online). By November 1999 it is expected that landscape irrigation at all sites will be fully automated and based on evapotranspiration data, further improving water efficiency.
- **Commercial/Industrial/Institutional (CII) Audit Program** – This program was intended to offer free detailed water-use audits to large CII customers for the purpose of identifying potential water and cost savings through operational changes and retrofits with water-efficient equipment. As part of this program, no-interest loans to fund equipment retrofits were to be offered as an incentive. To date, no audits have been completed due to lack of interest from the CII sector. However, the no-interest loan fund has been used to provide loans to large commercial and multi-family subsidized housing projects to retrofit the buildings with ultra-low flow toilets. To date, approximately \$ 40,000 in loans has been used to fund retrofits at 4 projects in Santa Monica.
- **Santa Monica Urban Runoff Recycling Facility (SMURRF)** – When completed, this facility will treat low flow runoff from the Pico-Kenter and Pier stormdrains on a year-round basis and the treated water will be reused for irrigation and toilet flushing. City irrigation sites currently planned include Woodlawn Cemetery, the Olympic Boulevard median, Memorial Park, the Civic Center, and Palisades Park. CALTRANS has also expressed interest in using

the treated water for landscaping along the Santa Monica Freeway. The facility will be located adjacent to the Moss Avenue Sewage Pumping Station just south of the Pier Bridge. Construction began in May 1999 and the facility is scheduled to be operational by May 2000.

Obstacles

- **Uneven Compliance with No Water Waste Ordinance and Retrofit Upon Sale Ordinance** – The uneven compliance with both of these ordinances is attributed to lack of awareness of the ordinance, particularly by homeowners and landscape maintenance crews, as well as insufficient enforcement by the City due to lack of a full time inspection staff.
- **Training and Awareness of Landscape Maintenance Crews** – Typical residential landscape maintenance crews are not aware of Santa Monica's water conservation requirements and are not trained to install water-conserving irrigation systems or to schedule irrigation systems efficiently.

Plans for the Future

In FY 1999-2000 the Resource Efficiency Office of the Environmental Programs Division plans to develop and implement the following programs and efforts to reduce water consumption in Santa Monica:

- **Increased Enforcement of No Water Waste Ordinance** – The Resource Efficiency Inspector will devote more of his time to enforcement and education efforts related to the ordinance. In addition, staff plans to investigate options to increase penalties for non-compliance.
- **Retrofit Upon Sale Ordinance Outreach** – An outreach campaign targeting realtors and escrow agents addressing the requirements of the ordinance will be developed and launched in 1999.
- **Water-Efficient Washing Machine Program** – Staff plan to develop and implement a program to provide subsidies for the purchase of water and energy efficient front loading washing machines for single family residents and for coin-operated machines in multi-family units.
- **Water Conservation Education for Students** – Staff plan to develop and implement new school-based education efforts about water and energy conservation.
- **Commercial/Institutional/Industrial Water Efficiency Program** – Staff are currently working with MWD to develop a joint program to provide rebates for the purchase and installation of cooling tower controllers, commercial ultra-low

flow toilets and water-efficient commercial washing machines to CII customers in Santa Monica. The program is anticipated to begin in late 1999 or early 2000 pending finalization of a contract between MWD and the City.

Recommendations

- 1.) If the City is to achieve its 20 percent water-use reduction goal it needs to increase its efforts to promote water efficiency in all sectors with an emphasis on reducing outdoor water use in the single family residential sector. Continued increases in water use since 1996 indicate that the revised water and wastewater rate structure adopted by City Council in May 1996 has not been effective in encouraging water efficiency in this sector. Staff should evaluate the use of regulatory, enforcement and educational measures to effectively reduce outdoor water use in this sector.

ENERGY

Adopted Indicator and Target

The adopted energy indicator measures total citywide energy use from non-mobile sources (electricity and natural gas). The adopted indicator target initially called for a 16% reduction by the year 2000, using 1990 as a baseline. The December 1996 Sustainable City Progress Report recommended revising the target because the baseline energy use data used to derive the target was found to be incorrect. To date, a new target has not been developed.

Progress Towards Goal

Citywide Energy Use in Santa Monica (all units in million mBTUs)

	1990	1991	1994	1995	1997
Electricity	2.45	2.39	2.48	2.53	2.72
Natural Gas	4.0	3.27	2.62	3.10	3.05
Total	6.45	5.66	5.10	5.63	5.77

Energy Use by Sector (%)

	1990		1991		1994		1995		1997	
	Elec	Gas	Elec	Gas	Elec	Gas	Elec	Gas	Elec	Gas
Residential	26	47	26.4	59.3	25.8	69	25	58	25	58
Commercial	66.5	49	66.5	36.7	67.3	29	68	40	68	40
Industrial	7.5	4	7.1	4	6.9	2	7	2	7	2

As the figures above indicate, energy use in Santa Monica significantly dropped between 1990 and 1994 and has increased at a slower rate through 1997 (data for 1998 is pending). These fluctuations are due primarily to changes in electricity and natural gas use in the Commercial sector over the period. Between 1990 and 1997 total electricity use increased in the City by 11%. This increase can be attributed entirely to increases in Commercial use. Over the same period, total natural gas use decreased by almost 24%. Again, this can be attributed to significant decreases in Commercial use (-38%) accompanied by slight decreases in use by the Residential and Industrial sectors.

The economic recession in the early 1990s and the 1994 Northridge earthquake are the likely reasons for the significant decrease in natural gas use between 1990 and 1994. The Gas Company indicates that the earthquake contributed to the decrease through the disruptions in natural gas delivery, sometimes for several months, and less business activity following the earthquake. Likewise, subsequent increases in electricity and natural gas use are likely due to a strengthening local economy which contributed to higher commercial occupancy rates, higher daytime populations in the city and increased development.

Citywide Greenhouse Gas Emissions for Santa Monica

	Equivalent CO ₂ (tons)	% Change from 1990
1990	936,651	--
1995	860,856	-8.1%
1997	887,692	-5.2%

Greenhouse Gas Emissions by Sector (%)

	1990	1995	1997
Residential	19.5%	20.5%	20.3%
Commercial	31.7%	30.8%	31.4%
Industrial	3%	2.6%	2.7%
Transportation	34.4%	35.3%	35.7%
Solid Waste	11.3%	10.7%	9.8%

The greenhouse gas (GHG) emission data above include emissions of carbon dioxide (CO₂) from both stationary and mobile sources and emissions of methane. CO₂ is produced by the burning of fossil fuels – such as oil, natural gas, gasoline, diesel fuel, and coal – for the production of electricity, or used directly for heating or powering vehicles. Urban methane is produced primarily by the decomposition of buried organic waste.

Between 1990 and 1995 Citywide GHG emissions fell by 8.1% and then increased by 3.1% between 1995 and 1997. In 1997 emissions were 5.2% below 1990 levels. The decrease between 1990 and 1995 is likely due to reduced commercial energy use and vehicle miles traveled as a result of the local economic recession. The subsequent increase in emissions is likely a response to the strengthening economy following the recession. City programs addressing energy efficiency and renewable energy, alternatives to single passenger automobile trips, alternative fuel vehicles, community forestry and open space, waste reduction and recycling, toxics use reduction, water conservation and green building all contribute to reductions in GHG emissions, however these reductions have not yet been quantified. To date, the City has not adopted a GHG emission reduction target.

Program and Policy Update

Since December 1996, the following programs and policies to increase efficiency and conservation of non-renewable energy resources have been developed, implemented or are currently ongoing:

- **ENVEST Energy Efficient Retrofits of City Facilities, Phase 2** – In March 1995, the City negotiated a \$1.6 million lease-purchase agreement with Southern California Edison, as part of their ENVEST program, for the purchase and installation of energy efficient equipment (primarily lighting, heating and cooling system upgrades, and energy control systems for

buildings) for City facilities. Cost savings realized through reduced energy consumption are being used to offset the cost to pay back the initial capital investment. The payback period for this program is 12 years. Once the investment is paid back, all savings will accrue to the City. Phase I of this program was completed in 1996 and involved the installation of energy efficient equipment in City Hall, the Police Station, the Civic Auditorium, the Main Library, the Fairview and Ocean Park Branch Libraries, and the six City-owned parking structures. Phase 2 was completed in May 1998 and involved retrofits of the City Yards, the Ken Edwards Center, the Montana Branch Library, the Airport Administration building, the Senior Center, buildings at Memorial, Virginia, Joslyn and Clover Parks, and public bathrooms at the beach.

- **Development of Strategic Energy Plan** – Staff presented a Strategic Energy Plan to City Council in October 1999 detailing the City's long range strategies to improve energy efficiency and reduce non-renewable energy consumption. The plan includes analysis of energy demand in the city, quantification of the City's existing energy efficiency and renewable energy efforts, and addresses the marketing of renewable energy to Santa Monica residents and businesses, as well as the efforts listed below under Plans for the Future.
- **Purchase of 100% Renewable Energy for City Facilities** - In February 1999 City Council authorized the City Manager to enter into a contract with Commonwealth Energy Corporation for the purchase of 100% renewable energy to power all City facilities. Service began shortly after the City finalized the contract with Commonwealth in June 1999. The energy is provided by Calpine Corporation from its geothermal plants located in Northern California. Beginning in 2000, the source of the 100% renewable electricity will switch to new geothermal generation facilities currently being developed in Southern California. The cost increase to the City for switching to 100% renewable energy is approximately 5%. At the time the contract went into effect Santa Monica was the first municipality in the United States to obtain all of its electricity from renewable sources. A projection based on the City's 1998 energy use data indicates the switch to 100% renewable electricity will annually reduce GHG emissions by 13,672 tons, NOx emissions by 16.2 tons, SOx emissions by 14.57 tons, PM₁₀ particulates by 2,285 lbs. and reactive organic groups by 190.5 lbs.
- **Administrative Instruction for the Purchase of Energy-Efficient Office Equipment** – In September 1998 staff in the Environmental Programs, Purchasing and Information Systems divisions completed an administrative instruction that applies to all City employees who purchase, lease or use office equipment. The policy instructs these employees to purchase energy-efficient office equipment and identifies ways to use the equipment in the most energy-efficient manner possible. The policy requires that all computer processing units, monitors, printers, scanners, fax machines, copiers, and multi-function

devices purchased or leased by the City shall, at a minimum, meet the energy efficiency standards established by the U.S. EPA's Energy Star program. This policy has been forwarded to the City Manager's office and is currently awaiting final approval.

- **Photovoltaic Demonstration Projects** – The City recently facilitated the installation of two photovoltaic (PV) demonstration projects at the Santa Monica Pier and the Santa Monica Civic Center. A 42.5 kW system was installed at Pacific Park on the Pier in October 1998 and provides power to operate the Pacific Park Ferris Wheel. Edison Technology Solutions and the California Energy Commission funded the project. In March 1999 an integrated PV carport was installed in the Civic Auditorium Parking Lot. The system provides electricity to the Civic Auditorium and was funded by Edison Technology Solutions, the California Energy Commission, and the City of Santa Monica.
- **Traffic Signals** – As reported in the December 1996 Progress Report, the City's Parking and Traffic Engineering Division had planned to retrofit all City traffic signals with energy efficient lamps in 1997. This has not been completed due to a lack of budgeted funds to cover the up front replacement costs. Funds for this purpose have been requested as part of the FY 1999-2000 CIP budget.

Obstacles

In March 1998, California's electric industry was restructured and traditional electric utility functions were "unbundled", creating a competitive market for electricity generation in the state. However, as part of the restructuring, investor-owned utilities were allowed to recover stranded investments through a surcharge levied on all utility customers during a transition period that ends in 2002. The effect of this surcharge has been to limit competition, and as a result electricity prices in California have not significantly dropped, as would be expected in a competitive marketplace. When the transition period ends in 2002, however, energy analysts expect electricity costs to drop significantly.

This situation has created two potential obstacles for the City – diminished economic incentives to conserve energy due to reduced electricity costs; and uncertainty on the part of consumers as to the ultimate effects of the restructuring process. Because expected future reduced costs will tend to diminish or eliminate the monetary incentive for energy customers to conserve electricity, the City's efforts to reduce citywide energy use will likely be impaired. In addition, uncertainty about the ultimate effects of the restructuring process due to the lack of a true competitive marketplace will make it difficult for the City to accurately predict the effectiveness of future citywide energy efficiency initiatives.

Plans for the Future

In FY 1999-2000 the Resource Efficiency Office of the Environmental Programs Division plans to pursue the following programs and efforts to improve energy efficiency and reduce the use of non-renewable energy resources in Santa Monica:

- **Public Education and Outreach** – Staff plan to develop an outreach program targeting the residential and commercial sectors to promote energy efficiency and the use of renewable energy.
- **Photovoltaic and Local Generation Projects** – Staff plan to investigate opportunities to site additional PV arrays and distributed generation projects such as fuel cells and gas microturbines in the City. Planned sites for additional PV arrays include the parking garage at Santa Monica Place and as an integrated skylight on the planned Public Safety Facility
- **Feasibility Study for Creating an Independent Energy District at the Civic Center** – Staff are currently working with consultants to evaluate the feasibility of developing local energy generation capacity to power Civic Center facilities.
- **Greenhouse Gas Emission Reduction Plan**
Santa Monica became a member of the International Council for Local Environmental Initiatives (ICLEI) Cities for Climate Protection Program in 1995. This program promotes actions by local governments throughout the world to reduce greenhouse gas emissions. By joining the campaign, the City has committed to conduct a citywide greenhouse gas emissions analysis, establish a greenhouse gas reduction goal, and develop and implement a plan to achieve that goal. The baseline analysis has been completed and the information is presented above in Progress Towards Goal. The greenhouse gas emission reduction goal will be adopted following completion of the emission reduction plan. The emissions reduction plan is scheduled to be completed by Fall 2000.

Recommendations

- 1.) Staff should prioritize the development of new citywide energy use reduction and renewable energy use targets for the Sustainable City Program energy indicator.
- 2.) Following completion of the greenhouse gas emission reduction plan, an emission reduction target should be adopted and incorporated as an indicator for the Sustainable City Program.

PURCHASING

Adopted Indicator and Target

Achieve a 50% average post-consumer recycled and/or tree-free content in all City office paper purchases by the year 2000.

Progress Towards Goal

Because the City's financial management computer system is currently unable to provide a detailed report of commodities purchased by the City, data to evaluate progress for this indicator is not available. However, in April 1998 the City purchased a new computerized financial management system called STARS 2000, which will be able to provide this information, using the nationally standardized NIGP commodity code system. The STARS 2000 purchasing module came online in July 1999, and data will be available to track this indicator, as well as purchases of other environmentally preferable products, for fiscal year 1999-2000.

And although detailed data is not available, purchasing records indicate that the City is making significant progress towards its goal. In January 1999 the City began purchasing copy paper with 50% post-consumer recycled content for use in all City copiers. Prior to this time, the City purchased copy paper with a maximum of 30% post-consumer recycled content. Based on a review of purchasing records completed in 1995, copy paper represents approximately 65% of all City paper purchases.

Program and Policy Update

Since December 1996 the following programs and policies intended to promote environmentally preferable purchasing have been developed, implemented or are ongoing:

- **Administrative Instruction for the Purchase of Energy-Efficient Office Equipment** – In September 1998 staff in the Environmental Programs, Purchasing and Information Systems divisions completed an administrative instruction that applies to all City employees who purchase, lease or use office equipment. The policy instructs these employees to purchase energy-efficient office equipment and identifies ways to use the equipment in the most energy-efficient manner possible. The policy requires that all computer processing units, monitors, printers, scanners, fax machines, copiers, and multi-function devices purchased or leased by the City shall, at a minimum, meet the energy efficiency standards established by the U.S. EPA's Energy Star program. This policy has been forwarded to the City Manager's office and is currently awaiting final approval.

- **Modification of Tropical Rainforest Wood Purchasing Ban** – In September 1998 City Council directed the City Attorney to modify the City’s ordinance banning the purchase of tropical rainforest woods. In 1990 the City Council adopted the original ordinance, which prohibits the purchase or use by the City of any tropical rainforest wood product. The marketplace has responded to this and other similar purchasing bans by clearing tropical rainforests to institute more lucrative cash crop agriculture, thus defeating the City’s intent of protecting tropical rainforest ecosystems. The modified ordinance allows the purchase of tropical rainforest wood provided it is certified as sustainably grown and harvested by an agency accredited by the Forest Stewardship Council (FSC). The modified ordinance similarly regulates the purchase by the City of old-growth temperate rainforest wood products, which wasn’t addressed in the 1990 ordinance. The ordinance is currently being redrafted by the City Attorney’s office.
- **Purchasing Division QPO System** – In 1997, Purchasing Division staff launched a database that tracks all goods and services purchased with quick purchase orders (QPOs) using commodity codes. The system can provide reports detailing the items purchased, user department, dollar amount and vendor purchased from. This information has never previously been available and addresses one of the recommendations from the December 1996 Sustainable City Progress Report. Data collected with this system can be used to enforce existing purchasing policies and provide input for the development of new policies.
- **Purchase of 100% Renewable Energy for City Facilities** - In June 1999 the City entered into a contract with Commonwealth Energy Corporation for the purchase of 100% renewable energy to power all City facilities. Santa Monica is the first municipality in the United States to obtain all of its electricity from renewable sources. A projection based on the City’s 1998 energy use data indicates the switch to 100% renewable electricity will annually reduce GHG emissions by 13,672 tons, NOx emissions by 16.2 tons, SOx emissions by 14.57 tons, PM₁₀ particulates by 2,285 lbs. and reactive organic groups by 190.5 lbs. Additional information can be found in the *Energy* chapter of this report.
- **Vehicle Replacement Policy** – In 1996 the City began purchasing fleet vehicles in accordance with a Council-adopted Vehicle Replacement policy. The policy institutes a program that establishes a replacement schedule for all fleet vehicles and requires, where feasible, replacement with vehicles that operate using reduced-emission fuels. The policy was designed to assure attainment of the Sustainable City program goal of 75% of the fleet powered by alternative fuels by the year 2000. This policy is discussed in more detail in the *Transportation* chapter of this report.

- **Buy Recycled Conference** – In November 1998 the City hosted a “Closing the Loop: Buy Recycled” conference in conjunction with the Southern California Council on Environment and Development (SCCED). The conference was attended by 125 procurement officers, building and fleet maintenance managers, public works officials and recycling coordinators from throughout southern California who learned ways to purchase more recycled and environmentally-preferable products.
- **Green Purchasing Group** – In May 1999, Environmental Programs Division staff initiated bi-monthly meetings of staff assistants from all City departments to raise awareness about the availability, effectiveness and benefits of environmentally preferable or “green” office products and to encourage their purchase.

Obstacles

- **City Staff Awareness/Lack of Enforcement** - In 1996, the City’s Purchasing Task Group determined that other than tracking capability, the biggest obstacle to the effective implementation of policies to promote the purchase of environmentally preferable goods and services was lack of staff awareness, both about the City’s policies and product availability. Purchasing Division staff have reported that due to a lack of awareness about City purchasing policies and the lack of enforcement mechanisms, City staff often do not follow existing purchasing policies. This remains the primary obstacle to the purchase of more environmentally preferable products today. The Green Purchasing Group (see above) was initiated to help address this problem.
- **Lack of Reliable Third Party Certification** – Currently it is very difficult for end users to judge the relative environmental merits of most durable and consumable goods. To do this accurately often requires relatively sophisticated life cycle assessments which are impractical for most end users to perform. In the absence of reliable third party certification of environmental claims, City staff are left either to rely on manufacturers claims, which are often misleading or inaccurate, or to conduct time consuming research when specifying products for City purchase. This presents a significant obstacle to the City’s purchase of more environmentally preferable products because currently no staff are available to conduct this research and primarily focus on these issues.

Plans for the Future

In 1999 the Finance Department’s Purchasing Division plans to begin the following efforts to encourage the purchase of more environmentally preferable products:

- **Data Tracking** – Purchasing Division staff plan to use the Stars 2000 system’s reporting functions to focus their efforts to encourage procurement (by departments and centrally through the Purchasing Division) of more environmentally preferable products.
- **Environmental Product Catalogs** – Explore putting various catalogs from vendors of environmentally preferable products on line to facilitate purchase of these products by City staff.
- **Increase User Awareness** – Purchasing Division staff plan to work with Environmental Programs Division staff to identify goods and services currently being purchased by the City that can be replaced with more sustainable alternatives and work with the end users to encourage converting to the new products through the use of “recognition” and other types of incentives.

Recommendations

- 1.) The Purchasing Task Group should be reformed and given the task of determining ways to improve staff awareness and to improve existing purchasing policies. Specifically, the group should:
 - determine the feasibility of formalizing the currently informal Recycled Products Procurement Policy as an administrative instruction or through Council approval to provide Purchasing staff with a method of enforcement;
 - determine the feasibility of revising the Purchasing Division’s definition of the term responsible bid to include some level of environmental performance;
 - identify and prioritize categories of goods and services for future development of sustainable purchasing criteria;
 - recommend additional indicators and targets for the purchase of environmentally preferable products; and
 - work with Environmental Programs division staff to advocate for independent third party certification of environmental claims.

CONSTRUCTION AND DEVELOPMENT

Adopted Indicator

No indicator specifically related to construction and development was adopted as part of the Sustainable City Program.

Progress Towards Goals

Specific goals have not been set in the Sustainable City Program for construction and development projects. However, construction, development and long-range planning in the city likely have a significant effect on a majority of the program indicators including energy use, water use, volumes of landfilled solid waste, wastewater flow volumes, stormwater discharges, amount of public open space and the availability of affordable housing. The Planning Division's January 26, 1999 Cumulative Development Projects List includes 49 new construction and major remodel projects in Santa Monica in various stages of the planning approval and construction process. These projects include multi-family residential units, mixed use residential/office/retail projects, schools and hospital renovation and expansions, municipal projects, hotels, restaurants, and large mixed-use office complexes. These projects vary in size from a 3500 square-foot 5-unit condominium to a 950,000 square-foot residential/office/retail development.

To address impacts related to construction and development, the City contracted with Sheltair Scientific Ltd., a sustainable design consultant team, in February 1996 to formulate Green Building Development Guidelines. The Guidelines are currently completed in draft form and address the following topic areas: Building Site and Form, Landscaping, Transportation, Building Envelope, Building Materials, Water Systems, Electrical Systems, HVAC Systems, Control Systems, Construction Management, and Commissioning. For each topic area the Guidelines present required and recommended practices intended to reduce environmental impacts associated with the construction and operation of commercial and municipal development projects in Santa Monica. It is likely that all future municipal development projects will be required to meet a certain threshold of guideline performance or incorporate a minimum number of guideline recommended practices, pending Council approval.

The current draft of the Guidelines was completed in April 1999. This draft is in the process of being reviewed by the City's Housing and Planning Commissions, the Architectural Review Board, the Task Force on the Environment and by members of the public. Following this review process a revised final draft will be submitted to City Council for approval in October 1999.

With regard to long-range planning, the 1996 Sustainable City Progress report recommends that future updates of the City's General Plan Elements should use the Sustainable City Program as a starting point to ensure that they are in line

with the guiding principles, goals and objectives of the program and that they will help to achieve the indicator targets. This recommendation has been followed in the subsequent updates of the Open Space and Conservation Elements.

The updated draft Open Space Element includes goals, policies and implementation measures intended to increase the amount of public open space, the number of community gardens, and the number of public trees in the city. The Element has been conceptually approved by the City's Planning Commission and City Council and is currently undergoing environmental review. It is scheduled for final approval in October 1999.

Staff from the City's Planning Department have been working with Environmental Programs Division staff to incorporate sustainability concepts into the Conservation Element, which is currently in the process of being updated. The updated draft Conservation Element bases its four primary goals on the concept of sustainability and the guiding principles of the Sustainable City Program. The Element also incorporates Sustainable City Program policies, programs and projects as its major policies and implementation measures. The draft Element has been completed and is currently awaiting review and conceptual approval by the Planning Commission and City Council.

Project Updates

- **Public Safety Facility** – This four story, 115,000 square-foot facility is designed as a “green” demonstration project. It will be located adjacent to City Hall and will house the Police station and jail, the Fire Department administrative offices, the central dispatch facility, and the emergency operations center. Sustainable design elements include photovoltaic panels, dual plumbing to allow the use of reclaimed water for toilet flushing, high efficiency lighting and HVAC systems, occupancy sensors, a floor-supplied forced air system, and recycled and low VOC building materials and finishes. The facility has been designed to exceed Title 24 energy efficiency requirements by 45% to 50%. Construction on the project began in August 1999.
- **Other Projects** – Sustainable design and building elements have been incorporated into the following municipal construction and renovation projects that are currently under construction or recently completed:
 - **Civic Auditorium** – recycled materials were incorporated into the terrazzo tile flooring.
 - **Fire Station #2** – energy efficient mechanical systems and environmentally preferable building materials.
 - **City Council Chamber renovation** – energy efficient lighting and recycled content flooring materials.
 - **Pier Carousel Building** – natural ventilation was restored and ceilings were insulated with recycled cellulose.

- **Miles Playhouse** – environmentally preferable finish materials and reuse of existing fixtures.
- **City Hall recarpeting** - recyclable carpet tiles with recycled-content backing.
- **Marine Park** – playing field lighting is energy efficient.

Sustainable design and construction requirements have also been included into the bid specifications for planned municipal projects including the new Convention and Visitors Bureau Information Center and the 70,000 square-foot addition and remodel of the Main Library.

- **Sustainable Building Material Database** - Engineering Division staff are currently compiling a database of environmentally preferable building materials. Materials are being evaluated based on a variety of criteria including life cycle analysis, durability, occupant health impacts and location of manufacture. This database is being used as a resource for specifying construction and finish materials for municipal projects and will likely be made available to the public in the future.

Obstacles

To date, little effort has been made to document the individual or cumulative environmental effects of new development projects as they relate to the Sustainable City Program indicators. Environmental Impact Reports prepared for larger development projects present estimates of projected environmental impacts but these do not specifically address the indicators and they are not measured or verified following construction. This information is not essential but would be helpful when deciding where to direct future conservation and planning efforts.

Recommendations

- 1.) The concept of sustainability should be introduced into the City's short- and long-range planning processes. All City boards, commissions, and staff dealing with construction and development projects should be educated about the Sustainable City Program and should work to incorporate it into their operations. One suggested method to incorporate the goals of the Sustainable City Program into the City's planning process is to use the Sustainable City Program indicators as threshold levels for the CEQA evaluation process.
- 2.) Following adoption of the Sustainable Development Guidelines, all City-sponsored construction and development projects should incorporate sustainability measures specified in the guidelines. Minimum standards for municipal development projects should be set and a mechanism should be developed to account for possible additional upfront costs that can be offset by operational cost savings.

- 3.) With regard to specific residential and commercial development projects, an investigation into the feasibility of obtaining and compiling performance data should be undertaken, possibly as a component of the Sustainable Development Guidelines, for the purpose of verifying that current programs are effective and to provide input for future policy decisions.

- 4.) The City should provide green building information obtained during the development of the Green Building Design and Construction Guidelines to Sverdrup Corp, the consultant overseeing the renovation and construction of Santa Monica - Malibu Unified School District facilities.

TRANSPORTATION

Adopted Indicators and Targets

- Using 1990 figures as a baseline, increase ridership on Santa Monica’s Big Blue Bus (including shuttles) by 10% by the year 2000.
- Achieve an Average Vehicle Ridership (AVR) of 1.5 for all employers in Santa Monica with over 50 employees by the year 2000.
- Convert 75% of the City vehicle fleet to vehicles using reduced-emission fuels by the year 2000.

Progress Towards Goals

- **Santa Monica Big Blue Bus Ridership**

Year	Big Blue Bus	Shuttles	Totals	% Change*
1990	18,997,803	0	18,997,803	--
1991	19,472,820	0	19,472,820	+2.5
1992	18,762,519	0	18,762,519	-1.2
1993	18,005,720	1,432	18,007,152	-5.2
1994	17,602,352	21,968	17,624,320	-7.2
1995	17,770,370	105,390	17,875,760	-5.9
1996	18,433,192	195,144	18,628,336	-1.9
1997	19,368,271	243,356	19,611,627	+3.2
1998	20,643,266	169,959	20,813,225	+9.5

*Relative to 1990 baseline

The 1990 baseline for this indicator is 19 million riders. The targeted 10% increase by the year 2000 is 20.9 million riders. Ridership fell by 7.2% between 1990 and 1994, which Transportation Department staff attributed primarily to the effects of the economic recession. Since 1994, ridership has significantly increased, and by 1998 was 9.5% above the 1990 baseline. This increase is likely due to the effects of the improving local economy as well as service improvements implemented as part of the Transportation Department’s Service Improvement Plan (see Program and Policy Update below). Most of the service improvements implemented as part of the SIP have been made since 1997 and likely account for the large increase in ridership between 1997 and 1998. Transportation Department staff expect ridership increases to continue as the result of additional planned service and infrastructure improvements (see Plans for the Future below) and expect that the goal of a 10% increase will be surpassed by 2000.

- Citywide Average Vehicle Ridership for Employers with >50 Employees**
 Average Vehicle Ridership (AVR) is a measurement of vehicle occupancy indicating the average number of persons traveling in a measured number of vehicles. Increased vehicle occupancy leads to reductions in traffic congestion and vehicle air emissions. The AVR figures below are based on information that the City's Transportation Management Office (TMO) collects for employers of 50 or more employees as part of the requirements of the City's Transportation Management Plan Ordinance (TMP). The indicator target uses the goal adopted in the TMP which calls for an AVR of 1.5 for all employers in Santa Monica with over 50 employees by the year 2000. City progress towards this target is listed below (For comparison, the Southern California regional AVR is currently 1.27).

Citywide AVR for Employers with >50 Employees

	1993*	1995	1996	1997	1998
AVR	1.13	1.29	1.34	1.37	pending

*Prior to implementation of City's Transportation Management Ordinance

Data for 1998 are currently being compiled. TMO staff expect continued increases in citywide AVR and that the 1.5 goal will be met by 2000.

(Note: There are two methodologies for calculating AVR. The first is used by the South Coast Air Quality Management District (SCAQMD) and is called *AVR Averaging*. This is calculated by adding the AVRs for all employers of >50 employees and then dividing the result by the number of employers. The second methodology is the *Actual AVR* which is calculated by dividing the total number of employee trips by the total number of employee vehicles used for those trips during peak commute hours for all employees of all regulated employers. TMO staff indicate that AVR Averaging tends to overstate the AVR and that Actual AVR is the more accurate of the two methodologies. The 1.5 target is based on Actual AVR. AVR figures reported in the December 1996 Sustainable City Progress Report were taken from the TMO's reports to SCAQMD and were calculated using AVR Averaging, which overstated the City's progress to that point. The figures above were calculated using Actual AVR.)

- Fleet Vehicles**

The Sustainable City Program indicator target for Fleet Vehicles calls for 75% of the City's Fleet to operate on reduced emission fuels (REFs) by the year 2000. REFs include compressed natural gas (CNG), liquid natural gas (LNG), propane and electricity, all of which produce fewer air emissions per equivalent gallon than gasoline or diesel. The City Fleet refers to all vehicles maintained by the Fleet Management Division, which include vehicles used by City office staff, maintenance crews and public works operations, as well as Police Department motorcycles and parking enforcement scooters. For the purpose of this indicator, the City Fleet does not include vehicles maintained and operated

by the Police, Fire and Transportation Departments. There are currently 580 vehicles in the City Fleet.

City Fleet Vehicles Using Reduced-Emission Fuels

	1993	1995	1996	1997	1998
Number of REF Vehicles	59	88	127	151	191
% of City Fleet	10%	15%	22%	26%	33%

Between 1993 and 1998 the percentage of REF vehicles in the City's fleet increased from 10% to 33%. As of June 1999, 34% or 199 of the 580 total fleet vehicles were REF vehicles. Those include 130 CNG vehicles, 43 propane-fueled vehicles, and 26 electric vehicles.

Fleet Management staff indicate that by December 2000 an additional 100 fleet vehicles will be replaced by REF vehicles, bringing the percentage of REF vehicles in the fleet to 52%. Staff cite lack of REF vehicle availability and long delivery timetables as obstacles to meeting the 75% goal (see Obstacles below). Staff also indicate that of the 580 total fleet vehicles, only 410 are suitable for replacement with REFs. The remaining 170 vehicles include Police motorcycles, non-propelled equipment including trailers, and earth moving equipment for which no REF alternatives exist. Using the vehicle purchase projections above, 73% of the 410 vehicles with REF alternatives will be REF vehicles by December 2000. (Note: Even if all 410 vehicles were replaced with REF vehicles, this would only represent 71% of the total City fleet as defined above. Thus the 75% target for the indicator, as currently defined, is not attainable.)

Program and Policy Update

- **Big Blue Bus Service Improvement Plan (SIP)**

In an effort to improve service and increase ridership, the Transportation Department began developing the SIP in March 1996. The development process consisted of analyses of route-level performance data, on-board surveys of bus riders, input from Big Blue Bus staff, focus group surveys, and a series of public meetings to obtain feedback from Big Blue Bus riders and service area residents. The SIP was adopted by City Council in February 1997 and served as a blueprint for modifications to Big Blue Bus fixed route, TIDE and WISE paratransit services. Improvements made as a result of the 1997 SIP include improvements in service frequencies on weekdays, increases in weekend service on several routes, increased service hours, and expansion of the overall service area from 40 to 50 square miles. These improvements have contributed to an overall increase in bus ridership as well as reductions in overcrowding on several routes.

- **Installation of CNG Fueling Stations at City Yards**

In 1998 a CNG fueling facility was installed at the City Yards to provide fuel for City fleet vehicles. Prior to installation of the facility, all CNG fleet vehicles were refueled offsite at a Southern California Gas Company facility. The City Yards facility has 2 fast-fill and 34 slow-fill stations and dispenses approximately 12,000 equivalent gallons of CNG per month. Construction of the \$1 million facility was partially funded by a \$350,000 grant from the SCAQMD.

Accomplishments

- **Big Blue Bus Awards and Recognition**

In 1998 Santa Monica’s Big Blue Bus was ranked the number one transit system in the country, based on a comparative study conducted by University of North Carolina at Charlotte. The study rated urban transit systems in the United States in terms of overall cost-effective performance, based on 1996 data compiled and analyzed by UNC Charlotte’s Center for Interdisciplinary Transportation Studies. The study reviewed transit service levels, operating costs, fares, subsidies and ridership rates for 135 of the nation’s largest urban transit systems. The Big Blue Bus’ operating costs and fares were substantially lower than the national average yet achieved ridership rates that far exceeded the national average. In addition to this award, in 1997 Santa Monica’s Big Blue Bus won the Outstanding Achievement Award from the American Public Transit Association. The Big Blue Bus also won Outstanding Achievement Awards in 1987 and 1992.

- **City Employee Commute Reduction Program**

The Commute Reduction Program was developed to reduce the number of single passenger commute trips by City employees. The City’s goal for this program has been to maintain an AVR of 1.5 for all City worksites with over 100 employees. These include the Civic Center, the Transportation Yards, the City Yards and the Main Library. The program has been responsible for significant increases in the AVR of City employees since its inception in 1990.

City Employee AVR

	1990	1995	1996	1997	1998
Civic Center	1.16	1.89	1.90	1.84	1.84
Transportation Yards	1.10	1.46	1.62	1.74	1.69
City Yards	1.14	1.60	1.79	1.88	1.83
Main Library	N/A	1.77	1.66	1.77	1.64
City Average*	1.13	1.68	1.74	1.81	1.75

* For comparison, the Southern California regional average AVR is currently 1.27

Obstacles

- **REF Vehicle Availability**

Staff has found it difficult at times to find REF vehicles that meet the City's specifications and requirements, particularly for specialty vehicles and heavy equipment. This combined with long delivery timetables of 12 to 18 months or more have affected the city's ability to meet its REF vehicle purchasing targets.

Plans for the Future

- **Big Blue Bus Service Improvement Plan (SIP) Update**

In April 1999 the City Council adopted the Big Blue Bus SIP Update. The SIP Update was developed in a similar manner to the 1997 SIP, incorporating technical analyses of services as well as extensive community and staff input, and provides a schedule of recommended service improvements for FY 2000 – 2003. Planned improvements include changes in route alignments, service frequencies, vehicle types, and consideration of a community transit system of smaller capacity vehicles to serve primarily residential neighborhoods.

- **Construction of Liquid Natural Gas (LNG) Fueling Facility**

Planning for installation of a LNG Fueling Facility at the City's Transportation Yards to fuel the Big Blue Bus fleet is currently in the design phase. When completed, the facility will have two multi-purpose (LNG/diesel) fuel lanes with a capacity to fuel 220 LNG buses within an 8-hour period. The Big Blue Bus fixed-route fleet currently operates on diesel fuel, however all future vehicle replacements and purchases will be LNG-fueled. The design phase for the facility is scheduled for completion by December 1999 with construction set to begin in early 2000. The facility should be operational by late Fall 2000.

- **Downtown Transit Mall**

Construction of a Transit Mall is currently in the planning phase as part of a larger Santa Monica downtown improvement program. The Transit Mall will be located along Broadway and Santa Monica Boulevard in the downtown area and will include widened sidewalks, new paving, improved street lighting, sidewalk benches, new bus shelters, transit informational kiosks and bus priority lanes to ease traffic flows in the area. Construction on the Transit Mall is scheduled to begin in January 2000.

Recommendations

- 1) **City Fleet Vehicles** – The 75% target for this indicator is not attainable because of the way the City fleet and the indicator baseline are defined. It is recommended that the indicator and target be reviewed by Fleet Management staff to determine if a more accurate indicator and target can be developed. One possibility is to measure the amount of fuel used by the City fleet and set

a target for the amount of reduced-emission fuel used as a percentage of total fuel use. This would eliminate the ambiguities related to the number and types of vehicles in the fleet.

HAZARDOUS MATERIALS

Adopted Indicators and Targets

- Achieve a 10% reduction in the amount of hazardous waste generated by City operations by the year 2000, using 1996 figures as a baseline.
- Achieve a 10% reduction in the amount of hazardous materials purchased by the City by the year 2000, using 1998 figures as a baseline.
- Remediate and close 75% of all known underground storage tank (UST) sites requiring clean-up by the year 2000, using 1993 figures as a baseline.
- Prior to December 22, 1998 all publicly and privately owned USTs shall either be removed from the ground, upgraded or replace with systems in compliance with the new federal UST standards.

Progress Towards Goals

- **Hazardous Waste Generated by City Operations** – Data for this indicator will be available in October 1999. Environmental Programs Division staff are in the process of creating a database to track in-house generation and disposal of hazardous waste. The database will provide information on waste source, type, quantity, disposal method, and disposal cost for all hazardous waste generated by City operations since January 1996.
- **Hazardous Materials Purchases** – Because the City's financial management computer system was previously unable to provide a detailed report of commodities purchased by the City, data to evaluate progress for this indicator is not available. However, in April 1998 the City purchased a new computerized financial management system called STARS 2000, which will be able to provide this information, using the nationally standardized National Institute of Government Purchasers (NIGP) commodity code system. The STARS 2000 purchasing module came online in July 1999, and data will be available to track this indicator, as well as purchases of other environmentally-preferable products, for fiscal year 1999-2000.
- **UST Sites Requiring Clean-up** – This indicator calls for a 75% reduction in the number of UST sites requiring cleanup, from 25 in 1993 to 6 by the year 2000. However, it was noted in the December 1996 Sustainable City Progress Report that attainment of the 75% reduction goal is somewhat outside of the City's control because of the relatively slow and variable pace of site remediation and because new underground tank leaks may occur at any time, increasing the number of sites requiring cleanup. The baseline of 25 refers to sites that are under the regulatory jurisdiction of the City of Santa Monica. These are

primarily sites involving soil contamination only. The baseline does not include sites requiring cleanup in Santa Monica that are under the jurisdiction of the Regional Water Quality Control Board (primarily sites with both soil and groundwater contamination).

In 1995, the number of UST sites under City jurisdiction requiring cleanup was 18. Of those 18 active sites, six were in the process of being remediated, five were undergoing investigation to determine the extent of contamination, and seven were awaiting investigation. As of May 1999, the number of UST sites under City jurisdiction requiring cleanup was 21. Of those, three are in the process of being remediated, eight are undergoing investigation, and ten are awaiting investigation. In addition to the sites under City jurisdiction, there are currently ten active UST sites in Santa Monica under jurisdiction of the Regional Water Quality Control Board. Locations of all active UST sites as well as UST sites that have been closed between January 1, 1993 and May 1999 are shown on Figure 1.

Active UST Sites (City Jurisdiction)

	1993	1995	1999
Total	25	18	21
• Remediation	N/A	6	3
• Investigation	N/A	5	8
• Investigation Pending	N/A	7	10

Since 1995, eight UST sites have been satisfactorily remediated and closed, however eleven new contaminated sites have been identified and added to the list. The increase in the number of contaminated sites requiring cleanup between 1995 and 1999 is primarily due to contamination discovered at sites during the completion of upgrades to comply with new Federal UST standards (see below). Environmental Programs Division staff feel that once all UST sites in the city meet the new Federal standards, the likelihood of new UST leaks should decrease.

- **USTs in Compliance with Federal Standards** – On December 22, 1998 new US EPA and State Water Resources Control Board requirements for USTs took effect. To comply with the requirements, site owners must, at a minimum, provide secondary containment for all non-motor vehicle fuel tanks, spill protection and overfill prevention systems for all tanks, and corrosion protection for all tanks and piping. If site owners decide not to upgrade their UST system to meet these requirements they must remove the tanks from the ground. The adopted target for this indicator is that 100% of publicly and privately owned USTs be in compliance with the new standards by December 22, 1998.

There are currently 146 USTs located in Santa Monica. The City owns eighteen of those tanks, and the remainder are privately owned. As of

September 1999, 139 of the 146 tanks or 95% were in compliance with the Federal standards and the remaining seven required modification or removal. Of the seven remaining tanks not meeting the new standards, all have received temporary closure and the owners of five have submitted applications for upgrade or removal activities. Enforcement action is being pursued against the owner of the two remaining tanks. Sixteen of the eighteen City-owned tanks are in compliance with the regulations and the remaining two have been temporarily closed and will be removed from the ground this year.

Program and Policy Update

Listed below are updates of ongoing and newly established (since December 1996) City programs and policies designed to reduce environmental and human health impacts of hazardous materials and hazardous waste.

- **Residential Household Hazardous Waste Collection** – In 1988 the City opened a permanent collection facility for household hazardous waste (HHW) at the City Yards. This replaced annual HHW round-ups that began in 1984. The facility accepts HHW such as paint, cleaning products and pesticides at no charge to Santa Monica residents. Funding for operation of the facility and waste disposal comes from monthly City refuse fees. In 1998 Environmental Programs Division staff completed a Needs Assessment for the HHW collection facility in an effort to improve customer service. Based on the findings of the Needs Assessment the following improvements have been made:

- Extended hours of operation
- Improved directional signage
- Improved facility appearance
- Conducted service enforcement workshop for facility staff to improve customer service
- Began ongoing customer satisfaction survey and created database to track results. Set initial target of 80% of participants rating service “good” or “excellent”
- Developed data base to manage and track facility operations

In addition, staff plan to expand the functionality of the facility by providing customers with more educational information about hazardous materials, hazardous waste and alternative products when they come to the facility to drop off their waste. Staff are also evaluating ways to maximize the recyclability and reuse of the hazardous wastes brought in for disposal. For example, latex paint, which was previously used as a fuel for incineration, is now being more beneficially recycled into masonry blocks for construction. In fiscal year 1997-98, 42% of the collected HHW (by weight) was recycled, 15% was reused, 39% was used as a fuel for incineration, 1% was neutralized and 3% was disposed of in a landfill.

- **Toxics-Use Reduction Program** – The Toxics-Use Reduction (TUR) Program is an ongoing program initiated in 1993 to identify and reduce the amounts of toxic products used in all areas of City operations. To date the program has resulted in significant reductions in the use of hazardous materials in the areas of custodial cleaning products, fleet maintenance, public facilities maintenance (painting, plumbing, and woodworking) printing, and pest management.
- **TUR / Pest Management Update** – The City's Integrated Pest Management (IPM) program was begun in 1996 and seeks to minimize the application of pesticides by focusing on long-term mechanical and administrative preventative measures to control pests. Phase 1 of the program was implemented in November 1996 and focused on indoor and structural pests. As part of this phase, the City hired an IPM contractor to provide pest control services for all City facilities. In addition, City staff members were identified and trained as “pest managers” who are responsible for implementing some of the IPM practices (see Accomplishments below). Phase 2 began in 1998 and focused on landscape pests. This involved the elimination of broadcast applications of herbicides in all City parks and sports fields, and the establishment of pilot pesticide-free zones in certain City right-of-ways and parks to control landscape pests. Based on results of the pilot, additional zones will likely be created throughout the city in late 1999. Phase 3 of the program began in June 1999 following completion of an independent audit and evaluation of the current IPM program. Phase 3 will focus on implementing recommendations from the evaluation and will expand the program to address the control of outdoor pests and the implementation of IPM in facilities leased by the City.
- **TUR / Fleet Maintenance Update** – The following progress has been made in reducing the use of toxic and hazardous materials in the Fleet Maintenance Division:
 - Re-refined oil has been used on a limited basis in the City's fleet vehicles since 1993 and in all fleet vehicles since 1996.
 - Propylene glycol antifreeze (a less toxic alternative to conventional ethylene glycol antifreeze) was introduced on a pilot basis in fleet vehicles in 1995. By 1997 propylene glycol antifreeze was being used in all fleet vehicles.
 - Fleet Maintenance staff have eliminated the use of aerosol products in all but one of their maintenance procedures.
 - In 1998 all solvent-based parts washers used by the Fleet Maintenance Division were replaced with less-hazardous aqueous-based parts washers.
 - All used oil filters are dismantled rather than crushed to permit reconditioning and reuse rather than downcycling of the recycled scrap materials.
- **Waste Oil Recycling Program** – Since 1982 the City has provided curbside collection of waste oil and oil filters for Santa Monica residents. In 1994 the City expanded this program by providing reusable oil collection containers free

to residents. The program further expanded in 1998 by providing four used-oil collection centers at the Santa Monica Airport to provide airport tenants with a place to drop off their waste oil and oil filters for recycling. Installation of these collection centers was accompanied by a variety of educational materials and presentations to airport tenants to encourage their use. This program was funded by a \$70,000 grant from the California Integrated Waste Management Board.

- **Toxic and Hazardous Household Products Labeling Ordinance** – To raise the awareness of consumers in Santa Monica about the environmental and economic impacts of using products containing hazardous ingredients, the City passed the Toxic and Hazardous Household Products Labeling Ordinance (also known as the Consumer Awareness Labeling Ordinance) in 1994. This ordinance requires the placing of signs on store shelves containing toxic or hazardous substances for sale, including automotive products, paint products, pesticide products, and pool or spa maintenance chemicals. In addition, retailers must display consumer information pamphlets near the products and make retail staff aware of the program. Both the signs and the pamphlets are designed to educate consumers about the toxic or hazardous nature of the products, the proper use of these products, instructions for the proper disposal of these products, and the identification and availability of more environmentally preferable product alternatives. Following two years of implementation, a telephone survey and focus group evaluation was conducted in late 1996 to assess the effectiveness of the ordinance. Results of the evaluation led to a redesign of in-store educational materials and the production of a retail staff training video (funded by an \$80,000 grant from the California Integrated Waste Management Board).
- **Certified Unified Program Agency (CUPA)** – In 1993 the State of California passed legislation requiring that one agency in each City or County act as a CUPA to consolidate and coordinate hazardous materials management regulatory programs. On July 1, 1997 the City of Santa Monica was approved by the California Environmental Protection Agency to be a CUPA. As a CUPA the City is required to consolidate, coordinate and make consistent the administrative requirements, permits, inspection and enforcement activities and fees of six hazardous materials / waste regulatory programs. These are referred to as program elements and include 1) Community Right To Know, 2) Uniform Fire Code Business Plan, 3) Hazardous Waste Generation, 4) Accidental Release Prevention, 5) Above Ground Storage Tanks, and 6) Underground Storage Tanks. As part of the program the City has issued CUPA permits to all businesses regulated under one or more of the program elements and has developed a consolidated billing system.

Accomplishments

Integrated Pest Management Program Accomplishments – Phase 1 of the City's IPM program achieved the following results after the first full year of program implementation:

- Achieved excellent control of pests including rats, mice, cockroaches and ants in and around all City owned buildings and structures. Number of pest related complaints received by facilities managers significantly decreased.
- Achieved a reduction in the hazard associated with pesticide applications by eliminating the use of spray pesticides in all cases except to control termites in wall/ceiling voids.
- Received excellent service from pest control contractor based on results of a survey of pest managers.
- Reduced cost of pest control services by 30%.
- Recipient of 1998 IPM Innovator Award from the California Department of Pesticide regulation (see below).

Awards and Recognition - Since publication of the previous Sustainable City Progress Report in December 1996, the City has received the following awards and recognition for innovation and programmatic excellence in the areas of household hazardous waste, source reduction, pest management and environmentally preferable purchasing:

- 1998 Program Excellence Award for Household Hazardous Waste and Used Oil Programs. Awarded by the California Integrated Waste Management Board and the California Department of Toxic Substances Control.
- 1998 Program Excellence Award for Household Hazardous Waste and Source Reduction Programs. Awarded by the North American Hazardous Materials Management Association.
- 1998 Integrated Pest Management Innovator Award. Awarded by the California Department of Pesticide Regulation.
- 1997 and 1998 Certificate of Environmental Achievement for Toxics Use Reduction. Awarded by the Renew America National Awards Council for Environmental Sustainability.
- 1998 Publication of The City of Santa Monica's Environmental Purchasing – A Case Study. Published by the Environmental Protection Agency.

Obstacles

Listed below are obstacles identified in the December 1996 Sustainable City Progress Report that have not yet been successfully addressed:

- **Inconsistent Availability of Alternative Cleaning Products in the City Warehouse**

All City janitorial staff have been directed to obtain their cleaning products from the City warehouse, which stocks alternative cleaning products exclusively. However, staff have reported that the warehouse often does not have adequate stock on hand, causing the janitors to purchase conventional, toxic cleaning products from outside vendors. These availability problems have lead some janitors to avoid the warehouse altogether and purchase products from outside vendors that haven't been approved for use as part of the Toxics Use Reduction program. This obstacle is currently being addressed through management changes at the warehouse and the establishment of a computerized inventory system, which came online in July 1999.

- **Lack of Participation in the Conditionally Exempt Small Quantity Generator (CESQG) Program**

Very few businesses have participated in the CESQG program since it began in 1994. This program allows commercial hazardous waste generators in Santa Monica, Beverly Hills, West Hollywood and Culver City to deposit their hazardous waste at the HHW Collection Facility at prices equal to the City's cost for disposal or recycling. Prior to the initiation of this program small quantity generators wishing to properly manage hazardous waste had to hire commercial waste haulers, at a much greater expense, for disposal of even the smallest amounts of waste. In FY 1995-96, only 21 businesses participated in the program and throughout 1997 and 1998 participation remained low. It is likely that this is due to a general lack of awareness about the program and about the true costs of hazardous waste disposal.

- **Inadequate Training of Fire Department Inspectors**

Fire Department inspectors visit Santa Monica businesses that store and use hazardous materials to verify volumes and types of material stored as part of the Community Right to Know program as well to enforce fire code regulations pertaining to hazardous materials storage. Until recently, these inspectors have not had sufficient training or expertise to adequately conduct these inspections. The inspectors are now periodically receiving hazardous materials training in an effort to remedy this situation.

- **Lack of Enforcement of Ozone-Depleting Compound Ordinance**

Currently the Environmental Programs Division has one staff member who conducts hazardous materials-related inspections as part of the Consumer Awareness Ordinance. This staff person has not been trained to enforce the Ozone-Depleting Compound (ODC) Ordinance and is unable to commit

sufficient time to conduct full ODC inspections. Although the ordinance has been largely pre-empted by subsequent Air Quality Management District regulations, there remain select sections of the City's ordinance which are not covered by AQMD regulations and remain unenforced.

Plans for the Future

- **Underground Storage Tank Program Performance Evaluation** – In May 1999, Environmental Programs Division staff began an evaluation of the program to improve performance and efficiency in all aspects of UST regulation. As part of this evaluation, it is anticipated that the UST Ordinance will be amended to ensure the highest degree of safeguarding against future UST leaks. The amended ordinance will go beyond current State and Federal standards and require, at a minimum, secondary containment for tanks, piping, turbine and fill port sumps, 15 gallon overspill containment devices on all product tanks, and continuous monitoring of all secondary containment. Under the current UST ordinance these requirements do not apply to USTs containing motor vehicle fuel. The evaluation will be completed and recommendations implemented by the end of FY 1999-2000. It is anticipated that completion of the performance evaluation will result in shorter turn around times and reduce paperwork for permitting installation and removal of USTs.
- **Conditionally Exempt Small Quantity Generator (CESQG) Program** – Environmental Programs Division staff plan to increase outreach regarding this program through business and trade associations in FY 1999-2000 and possibly expand the service to include pick-up in an effort to increase participation in the program.
- **TUR / Fleet** – Environmental Programs Division staff plan to work with the Fleet Maintenance Division in FY 1999-2000 to pilot the use of biodegradable hydraulic oil in fleet vehicles and equipment.
- **Re-refined Oil** – In June 1999 the Environmental Programs Division began a pilot promotion to increase demand and availability of re-refined oil to consumers. The promotion involved distribution of a \$5 off coupon for the purchase of re-refined oil and educational materials at local oil change facilities. Based on the success of this pilot promotion, it will likely be extended throughout the year.
- **Environmental Education** – Environmental Programs Division staff are currently developing an Environmental Services Directory for distribution to local residents and businesses. The directory will provide a comprehensive listing of information and resources on all environmental services provided by the City. The directory is scheduled to be completed by Fall 1999.

- **Toxic and Hazardous Household Products Labeling Ordinance** – In FY 1999-2000 Environmental Programs Division staff plan to implement an in-store training program at stores affected by the ordinance to increase the awareness among retail staff about the ordinance goals. EPD staff also plan to work with local retail outlets to increase the availability of alternatives to hazardous chemical products.
- **Best Management Practices (BMPs) for Handling Lead-Based Paint** – Environmental Programs Division staff are currently developing protocols related to lead-based paints to be used by all outside contractors conducting demolition or renovation of municipal facilities. During FY 1999-2000 Environmental Programs and Public Facilities Maintenance staff will be developing BMP protocols for all City employees whose work potentially disturbs painted surfaces. These protocols follow a 1998 training workshop for Public Facilities Maintenance staff on lead-based paint BMPs.

Recommendations

- 1.) Because the city currently doesn't have the capability to track its purchases of hazardous materials, it is recommended that the baseline for the indicator tracking City purchases of hazardous materials be developed in 2000 when one year's worth of purchasing data will be available. A target for the indicator should be developed for the year 2010 following analysis of the baseline data and evaluation of operations areas where reductions can be made.
- 2.) The indicator tracking UST sites requiring cleanup calls for a 75% reduction, from 25 sites in 1993 to 6 by the year 2000. However, it was previously noted that attainment of this goal is outside of the City's control because of the relatively slow and variable pace of site remediation and because new underground tank leaks may occur at any time, increasing the number of sites requiring cleanup. It is recommended that the target for this indicator be changed as follows: ***Beginning July 1, 1999 remediate and close at least 75% of known underground storage tank sites requiring cleanup (under City jurisdiction) within 24 months from the discovery date of the release.***
- 3.) Fire inspectors should receive adequate and ongoing hazardous materials training in order to effectively carry out their Community Right to Know and fire code inspections.
- 4.) The Environmental Programs Division should identify needs and resources required in order to provide enforcement of the City's Ozone-Depleting Compound Ordinance.

STORMWATER, WASTEWATER AND SANTA MONICA BAY

Adopted Indicators and Targets

- Achieve 100% diversion or treatment of dry weather runoff for all Santa Monica stormdrains between March and November by the year 2000.
- Using 1990 figures as a baseline, reduce city-wide wastewater flows by 15% by the year 2000.

Progress Towards Goals

• **Stormwater and Urban Runoff**

In 1999, approximately 92% of Santa Monica's dry weather runoff was diverted to the sewer system between May and October.

There are three major stormdrain outfalls in Santa Monica that discharge dry weather runoff to the Santa Monica Bay and two minor outfalls. The major outfalls are Pico-Kenter, the Santa Monica Pier outfall, and Ashland Avenue; the minor ones are Montana and Wilshire outfalls, which exit on the beach, but are generally only trickles. However, additional runoff occurs from the northern, eastern and southern sections of the city, exiting to the ocean via outfalls in the City of Los Angeles: Santa Monica Canyon, Ballona Creek and Rose Avenue. To achieve the adopted indicator target, all of the runoff from the three major Santa Monica outfalls would have to be treated or diverted to the sewer system between the months of March and November each year. Currently, flows from the Pico-Kenter and Pier outfalls, which carry approximately 92% of dry weather flow in Santa Monica, are diverted each year between the months of May and October under agreement with the City of Los Angeles. The City has been unable to meet its diversion target entirely because, under this agreement, the City is prohibited from diverting urban runoff flows to the sewer between November 1 and April 30 each year.

Flows from the Ashland-Rose Avenues outfalls are expected to be diverted to the City of LA's Hyperion wastewater treatment facility in mid-2000. In addition, the City's Santa Monica Urban Runoff Recycling Facility (SMURRF) is scheduled to begin operation in June 2000 (see below). The SMURRF will treat dry weather flow from the Pico-Kenter and Pier stormdrains year-round and reuse this water for landscape irrigation and indoor toilet and urinal flushing. Once these two projects have been completed, almost 100% of Santa Monica's dry weather runoff will receive treatment of some type: the 92% at the SMURRF year-round and almost 8% from the Ashland-Rose combination between April 15 and October 15.

- **Wastewater**

Citywide Wastewater Flows

	1995	1996	1997	1998
Average daily wastewater flows (mgd)	8.85	8.97	8.98	9.05*
% reduction relative to 1990	14.9%	13.8%	13.7%	13%

*estimated

Estimated* Wastewater Generation by Sector

	1995	1996	1997	1998
Single Family Residential	15.5%	14.7%	16.8%	15.9%
Multi-Family Residential	51.9%	49.1%	48.2%	49.2%
Commercial /Industrial	32.6%	36.2%	35%	34.9%

*Percentages calculated for each sector by multiplying water use data by a discharge factor, which represents an estimate of the portion of total water used that is discharged to the sewage system. The discharge factors were developed as part of the 1996 Water and Wastewater Rate Study and are as follows: Single Family = 51%, Multi Family = 90%, and non-residential = 89%.

The Wastewater indicator goal calls for a 15% reduction in wastewater flow, from a baseline of 10.4 million gallons per day (mgd) in 1990 to the target of 8.8 mgd in 2000. The City surpassed this target with a 17% reduction to 8.6 mgd in 1991. In 1993 the flows averaged 8.5 mgd and in 1994 dropped again to 8.3 mgd, representing a 20.2% reduction from the baseline. This trend reversed in 1995 and wastewater flows have been slowly increasing each year since. Based on estimated figures from 1998, average daily flows are now about 13% below the 1990 baseline.

Reasons for the slow increase are likely due to increased residential water use, increased commercial and residential development, higher occupancy rates in local hotels, and higher occupancy rates in commercial spaces in Santa Monica due to the strong economy. These conditions contribute to higher daytime populations in the city and new sewer connections, which in turn lead to increased water use and wastewater generation in each sector.

Program and Policy Update

Listed below are program and policy measures intended to reduce pollution impacts to Santa Monica Bay that have been initiated, completed or significantly progressed since December 1996:

- **Santa Monica Urban Runoff Reclamation Facility (SMURRF)** – As mentioned above, the primary function of this facility will be to treat low flow runoff from the Pico-Kenter and Pier stormdrains on a year-round basis. The facility will filter and disinfect up to 500,000 gpd of urban runoff so that it may be reused for various applications including irrigation and dual plumbing. City irrigation sites currently planned include Woodlawn Cemetery, the Olympic Boulevard median, Memorial Park, the Civic Center, and Palisades Park.

CALTRANS has also expressed interest in using the treated water for landscaping along the Santa Monica Freeway. The facility will be located adjacent to the Moss Avenue Sewage Pumping Station just south of the Pier Bridge. It will include a visitor's center and educational exhibits to raise awareness of runoff pollution and present pollution prevention options. Construction began in May 1999 and the facility is scheduled to be operational in June 2000.

- **Model Program Compliance** – In July 1996 the Los Angeles County Regional Water Quality Control Board adopted a comprehensive revision of the National Pollutant Discharge Elimination System (NPDES) permit for Los Angeles County. The revised permit is more comprehensive than its predecessor and requires all jurisdictions within the county to develop an implementation plan addressing baseline performance targets outlined in five model programs. The model programs address Public Agency Compliance, Development and Planning, Construction, Public Education and Illicit Discharges. The City is currently preparing its implementation plan for submittal in the spring of 2000. Santa Monica is currently implementing a vast majority of the tasks outlined in the model programs and will likely only need to enhance or modify its current policies and practices to comply with the new permit.
- **Catch Basin Pilot Study** – In 1996 Santa Monica received funding from the Santa Monica Bay Restoration Project to conduct this study which involved the investigation of inserts for filtering, collecting and containing pollutants in catch basins. The study was completed in September 1998 and findings indicated that most commercially available catch basin inserts are not effective. However, as part of the study, prototype catch basin inserts were developed by researchers at UCLA. These inserts effectively trapped approximately 70% to 90% of pollutants such as oil, grease and fine particles entering catch basins and were relatively inexpensive to construct, install and maintain. They will be further evaluated in catch basins throughout the City as part of another study scheduled to begin in 1999 (See [Plans for the Future](#) below).
- **StormTreat Urban Runoff Treatment System Pilot Project** – In November 1997 the City received LA County Proposition A funding to purchase and install eight StormTreat Urban Runoff Treatment Systems at City facilities. The StormTreat system is a self-contained urban runoff treatment system that incorporates sedimentation, filtration, and treatment with vegetation within modular units. To date, four StormTreat units have been installed at Bergamot Station and four units have been installed at the City's Beach Maintenance Facility. City staff currently oversee the operation and monitoring of the systems to test the removal efficiencies for a wide range of pollutants found in urban runoff.
- **Urban Runoff Public Education** – Since 1996 the City has significantly increased its public education efforts to raise awareness about urban runoff.

In 1997 the City introduced the Pollution Prevention Hotline (458-8945), a menu driven system that routes pollution-related complaints and reports to the appropriate City office for response. The hotline number was printed on tiles with the message “No Dumping, Drains to the Bay” which were attached to all 824 City-owned catch basins in late 1997 and early 1998. The hotline has also been advertised in an ongoing public service announcement on City TV, on register receipts at grocery stores throughout Santa Monica, and in the Seascape and Wavelengths newsletters. Additional urban runoff pollution prevention educational messages will be incorporated into the SMURRF and in a Transit Mall planned for downtown Santa Monica. In 1998 the City’s Environmental and Public Works Management Department co-sponsored EarthFest, a county-wide Earth day celebration, and BayKeepers Bay Walk and Kelp Fest. The City has committed to provide funding for these events again in 1999.

- **Industrial Waste Public Education** – In 1998, Industrial Waste section staff began an outreach program to educate Santa Monica automotive repair and manufacturing facilities about Air Quality Management District Rule 1171. This rule, which went into effect January 1, 1999, requires these facilities to replace solvents with water-based cleaning systems in an effort to reduce air emissions. This outreach program included presentation of a workshop on water-based cleaners for auto maintenance employees, development and distribution of educational brochures, individual outreach during site inspections, and facilitation of pilot studies at four Santa Monica auto repair companies. In September 1998, Industrial Waste inspectors began an educational site visit program covering all permitted facilities, restaurants and mini-markets that sell prepared food. The focus of this program is to raise awareness about urban runoff issues and is required as part of the City’s compliance with the new Los Angeles County NPDES Permit. As part of this program, inspectors conduct complete stormwater inspections during site visits and distribute a variety of urban runoff educational materials.

Obstacles

- **Enforcement of Urban Runoff Ordinance** – The 1996 Sustainable City Progress Report identified implementation and enforcement of the Urban Runoff Ordinance as significant obstacles. Since that time, the implementation issues that were identified have been addressed. Runoff calculations have been simplified and standardized, urban runoff worksheets have been developed to track compliance, and a database for compiling data from urban runoff mitigation plans is being developed. Enforcement of the ordinance, however, continues to be a problem. In 1996 field inspections were not taking place during construction to ensure compliance with terms of the ordinance. Since that time a public works inspector has begun conducting field inspections, however he is unable to complete all of the inspections required.

To overcome this obstacle, the City's Stormwater Management Program Coordinator began conducting all field inspections in September 1999 to monitor compliance with the ordinance.

- **Urban Runoff Ordinance Technical Compliance Issues** - Staff have identified that most developers constructing lot-line to lot-line developments in commercial districts have been technically complying with the ordinance, however their compliance isn't reducing runoff to the bay. Because these types of developments have little or no landscaped area they are limited in the types of runoff reduction measures they can incorporate in their projects, so they typically install holding tanks onsite. These tanks capture and retain onsite the required amounts of runoff during storm events, however the captured water is usually discharged to the street or stormdrain following the event, thus defeating the purpose of the measure. In cases such as this where no practical solution exists to comply with the ordinance, amending the ordinance to allow developers to pay in lieu fees would be more practical.

Plans for the Future

- **Stormwater – Catch Basin Inserts**

The City has received funding to install a variety of inserts designed to intercept oil, grease and trash at the catch basins and keep it from entering the stormdrains. These inserts include screens to cover catch basin openings, and filters and baskets installed within the basins. Construction and installation of the inserts in approximately 400 catch basins is scheduled to begin during late 1999 or early 2000.

- **Continuous Deflection Separation (CDS) Units**

The City recently received LA County Proposition A funds to purchase and install three CDS units. When urban runoff passes through these units a mechanical process removes 100% of all floatable material and up to 90% of all material larger than .06 inches. A 10-foot diameter unit will be installed adjacent to the SMURRF to remove floatable materials from the runoff prior to treatment. Two smaller CDS units will also be installed at the City Yards to treat runoff generated onsite. Installation of these units is scheduled to be completed by December 1999.

- **Industrial Waste – Certificate of Recognition Program**

In June 1999 the City's Industrial Waste section began developing this program to provide recognition to businesses in Santa Monica that have achieved excellent compliance with pretreatment and stormwater regulations. It is anticipated that the program will be launched by December 1999.

Recommendations

- 1.) Staff should investigate the possibility of amending the Urban Runoff Ordinance to allow developers to pay an in lieu fee if reasonable solutions do not exist to permanently reduce runoff from the site.

- 2.) The stormwater indicator target currently requires the City to achieve a 100% diversion or treatment of dry weather runoff from March through November by the year 2000. This cannot be met because Santa Monica's agreement with the City of Los Angeles prohibits diversion of urban runoff to the sewer system between November 1 and April 30. It is recommended that City staff work to amend the agreement with the City of Los Angeles to allow dry weather diversion to the sewer system between November 1 and April 30.

EDUCATION

Adopted Indicator and Target

Create and implement a Sustainable Schools Program in the Santa Monica-Malibu Unified School District (SMMUSD) by the year 2000

Progress Towards Goal

Since December 1996, there has been no progress towards the achievement of this goal. A Sustainable Schools Program proposal and format was developed in 1996 by City staff and members of the Task Force on the Environment, with input from SMMUSD staff. Funding for the first year of the proposal was included in the City's FY 1996 -1997 budget request but it was turned down by City Council. In its place, Council provided \$250,000 to the District to fund one or more Council-specified items, one of them being the Sustainable Schools Program. District staff subsequently prepared proposals to the School Board for each of the funding options specified by Council, but the School Board did not select the Sustainable Schools Program as one of the programs to be funded.

In the past two years there has been no additional effort on the part of City Staff or the Task Force on the Environment to encourage the adoption of a comprehensive Sustainable Schools Program at the District.

Program and Policy Update

The following environmental education efforts have been implemented, adopted or have significantly progressed since December 1996:

- **Farmers' Market Fruit and Salad Bar Program** - This program began in 1997 and is a collaborative effort between the Farmers' Market, City of Santa Monica, SMMUSD Food Services Department and the UCLA-Occidental Community Food Security Project. It is currently in place at six of the eight Santa Monica public elementary schools. As part of the program, fruits and vegetables are purchased by SMMUSD twice a week from the Wednesday and Saturday markets at a reduced cost. The produce is prepared daily by parent volunteers for use in salad bars in SMMUSD elementary schools. In addition, the salad bar is tied into gardening and composting activities at each school and is integrated into classroom curriculum about nutrition, health and the environment.
- **School Gardening Program** - This program was developed as a partnership between the City, the School District and Common Ground (a non-profit organization affiliated with the University of California Cooperative Extension) to construct educational gardens at Santa Monica public schools. The program is funded by the City with day to day operation and volunteer coordination being provided by Common Ground. SMMUSD provides office space for Common

Ground's program manager, administrative assistance and the resources of their maintenance staff. The program began in 1995 and by December 1996 had resulted in the construction or expansion of gardens at Edison, Franklin, McKinley, Roosevelt, and Will Rogers Elementary Schools and Lincoln Middle School. Since that time additional gardens have been constructed at John Adams Middle School, Grant, SMASH and John Muir Elementary Schools, and Santa Monica High School. Recent construction of a green house at Santa Monica High School will help to link the gardens together by providing seedlings for all of the other gardens in the District. Additional plans include student field trips to visit gardens at other schools in the District.

- **Santa Monica Festival Environmental Art Projects** - Prior to the 1997 and 1998 Santa Monica Festivals, City staff from the Environmental Programs Division gave presentations on a variety of environmental topics including air quality, water quality, urban runoff, and recycling, to Santa Monica students in elementary, middle and high schools. Following the presentations, artists worked with the students to create artworks related to the environmental topics. The artworks displayed during the opening procession of the Santa Monica Festival and were put on public exhibition for three months at the Santa Monica Place Community Focus Gallery.
- **Re-Refined Oil Presentations** - City Environmental Programs Division staff conducts ongoing presentations on oil recycling and re-refined oil at auto shop classes at local high schools and at Santa Monica College. In addition, the City has contracted with the California Conservation Corps to deliver similar presentations to 9th grade science classes in Santa Monica. The Environmental Programs Division has also contracted with the Latino Resource Organization to conduct outreach to Santa Monica's Latino community regarding hazardous materials, waste oil recycling and the use of re-refined oil.
- **Environmental Education Presentations** - Environmental Programs Division staff regularly give presentations on environmental topics to community groups, including neighborhood organizations and senior citizens groups, and distribute information at a variety of community events.
- **Used Oil Recycling Educational Display** - In 1998, the Environmental Programs Division funded the design and installation of an interactive educational display on used oil recycling and health of the bay at the UCLA Ocean Discovery Center.
- **SMMUSD Environmental Education Policy** - In May 1998 the Santa Monica-Malibu Board of Education adopted an Environmental Education Policy encouraging the teaching of environmental curricula at all grade levels within the District.

- **Sustainable City Program Outreach Strategy** – In August 1998 the Environmental Programs Division contracted with public relations firm Rogers and Associates to develop a comprehensive public outreach strategy. The outreach strategy is intended to help increase community awareness of the Sustainable City Program goals and increase participation in each of its component programs. The outreach strategy was completed in September 1999 and implementation is scheduled to begin in October 1999.
- **Green Team Program** – In March 1998 the Environmental Programs Division contracted with the non-profit Bay Area Green Team Project to develop and implement a neighborhood environmental outreach program on a pilot basis. The Green Team program is intended to raise public awareness and increase participation among Santa Monica residents in meeting the Sustainable City Program goals. Green Teams are groups of six to eight neighbors who meet regularly over a three-month period to learn how to reduce environmental impacts and save money through actions taken at their homes. The first Green Teams began meeting in January 1999 and it is estimated that 25 to 40 teams will have formed by the end of 1999. This pilot program may be expanded in future years if it proves to be successful.
- **Santa Monica College Environmental Education Center** - In 1998 the SMC administration designated an existing campus building to permanently house an Environmental Education Center. SMC faculty, students and staff are currently working to identify funding sources to develop and staff the Center which, when completed, will serve as a central repository of environmental resources for students, residents and businesses.

Obstacles

The primary obstacles to the successful implementation of a Sustainable Schools Program in the SMMUSD are listed below:

- 1.) City Council has been unwilling to earmark funds to the SMMUSD for the purpose of creating this program.
- 2.) It is not a high priority among District staff and School Board members in the face of other programs competing for funding and staffing.
- 3.) Availability of funding.

Obstacles 2 and 3 were also identified in the December 1996 Sustainable City Progress Report. To address these obstacles the Progress Report recommended that City Staff and Task Force members work with the District administration and staff to revise the program proposal, based on input from teachers, administrative staff and School Board members, and to identify funding for the program. In addition, it was recommended that Task Force members and

City staff should work to educate School Board members, City Council members and District staff about the potential environmental and economic benefits of the program. To date, a coordinated effort to implement these recommendations and address these obstacles has not been undertaken.

Plans for the Future

- **Green Map Project** – In September 1999 the Environmental Programs Division contracted with a consultant firm to develop GIS-based Green Maps of the Santa Monica area and the Ballona watershed. The maps will provide information on environmental resources, notable ecological features, and “green” businesses. Research for the maps will be conducted by students from Santa Monica College, local middle schools and Santa Monica High School as part of integrated curriculum developed by the consultant in partnership with local instructors. The completed maps will be used as environmental educational and outreach tools for students, residents, businesses and visitors to Santa Monica.

Recommendations

- 1.) Because City Council has been unwilling to earmark funds to the SMMUSD to create a Sustainable Schools Program, it is recommended that funds be allocated to create a City staff position in the Environmental and Public Works Management Department to work full time with the School District to develop and implement a program.
- 2.) City staff and Task Force members should work to educate School Board members, City Council members and District staff about the potential environmental and economic benefits of implementing a Sustainable Schools Program.

HOUSING

Adopted Indicator and Target

The Sustainable City Program indicator target for affordable housing originally called for an increase of 750 deed-restricted affordable housing units in Santa Monica by the year 2000. The 1990 baseline of 1172 units presented in the 1994 Sustainable City Program document refers to the number of *deed-restricted, publicly assisted* affordable housing units in the city at that time. That baseline figure does not include the number of privately developed deed-restricted units because an inventory of those units had not yet been completed. Because the existing baseline for this indicator does not accurately reflect the total number of deed-restricted units in the city, the December 1996 Sustainable City Progress Report recommended that a new baseline and target be developed upon completion of the inventory being conducted as part of the 1998-2003 Housing Element Update, which was adopted by City Council in April 1998.

The new baselines and targets for this indicator are as follows:

	Baseline (Oct 1996)	Target (June 2003)
Publicly Assisted Units	1453	1903 (450 additional units)
Privately Developed Units	643	928 (285 additional units)
Totals	2096	2831 (735 additional units)

These targets are consistent with the targets adopted by the City Council in the 1998-2003 Housing Element Update

Progress Towards Goals

Affordable Housing Units in Santa Monica

	1990	1996	1997	1998
Publicly Assisted Units	1172	1453	1603	1725
Privately Developed Units	N/A	643	652	661
Totals	N/A	2096	2255	2368

As the above figures indicate, at least 178 publicly assisted units and 267 privately developed units must be constructed between December 1998 and December 2003 in order to meet the City's targets. Based on recent affordable housing production rates and new programs and policies intended to increase the development of new affordable housing, it is likely that the target for publicly assisted units will be met. However, due to recent changes in the Proposition R /

Inclusionary Housing Program (see Program and Policy Update below) the target for privately developed units will be more difficult to achieve.

Program and Policy Update

Listed below are updates of ongoing and notable newly established (since December 1996) City programs and policies related to the Housing indicator targets (Additional information on new and planned housing programs can be found in the 1998-2003 Housing Element Update).

- **Proposition R / Inclusionary Housing Program** - In November 1990, Santa Monica voters approved Proposition R requiring that 30% of all new multi-family construction of two or more units (on an annual basis) be affordable to low- and moderate-income households.

To implement Proposition R, the City Council adopted Ordinance 1615 in March 1992 establishing detailed regulations for the City's Inclusionary Housing Program. The Inclusionary Housing Program required all multi-family residential projects of two or more units set aside 30% of the units for low- and moderate income households. Under Ordinance 1615, at least 50% of the affordable (i.e. inclusionary) housing units were required to be low-income units. Projects ranging from 2 to 6 units were required to provide only 1 low-income unit. In limited circumstances an inclusionary fee could be paid in lieu of providing the required low-income units on-site. Projects of 20 units or more had to provide all inclusionary units on-site.

On July 21, 1999, the City Council replaced the Inclusionary Housing Program (Ordinance 1615) with Ordinance 1918, the Affordable Housing Production Program. Under Ordinance 1918, a developer may satisfy the City's affordable housing obligation by paying an affordable housing fee, by constructing affordable housing units on site or off site, or by choosing among other options. Thus, the main difference between Ordinance 1918 and Ordinance 1615 is that Ordinance 1918 allows payment of an in lieu fee in virtually all situations, whereas Ordinance 1615 only allowed payment of a fee under limited circumstances. Moreover, on a per project basis, the required fee under Ordinance 1918 is now significantly lower than it was under Ordinance 1615.

- **Assessment of City-Owned/Publicly-Owned Land for Affordable Housing**— Due to the shortage of vacant properties suitable for residential development in Santa Monica, the city is investigating the feasibility of long-term leases of City-owned and publicly-owned land and sale of air rights above City-owned parking lots to facilitate affordable housing development. As part of this program, Resource Management and Planning Division staff are: 1) Conducting an inventory of publicly-owned land and examining the feasibility of use for affordable housing development, 2) Assessing the use of City-owned, publicly-owned and privately-owned land for affordable housing, and 3) Examining the

feasibility of purchasing land for development of affordable housing. In the future, the City may enact a land-banking program, if feasible, for the City and non-profit developers of affordable housing to purchase land and existing properties for future development of affordable housing.

- **Facilitation of Sustainable Housing Development** – In conjunction with the City's development of Green Building Design and Construction Guidelines (see *Construction and Development* chapter of this report for more information) staff from the Planning Division and the Environmental and Public Works Management Department are working to ensure that affordable housing projects are built in a sustainable manner. As part of this program, sustainable design and construction requirements are being incorporated in development agreements, and affordable housing projects are being designed to meet energy efficiency requirements outlined in the Guidelines. Following adoption of the Guidelines later this year, staff plan to develop minimum requirements for sustainable performance of all publicly-financed affordable housing projects, educate developers in ways to create environmentally sustainable housing and develop incentives to promote sustainable design and construction in these projects.

Obstacles/Needs

Listed below is a summary of key housing obstacles and needs as identified in the 1998-2003 Housing Element Update:

- **Effects of Costa-Hawkins Vacancy De-control Regulation** – The City of Santa Monica adopted a rent control law in 1979 and in 1996 had an inventory of approximately 30,000 rent-controlled units. Adoption of the Costa-Hawkins Rental Housing Act in 1995 by the state legislature, however, brought about statewide de-control of rent-controlled housing upon vacancy. The Act allowed landlords to raise rents by up to 15% upon voluntary vacancy of rental units a maximum of two times between October 1995 and December 1998. Beginning in January 1999, landlords were allowed to establish initial rents for new tenancies at market levels. Upon occupancy by a new tenant, units are re-controlled until vacated again.

Rent Control Department staff indicate that the Costa-Hawkins Act has led to the loss of affordable housing units in Santa Monica at a rapidly escalating rate. Between January 1 and May 15, 1999, 1433 vacancy increases have been filed with the City and median rents on those units have increased between 41% and 85%. Affordable units were lost at every affordability level and every bedroom size. Staff projections indicate that 2359 units (representing 10% of all units) affordable to very low and low income households (those earning up to 80% of the LA County median household income) will be lost citywide by December 1999 following one year of full vacancy de-control / re-control. These are in addition to over 4675 units affordable to very low income

households that were lost between October 1995 (when vacancy increases began) and December 1998.

While the number of deed restricted affordable housing units has significantly increased over the past decade (see Progress Towards Goals above), the total number of affordable units in the city has significantly decreased over the same period due to vacancy de-control.

- **Housing for Families with Children** – The percentage and number of families with children, as well as average household size in Santa Monica have continued to decrease since 1980. Several factors contribute to these declines. The supply of adequately sized housing units is limited, particularly in the rental market, and limited home purchase opportunities are available given the high for-sale housing costs. For families with income constraints, their ability to locate adequate and affordable housing continues to diminish with rising housing costs. Overcrowding results as many families overpay for housing and/or live in small housing units to save on costs.
- **Housing Production** – Because Santa Monica is a highly developed urban community, there is a shortage of vacant properties suitable for residential development. This will impact the availability of housing for all income levels if the city's population increases as is projected in the coming years. The City is addressing this obstacle by assessing the feasibility of using City-owned and publicly owned land for affordable housing (see Program and Policy Updates above).

Plans for the Future

Numerous ongoing and new programs and policies addressing all aspects of housing production, availability, and affordability are planned for the next several years as part of implementation of the 1998-2003 Housing Element Update. Please refer to the Housing Element Update for more information.

Recommendations

- 1.) The policies and programs outlined in the 1998-2003 Housing Element Update should be fully implemented and progress carefully tracked in order to meet the Sustainable City Program targets for housing and address the obstacles and needs outlined above.
- 2.) The updated Housing Element should be reviewed to determine if, based on its findings and recommendations, additional indicators for housing can be incorporated into the Sustainable City Program. While the number of deed restricted affordable housing units has significantly increased over the past decade, the total number of affordable units in the city has significantly decreased over the same period due to vacancy de-control. The adoption of

additional indicators and targets would likely provide a better overall picture of Santa Monica's housing resources and needs. The Housing Commission and City staff from the Resource Management and Planning and Community Development departments should be consulted during this process.

COMMUNITY AND ECONOMIC DEVELOPMENT

Adopted Indicators and Targets

- Using 1990 figures as a baseline, increase the total amount of public open space in Santa Monica by 16 acres by the year 2000.
- Create three new community gardens in Santa Monica by the year 2000.
- Using 1990 figures as a baseline, increase the number of trees in public spaces by 350 by the year 2000.

Progress Towards Goals

Open Space

This indicator calls for an increase in public open space from 164 acres in 1990 to 180 acres by the year 2000. The definition of public open space as used for this indicator includes public parks, public landscaped sites that do not contain recreational facilities and landscaped median strips greater than 1 acre that are used for public recreation. The 209-acre Santa Monica State Beach, which is managed by the City under an operating agreement with the State of California, is not included in these figures because, although it is available to all Santa Monica residents for recreational uses, it is viewed as a regional resource.

The open space indicator goal of 180 acres was reached in 1997 and there are currently 180.6 acres of open space in Santa Monica. The draft Open Space Element and draft Parks and Recreation Master Plan, which were conceptually approved by City Council in 1997, include plans to significantly increase the amount of parks and open space in the city in the coming years (see Program and Policy Update below).

Community Gardens

There are currently two community gardens in Santa Monica. The Sustainable City Program indicator for community gardens calls for the construction of three additional gardens by the year 2000. No additional community gardens have been constructed since the baseline was established in 1993. It is not likely that the goal of three additional gardens will be met by 2000, however the draft Open Space Element and draft Parks and Recreation Master Plan include plans to build several new community gardens in the coming years (see Program and Policy Update below). A timeline for construction of these additional gardens has not been set.

Trees

The Sustainable City Program indicator for Trees in Public Spaces calls for an increase of 350 trees by the year 2000 from a baseline of 28,000 trees in 1990. This baseline is an estimate provided by the Parks and Sports Division. The estimate was based on a 1987 count of 26,767 public trees and estimates of trees planted between 1987 and 1990. A citywide tree inventory conducted in 1997 counted 28,907 public trees, indicating that the 350 tree goal had been surpassed. Since that time 450 trees have been added, bringing the total to 29,357 public trees as of June 1999. When completed in FY 1999-2000 the Pico streetscape project will provide a net gain of 358 trees and the Millennium Tree Planting program will result in the planting of an additional 2000 trees.

Program and Policy Update

Community Development

- **Open Space Element / Parks and Recreation Master Plan** - In 1995 the Community and Cultural Service (CCS) and Planning and Community Development departments initiated a long range planning process to update the Open Space Element of the City's General Plan and to produce the City's first Parks and Recreation Master Plan (PRMP). The Open Space Element is intended to provide long-range goals, objectives and policies for parks and open space in Santa Monica. The PRMP will present more specific implementation recommendations.

As part of this planning process, program staff solicited input from community members regarding their preferences for how open space and parks should be designed, renovated, or expanded. Additional research included community open houses and meetings, phone surveys, park user surveys, student outreach, and an inventory of the existing open space and park system. The draft Open Space Element and PMRP were completed in March 1997 and were conceptually approved by City Council in July 1997. Both will be presented to Council for final approval following completion of an environmental impact report.

Among the objectives and policies of the draft Open Space Element are to expand the city's open space system through the use of public property, shared use of school sites, freeway-adjacent street ends and through the acquisition of new land. The draft PMRP identifies between 30 and 57 acres of potential new park space including 13.2 acres at the Civic Center. The plan also calls for the creation of community gardens and recreational areas in freeway-adjacent street ends.

- **Beach Improvement Group Project** - The Beach Improvement Group (BIG) Project is the collective name for five capital improvement projects under the oversight of the City's CCS and Environmental and Public Works Management

(EPWM) Departments. The five projects include: renovation of the northern section of Palisades Park, reconstruction of the California Incline, widening of the Santa Monica Pier bridge, improvement to sidewalks, landscaping and park areas in the South Beach area between the Pier and Bay Street, and enhancement of the gateway where Interstate 10, Pacific Coast Highway, and the Pier intersect. City Council approved the conceptual design for the project in July 1996 and construction began in 1998. The Palisades Park renovation was completed and the park reopened to the public in August 1999. The South Beach improvements are scheduled for completion in late Fall 1999. The other three projects will begin construction in late 1999 and early 2000.

- **Community Forestry Program** – In March 1997 the City hired a full-time Community Forester to oversee the development and implementation of a Community Forest Management Plan. As part of the development of that plan, a citywide inventory of public trees was completed in 1997. Public workshops were also held in 1997 and 1998 to obtain feedback from residents and business owners on issues such as tree selection and maintenance. The plan, which is currently in draft form, sets forth objectives and policies related to enhancement, maintenance and protection of the community forest. It contains results of the citywide tree inventory, plans and criteria for choosing and removing street trees, guidelines for street tree care, and an outline for public education. The plan is scheduled to go to City Council for approval in November 1999. One of the short-term objectives noted in the draft plan is to plant an additional 2000 public trees during FY 1999-2000.

Economic Development

- **Farmers' Market Fruit and Salad Bar Program** -The four weekly Farmers' Markets in Santa Monica contribute to sustainable economic development by creating a market for fresh produce grown by local family farmers. In 1997 this market was expanded to include the Santa Monica-Malibu Unified School District (SMMUSD) through the development of the Farmers' Market Fruit and Salad Bar Program. The program is a collaborative effort between the Farmers' Market, City of Santa Monica, SMMUSD Food Services Department and the UCLA-Occidental Community Food Security Project and is currently in place at six of the eight Santa Monica public elementary schools. As part of the program, fruits and vegetables are purchased by SMMUSD twice a week from the Wednesday and Saturday markets a reduced cost. The produce is prepared daily by parent volunteers for use in salad bars in SMMUSD elementary schools. In addition, the salad bar is tied into gardening and composting activities at each school and is integrated into classroom curriculum about nutrition, health and the environment.
- **Local Business Bidding Preference** – In June 1999, City Council voted to establish a 1% bidding preference to Santa Monica businesses when submitting bids for city contracts. The 1% figure reflects a sales tax rebate the City receives from business conducted locally, which can have the effect of

reducing contract costs to the City. The Council enacted this preference in order to save tax dollars as well as to support local businesses. Purchasing goods and services locally contributes to sustainable economic development by reducing environmental impacts related to transportation, employing local residents, and redistributing City funds back into the community.

Obstacles

• Open Space and Community Gardens

The primary obstacles to meeting the goals of increasing the amount of public open space and the number of community gardens in the city is the lack of available public land for redevelopment, high land prices, and lack of available funds for land purchases and renovations. The draft Parks and Recreation Master Plan addresses these obstacles in light of identified community needs and proposes strategies to overcome them.

• Human Services

Obstacles to the effective provision of services to seniors, disabled persons, homeless persons, and families, youth and children include: lack of adequate or consistent funding from local, county, state and federal sources; inadequate capacity of service providers to meet emerging human service needs; fragmentation of services; and broader socio-economic pressures such as low wages, lack of affordable housing opportunities, and welfare reform.

Plans for the Future

Open Space, Parks and Recreation – The following open space, parks and recreation projects are in various phases of planning or development:

- **Municipal Pool** – In December 1998 the City Council conceptually approved plans for a new municipal swimming pool. The project includes a new 50-meter pool and smaller instructional and recreational pool at Santa Monica College to replace the existing municipal pool. The new facility will be built adjacent to 16th Street on the northwestern part of the campus. Construction is scheduled to begin in Fall 1999.
- **Airport Park** – A Request for Proposals was issued March 23, 1999 to begin environmental analysis for the first phase of park uses on non-aviation land at the Santa Monica Municipal Airport. Phase I will involve the construction of 5 acres of sports fields, a 1¼ -acre off-leash dog area, parking, restrooms, streetscape improvements on Airport Avenue, and children's play areas. An Environmental Impact Report to assess the traffic, construction, and other impacts associated with the project is currently being prepared.

- **Douglas Park Improvements**– Construction of several improvements at this park will begin in Fall 1999. The project will include the construction of new ponds with water plants and fish, a new playground, a new irrigation system, a new restroom building and a water feature/children’s play area.
- **Playground Renovations** –The playgrounds at Clover, Joslyn, Marine, and Ozone parks will be upgraded and fitted with new play equipment. Renovations are currently underway at Joslyn Park and will be followed with work at the other three playground sites.
- **Virginia Avenue Park Expansion** – In 1998 the Community and Cultural Services Department began a planning and design process for the expansion of Virginia Avenue Park. The park area will increase by over 3 acres through the removal of an existing parking lot and acquisition of two adjacent commercial properties. The design for the park expansion has been informed by results of public surveys and preferences expressed through a community design process which includes a second phase led by a Working Group comprised of representatives from the Recreation and Parks Commission, the Virginia Avenue Park Advisory Board, the Planning Commission and two youths. Following completion of this process, the proposed concept design will be presented to the Virginia Avenue Park Advisory Board, the Recreation and Parks Commission, the Planning Commission and Arts Commission for their recommendations. These recommendations will be forwarded to the City Council for consideration. Following Council approval of the concept plan required environmental documents will be prepared as well as refinement of the plans culminating in construction documents. It is anticipated that park construction will begin in winter 2000 and be completed in approximately 1 year.
- **415 PCH Renovation** – In July 1999 City Council approved a proposal to renovate the city-owned five acre parcel located at 415 Pacific Coast Highway for use as a public beach park and banquet center. The proposal calls for restoration of existing structures for use as community and non-profit meeting facilities and a banquet facility, construction of gardens and an outdoor terrace, renovation of an existing swimming pool, and creation of a “beach square” informal meeting place. Next steps involve preparation of an Environmental Impact Report, documentation drawings and a demolition plan.

Sustainable Economic Development - Sustainable Business Workshop Series

City staff are currently working with the Santa Monica Chamber of Commerce to develop a Sustainable Business Workshop series. The series is an outgrowth of the Chamber’s Sustainable Quality Awards program and is intended to provide information to local businesses wishing to incorporate sustainable practices into their operations. The series will initially consist of three workshops addressing

general sustainable business practices, energy efficiency and renewable energy, and green building concepts. The series is began in September 1999 and will run through Spring 2000.

Community Profile and Human Services Plan – Over the past two years, the Human Services Division of the Community and Cultural Services Department has been undertaking a broad human services review in an effort to develop an updated “Community Profile” and Human Services Plan for the year 2000 and beyond. Towards this end, the Division has compiled information from conversations with hundreds of people, reviews of action plans from the past decade, program evaluations, an inventory of existing services and research. The resulting “Community Profile” will include demographic information and reflect the community’s values and concerns about human service issues. In the fall of 1999 and winter of 2000, staff will present and get feedback on the “Community Profile” through telephone and mail surveys, participation in Commission and other community meetings, focus groups, a homeless census, and a broadly advertised public meeting. In June of 2000, staff will complete a Human Services Plan. The Plan will outline priority human service needs and opportunities, a funding rationale, and an implementation strategy for FY2000 and beyond.

Recommendations

- 1.) The Sustainable City Program currently contains few indicators that address the health and sustainability of the community and no indicators that address the city’s economic sustainability. It is recommended that a process be developed to identify new indicators to measure progress in these areas based on the city’s stated goals as expressed in the City’s long range planning documents. Potential indicators may address such topics as childcare, human services and jobs housing balance in Santa Monica. Staff from the EPWM, CCS, Planning and Community Development and Resource Management Departments should be involved in this process.

ACKNOWLEDGMENTS

Santa Monica Task Force on the Environment

Tim Carmichael - Director, Coalition for Clean Air
Mark Gold (Chair) - Director, Heal the Bay
Sandy Grant – Education and Outreach Specialist
Susan Mearns – Environmental Risk Assessment Consultant
Tom Nelson – VP HOK Architects, Sustainable Design Advocate
Matt Petersen – Director, Global Green USA
Bill Selby - Professor of Earth Sciences, Santa Monica College

This report was prepared by:

Dean Kubani
Sustainable City Program Coordinator
Environmental Programs Division
City of Santa Monica
200 Santa Monica Pier
Santa Monica, CA 90401
Ph: (310) 458-2227
Fax: (310) 393-1279
Email: dean-kubani@ci.santa-monica.ca.us

under the guidance of the Task Force on the Environment

Review, input and assistance were provided by members of the Task Force on the Environment and City staff from the following departments: Community and Cultural Services, Environmental and Public Works Management, Finance, Fire, Library, Planning and Community Development, Police, Rent Control, Resource Management, and Transportation.