# Table of Contents

**Topical List of Indicators** ................................................................. 2

**Introduction** .................................................................................. 3

**Executive Summary** ................................................................. 4

**Key Indicator: Water—Supply and Demand** ................................. 7

**Sustainability Indicators** ............................................................ 11

- Agriculture ................................................................................. 12
- Air Quality .................................................................................. 13
- Carbon Dioxide Emissions ....................................................... 14
- Children: Child Abuse ............................................................... 16
- Children: Child Care ................................................................. 17
- Children: Health ......................................................................... 18
- Contaminated Sites .................................................................... 19
- Crime .......................................................................................... 20
- Disaster Preparedness ............................................................... 21
- Ecological Footprint ................................................................. 22
- Economy: Income Distribution and Poverty ......................... 23
- Economy: Jobs ........................................................................... 24
- Economy: Unemployment ......................................................... 25
- Education .................................................................................... 26
- Energy Use .................................................................................. 28
- Green Buildings ......................................................................... 30
- Habitat Protection ...................................................................... 31
- Health Care: Community Health ........................................... 32
- Health Care: Insurance and Cost ............................................. 33
- Housing: Affordability ............................................................... 34
- Housing: Homelessness ............................................................. 36
- Land Use ..................................................................................... 37
- Parks and Open Space ............................................................... 38
- Pesticide Use .............................................................................. 39
- Population ................................................................................... 40
- Public Library Use ....................................................................... 41
- Solid Waste ................................................................................ 42
- Transportation: Gasoline Use and Fuel Efficiency ............. 43
- Transportation: Vehicle Travel and Public Transit ............ 44
- Voter Participation ...................................................................... 45
- Water: Bay and Ocean Water Quality .................................... 46
- Water: Drinking Water Quality ............................................... 47

**Sustainability Updates from the Cities and the County** ............ 48

- Atherton .................................................................................... 49
- Belmont .................................................................................... 49
- Brisbane .................................................................................. 50
- Burlingame ............................................................................... 51
- Colma ....................................................................................... 52
- Daly City .................................................................................... 53
- East Palo Alto ........................................................................... 54
- Foster City ................................................................................. 54
- Half Moon Bay ........................................................................... 55
- Hillsborough ............................................................................. 56
- Menlo Park ................................................................................ 57
- Millbrae ..................................................................................... 58
- Pacifica ....................................................................................... 59
- Portola Valley ............................................................................ 60
- Redwood City ............................................................................ 61
- San Bruno .................................................................................. 62
- San Carlos .................................................................................. 64
- City of San Mateo ...................................................................... 65
- South San Francisco .................................................................. 66
- Woodside ................................................................................... 67
- San Mateo County ..................................................................... 68
- San Mateo County Community College District ............... 69

**Appendix** ..................................................................................... 70

**Will You Help?** ............................................................................ 80

**Acknowledgements** ................................................................... Inside back cover
Topical List of Indicators

Environment

Air Quality ................................................................. 13
Carbon Dioxide Emissions ........................................... 14
Contaminated Sites ..................................................... 19
Ecological Footprint .................................................... 22
Green Buildings .......................................................... 30
Habitat Protection ....................................................... 31
Pesticide Use ............................................................... 39
Solid Waste ................................................................. 42
Water: Bay and Ocean Water Quality .................................. 46
Water: Drinking Water Quality ........................................ 47
Water: Supply and Demand ............................................ 7

Society

Children: Child Abuse .................................................. 16
Children: Child Care ..................................................... 17
Children: Health .......................................................... 18
Crime ........................................................................ 20
Disaster Preparedness ................................................... 21
Education ................................................................. 26
Health: Community Health .......................................... 32
Housing: Homelessness ............................................... 36
Parks and Open Space .................................................. 38
Population ................................................................. 40
Public Library Use ....................................................... 41
Voter Participation ....................................................... 45

Economy

Agriculture ................................................................. 12
Economy: Income Distribution and Poverty ....................... 23
Economy: Jobs ............................................................. 24
Economy: Unemployment ............................................. 25
Energy Use ................................................................. 28
Health: Insurance and Cost .......................................... 33
Housing: Affordability .................................................. 34
Land Use ................................................................. 37
Transportation: Gasoline Use and Vehicle Fuel Efficiency .... 43
Transportation: Vehicle Travel and Public Transit ............... 44
What Is Sustainability?
Sustainability is a short-hand term for viewing the relationship between our actions today and their effect on the future. Living sustainably means that we meet today’s needs without compromising the ability of future generations to meet their needs. Sustainable planning recognizes the interconnections between the environment, economy, and society. A disruption in any one area affects the health of the other two.

In recent years, the idea of sustainability has moved into the mainstream. However, many believe sustainability is solely an environmental issue or more narrowly, an effort to reduce greenhouse gas emissions. As important as these are, true sustainability is much more. Sustainability recognizes the connection between a healthy environment, a vibrant economy, and a socially equitable community—the three E’s of sustainability.

What Is an Indicator?
An indicator is a statistic or trend that displays the direction in which a particular condition is heading. Indicators measure whether a community is getting better or worse at providing all of its members with a productive, enjoyable life, both now and prospectively in the future. Indicators can be used by policy makers and planners to set goals, measure progress toward achieving them, and prioritize the allocation of scarce resources.

What Would a Sustainable San Mateo County Be Like?
A sustainable San Mateo County would . . .

Environment
. . . have clean air, clean water, and be free from pollution. It would have a healthy environment where resources would be replaced and not depleted. It would also include natural spaces where animals and plants can thrive.

Economy
. . . have a strong economy that fosters sound businesses, governments, and nonprofit organizations. Its economy would provide good jobs, basic community needs, a fertile ground for innovation, and a solid foundation for society.

Social Equity
. . . meet the needs of all of its citizens. It would provide all residents with good schools, affordable housing, and basic services that enable even the least affluent to live comfortably. It would also foster a sense of individual responsibility for the community.
Sustainable San Mateo County

The twelfth annual *Indicators for a Sustainable San Mateo County* evaluates 33 indicators, or trends, to provide a snapshot of how we are doing as a community and show our progress toward a sustainable future. Among the 33 indicators is a key indicator, Water—Supply and Demand, which we believe will have an increasingly important role in the county’s long-term sustainability.

**Water—Supply and Demand**

In FY 2005-06, total water use in San Mateo County was 8 percent less than FY 2000-01, primarily because of a wet spring and a resultant decline in irrigation demands. Demand for water is expected to grow by nearly 25 percent by FY 2030-01, however.

Over 90 percent of the county’s water supply comes from the San Francisco Public Utilities Commission’s regional water system, which in turn gets most of its water (85 percent) from the Hetch Hetchy reservoir in the Sierra Nevada. Without new local sources of water, the county will continue to be dependent on water from Hetch Hetchy in the future.

### Executive Summary

**POSITIVE TRENDS**

**Air Quality**

In 2007, the county continued to have clean air, although short-term particle pollution is a concern.

**Carbon Dioxide Emissions**

In 2006, both total annual carbon dioxide emissions and per capita emissions were below 2000 levels.

**Children: Health**

In 2006-07, the percentage of fifth, seventh, and ninth graders in the county meeting all CA physical fitness test standards was higher than in any other school year this decade. In 2005, 99 percent of all children in San Mateo County were covered by some form of health insurance.

**Contaminated Sites**

At the end of 2007, the number of contaminated sites in San Mateo County was 39 percent lower than in 1998.

**Crime**

In 2006, rates of violent and juvenile crime were lower than in 2005; gang-related homicides were at their lowest level since 2002.

**Economy: Jobs**

In 2006, the number of jobs in the county increased by 2 percent from the previous year; the job base remained diversified across industries and company sizes.

**Green Buildings**

San Mateo County and the City of Brisbane have green building ordinances, and other local governments promote or encourage green building practices.

**Public Library Use**

In FY 2005-06, adjusting for inflation, library expenditures per capita had increased 16 percent since FY 1996-97.

**Solid Waste**

In 2006, total solid waste generated and disposed of in landfills was lower than any year in the past decade.

**Transportation: Gasoline Use and Fuel Efficiency**

In 2006, total gasoline consumption was lower than in any year in the past decade.

**Water: Bay and Ocean Water Quality**

Although the Bay will remain a highly polluted water body for a number of years, the long-term outlook is generally positive. In 2007, there were no beach closures from sewage spills, down from five in 2006.

**Water: Drinking Water Quality**

In 2006, the county’s drinking water continued to meet state and federal water quality standards.
Agriculture
In 2006, adjusting for inflation, the total production value of agricultural products was down 41 percent from 1997.

Children: Child Abuse
In 2006, the rate of child abuse referrals per 1,000 children was higher than any year since 1998.

Children: Child Care
In 2007, the total number of licensed child care spaces was down 22 percent from 2004.

Ecological Footprint
The average county resident’s use of natural resources exceeds nature’s ability to replenish them.

Economy: Income Distribution and Poverty
In 2006, over 7 percent of residents lived in households with an income below the federal poverty level; over one-third of households had earnings below the county’s self-sufficiency level.

Health Care: Community Health
In 2004, only 7 percent of residents practiced a combination of healthy behaviors (do not smoke, not overweight, exercise, eat a healthy diet) that limit the risk of cancer and heart disease.

Housing: Affordability
In 2007, despite housing costs declining or leveling in other parts of the country, housing costs in the county increased from 2006.

Pesticide Use
In 2006, because of a large increase in rights of way applications, nonresidential use of the most toxic pesticides increased by over 50 percent since 2005.

Transportation: Vehicle Travel and Public Transit
In 2006, average vehicle hours of delay increased by 1 percent; driving alone is the commute of choice for nearly three quarters of the workers in the county.

Disaster Preparedness
All of the county’s local governments have adopted coordinated plans to respond to natural or human-caused disasters; it is unclear, however, how prepared citizens or businesses are for emergencies.

Economy: Unemployment
In 2007, the county’s unemployment rate was up slightly from 2006, but was still far below the unemployment rates in 2002 through 2004.

Education
In 2007, a greater percentage of schools in the county met their Academic Performance Index growth targets than statewide; it is unclear, however, whether all children have an equal opportunity to excel in school.

Energy Use
In 2006, energy use from natural gas and electricity increased by 3 percent, the county’s electricity is less carbon intensive than the state overall, however, and the installed capacity of solar power continues to grow.

Habitat Protection
The county is home to over 40 state or federally listed threatened or endangered species. This has been unchanged for a number of years.

Health Care: Insurance and Cost
In 2005, the percentage of residents lacking health insurance declined from 2003. In 2007, health care costs grew 7 percent from 2006.

Housing: Homelessness
Based on findings from the 2007 Homeless Census and Survey, there were an estimated 6,646 individuals who were homeless at some point during the year.

Land Use
In 2005, urban land accounted for 37 percent of all land in the county; residential land accounted for over half of all urban land.

Parks and Open Space
There are over 110,000 acres of parkland and open space; it is unclear if all residents have equal access to parks.

Population
From 1998 to 2007, the county’s population grew nearly 6 percent.

Voter Participation
In the 2006 midterm elections, voter turnout was higher in San Mateo County than statewide; less than half of all eligible voters voted, however.
Local governments play an integral role in building a sustainable future. SSMC asked San Mateo County, the cities within the county, and the San Mateo Community College District to describe their actions and policies related to three important indicators of sustainability: carbon emissions, disaster preparedness, and water.

Carbon emissions
In 2007, Menlo Park, San Bruno, and the City of San Mateo calculated community-wide carbon inventories to identify opportunities to reduce carbon emissions and set emissions reduction goals. Other cities planned to calculate their community-wide carbon inventories in 2008.

To reduce carbon emissions in their communities, local governments have:

- Promoted smart land use, including transit-oriented and mixed-use development that is bicycle and pedestrian friendly. One example is the proposed Ravenswood Business District in East Palo Alto.
- Encouraged the use of green building strategies through public outreach and education. In 2007, Brisbane passed a green building ordinance regulating the construction of new private and public buildings.
- Supported solar energy through rebate programs (Millbrae) or a community purchase program (San Carlos).

To reduce carbon emissions from their own operations, local governments have:

- Purchased low-emission hybrid, biodiesel, compressed natural gas, or electric vehicles for city use.
- Installed cogeneration systems (e.g. Burlingame, Millbrae, and the Community College District) and solar photovoltaics (e.g. Pacifica’s Calera Creek Water Recycling Plant).
- Made city facilities more energy efficient by conducting energy audits, upgrading to more energy-efficient lighting and other equipment, and employing peak demand reduction programs.

Disaster Preparedness
A major earthquake is the disaster of greatest concern to cities and the county. Others include wildfires, hazardous waste incidents, and pandemics. Winter storms that cause mudslides and flooding seem to currently be the most common emergency in the county. For a number of communities, isolation after a disaster is of great concern.

Local governments provide disaster preparedness training programs for their staff and the public, including:

- Staff training on roles and responsibilities as delineated in each city’s emergency operations plan.
- Staff participation in the annual Statewide Medical & Health Disaster Exercise, the annual state-sponsored Golden Guardian regional disaster response exercise, and trainings on specific disasters.
- Community Emergency Response Team trainings that teach individuals skills such as fire safety, light search and rescue, and first aid.
- Short “R-U Ready” disaster preparedness classes that teach individuals how to prepare their families, homes, and workplaces for emergencies.

Water
To more efficiently manage water resources, local governments have:

- Created incentive programs for residents to install low-flow toilets and water-efficient washing machines.
- Distributed free water conservation devices, such as shower heads and faucet aerators.
- Implemented school education programs, such as the water-wise program for fifth graders in Hillsborough, Menlo Park, and San Bruno.
- Developed large landscape water audit and education programs to encourage the use of drought resistant plants.
- Implemented commercial programs such as clothes washer programs, water audits, and spray valve installation programs aimed at restaurants (e.g. Burlingame, Menlo Park, and Pacifica).
- Installed low-flow toilets and other water-saving devices in government facilities (e.g. Burlingame, Colma, South San Francisco, and the Community College District).
- Installed artificial turf grass, drought resistant plants, and computer-managed irrigation systems; all these initiatives reduce outdoor water use at government facilities and parks.

In 2007, Redwood City launched a new Recycled Water Project that provided 30 million gallons of water for outdoor and other nonpotable uses.
**Key Indicator: Water—Supply and Demand**

**Why Is This Important?**
Communities need safe, clean drinking water and adequate supplies to accommodate their residential and nonresidential needs. Currently, San Mateo County has both. The county has limited local sources of water, however, and relies heavily on the San Francisco Public Utilities Commission’s (SFPUC) regional water system. The SFPUC system gets 85 percent of its water from Sierra Nevada snowmelt stored in the Hetchy Hetchy reservoir in Yosemite National Park. The remaining 15 percent comes from local Bay Area watersheds.

Four main factors could impact or endanger the balance between the county’s future water supply and demand: population growth, drought, an earthquake, and climate change.

- Population growth: Primarily because of population growth, demand for water in San Mateo County is projected to be nearly 25 percent higher in FY 2030-31 than it was in FY 2005-06.
- Drought: San Mateo County has experienced drought in the past, most recently in the early 1990’s, and will experience drought conditions in the future. Currently, the SFPUC has a water shortage plan that could lead to cutbacks of up to 30 percent during an extended drought.
- Earthquake: The regional water system crosses major fault lines in the Bay Area and a major earthquake could damage the system and lead to supply disruptions. The SFPUC has adopted a capital improvement plan to repair and seismically upgrade the system’s infrastructure. The expected completion date for the various projects is 2015.
- Climate change: Rising temperatures from climate change could reduce annual snowpack in the Sierra Nevada because of a rise in the snowline, a thinner snowpack at low or medium elevations, or an increased amount of precipitation falling as rain rather than snow. Increased evaporation rates due to climate change could also increase water demand for agriculture and landscaping.

**What Is a Sustainable State?**
A sustainable state is one where water supplies and demand for water resources are in balance and there is a diversity of supply to reduce the risk of shortages or disruptions from any single source.

**How Are We Doing?**
Nearly all San Mateo County residents are serviced by water agencies (individual cities or water districts) that are members of the Bay Area Water Supply and Conservation Agency (BAWSCA). BAWSCA agencies, both those within San Mateo County and those in Alameda and Santa Clara Counties, have a combined Master Water Sales Agreement with the SFPUC that assures an annual supply of 184 million gallons of water per day (mgd). The agreement expires in 2009, but the supply assurance survives the contract until a new agreement is reached.

Water agencies within San Mateo County are allocated 90.5 mgd of the total. Because of population growth, BAWSCA projects that the county will need more than 90.5 mgd annually by FY 2010-11. Having demand above the supply assurance could lead to an increase in water rates or other measures to reduce demand if water supplies are not available.

**Sources of Water Supply in San Mateo County, FY 2005-06**

<table>
<thead>
<tr>
<th>Source</th>
<th>Supply (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Water</td>
<td>1.8</td>
</tr>
<tr>
<td>Ground Water</td>
<td>2.4</td>
</tr>
<tr>
<td>Recycled Water and Other</td>
<td>0.2</td>
</tr>
<tr>
<td>Purchased from SFPUC</td>
<td>84.7</td>
</tr>
</tbody>
</table>

mgd = million gallons per day

Data source: Bay Area Water Supply and Conservation Agency

---

No Clear Trend

continue
Projections to FY 2030-31 show that the BAWSCA agencies in the county will continue to receive at least 90 percent of its water supply from the SFPUC. Recycled water use is anticipated to grow to 1 percent of water supply because of the Redwood City recycled water project.

Among local water agencies, the City of San Bruno relies least on water supplied by the SFPUC. In FY 2005-06, 45 percent of San Bruno’s water supply came from local groundwater sources.

Other water agencies with significant local water sources include Coastside County Water District (20 percent of its supply came from local groundwater and surface water), California Water Service – Bear Gulch District (12 percent of its supply came from surface water from the Bear Gulch Reservoir), and Daly City (10 percent of its supply came from local groundwater).

In 2005-06, 14 of the 19 water agencies in San Mateo County received all of their water from the SFPUC.

**Demand**

- In FY 2005-06, annual water use among the 19 BAWSCA agencies in San Mateo County totaled 89.1 mgd, 8 percent less than in FY 2000-01. Wet spring weather that led to decreased demand for irrigation in FY 2005-06 was the primary reason for the decline in water demand from FY 2000-01.

- In FY 2005-06, residential water use accounted for 68 percent of total water use, roughly the same percentage as in previous years. Of the residential use, two-thirds is for indoor water use, primarily toilets and washing machines.

Average residential per capita consumption in the county was 87.1 gallons per capita per day. Residential water use is correlated with land use, climate, and income. Affluent communities tend to have higher outdoor water usage than other communities because of larger landscaping needs.

Per capita residential water use in the county was highest in the Town of Hillsborough (276.9 gallons per capita per day) and lowest in the Westborough Water District located in South San Francisco (48.8 gallons per capita per day).

### Per Capita Residential Water Use by Agency, FY 2005-06

<table>
<thead>
<tr>
<th>Agency</th>
<th>Gallons per Capita per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hillsborough</td>
<td>276.9</td>
</tr>
<tr>
<td>CWS Bear Gulch</td>
<td>185.1</td>
</tr>
<tr>
<td>Menlo Park</td>
<td>130.4</td>
</tr>
<tr>
<td>CWS Mid-Peninsula</td>
<td>89.6</td>
</tr>
<tr>
<td>Redwood City</td>
<td>89.6</td>
</tr>
<tr>
<td>Burlingame</td>
<td>89.3</td>
</tr>
<tr>
<td>Mid-Peninsula (Belmont)</td>
<td>88.6</td>
</tr>
<tr>
<td>Estero</td>
<td>88.2</td>
</tr>
<tr>
<td>Millbrae</td>
<td>80.5</td>
</tr>
<tr>
<td>Coastside</td>
<td>73.4</td>
</tr>
<tr>
<td>Skyline County</td>
<td>73.1</td>
</tr>
<tr>
<td>Brisbane</td>
<td>69.9</td>
</tr>
<tr>
<td>San Bruno</td>
<td>67.7</td>
</tr>
<tr>
<td>CWS S. San Francisco</td>
<td>60.3</td>
</tr>
<tr>
<td>NCCWD (Pacific)</td>
<td>59.6</td>
</tr>
<tr>
<td>Daly City</td>
<td>53.7</td>
</tr>
<tr>
<td>East Palo Alto</td>
<td>53.6</td>
</tr>
<tr>
<td>Westborough</td>
<td>48.8</td>
</tr>
</tbody>
</table>

*Data source: Bay Area Water Supply and Conservation Agency*

Total annual demand in the county is projected to increase to 111.7 mgd by FY 2030-31. More than five mgd of that demand is expected to be mitigated by conservation, primarily from the impact of existing water-saving plumbing codes.
What Can We Do?
With population growth driving an increase in demand and potential threats to future water supplies from drought, earthquakes, and climate change, San Mateo County will need to pursue aggressive conservation or expand its sources of water supply to reach a sustainable state.

The California Urban Water Conservation Council has compiled a list of conservation Best Management Practices (BMPs) for water agencies. The implementation of these BMPs varies across the county’s water agencies. In some cases, individual BMPs are considered to be not currently cost effective or not relevant to an agency’s customer classes.

In FY 2005-06, Redwood City had implemented 14 of the 15 BMPs, the highest total in the county. Four other cities or agencies (Burlingame, Coastside County Water District, Daly City, and Millbrae) had implemented 13 of the 15 BMPs.
Lessons from Redwood City
In FY 1998-99, Redwood City began exceeding its allocated portion of the assured supply under the SFPUC Master Water Sales Agreement (11.4 mgd compared with a supply assurance of 10.9 mgd). Since then, Redwood City has continued to exceed its supply assurance by roughly 0.9 mgd. Projections showed that the city’s water demand would continue to grow resulting in an inability to meet normal water demands without conservation or water recycling.

In 2001, Redwood City began introducing new water conservation programs aimed at both residential and nonresidential customers. These included:

- Distribution of water conservation kits including free showerheads and aerators for households (2,239 distributed to date).
- Rebates to customers who purchase high-efficiency clothes washers (2,768 rebates to date).
- Free residential water use surveys, including checking toilets, showers, and faucets for leaks (1,042 to date).
- A high-efficiency toilet replacement program (8,784 toilets to date).
- Customized water use budgets for customers with dedicated landscape irrigation meters. The budgets are based on weather conditions and site characteristics including type of plants. Also offered are site surveys by an irrigation expert to improve irrigation efficiency and scheduling.
- Conversion of natural grass playing fields to synthetic turf to reduce irrigation demands.
- A large landscape conservation program aimed at reducing water use. Reductions were achieved at 66 of 75 homeowner association sites and 22 of 28 city parks.
- Education programs for schools.
- Distribution of newsletters to customers with tips and advice for conserving water.

In 2003, the Redwood City Council approved a project to deliver recycled water for nonpotable uses in the city. In 2007, the recycled water project saved the city over 30 million gallons of water. Projections show that the city’s future annual water supply will include roughly one mgd from recycled water.

Through its water conservation efforts, Redwood City is expected to reduce its annual demand by 0.7 mgd. With additional water made available as a result of recycling, Redwood City will be below its supply assurance allocation and be able to provide additional water supply for future users.

What Can You Do?
Indoor
- Check for water leaks
- Take shorter showers
- Install low-flow showerheads
- Equip faucets with aerators
- Replace your old toilet with a high-efficiency toilet
- Upgrade to a water-efficient washing machine
- Wash only full laundry loads
- Turn off water while brushing teeth and washing dishes

Outdoor
- Plant drought-tolerant species
- Water your lawn only when it needs it
- Water during the cool part of the day
- Place mulch around trees and plants
- Install shutoff nozzles on garden hoses
- Sweep sidewalks and driveways
- Position sprinkler heads so that the lawn is watered, not the sidewalk
- Check for broken sprinkler heads or irrigation leaks

For more water saving tips, go to www.watersavinghero.com.

See appendix page 70. Researchers: Joyce Routson and Joe Rois
Sustainability Indicators

Many cities, counties, and regions in the United States and internationally are now using sustainability indicators as planning tools and to set community-wide goals. An indicator is a statistic or trend that allows us to evaluate whether we are moving toward sustainability in our community. An indicator helps us understand where we are and which way we are going. Each indicator that follows was chosen because of its importance to one or more of the three goals of sustainability: a healthy environment, a vibrant economy, and a socially equitable community.

Indicators of sustainability differ from traditional indicators of economic or environmental progress; they highlight the interconnectedness of the environment, economy, and society. Sustainability indicators show that a negative trend in one area affects the health of the other two.

Sustainability requires we make decisions so that future generations can enjoy a healthy environment, economy, and society. Sustainability indicators can be used to assist us in making sound decisions on issues that affect the future of the county.
**Why Is This Important?**

Farmland—or working landscapes—provide economic, environmental, and quality of life benefits. Locally grown food maintains its freshness and nutritional value, contributes to the county’s food security, and can also reduce transportation-related air pollution and costs. Controlled grazing helps minimize soil erosion and control invasive weeds. Organic farming practices are especially important for maintaining agricultural vitality because they reduce the harmful environmental and health effects of pesticides and protect long-term soil quality.

**What Is a Sustainable State?**

A sustainable state is one where agriculture is economically viable for both owners and laborers and agricultural practices conserve natural resources and biodiversity, maintain healthy soils and ecosystems, and provide food security for local communities.

**How Are We Doing?**

- According to the *San Mateo County: 2006 Agricultural Crop Report*, the gross production value of all crops in the county was $169 million, a slight increase from 2005. Adjusted for inflation, however, this is a 41 percent decline from 1997.

| Total Production Value of Agriculture in San Mateo County, 1997-2006 |
|-------------------------|-------------------------|
| 1999: $221              | 2000: $221              |

- Nineteen percent of the county’s land is agricultural. Ninety percent of the county’s cultivated land was used for field crops (beans, grain, and hay) or pasture. The remaining farmland was used for vegetables, fruit, nuts, floral, and nursery crops.
- In 2006, less than 1 percent of the county’s cultivated agricultural land was farmed organically, with only eight farms totaling 153 acres.
- In 2006, the number of farmers’ markets in the county increased by one to 14.

**Agricultural Awareness Ordinance**

In October 2007, San Mateo County passed the Agricultural Awareness Ordinance which states the “declared policy of this county to conserve, protect, and encourage agricultural operations on agricultural land within the county.” The ordinance also provides for a process to handle grievances against agricultural practices.

**Blue House Farm and Pie Ranch**

Blue House Farm (www.bluehousefarm.org), a certified organic farm, has a Community Supported Agriculture program that supplies regular deliveries of produce throughout the growing season to its members. Pie Ranch (www.pieranch.org) has a Community Supported “Eggriculture” program, supplying eggs to supporters. Both farms have educational programs designed to provide an opportunity for students to learn about sustainable agriculture.
Why Is This Important?
Clean air is essential to human and environmental health. Air pollution increases the risk of lung disease and contributes to a variety of health problems, including asthma, cardiovascular disease, and respiratory problems in children. Air pollution can also damage local ecosystems.

What Is a Sustainable State?
A sustainable state is one where the air is clean and poses no threat to human health or environmental quality.

How Are We Doing?
Particulate matter
Suspended particulate matter (PM) is associated with asthma and other respiratory ailments, contributes to haze, and harms the environment. The size of particles is directly linked to their potential for causing health problems, with the smaller particles most dangerous as they can lodge deep in the lungs.

The main source of PM is vehicles. Other sources include power plants, industrial processes, and wood combustion (including wood-burning stoves).

- In 2007, the state maximum 24-hour standard for PM of 10 microns or less (PM10) was exceeded on 1.6 percent of the days tested at the Redwood City air quality monitoring station.
- In 2006, federal standards for PM of 2.5 microns or less (PM2.5) were revised because of health risks associated with small particle pollution.
- In 2007, concentrations of PM2.5 were above the federal 24-hour standard on 1.1 percent of the days tested.
- The county received a “B” grade from the American Lung Association (ALA) for particulate pollution. The ALA ranked the Bay Area among the top 25 metropolitan areas most polluted by short-term particle pollution in the country, however.

Ozone
Ground-level ozone is the main component of smog. It can be a trigger for asthma even at very low levels and can cause permanent lung damage after long-term exposure. It can also damage plants and harm ecosystems. Vehicles are the primary source of ground-level ozone.

- In 2007, there were no days when ozone concentrations exceeded the state one-hour standard at the Redwood City station.
- In the past decade, ozone concentrations have never exceeded the state one-hour standard more than once in a given year.
- The county received an “A” grade from the ALA and with 12 California counties was ranked among the best in the country for ozone.

Other
Other monitored pollutants include carbon monoxide and nitrogen dioxide. In 2007, as in the past decade, there were no days when state or federal standards were exceeded for either of these pollutants.

Carbon dioxide, a major contributor to climate change, is discussed in the Carbon Dioxide Emissions indicator.

See appendix page 71. Researcher: Gladwyn d’Souza
Why Is This Important?
Carbon dioxide (CO$_2$) is a greenhouse gas linked to climate change. CO$_2$ enters the atmosphere through nature’s carbon cycle and human activities such as the burning of fossil fuels and deforestation. Human activities are the main driver of increased CO$_2$ in the earth’s atmosphere. They have led to global atmospheric concentrations of CO$_2$ that are 35 percent higher than they were before the industrial revolution. Potential impacts from climate change include extreme weather events, changes in amounts and forms of precipitation, and species migration. Climate change may also exacerbate air pollution and expand the range of certain infectious diseases into San Mateo County.

What Is a Sustainable State?
A sustainable state is one where CO$_2$ emissions are reduced to a level that is in balance with nature’s ability to absorb those emissions.

How Are We Doing?
In 2006, CO$_2$ emissions in San Mateo County totaled 5.91 million metric tons, a 1 percent decrease from 2005 and a 5 percent decrease from 2000. On a per capita basis, emissions are 7 percent lower than in 2000. A decrease in gasoline consumption is the primary reason for the decline in emissions from 2000.

Transportation
- Although gasoline consumption has declined by 9 percent since 2000, in 2006 transportation-related emissions still accounted for 58 percent of the county’s total CO$_2$ emissions.
- In each year this decade, transportation has accounted for over 55 percent of total annual CO$_2$ emissions.

Sources of Carbon Dioxide Emissions in San Mateo County, 2006

Data sources: California Department of Transportation, California Energy Commission, and California Integrated Waste Management Board
Carbon Dioxide Emissions, continued

Electricity
Emissions from electricity are driven by both total electricity use and the carbon content of the generation source of that electricity. Pacific Gas and Electric Company (PG&E), delivers most of the electricity in San Mateo County and has a mix of generation sources that is less carbon intensive than the electricity for the state as a whole (see Energy Use indicator for more information).

- In 2006, electricity use accounted for 20 percent of total CO$_2$ emissions.
- Between 2000 and 2006, electricity use has accounted for 19 to 23 percent of annual CO$_2$ emissions. This is because of both varying levels of electricity use and a changing mix of energy sources generating PG&E’s electricity.

Natural gas
- In 2006, natural gas accounted for 20 percent of total CO$_2$ emissions.
- Between 2000 and 2006, natural gas has accounted for 18 to 20 percent of annual CO$_2$ emissions.

Solid waste
- The decomposition of solid waste disposed of in landfills accounts for a small but still significant portion of the county’s total CO$_2$ emissions (130,000 metric tons or 2 percent of all CO$_2$ emissions).
- In 2006, CO$_2$ emissions from solid waste were nearly 19 percent below 2000 levels.

Residential and nonresidential energy use
- In 2006, residential consumption of electricity and natural gas accounted for 19 percent of total CO$_2$ emissions. Nonresidential electricity and natural gas consumption accounted for 21 percent.
- In 2006, CO$_2$ emissions from nonresidential consumption of electricity and natural gas were 3 percent higher than in 2000, whereas emissions from the residential sector were down slightly.

Other sources of CO$_2$ emissions
Our calculation of total CO$_2$ emissions does not include airplane travel. We do not have an estimate for the number of airplane trips county residents made nor for the amount of jet fuel used. We also did not calculate emissions from off-road vehicles or boats.

| Carbon Dioxide Emissions (Thousand Metric Tons) In San Mateo County, 2006 |
|---------------------|-----------------|-----------------|-----------------|-----------------|
|                     | Electricity    | Natural Gas     | Solid Waste     | Transp.         | Total           |
| Atherton            | 13             | 25              | 2               | 54              | 94              |
| Belmont             | 23             | 37              | 3               | 87              | 150             |
| Brisbane            | 15             | 9               | 2               | 35              | 61              |
| Burlingame          | 55             | 65              | 6               | 172             | 297             |
| Colma               | 7              | 4               | 1               | 16              | 27              |
| Daly City           | 64             | 92              | 11              | 231             | 398             |
| East Palo Alto      | 16             | 25              | 3               | 60              | 104             |
| Foster City         | 45             | 45              | 3               | 129             | 223             |
| Half Moon Bay       | 16             | 23              | 5               | 60              | 104             |
| Hillsborough        | 14             | 29              | 2               | 61              | 106             |
| Menlo Park          | 83             | 103             | 2               | 258             | 446             |
| Millbrae            | 21             | 35              | 2               | 80              | 139             |
| Pacifica            | 25             | 42              | 4               | 98              | 169             |
| Portola Valley      | 6              | 12              | 0               | 25              | 43              |
| Redwood City        | 140            | 118             | 30              | 397             | 685             |
| San Bruno           | 42             | 46              | 5               | 129             | 223             |
| San Carlos          | 44             | 50              | 6               | 139             | 239             |
| San Mateo           | 121            | 141             | 16              | 383             | 661             |
| S. San Francisco    | 135            | 159             | 15              | 426             | 735             |
| Woodside            | 10             | 15              | 1               | 35              | 61              |

*Note: transportation-related emissions were assumed to be the same percentage as for the county as a whole. See appendix.

Data sources: California Department of Transportation, California Integrated Waste Management Board, and Pacific Gas and Electric Company

California AB32
In 2006, Governor Schwarzenegger signed AB32, the California Global Warming Solutions Act, requiring the California Air Resources Board (CARB) to establish a statewide greenhouse gas emissions cap for 2020, based on 1990 levels. CARB is required to adopt a plan by January 1, 2009 indicating how emissions reductions will be achieved from significant greenhouse gas sources via regulations, market mechanisms, or other actions.

See appendix page 71. Researcher: Danielle Lee
Children: Child Abuse

Why Is This Important?
Healthy children in stable families provide the foundation for a sustainable community. Unable to protect themselves, children depend upon adults to provide a safe and nurturing environment. When a child is abused, particularly by an adult with whom that child has a significant relationship, that child’s development is profoundly impacted. Trauma from child abuse can result in lifelong social impairment and affect academic and occupational performance. Many perpetrators of child abuse experienced abuse during their childhood.

What Is a Sustainable State?
A sustainable state is one where all children are nurtured in stable, loving, and healthy families through their development to adulthood.

How Are We Doing?
In 2006, 4,568 children in San Mateo County were referred to Child Protective Services as victims of child abuse—roughly 3 percent of the total child population in the county. The rate of child abuse referrals per 1,000 children in the county increased from 24.9 in 2005 to 27.8 in 2006. Although this is the highest rate the county has seen since SSMC began tracking these data, it is still far below the state rate of 48.3 referrals per 1,000 children.

In 2006, rates of child abuse referrals varied across ethnicity, age, and gender.
- The referral rate for African American children in the county was greatest, 100.7 per 1,000 children. Referral rates for Native American and Latino children also were above the overall county rate, 44.1 and 34.0 respectively.
- Referral rates among age groups ranged from 21.3 per 1,000 one- and two-year old children to over 31.0 per 1,000 for children under the age of one and children between the ages of 11 and 15.
- The referral rate for female children was higher than for male children, 30.0 per 1,000 children compared with 25.5.

Child abuse referrals are categorized into subgroups: sexual abuse; physical abuse; severe neglect; general neglect; exploitation; emotional abuse; caretaker absence/incapacity; at-risk, sibling abused; and substantial risk. In 2006, general neglect and substantial risk of abuse accounted for over half of all referrals.

In 2006, 242 children in the county first entered the foster care system, or 1.5 per 1,000 children. This is higher than the 1.2 per 1,000 children in 2005 but less than half the rate at the state level, 3.2 per 1,000 children.

See appendix page 72. Researchers: Michelle Lin and Tracy Ng
**Why Is This Important?**

The quality of child care, including preschool, influences socio-emotional and cognitive development, including language learning, problem solving, self control, social skills, and school readiness. San Mateo County’s high cost of living makes the availability of affordable child care extremely important as many families need two incomes to afford to live here. Many of the county’s middle- and low-income families do not qualify for state or federal child care subsidies as they earn too much based on guidelines that do not account for regional differences in cost of living.

**What Is a Sustainable State?**

A sustainable state is one where there is a variety of child care options that supply enough diversity, flexibility, and affordability to meet parental choices and needs, such as non-traditional schedules and children with special needs.

**How Are We Doing?**

**Supply**

- In 2007, over 82,000 San Mateo County children lived in households where either both parents worked or in the case of single-parent households, the parent with whom they lived worked. There were less than 22,000 licensed child care spaces, however, just 27 percent of the number of children potentially needing care.

**Cost**

- Between 2003 and 2007, child care costs increased on average by 10 percent in inflation adjusted dollars. This included a 1 percent increase from 2006.
- The largest increases came in care for school age children in family child care homes (22 percent increase from 2003) and preschoolers in child care centers (21 percent increase from 2003).
- In November 2007, 4,181 children were on the county’s Centralized Eligibility List, a countywide list of children from low-income families who are eligible and waiting for subsidized care. Without adequate funding for child care subsidies, families can remain on the list for years waiting aid.

**Closing the Gap**

Several initiatives aim to address the child care shortage. The SmartKids Child Care Facilities Fund issues grants to providers to help with startup costs, training, facility improvements, and equipment purchases, as well as facility improvement grants to licensed, nonprofit child care centers serving low-income children. The San Mateo CARES (SaMCARES) incentive program seeks to improve the quality of care by encouraging child care professionals to pursue child development training and promoting the retention of qualified providers.

---

**AVERAGE COST OF CHILD CARE IN SAN MATEO COUNTY, 2007**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Centers</th>
<th>Family Child Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant</td>
<td>$1,247/month</td>
<td>$936/month</td>
</tr>
<tr>
<td>Preschool</td>
<td>$819/month</td>
<td>$881/month</td>
</tr>
<tr>
<td>School Age</td>
<td>$375/month (part-time)</td>
<td>$7.73/hour</td>
</tr>
</tbody>
</table>

Data sources: California Department of Finance, the U.S. Census Bureau, and the Child Care Coordinating Council of San Mateo County
Why Is This Important?
A child’s health can impact his or her physical and emotional development. It can also impact their education through missed school days or an inability to concentrate during class. Obese or overweight children are at risk of developing high blood pressure, high cholesterol, asthma, and Type 2 diabetes, among other serious physical problems. Immunizations protect children against serious and potentially fatal diseases and can prevent the spread of communicable diseases. Health insurance, either public or private, provides access to health care.

What is A Sustainable State?
A sustainable state is one where all children are healthy and have access to affordable health care.

How Are We Doing?
Physical fitness
Administered to students in grades five, seven, and nine, the California Physical Fitness Test measures six areas of fitness: upper body strength, flexibility, aerobic capacity, body composition, abdominal strength, and trunk extensor strength.

• During the 2006-07 school year, the percentage of students in the county meeting all six fitness standards was higher than any other period this decade for each grade level.
• Among all California students, 27 percent of fifth graders, 31 percent of seventh graders, and 30 percent of ninth graders met all six fitness standards.

Immunizations
In 2006, 79 percent of children in the county enrolled in kindergarten had received all of their required immunizations by the age of two, roughly the same percentage as the state as a whole (78 percent). This was 4 percent less than the rate in 2004.

Health insurance
In 2005, 99 percent of children in the county were covered by some form of health insurance and 83 percent had dental insurance.

• Employer-based health insurance covered 73 percent of the children. Medi-Cal or California’s Healthy Families program provided coverage for another 17 percent. The other 10 percent were covered by private insurance or some other public health insurance.
• At the state level, employer-based health insurance covered 53 percent of children with Medi-Cal or the Healthy Families Program covering 34 percent.

Teen Health Spa and Shapedown
The Teen Health Spa is a program for young women ages 12-16 that addresses nutrition, exercise, body image, self-esteem, and other weight-related issues. Shapedown is a free, eight-week family-based weight management support program for children, teens, and their parents. Both programs are offered by the San Mateo County Health Department’s Nutrition Services program.

See Appendix page 72. Researchers: Mary Hill and Gar Yeung
Why Is This Important?
Contaminated sites are areas with ground pollution that can jeopardize public health, the environment, and the economy. Ground contamination has been found on public and commercial land as well as in residential areas. Contaminated sites are an economic liability as site cleanup can be costly and time consuming. Contaminated sites are most common in larger cities with significant industrial or commercial activity and abandoned gasoline stations. There are many sources of ground pollution including:

- Leaking underground storage tanks containing gasoline, heating oil, or other potential contaminants
- Chemical or sewage leaks
- Hazardous material spills
- Landfills

What Is a Sustainable State?
A sustainable state is one where the number of contaminated sites decreases to zero and no new cases of contamination occur.

How Are We Doing?
The California State Water Resources Control Board maintains a database of contaminated sites monitored by local and regional water boards. For San Mateo County, the local authority is the San Francisco Regional Water Quality Control Board.

Contaminated Sites in San Mateo County (as of Year End)

- At year end 2007, there were 507 contaminated sites in San Mateo County that are undergoing investigation, monitoring, and cleanup. The total number of contaminated sites has declined by 39 percent since 1998.
- South San Francisco, Redwood City, and the City of San Mateo had the highest number of contaminated sites. In all three cities, however, the number of contaminated sites has declined by between 28 and 40 percent since 1998.
- Although the countywide total number of contaminated sites decreased from 2006, five cities (Burlingame, Daly City, East Palo Alto, Pacifica, and San Carlos) had more sites at the end of 2007 than the previous year, signifying newly contaminated or discovered sites.
- Among the contaminated sites was one federal Superfund site, a location in East Palo Alto that was once home to a pesticide manufacturing plant.

Data sources: California State Water Resources Control Board and the San Francisco Regional Water Quality Control Board

See appendix page 73. Researcher: Flora Kaplan
**Why Is This Important?**

High levels of crime impact a community’s social and economic well-being. In areas with high levels of crime, community members may become fearful and lose their attachment to their community. High levels of crime can impact property values, inhibit investment in a community, and keep potential customers from visiting local businesses. It can also drain public resources that would otherwise go to other needed services. High levels of juvenile crime are especially disturbing as youths who continue criminal behavior may not develop into emotionally stable and productive adults, harming the long-term stability of a community.

**What Is a Sustainable State?**

A sustainable state is one where crime levels are low and communities have safe schools and neighborhoods.

**How Are We Doing?**

**Violent crime**

- In 2006, the rate of violent crime in San Mateo County was 300.9 crimes per 100,000 residents, an 11 percent decrease from 2005. As in past years, this is far below the statewide rate, which was 518.4 per 100,000 residents in 2006.
- The county’s decline in violent crime was driven primarily by a 15 percent decline in the number of aggravated assaults.

**Juvenile crime**

- In 2006, juvenile felony arrests totaled 888 in San Mateo County, a slight drop from the 890 in 2005.

- Although that figure is 9 percent higher than the low of 812 arrests in 2002, it is over 30 percent lower than ten years ago.
- Total juvenile arrests (including felonies and misdemeanors) declined by 7 percent from 2005 and are 37 percent lower than ten years ago.
- The trends in San Mateo County for both felony and total juvenile arrests compare favorably with the state where the number of arrests increased by 5 and 7 percent from 2005 respectively.

**Positive Trend**

- Data source: California Department of Justice, Criminal Justice Statistics Center

---

**Gang violence**

In 2004 and 2005, there was a combined total of 56 homicides in San Mateo County. Fourteen, or 25 percent, of these were gang related. Six of these crimes occurred in East Palo Alto and three in Redwood City. In no other years since 1997 has the number of gang related homicides been higher than two. In 2006, there was one.

---

**See Appendix page 73. Researchers: Christine Lewis and Shazia Virji**
Why Is This Important?
Natural or human-caused disasters can have devastating effects on a community, the economy, and the environment. Having community-wide or individual plans that provide food, clean water, emergency medical services, temporary shelter, transportation, and other items can lessen the impacts from disasters on residents. Plans to enable areas to quickly restore vital services are also essential so that the effects from a disaster are not compounded by a lack of power, water, sewer, and/or other services. Residents or businesses may move elsewhere if they perceive the time taken to mitigate the effects of a disaster is too long, the damage to resources too great, or recovery aid unevenly distributed.

What Is a Sustainable State?
A sustainable state is one where a community is prepared to meet the emergency needs of all of its members in the event of a disaster.

How Are We Doing?
Local government preparedness
Guidelines under California’s Standardized Emergency Management System (SEMS) and the Federal National Incident Management System (NIMS) are designed to help local governments develop emergency operations plans (EOPs) for disasters. Having an EOP compliant with SEMS and NIMS ensures that during a major disaster, responders can work in a coordinated manner with personnel from other local jurisdictions and the state and federal governments.

- San Mateo County and all of the cities within the county have EOPs compliant with SEMS.
- As of January 2008, over 70 percent of cities in the county had EOPs that were compliant with NIMS. Of the others, nearly all were in the process of updating their plans to meet NIMS guidelines.

In addition, each year city and county emergency personnel and other staff undergo multiple trainings on disaster response procedures.

Community preparedness
Community Emergency Response Team (CERT) training teaches individuals skills such as fire safety, light search and rescue, and first aid; such skills can help local communities during an emergency. Ham radio operator training can provide a community with emergency communication capabilities. A volunteer Medical Reserve Corps (MRC) can help meet the public health needs of a community in an emergency. As of the end of 2007:

- Residents in 85 percent of cities in the county had CERT training available through their local government or fire district. The county also provided CERT training.
- 80 percent of all cities in the county had a trained group of ham radio operators.
- Only the Town of Woodside had an established MRC (although others had identified volunteer medical workers in their communities).

Individual preparedness
In a 2007 poll, the American Red Cross found that only 7 percent of Americans had taken three essential steps necessary to prepare for a disaster: (1) assembled a disaster kit with emergency supplies, (2) made a plan on how to reach family members if they are separated, and (3) were informed about the types of disasters most likely to occur in their community.

Are you prepared?

- Do you know how to find the emergency broadcasting channel on the radio?
- Have you prepared a disaster supply kit with emergency supplies such as water, food, and medicine that is kept in a designated place in your home?
- Have you prepared a small kit with emergency supplies that you keep in your home, in your car, or where you work to take with you if you had to leave quickly?
- Have you made a specific plan for how you and your family would communicate in an emergency situation if you were separated?
- Have you established a specific meeting place to reunite in the event you and your family cannot return home or are evacuated?
- Have you practiced or drilled on what to do in an emergency at home with your family?
- Have you taken CPR and first aid training in the past five years?
- Have you signed up for SMC Alert? It’s San Mateo County’s electronic emergency notification system at www.smcalert.info.

See appendix page 73. Researcher: Joe Rois
**Why Is This Important?**

All human activities depend on the biological support of nature. An Ecological Footprint is a tool designed to measure a population’s use of natural resources. It measures the area of land and water a population requires to produce the resources it consumes and absorb the waste it produces. When a population has a footprint exceeding the area available to replenish its resources, it draws down the natural inventory of those resources. This is important for sustainability because this can impact the quality of life of future generations.

The components of an Ecological Footprint include:
- Natural resources used in production (crop land, grazing land, fishing grounds, and forest land),
- Surface area of the earth (land and water) needed to sequester carbon dioxide emissions from energy use and production, and
- Land required to accommodate human infrastructure (housing, transportation, industrial production, and other built-up land).

**What Is a Sustainable State?**

A sustainable state is one where society’s demand upon nature is in balance with nature’s productive and regenerative capacity, and each person has access to the natural resources necessary to sustain his or her needs.

### Ecological Footprints, Acres per Person, 2003

<table>
<thead>
<tr>
<th></th>
<th>2003 Footprint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td>5.5 acres</td>
</tr>
<tr>
<td>United States</td>
<td>23.7 acres</td>
</tr>
<tr>
<td>San Mateo County (2001)</td>
<td>20.9 acres</td>
</tr>
</tbody>
</table>

**How Are We Doing?**

- In 2003, the global per capita Ecological Footprint was 5.5 acres, whereas the earth's ecological capacity to produce and regenerate was only 4.4 acres per person—a 1.1 acre per person “overshoot.”
- In 2003, the U.S. per capita Ecological Footprint was 23.7 acres, over four times the global footprint.
- In 2001, the Ecological Footprint for San Mateo County was 20.9 acres per person, 2.8 acres less than the 2003 national footprint but still over three and a half times the global figure.
- The largest component of the county’s footprint was energy, accounting for over 13 acres, or 63 percent of the total footprint. This component includes not just energy we use to heat our homes and for transportation, but also the energy used in the production and transportation of the food and other products we enjoy as consumers.
- The county’s total Ecological Footprint in 2001 totaled over 23,000 square miles. Comparatively, the county itself encompasses only 531 square miles.

For more information on Ecological Footprints, please see the Global Footprint Network at www.footprintnetwork.org and Redefining Progress at www.rprogress.org. To estimate your individual Ecological Footprint, see www.myfootprint.org.

---

*Data source: Global Footprint Network and Redefining Progress*

See appendix page 73. Researcher: Joe Rois
Why Is This Important?
The cost of living in San Mateo County is very high relative to other parts of California. Wide gaps in income levels may create a small class of upper-income residents who can afford to live in the county while middle- and lower-income residents may have difficulty remaining. A large income disparity can cause unequal access to education, health care, and other resources. People living in poverty are often unable to meet their nutritional, health care, and educational needs. Children are especially vulnerable to poverty, as deprivation can stunt physical growth and cognitive development.

What Is a Sustainable State?
A sustainable state is one where all community members, regardless of income level, are able to meet their basic needs and enjoy a high quality of life.

How Are We Doing?
Income distribution
In 2006, there were income disparities across individual households in San Mateo County as well as across cities.

- Between 2004 and 2006, the percentage of households in San Mateo County with income above $100,000 grew from 34 percent to 38 percent of total households.
- Between 2004 and 2006, the percentage of households that earned less than $50,000 declined from 36 percent to 30 percent of total households. It is unclear whether this is because of earnings growth or because lower-income households were moving out of the county.
- In 2006, Atherton ($226,414) and Portola Valley ($209,274) had the highest median household incomes in the county. In comparison, four cities in the county had household median incomes below $80,000 (Colma, South San Francisco, San Bruno, and Daly City) and six other cities’ median household incomes were below $90,000.

Poverty
- In 2006, 7.4 percent of San Mateo County residents lived in households with earnings below the federal poverty threshold ($16,079 for a family of three), compared with 13.1 percent of individuals in the entire state.
- In 2006, 10.2 percent of the county’s children lived in households with earnings below the poverty threshold, compared with 6.7 percent of adults age 18 and older.

Because of San Mateo County’s high cost of living, comparisons with the federal poverty threshold can be misleading. In 2006, a family of three in San Mateo County needed household earnings of $66,442 to be self sufficient. More than one-third of households earned less than that level of income. In 2007, the self-sufficiency level increased to $71,827.

See appendix page 73. Researcher: Carrie Branam
**Economy: Jobs**

**Why Is This Important?**
A growing and diversified job base provides economic opportunities for individuals with different skills and educational backgrounds. A substantial distribution of jobs among various industries and small and medium-sized companies creates a platform for economic sustainability. If employment is concentrated in a few large industries, a community's economic vitality is threatened if those industries decline.

**What Is a Sustainable State?**
A sustainable state is one where the number of jobs is sufficient to employ all those seeking work and job growth keeps pace with population growth.

**How Are We Doing?**
In 2006, San Mateo County added 6,600 jobs, a 2 percent increase from 2005. The 2006 reported job total is the highest for the county since 2002.

**Number of Reported Jobs in San Mateo County, 1997-2006**

<table>
<thead>
<tr>
<th>Year</th>
<th>Jobs (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>3324</td>
</tr>
<tr>
<td>1998</td>
<td>3441</td>
</tr>
<tr>
<td>1999</td>
<td>3573</td>
</tr>
<tr>
<td>2000</td>
<td>3758</td>
</tr>
<tr>
<td>2001</td>
<td>3699</td>
</tr>
<tr>
<td>2002</td>
<td>3437</td>
</tr>
<tr>
<td>2003</td>
<td>3251</td>
</tr>
<tr>
<td>2004</td>
<td>3275</td>
</tr>
<tr>
<td>2005</td>
<td>3275</td>
</tr>
<tr>
<td>2006</td>
<td>3341</td>
</tr>
</tbody>
</table>

Information on specific sectors included:
- The largest growth in reported jobs were in leisure and hospitality services (2,000 jobs), educational and health services (1,500 jobs), professional and business services (1,500 jobs), manufacturing (1,300 jobs), and construction (1,000 jobs).
- The information services sector saw the number of reported jobs decrease by 10 percent (2,000 jobs) from 2005.
- Despite recent losses, information services added 6,600 jobs since 1997, a 55 percent increase. Other large gains were found in educational and health services (14 percent increase) and construction (11 percent increase).
- The largest job losses since 1997 were in transportation, warehousing, and utilities (19 percent decrease); financial services (14 percent decrease); manufacturing (12 percent decrease); and wholesale and retail trade (11 percent decrease).

**Job diversity**
The county has a diversified job base with seven different sectors employing over 25,000 workers.

**Percentage of Jobs by Industry in San Mateo County, 2006**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation, Warehousing, and Utilities</td>
<td>8%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>9%</td>
</tr>
<tr>
<td>Educational and Health Services</td>
<td>10%</td>
</tr>
<tr>
<td>Government</td>
<td>10%</td>
</tr>
<tr>
<td>Wholesale and Retail Trade</td>
<td>14%</td>
</tr>
<tr>
<td>Professional and Business Services</td>
<td>18%</td>
</tr>
<tr>
<td>Other</td>
<td>21%</td>
</tr>
</tbody>
</table>

Jobs in the county are also diversified across different company sizes. As of September 30, 2006:
- Thirty-nine percent of the workforce was employed by businesses with fewer than 50 employees,
- Forty percent by businesses with 50-499 employees, and
- Twenty-one percent by employers with 500 or more employees.

**Projections**
By 2014, the total number of jobs in the San Francisco Metropolitan Statistical Area is expected to have grown by 5 percent (over 52,000 jobs) from 2004 levels. Computer system design services and management, scientific, and technical consulting services are each expected to see over 30 percent job growth. There is also expected to be large job growth in accommodation and food services, health care services, chemical manufacturing, and administrative and support services.

See appendix page 74. Nate Marsh and Kiyong Song
Why Is This Important?
The unemployment rate is a basic indicator of economic vitality. Unemployment rates fluctuate with economic cycles and vary across regions. Unemployed individuals are unable to earn money to meet financial obligations, may lack health insurance they normally would receive through an employer, and could be at risk of losing their home.

What Is a Sustainable State?
A sustainable state is one where the level of unemployment is low and the unemployed have access to training and other resources to help them find employment.

How Are We Doing?
• In 2007, the unemployment rate in San Mateo County was 3.8 percent. The average number of unemployed individuals was roughly 14,400 each month.
• The San Mateo County unemployment rate continued to be lower than either the state or federal rates, which were 5.3 percent and 4.6 percent respectively. The county unemployment rate has been below the state and federal rates for each of the last ten years.
• Although slightly higher than 2006, the 2007 unemployment rate was still far below the high rates of unemployment the county experienced in either 2002 or 2003.

Unemployment Rate by City and Census-Designated Place in San Mateo County, 2007 (Preliminary)

- In 2007, the unemployment rate was higher than in 2006 for every city in the county.
- At 9.5 percent, East Palo Alto had the highest unemployment rate in the county and has had the highest rate among cities in the county for each year this decade. However, the unemployment rate in East Palo Alto has declined significantly from 2003 when the rate was 14 percent.
- Hillsborough had the lowest unemployment rate at 1.5 percent and has consistently had the lowest unemployment rate in the county since 2000.

Unemployment Rate, 1998-2007

Data source: California Employment Development Department
(2007 figures are preliminary)
**Why Is This Important?**
A good education provides a foundation for children to become productive members of society, obtain high-quality jobs, and contribute towards their community’s general welfare. By providing equal access to a good education, schools can play a large role in creating a level playing field for all children, regardless of their socioeconomic status. Further, a highly skilled and educated workforce will attract businesses to the area with resulting economic benefits.

**What Is a Sustainable State?**
A sustainable state is one where all children receive a good education that equips them with the tools, knowledge, and confidence to fully reach their human potential and become active participants in society.

**How Are We Doing?**

**API scores**
The Academic Performance Index (API) is the cornerstone of California’s Public Schools Accountability Act of 1999. Student performance on standardized tests is aggregated at the school level and converted into a score between 200 and 1,000. Each individual school is given a yearly growth target based on the previous year’s performance level. The performance target for all California schools is 800.

In 2007, the median API scores for county schools were 797 for elementary, 773 for middle, and 738 for high schools. Median scores for middle and high schools improved from 2006, whereas the median score for elementary schools was down slightly from 798.

Comparisons of API scores between individual schools are problematic because of differences in student populations. A high proportion of socioeconomically disadvantaged students or English learners will have a negative impact on a school's API as these students generally score lower than other students. For example, in 2007 the median API for county school districts was 774, whereas the district level median API for socioeconomically disadvantaged students and English learners was 690 and 671 respectively.

**Preparation for higher education**
In 2006, 46 percent of the county’s high school graduating class met University of California (UC) and California State University (CSU) eligibility requirements, compared with 36 percent for the state.

**Percentage of High School Graduating Class Meeting UC and CSU Eligibility Requirements by District, 2005-06**

<table>
<thead>
<tr>
<th>District</th>
<th>UC Eligibility</th>
<th>CSU Eligibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Mateo Union</td>
<td>52%</td>
<td></td>
</tr>
<tr>
<td>La Honda-Pescadero Unified</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Cabrillo Unified</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Sequoia Unified</td>
<td>46%</td>
<td></td>
</tr>
<tr>
<td>S. San Francisco Unified</td>
<td>39%</td>
<td></td>
</tr>
<tr>
<td>Jefferson Union</td>
<td>36%</td>
<td></td>
</tr>
</tbody>
</table>

Data sources: California Department of Education and the Education Data Partnership

Despite meeting UC and CSU eligibility requirements, many graduates are still unprepared for higher education. Of the students from county high schools entering the CSU system in the fall of 2006, 34 percent were deemed not proficient in math and 42 percent were not proficient in English (as defined as prepared to enroll in college-level courses).

**continued**
Education, continued

School resources
There is wide variability in expenditures per student across school districts. Much of the variation is driven by the availability of local revenue sources to supplement state and federal dollars. It can also reflect revenues received for specific services, such as special education dollars.

<table>
<thead>
<tr>
<th>Expenditures per Student by School District, 2005-06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodside Elem.</td>
</tr>
<tr>
<td>Portola Valley Elem.</td>
</tr>
<tr>
<td>Las Lomitas Elem.</td>
</tr>
<tr>
<td>Hillsborough City Elem.</td>
</tr>
<tr>
<td>Ravenswood City Elem.</td>
</tr>
<tr>
<td>Sequoia Union High</td>
</tr>
<tr>
<td>Menlo Park City Elem.</td>
</tr>
<tr>
<td>San Mateo Union High</td>
</tr>
<tr>
<td>La Honda-Pescadero Unified</td>
</tr>
<tr>
<td>Belmont-Redwood Shores Elem.</td>
</tr>
<tr>
<td>Brisbane Elem.</td>
</tr>
<tr>
<td>Redwood City Elem.</td>
</tr>
<tr>
<td>Bayshore Elem.</td>
</tr>
<tr>
<td>Jefferson Union High</td>
</tr>
<tr>
<td>San Carlos Elem.</td>
</tr>
<tr>
<td>San Mateo-Foster City Elem.</td>
</tr>
<tr>
<td>Burlingame Elem.</td>
</tr>
<tr>
<td>Cabrillo Unified</td>
</tr>
<tr>
<td>Millbrae Elem.</td>
</tr>
<tr>
<td>Jefferson Elem.</td>
</tr>
<tr>
<td>Pacifica</td>
</tr>
<tr>
<td>San Bruno Park Elem.</td>
</tr>
<tr>
<td>S. San Francisco Unified</td>
</tr>
</tbody>
</table>

Data related to teachers in the county include:

• During the 2006-07 school year, 95 percent of the 4,565 teachers employed in county schools were fully credentialed, the same percentage as for all public schools in the state.

• During the 2005-06 school year, two districts (Los Lomitas Elementary and Portola Valley Elementary) had average annual teacher salaries exceeding $78,000. Thirteen school districts’ average teacher salaries were below $60,000.

• During the 2005-06 school year, two districts (Portola Valley Elementary and Woodside Elementary) had pupil-teacher ratios of roughly 13 students per teacher, whereas three districts (Pacifica, Jefferson Union High, and San Bruno Park Elementary) had pupil-teacher ratios over 22 students per teacher.

Arts, career technical, and outdoor education
Art is an important element in a well-rounded education. Students learn creative thinking and different ways of expressing themselves. Arts education can benefit all children, but the effects on at-risk children can be even greater. This is especially true for children from low-income households who, because of a lack of resources available to them, are less likely to be introduced to the arts. Arts competencies themselves can be marketable skills in today’s economy (e.g., web design, graphic arts, advertising, etc.).

Career technical education, formerly known as vocational education, helps students explore future career options and prepare for post-high school training or work. It can also simply keep students interested and engaged enough in school to graduate.

The following chart shows the number of fine art and career technical education classes offered in county schools since the 2002-03 school year.

<table>
<thead>
<tr>
<th>Fine Arts and Career Technical Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Classes Offered</td>
</tr>
<tr>
<td>Fine Arts</td>
</tr>
<tr>
<td>Career Technical Education</td>
</tr>
</tbody>
</table>

Data source: California Department of Education

The San Mateo Outdoor Education Program hosts students at Jones Gulch to learn about the natural world. Students attend classes, explore tide pools, visit marshes, and hike with a team of naturalists who teach them about the coastal environment and living sustainably. Since the 2003-04 program year, an average of over 4,600 fifth or sixth graders and over 460 high school students have participated annually.

See appendix page 74. Researchers: Elinore Bloomfield and Valerie Sims
**Why Is This Important?**

California and San Mateo County are dependent on the burning of nonrenewable fossil fuels such as coal, petroleum, and natural gas for energy. The burning of fossil fuels can negatively impact air quality and release significant quantities of carbon dioxide, a greenhouse gas linked to climate change. California has committed to reduce its greenhouse gas emissions to 1990 levels by 2020. Increased energy efficiency and an increase in non-greenhouse gas emitting energy sources are keys to achieving this goal. An overreliance on fossil fuels can also make an economy vulnerable to price spikes in the oil or natural gas markets.

**What Is a Sustainable State?**

A sustainable state is one that is carbon neutral and energy is produced from clean, renewable sources and used efficiently.

**How Are We Doing?**

**Energy consumption**

- In 2006, energy use from electricity and natural gas in San Mateo County totaled nearly 41 trillion British thermal units, a 3 percent increase from 2005 and a 12 percent increase from 1997. Since 1997, electricity use has increased by 23 percent. Natural gas use has increased 4 percent.
- In 2006, natural gas accounted for 55 percent of energy consumed in the county, roughly the same as in past years.
- In 2006, residential use accounted for 49 percent of energy consumption in the county. Average annual household electricity use in the county was 5,841 kilowatt hours, a 1 percent increase from 2005. Average annual household natural gas use was 528 therms, a 2 percent decrease from 2005.
- Average household energy use was highest in Atherton, Woodside, Hillsborough, and Portola Valley. Average household use was at least double the county average (and in some cases three times the average) for both natural gas and electricity in each of these communities.

### Average Residential Electricity Use per Household, 2005-2006

- Atherton
- Woodside
- Hillsborough
- Portola Valley
- Unincorporated
- San Carlos
- Half Moon Bay
- Menlo Park
- Belmont
- Foster City
- Millbrae
- Pacifica
- Redwood City
- San Mateo
- East Palo Alto
- Burlingame
- San Bruno
- Daly City
- S. San Francisco
- Brisbane
- Colma

![Bar chart showing electricity and natural gas use in San Mateo County from 1997 to 2006.](Data sources: California Energy Commission and Pacific Gas and Electric Company)
Sustainable San Mateo County

Electricity generation
Pacific Gas and Electric Company (PG&E) provides most of the electricity used by San Mateo County residents and businesses.

- In 2006, PG&E’s delivered electricity was generated primarily from natural gas (42 percent), nuclear power (23 percent), and large hydroelectric power (19 percent).
- Only 3 percent of PG&E’s delivered electricity came from coal-fired power plants. By comparison, coal accounted for 16 percent of the electricity delivered to all California electricity customers.
- In 2006, renewable energy sources, including biomass, geothermal, small hydroelectric, wind, and solar, accounted for 13 percent of PG&E’s delivered electricity, a slight increase from 2005 (12 percent).

In 2007, there were 246 new solar photovoltaic installations in the county totaling 1,236 kilowatts of new generation capacity. At year end 2007, there was over 4,000 kilowatts of solar generation capacity in the county (981 individual installations). More than half of this total was installed in either 2006 or 2007.

See appendix page 75. Researchers: Isabelle Gecils, Valerie Sims, and Joe Rois
Why Is This Important?
The construction, operation, maintenance, and removal of buildings use a tremendous amount of energy and natural resources and generate large quantities of waste and pollution. Green building practices seek to minimize the impact of our built environment by creating healthier and more resource-efficient buildings. Green buildings provide environmental benefits by reducing solid waste and conserving resources, economic benefits by reducing operating costs and enhancing asset values, and social benefits by minimizing the strain on local infrastructure and providing healthy indoor environments.

What Is a Sustainable State?
A sustainable state is one where buildings are resource efficient, produce minimal waste, built with nontoxic substances, and have healthy indoor environments.

How Are We Doing?
LEED Buildings
The U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) Green Building Rating System measures a building’s performance in five key areas: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. At year end 2007, there were five LEED certified buildings in San Mateo County.

• The William and Flora Hewlett Foundation Headquarters in Menlo Park
• The Rudolph and Sletten Corporate Headquarters in Redwood City
• The San Mateo County Forensic Laboratory in San Mateo
• The Alexandra Real Estate Equities building in South San Francisco
• A Sugen Pharmaceutical laboratory in South San Francisco

In addition, there are nearly 30 other projects in the county that have registered with the USGBC to begin the certification process. These projects are located throughout the county and include commercial buildings, libraries, schools, and other public facilities.

Green building policies
A green building policy is a written ordinance, code, policy, or guideline that promotes the construction of green buildings. Two local governments currently have green building policies.

• San Mateo County requires future county facilities over 5,000 square feet be built to LEED standards. In addition, the county is evaluating a new policy that would require all new construction over a specific size to meet certain green building standards.
• Brisbane requires all city and commercial buildings over a specific size to meet LEED standards, and residential buildings over a specific size to meet certain green building requirements.

In addition, Hillsborough and Portola Valley require that permit applications for new construction include either a Build It Green GreenPoints checklist or a Sustainable Buildings Checklist.

Local government can do many things to promote green building practices. Although not a complete list, specific policies in the county include:

• Nearly all of the cities in the county have construction debris and waste management ordinances that require reuse or recycling of materials from construction sites.
• Most cities have sought to make public facilities more energy efficient.
• Some cities offer rebates or have lowered fees for the installation of photovoltaic energy systems.
• Most cities and/or water districts have residential water conservation programs such as rebates for low-flow toilets and other water-saving devices.
• Many provide educational materials or programs for residents and building professionals.

See appendix page 75. Researcher: Brittany Bendix
**Why Is This Important?**
San Mateo County supports many plants and animals that are important to the health of local ecosystems and provide environmental and economic benefits to local communities. Development in sensitive areas, pollution, or the introduction of invasive species can all lead to habitat loss and destruction.

**What Is a Sustainable State?**
A sustainable state is one where ecosystems are healthy and land use or other decisions are balanced with the need for habitat protection.

**How Are We Doing?**

### Threatened and endangered species
San Mateo County is home to over 40 state or federally listed threatened or endangered species. Species with important habitat in the county include:

- The San Francisco garter snake, found only in San Mateo County, feeds primarily on the federally threatened California red-legged frog. Both species prefer wetland habitats, which have been lost to agricultural, commercial, and urban development.
- The marbled murrelet uses coastal streams to move between the ocean and its breeding sites in the SFPUC watershed.
- The endangered mission blue and callippe silverspot butterflies are protected by a Habitat Conservation Plan (HCP) on San Bruno Mountain. This HCP was the first in the nation and has been protecting the butterflies since 1983.
- The Bay checkerspot butterfly and numerous plant species depend on the county’s serpentine soils, which have been severely degraded because of habitat loss and automobile emissions that fertilize invasive grass species.

### Invasive species
The San Mateo County Weed Management Area is a regional organization formed by public agencies, private landowners, the agricultural industry, and environmental organizations that are concerned with invasive plant species in the county. Their top eight invasive species of concern are the yellow star thistle, jubata grass, pampas grass, French broom, Scotch broom, cape ivy, gorse, and fennel.

### Bird populations
Bird populations have been tracked through the Audubon Society’s Christmas bird counts at Año Nuevo and Crystal Springs. Three species were chosen to show trends in bird populations.

- The common raven because its population is closely tied to human presence and disturbance.
- The acorn woodpecker because it is a cavity nester that depends on oak habitats for survival.

### Habitat Restoration on Bair Island
Work on Bair Island in the Don Edwards San Francisco Bay National Wildlife Refuge will restore 1,400 acres of tidal marshland. Perimeter levees will be breached to allow tidal action via surrounding slough channels and excavations through internal levees will reestablish historic channels to facilitate circulation and drainage. The restored marsh complex will provide habitat for the endangered California clapper rail and salt marsh harvest mouse, and for other important San Francisco Bay wildlife such as the western snowy plover, California least tern, and California brown pelican. Begun in 2007, restoration work is hoped to be completed by 2010-11.

---

*Data source: National Audubon Society*
Why Is This Important?
The health of a community is affected by many interrelated factors including environmental and neighborhood characteristics, social factors, and individual behavior. Environmental and neighborhood characteristics influencing residents’ health can be direct, such as exposure to toxic substances, or indirect, such as access to recreation areas or the availability of affordable housing. Social factors that may impact residents’ health include the availability of health information (including linguistically and culturally appropriate information), norms encouraging healthy behaviors, and inequalities across socioeconomic or ethnic groups.

What Is a Sustainable State?
A sustainable state is one where a community provides a healthy environment for all of its members and healthy behaviors are reinforced in daily social interaction.

How Are We Doing?
In 2004, the leading causes of death in San Mateo County were cancer and heart disease. Together, they accounted for over half of all deaths in the county.

<table>
<thead>
<tr>
<th>Disease</th>
<th>Percentage of Total Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer</td>
<td>27%</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>26%</td>
</tr>
<tr>
<td>Cerebrovascular Disease</td>
<td>8%</td>
</tr>
<tr>
<td>Respiratory Disease</td>
<td>5%</td>
</tr>
<tr>
<td>Influenza and Pneumonia</td>
<td>4%</td>
</tr>
</tbody>
</table>

Data source: The Healthy Community Collaborative of San Mateo County

In 2004, only 7 percent of San Mateo County residents exhibited a combination of healthy behaviors that limit the risk of cancer and heart disease (they do not smoke, are not overweight, exercise at least three times per week, and eat an average of five fruits and/or vegetables a day).

- In 2004, men were much less likely than women to exhibit all four healthy behaviors (only 4 percent of men compared with 11 percent of women).
- Asian (9 percent) and White residents (8 percent) were more likely to exhibit all four healthy behaviors than African American (6 percent) or Latino residents (3 percent).

In 2004, 11 percent of county residents were smokers, with rates highest among persons with only a high school education or less (18 percent), Latino residents (16 percent), and men (15 percent).

In 2004, 55 percent of county residents did not participate in regular physical activity. Residents age 65 or older (73 percent), persons with only a high school education or less (63 percent), and women (58 percent) were least likely to participate in regular physical activity.

In 2004, 19 percent of county residents were obese, a significant increase from 1998 when only 13 percent of residents were obese.

Chronic diseases are long lasting and can cause limitations in daily activity. Between 1998 and 2004, there were significant increases in the prevalence of certain chronic diseases including asthma, lung disease, and diabetes among county residents.

Prevalence of Selected Chronic Illness in San Mateo County, 1998 and 2004

<table>
<thead>
<tr>
<th>Illness</th>
<th>1998</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arthritis/Rheumatism</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>Asthma</td>
<td>8%</td>
<td>15%</td>
</tr>
<tr>
<td>Chronic Lung Disease</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>4%</td>
<td>7%</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>5%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Data source: The Healthy Community Collaborative of San Mateo County

See appendix page 75. Researcher: Joe Rois
**Why Is This Important?**
Affordable quality health care is necessary for a healthy and productive life. Health insurance allows access to health care and spreads the cost across the community. High costs for health insurance, treatment, and medications are a deterrent to obtaining proper care and leave less money for other basic needs. Deferring care because of cost often leads to more severe illness, which burdens individuals and the health care system further.

**What Is a Sustainable State?**
A sustainable state is one where all members of the community have access to affordable quality health care.

**How Are We Doing?**

**Health insurance**
- In 2005, 8 percent of San Mateo County residents lacked health insurance—roughly 56,000 individuals. This is an improvement from 2003 when 10 percent of county residents lacked health insurance.
- The percentage of county residents lacking health insurance compared favorably with both the state (14 percent) and the entire nine-county Bay Area region (9 percent).

<table>
<thead>
<tr>
<th>Year</th>
<th>San Mateo County</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>2003</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>2005</td>
<td>14%</td>
<td>16%</td>
</tr>
</tbody>
</table>

*Data source: UCLA Center for Health Policy Research*

**Health care costs**
- In 2007, the cost of health care in the Bay Area Metropolitan region, as measured by increases in the medical care category of the Consumer Price Index, grew by 7 percent compared with a 3 percent increase for all goods.
- Over the past decade, medical costs have risen at an annual average growth rate of nearly 5 percent compared with a 3 percent growth rate for all goods.

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Increase in the Cost of Health Care in the Bay Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>7%</td>
</tr>
<tr>
<td>2008</td>
<td>7%</td>
</tr>
<tr>
<td>2009</td>
<td>10%</td>
</tr>
<tr>
<td>2010</td>
<td>7%</td>
</tr>
<tr>
<td>2011</td>
<td>3%</td>
</tr>
<tr>
<td>2012</td>
<td>3%</td>
</tr>
<tr>
<td>2013</td>
<td>3%</td>
</tr>
<tr>
<td>2014</td>
<td>3%</td>
</tr>
<tr>
<td>2015</td>
<td>3%</td>
</tr>
<tr>
<td>2016</td>
<td>7%</td>
</tr>
</tbody>
</table>

*Data source: U.S. Department of Labor, Bureau of Labor Statistics*

See appendix page 75. Researchers: Joyce Routson and Joe Rois
### Why Is This Important?
A lack of affordable housing limits the ability of people to live in San Mateo County and employers to recruit qualified workers. Individuals are left with the options of living in another county and facing long commutes, paying more than they can comfortably afford for housing, living in overcrowded conditions, or moving out of the area entirely.

### What Is a Sustainable State?
A sustainable state is one where housing is available and affordable to all members of society and new housing is built to meet projected population and job growth.

### How Are We Doing?
**Housing costs**
- The California Association of Realtors estimated that in the third quarter of 2007, only 17 percent of households in San Mateo County could afford to purchase an entry-level home, compared with 24 percent of households in the state and over 60 percent nationally (an entry-level home is defined as one that is equal to 85 percent of the prevailing median price).
- In 2007, the median sales price of a single-family home in San Mateo County was $918,000, a 2 percent increase from 2006 and a 68 percent increase from 1998. At the national level, the median sales price of a single-family home dropped by 1 percent from 2006.
- In 2007, the median sales price of a condominium was $570,000, an 82 percent increase from 1998.
- With median sales prices of single-family homes over $2 million, Atherton, Hillsborough, and Woodside continued to be the most expensive places to purchase homes in the county.
- In 2007, the household income necessary to purchase the median-priced single-family home in San Mateo County was nearly $196,000, more than twice the U.S. Housing and Urban Development median family income estimate for the San Francisco Metropolitan Area ($86,500).
- In 2007, average rents in the county for one- and two-bedroom apartments were $1,506 and $1,723 per month respectively. Even adjusting for inflation, these rents were 5 and 6 percent higher than in 2006.
- Average rents were highest in Menlo Park for a one-bedroom apartment ($1,972 per month) and Millbrae for a two-bedroom apartment ($2,072 per month).

---

**Data sources:** San Mateo County Association of Realtors and the San Mateo County Department of Housing
A significant shortage of housing supply is the primary cause of the high housing costs in the county. Barriers to housing development include limited undeveloped land, local regulatory barriers, and community opposition.

Every five to seven years, local jurisdictions are allocated housing production targets based on the state’s Regional Housing Need Allocation (RHNA) process. Projections are based on anticipated job growth, anticipated population growth, and existing need.

• During the 1999-2006 RHNA period, local governments in the county issued building permits for only 63 percent of the housing target for the county.

• Local governments in the county issued housing building permits for 20 percent of the RHNA allocation for housing affordable to very low-income households and 52 percent for low-income households.

In 2006-2007, a new Regional Housing Needs Allocation process took place. San Mateo County’s regional share of household growth was estimated to be 7 percent of the Bay Area’s growth and was accordingly allocated a target of nearly 16,000 units for the 2007-2014 period.

During the RHNA process, all 21 jurisdictions in the county formed a subregion that will manage the distribution of the housing need allocation numbers among the cities and the county. The formation of the subregion will allow jurisdictions to trade allocation figures in exchange for equivalent resources, in hopes that the overall housing need in the county will have a better chance of being met.

The next step in the RHNA process is for local jurisdictions to update the Housing Elements of their General Plans, which will outline how they expect to meet their housing need in the future.

See appendix page 76. Researcher: Nishita Bakshi
**Why Is This Important?**

Homeless individuals lack a fixed, regular, and adequate nighttime residence. Homelessness detracts from an individual’s ability to reach his or her full human potential and negatively impacts their overall health. Difficulty finding a safe place to sleep at night can undermine a person’s ability to maintain a steady job. Homelessness can impact children’s ability to succeed in school, putting them at risk of becoming homeless as an adult. Furthermore, homelessness jeopardizes the safety of both homeless individuals and the communities in which they seek shelter.

**What Is a Sustainable State?**

A sustainable state is one where nobody is homeless and those at risk of becoming homeless have access to safe temporary shelters, affordable permanent housing, and counseling and support services.

**How Are We Doing?**

In its 2007 Homeless Census and Survey, San Mateo County identified 2,064 homeless individuals residing in the county (0.3 percent of the total populations). This included 1,094 unsheltered individuals and 970 individuals in homeless shelters. Based on the survey findings, it was estimated that 6,646 individuals were homeless at some point during the year.

Other findings from the survey included:

- Seven percent of the 1,775 homeless households were families with dependent children.
- African Americans were disproportionately represented in the homeless population, comprising 3 percent of the county’s total population but 31 percent of its homeless population.
- Thirteen percent of the homeless population reported having been in the foster care system, which is consistent with national findings that a significant number of emancipated foster youth become homeless.
- Twenty-four percent of the homeless population reported having used hospital emergency rooms three or more times in the previous year.

**Homeless services**

In fiscal year 2006-07, the Shelter Network served 850 homeless families and 638 homeless adults, totaling 3,506 individuals. Of its 3,506 clients, 1,571 were children. The Shelter Network provided over 183,000 shelter bed nights, a 16 percent increase from the previous year. In November 2007, 55 families were on its waiting list for shelter.

Samaritan House reported that in 2007 there had been an increase in demand for beds at its Safe Harbor Shelter in South San Francisco. In 2007, all 90 beds were occupied for the entire year, whereas in the past the Shelter normally had vacant beds at some point during the summer months.

Through the county’s Project HOPE (Housing our People Effectively) plan, the City of San Mateo purchased the Vendome Hotel to create new units of permanent supportive housing for the long-term homeless. As of November 2007, six formerly homeless individuals resided at the Vendome, with more to move in as the hotel completes renovation.

See appendix page 76. Researcher: John Kittermaster
**Why Is This Important?**
Good growth management policies are necessary to balance the county's needs and preserve its high quality of life. Directing growth to already developed areas can preserve the county's character and lead to reinvestment in existing neighborhoods. Development away from urban centers where jobs are located can result in long commutes, traffic congestion, and air pollution from automobiles, as well as the loss of open space or agricultural land.

**What Is a Sustainable State?**
A sustainable state is one where a community balances land uses to meet the need for housing, commerce, infrastructure, agriculture, parks and open space, and habitat protection.

**How Are We Doing?**
- In 2005, 37 percent of the land in San Mateo County was urban, compared with only 26 percent for the entire Bay Area. This is primarily because of a lower proportion of land used for agriculture in the county compared with other counties in the region.
- Residential land accounted for over half of all urban lands (51 percent), a slightly higher percentage than for the entire Bay Area (49 percent).
- Major infrastructure, which is mainly roads and highways, accounted for 26 percent of urban land and 9 percent of all land in the county, in total over 26,000 acres.
- The amount of the county's urban land increased slightly from 2000, primarily because of land formerly classified as rangeland being converted to a residential or commercial use.

**By 2050, San Mateo County’s population is projected to grow to roughly 820,000, an increase of nearly 90,000 residents. Absent good policies to accommodate this growth in a sustainable manner, development may occur in ways that could negatively impact residents’ quality of life.**

**Planning for Sustainability**
The American Planning Association’s goals and policies for sustainable land use include:
- Reduce dependence upon fossil fuels by promoting: (a) compact development that minimizes the need to drive, (b) a mix of integrated community uses (housing, shops, etc.), (c) pedestrian friendly development, (d) transit-oriented development, and (e) local food production and agriculture that reduce the need for long-range food transport.
- Reduce activities that impact the natural environment through: (a) guiding development to existing developed areas, (b) maintaining a well defined “edge” around each community that is protected from development, (c) remediation and redevelopment of brownfield and other contaminated sites, and (d) creating financial and regulatory incentives for infill development (or elimination of disincentives).
- Meet human needs fairly and efficiently by eliminating disproportionate environmental burdens and pollution experienced by historically disadvantaged communities.

**Data source:** Association of Bay Area Governments

---

**Sustainable San Mateo County**

---

**Planning for Sustainability**

---

**Data source:** Association of Bay Area Governments

---

**No Clear Trend**
Parks and Open Space

Why Is This Important?
Parks and open space enrich a community’s quality of life. The availability of active (playgrounds, playfields, etc.) and passive (hiking trails, picnic areas, etc.) recreational opportunities offer public health benefits and increase values of nearby property. Parks are also public gathering places that bring people together and build a sense of community.

What Is a Sustainable State?
A sustainable state is one where parks and open space are abundant, of good quality, and readily accessible to all residents.

How Are We Doing?
There are over 110,000 acres of parkland and protected open space in San Mateo County, the majority of which is open for public use.

Significant landholdings in the county include watershed lands managed by the SFPUC, land owned by the Midpeninsula Regional Open Space Trust, state parks, San Mateo County parks, and land owned by the Peninsula Open Space Trust. The remaining protected lands are owned by cities, the federal government, state agencies, and nonprofit organizations.

City parks
City parks are generally the most accessible and most used park facilities. They can range from small pocket parks located within individual neighborhoods consisting solely of a playground and a few picnic tables, to large community or regional parks offering multiple active and passive recreational opportunities.

- In 2007, Brisbane had the highest number of acres of city-owned parkland per 1,000 residents in San Mateo County, with 6.6 acres per resident.
- The average number of acres per 1,000 residents for cities in the county was 2.3 acres per 1,000 residents.
- These numbers do not account for other recreational facilities, such as school playgrounds, county parks, or city-owned open space that could be available nearby to city residents.
- In 2007, 16 cities had an in lieu fee ordinance which levies a development fee to provide funds for parks expenditures.

### Acres of City-Owned Parks per 1,000 Residents, 2007

<table>
<thead>
<tr>
<th>City</th>
<th>Acres per 1,000 Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atherton</td>
<td>3.0</td>
</tr>
<tr>
<td>Belmont</td>
<td>1.2</td>
</tr>
<tr>
<td>Brisbane</td>
<td>6.6</td>
</tr>
<tr>
<td>Burlingame</td>
<td>2.3</td>
</tr>
<tr>
<td>Colma</td>
<td>1.3</td>
</tr>
<tr>
<td>Daly City</td>
<td>2.7</td>
</tr>
<tr>
<td>East Palo Alto</td>
<td>0.5</td>
</tr>
<tr>
<td>Foster City</td>
<td>4.5</td>
</tr>
<tr>
<td>Half Moon Bay</td>
<td>0.7</td>
</tr>
<tr>
<td>Hillsborough</td>
<td>0.3</td>
</tr>
<tr>
<td>Menlo Park</td>
<td>2.3</td>
</tr>
<tr>
<td>Millbrae</td>
<td>1.5</td>
</tr>
<tr>
<td>Pacifica</td>
<td>4.3</td>
</tr>
<tr>
<td>Portola Valley</td>
<td>3.8</td>
</tr>
<tr>
<td>Redwood City</td>
<td>2.4</td>
</tr>
<tr>
<td>San Bruno</td>
<td>1.7</td>
</tr>
<tr>
<td>San Carlos</td>
<td>1.7</td>
</tr>
<tr>
<td>San Mateo</td>
<td>2.0</td>
</tr>
<tr>
<td>S. San Francisco</td>
<td>2.6</td>
</tr>
<tr>
<td>Woodside</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Data sources: Survey of City Parks and Recreation Directors and the California Department of Finance

See appendix page 76. Researcher: Joe Rois
**Why Is This Important?**
Widespread use of toxic pesticides can damage human health and the environment. Toxic pesticides are nerve toxins, and can cause cancer, pose reproductive hazards, disrupt hormone function, and pollute the air and water. Pesticides that are applied to homes, gardens, buildings, agriculture, rights of way, and other areas can run off into waterways, polluting water and threatening the health of wildlife. Organic food production (a $16.7 billion dollar industry in the United States that grew 21 percent in 2006) and nontoxic pest management are emerging as alternatives to toxic pesticide use.

**What Is a Sustainable State?**
A sustainable state is one where the most toxic pesticides are eliminated from use and nontoxic management practices are widespread.

**How Are We Doing?**
In 2006, of the 365,000 pounds of pesticides used in San Mateo County for nonresidential purposes, 71 percent (257,000 pounds) was classified as most toxic by the Pesticide Action Network.

- In 2006, use of the most toxic pesticides in the county was up 57 percent from 2005 and 24 percent from 1997.

<table>
<thead>
<tr>
<th>Pounds of Pesticides Used in San Mateo County (Excluding Residential Use), 1997-2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
</tr>
<tr>
<td>1998</td>
</tr>
<tr>
<td>1999</td>
</tr>
<tr>
<td>2000</td>
</tr>
<tr>
<td>2001</td>
</tr>
<tr>
<td>2002</td>
</tr>
<tr>
<td>2003</td>
</tr>
<tr>
<td>2004</td>
</tr>
<tr>
<td>2005</td>
</tr>
<tr>
<td>2006</td>
</tr>
</tbody>
</table>

- The rise in 2006 was completely attributable to the increased use of the most toxic pesticides for rights of way (an increase from roughly 6,000 pounds in 2005 to 145,000 in 2006).

- In 2006, the use of the most toxic pesticides decreased for agriculture, nonresidential landscape maintenance, nonresidential structural pest control, and other uses.

**Uses of Most Toxic Pesticides in San Mateo County (Excluding Residential Use), 2006**

<table>
<thead>
<tr>
<th>Uses</th>
<th>Pounds (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rights of Way</td>
<td>145,000</td>
</tr>
<tr>
<td>Agriculture</td>
<td>25,000</td>
</tr>
<tr>
<td>Landscape Maintenance</td>
<td>11,000</td>
</tr>
<tr>
<td>Other</td>
<td>4,000</td>
</tr>
<tr>
<td>Total</td>
<td>190,000</td>
</tr>
</tbody>
</table>

- In 2006, three pesticides accounted for 73 percent of the most toxic pesticides used in the county (for nonresidential purposes).

1. Oryzalin, used almost exclusively for rights of way, accounted for 41 percent of total nonresidential use of the most toxic pesticides. Oryzalin is a known carcinogen and potential groundwater contaminant.

2. Sulfuryl fluoride, an acutely toxic fumigant used for termite pest control by structural pest control companies, was the second most heavily used toxic pesticide in the county (18 percent of total).

3. Metam-sodium, a pre-plant fumigant used primarily on Brussels sprouts and for rights of way, was third (14 percent of total). Metam-sodium is acutely toxic, a known carcinogen, and considered a developmental or reproductive toxin.

In 2006, there were over 105,000 pounds of oryzalin used in San Mateo County, compared with only 1,900 pounds in 2005. Oryzalin use is the primary reason for both the growth in overall use of the most toxic pesticides and for the growth in applications for rights of way. The reason for this growth is unclear.

*See appendix page 77. Researcher: Kendra Armer*
Why Is This Important?
Population growth increases demands on land, natural resources, and public services. Changing demographics require local businesses and governments to adapt their products and services to their populations’ specific needs.

What Is a Sustainable State?
A sustainable state is one where a community is able to accommodate population growth without negatively impacting quality of life or depleting scarce natural resources.

How Are We Doing?
• In 2007, the San Mateo County population was 734,500, a 1 percent increase from 2006 and a nearly 6 percent increase since 1998.
• The 2007 increase was due to roughly 5,000 more births than deaths as well as a positive net migration into the county of over 3,100 individuals.
• In 2007, 46 percent of the county’s population was White, 23 percent was Latino, 23 percent was Asian, 3 percent was African American, and the remaining 5 percent was multi-racial or another race. In 2000 by comparison, 50 percent of the county’s population was white, 22 percent Latino, and only 20 percent Asian.
• Since 2000, the median age in the county has increased from 37 to 39 years.

Since 2000, the proportion of the county’s population that is under 20 years of age has remained roughly 25 percent, whereas the proportion of individuals between the ages of 20 and 55 has declined from 54 to 50 percent, and the proportion of individuals over 55 years of age has increased from 21 to 25 percent.
• Daly City has the largest population among cities in San Mateo County with over 106,000 residents.
• Since 1998, South San Francisco and San Mateo have added the most new residents, roughly 5,400 and 4,700 respectively.
• East Palo Alto has added roughly 4,000 residents since 1998, the most among cities in the county with a population below 50,000.
• The county’s population is expected to continue to grow and reach nearly 820,000 by 2050.


Data source: California Department of Finance

See appendix page 77. Researcher: Carol Mink
Why Is This Important?
Public libraries are gateways to information, providing members of a community access to the internet, reference tools, and a variety of published materials. Libraries are important institutions for promoting social equity as they do not discriminate, but rather provide equal access to all members of society. For some, libraries are the only place they can access the internet or reading material. Libraries’ reference tools can be extremely helpful to students and the business community. Community rooms, children’s programs, and special literacy programs are offered by most libraries, helping foster an environment of unity and learning.

What Is a Sustainable State?
A sustainable state is one where all members of society have access to public libraries.

How Are We Doing?
The level of library expenditures indicates a community’s support for its libraries. In 2005-06, annual expenditures per capita for all public libraries in San Mateo County continued to increase, reaching $57.67. By comparison, annual expenditures per capita for neighboring Santa Clara County libraries was $45.60 and the statewide average was $29.39. After removing the effects of inflation, per capita expenditures in the county have increased 16 percent since 1996-97.

Other findings from 2005-06 included:

- Although 7 percent higher than a decade ago, the total number of hours public libraries in the county were open decreased by 1 percent from 2004-05.
- The total number of library card holders for county libraries was 15 percent higher than it was in 2001-02.
- Average countywide circulation per capita, which did not change from 2004-05, was 9.8 materials borrowed. Statewide circulation per capita was 5.4 materials borrowed.
- The number of internet terminals in county libraries was 0.8 per 1,000 residents, comparing favorably with the statewide average of 0.4 per 1,000 residents. The total number of internet terminals in county libraries increased by 26 percent from 2004-05.
- The number of reference questions asked continues to decline in county libraries, likely because of an increase in the use of the internet for reference purposes and the increasing number of internet terminals. In 2005-06, there were 10 percent fewer reference questions per capita than 1996-97.
**Solid Waste**

**Why Is This Important?**
Daily household and economic activity generates solid waste that is put in landfills. This waste is derived from timber, metals, and other natural resources. Many of these resources are renewable, but consumption may outpace nature’s ability to replenish them. Waste reduction and recycling efforts focus on ways to balance resource consumption and renewal and reduce the amount of waste put in landfills.

**What Is a Sustainable State?**
A sustainable state is one where consumption of resources is in balance with nature’s ability to replenish them and products that are produced are reused, recycled, or composted rather than thrown away.

**How Are We Doing?**
- In 2006, San Mateo County generated and disposed of in landfills a total of 723,000 tons of solid waste, a decline of 5 percent (38,000 tons) from 2005 and the lowest total in more than a decade.
- In 2006, total solid waste generated in the county was 21 percent less than 2000.
- Roughly one-third of all waste in the county is residential waste. According to state estimates, nearly 20 percent of residential waste is food remains and another 10 percent is organic matter such as leaves and grass.
- In 2006, the average household in the county generated an estimated 1.8 pounds of waste per day.
- In 2006, Redwood City, South San Francisco, and San Mateo generated the most commercial solid waste in the county.
- In the commercial sector, paper and food waste are the largest components of the waste stream. Restaurants and retail establishments are the largest generators of commercial waste (an estimated 10 percent and 9 percent of the total commercial waste stream respectively).

![Total Solid Waste Generated in San Mateo County, 1997-2006](image)

**Estimated Residential Waste per Capita per Day, 2006**

<table>
<thead>
<tr>
<th>City</th>
<th>Waste per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colma</td>
<td>4.3</td>
</tr>
<tr>
<td>Atherton</td>
<td>3.8</td>
</tr>
<tr>
<td>Hillsborough</td>
<td>3.7</td>
</tr>
<tr>
<td>Woodside</td>
<td>3.2</td>
</tr>
<tr>
<td>San Bruno</td>
<td>3.0</td>
</tr>
<tr>
<td>San Carlos</td>
<td>3.0</td>
</tr>
<tr>
<td>Pacifica</td>
<td>2.9</td>
</tr>
<tr>
<td>Menlo Park</td>
<td>2.6</td>
</tr>
<tr>
<td>Millbrae</td>
<td>2.1</td>
</tr>
<tr>
<td>Brisbane</td>
<td>2.0</td>
</tr>
<tr>
<td>Half Moon Bay</td>
<td>1.9</td>
</tr>
<tr>
<td>Daly City</td>
<td>1.8</td>
</tr>
<tr>
<td>Belmont</td>
<td>1.7</td>
</tr>
<tr>
<td>Burlingame</td>
<td>1.7</td>
</tr>
<tr>
<td>San Mateo</td>
<td>1.6</td>
</tr>
<tr>
<td>East Palo Alto</td>
<td>1.5</td>
</tr>
<tr>
<td>Portola Valley</td>
<td>1.5</td>
</tr>
<tr>
<td>Foster City</td>
<td>1.5</td>
</tr>
<tr>
<td>Redwood City</td>
<td>1.2</td>
</tr>
<tr>
<td>S. San Francisco</td>
<td>1.2</td>
</tr>
<tr>
<td>Unincorporated</td>
<td>0.9</td>
</tr>
</tbody>
</table>

*Data source: California Integrated Waste Management Board and the California Department of Finance*

See appendix page 78. Researcher: Kakoli Banerjee
Why Is This Important?
Motor vehicles are the largest source of pollution in San Mateo County, impacting both air and water quality. The transportation sector accounts for over half of the county’s total carbon dioxide emissions, a greenhouse gas linked to climate change. High gasoline costs can have a major impact on household spending as the prices of all goods are affected by high fuel costs.

What Is a Sustainable State?
A sustainable state is one that is carbon neutral and where alternative fuels or modes of transportation are available so that high fuel prices do not severely impact a household’s ability to purchase needed items.

How Are We Doing?
- In 2006, gasoline consumption in San Mateo County was 353 million gallons, the lowest total consumption in more than a decade.
- In 2006, per capita gasoline consumption was 486 gallons, a 3 percent decrease from 2005. Although this was the lowest per capita consumption in the county in more than a decade, it was still higher than the national level (467 gallons).
- In 2006, gasoline prices in the Bay Area averaged $2.81 per gallon. At the national level, gasoline prices averaged $2.64 per gallon.
- In 2006, inflation-adjusted gasoline prices in the county were 8 percent higher than in 2005 and 45 percent higher than in 1997.
- In 2006, the county’s average fuel economy increased by 3 percent to reach 19.6 miles per gallon. It has been consistently higher than the national average fuel economy (although we do not have a national figure for 2006, it was 16.7 miles per gallon in 2005).
- The San Francisco Metropolitan Area ranks second in the nation in hybrid vehicle popularity with an average of over 8.6 hybrids per 1,000 residents. Among states, California leads the nation in purchases of hybrid automobiles.

Signed into law in December 2007, the Energy Independence and Security Act increases the Corporate Average Fuel Economy (CAFÉ) standards for the first time since 1975. This law requires automakers to boost fleetwide gasoline mileage to 35 miles per gallon by the year 2020. The requirement applies to all passenger automobiles, including light trucks. Before this law was passed, CAFÉ standards called for passenger automobiles to average 27.5 miles per gallon and light trucks to average 20.7 miles per gallon.
Why Is This Important?
Transportation has a significant impact on the economy, environment, and individual quality of life. Traffic congestion causes costly delays resulting in lost productivity, less time with families, wasted resources, and stress. Vehicles pollute the air and water and are a significant contributor of greenhouse gas emissions. With housing increasingly unaffordable in San Mateo County, families may be forced to live far from their jobs, resulting in long commutes. San Mateo County also has heavy traffic because of commuters using the corridor between Santa Clara and San Francisco Counties.

What Is a Sustainable State?
A sustainable state is one where the costs associated with traffic congestion are minimal and individuals have access to affordable and reliable public transportation.

How Are We Doing?

Vehicle travel
• In 2006, average vehicle-hours of delay on San Mateo County freeways totaled 7,700 hours, a 1 percent increase from 2005.
• In 2006, costs from traffic delays totaled over $149,000 per day for an average weekday.
• Driving alone was the most popular mode of commute for nearly three out of four workers in the county.
• Over 11 percent of workers in the county had average commuting times of over 60 minutes, a slightly higher percentage than in previous years.

Public transit
• Although a still small proportion of commuters use public transit, in 2006 total weekday ridership across all transit agencies serving the county (BART, Caltrain, and SamTrans) grew by 5 percent.
• SamTrans riders accounted for 46 percent of all daily public transit riders.
• Caltrain saw the largest growth in ridership, with a nearly 13 percent increase from 2005.

Commute Modes for Workers in San Mateo County, 2006

Transportation 2035: Change in Motion
The Metropolitan Transportation Commission is preparing a new long-range transportation plan for the San Francisco Bay Area, Transportation 2035: Change in Motion. Performance targets to reach by 2035 that will help steer development of the plan include: (1) Reduce transportation-related CO₂ emissions to 40 percent below 1990 levels, (2) Reduce emissions of finer particulates (PM2.5) by 10 percent and coarser particulates (PM10) by 45 percent, (3) Reduce daily per capita vehicle miles traveled by 10 percent, (4) Reduce per capita delay by 20 percent, and (5) Decrease the share of low-income and lower middle-income residents’ household income consumed by transportation and housing by 10 percent.

See appendix page 78. Researcher: Jeremy Fisher
Why Is This Important?
Voting allows people to participate in community-wide decision making. High voter turnout indicates citizens are engaged and feel empowered to influence decisions affecting them. High voter participation is essential so that public policy accurately reflects the will of the people. Low voter turnout can signal disenfranchisement and skew public policy toward the desires of those who voted, rather than for the common good of all community members.

What Is a Sustainable State?
A sustainable state is one where all members of society participate in the democratic process by voting, assuring that all elected officials and ballot measures represent the will of the people.

How Are We Doing?
In 2007, there were 11 cities or towns in San Mateo County with elections for council seats and one, San Bruno, with a mayoral election. The following chart shows the percentage of registered voters who voted in each of these elections. Differences may reflect the presence of other local measures on ballots or different levels of competition for council seats.

Voter turnout is typically highest in even years when federal and state offices are on the ballot and lowest during odd years, such as 2007, when elections consist primarily of local offices and issues.

In the 2006 midterm election, voter turnout—as expressed as the percentage of eligible voters who voted (as opposed to the number of registered voters who voted)—was 45 percent in San Mateo County, compared with 39 percent statewide. Turnout in the county has exceeded statewide turnout in each of the past five even-year elections.

Other findings include:
- The 2000 and 2004 presidential election years were the only years in the past decade when the percentage of eligible voters who voted exceeded 50 percent in San Mateo County.
- In 2007, 74 percent of eligible voters in the county were registered to vote, compared with 68 percent statewide.
- Voter registration rates vary by age group and are highest among older voters. In 2006, individuals over the age of 55 accounted for roughly 31 percent of the voting age population, but over 35 percent of registered voters.

See appendix page 79. Researchers: Bertram Ieong and Terry Li
Why Is This Important?
San Mateo County is bordered by the San Francisco Bay to the east and the Pacific Ocean to the west. Both support marine ecosystems, local economies, recreational activities, tourism, and food resources.

What Is a Sustainable State?
A sustainable state is one where harmful pollutants do not run into the Bay and Pacific Ocean, and marine habitats are healthy and support native species.

How Are We Doing?
Bay water quality
Mercury and polychlorinated biphenyls (PCBs) are the primary drivers of ongoing fish consumption advisories in the Bay. New contamination comes from inflows from the Delta and urban runoff. High concentrations of these pollutants, however, are bound in the Bay’s sediment from past pollution and persist as the major source of contamination.

Through pollution prevention and cleanup efforts, the long-term trend for mercury and PCBs is expected to be positive. As concentrations are extremely high, however, and the pollutants are bound in the Bay’s sediment, it will be many years before concentrations of these pollutants decline significantly.

The primary source of new pollution entering the Bay is stormwater runoff. Examples of pollutants that can run into the Bay include:

- Mercury from broken fluorescent lights, old batteries, and thermometers
- Leaking oil, antifreeze, and gasoline from automobiles
- Pesticides and herbicides
- Motor oil waste from automobiles, lawn mowers, and small equipment
- Soaps and chemicals used to wash cars
- Copper dust from automobile brake pads
- Rubber tire dust from automobiles

Beach quality
In San Mateo County, beach closures are primarily due to sewage spilled in waterways that flow to either the Pacific or the Bay.

- In 2007, there were no beach closures due to sewage spills, a decline from the five closures in 2006 (four on the Pacific side of the county and one on the Bay side).
- In 2007, there were six beaches closed because of the Cosco Busan oil spill. With each of the six beaches closed for four days, there was a total of 24 total closed beach days.

<table>
<thead>
<tr>
<th>Beach Closures in San Mateo County, 2006-2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
</tbody>
</table>

Data source: San Mateo County Health Department, Environmental Health Division

Warning signs are posted at county beaches when water samples test high for fecal indicator bacteria.

- In 2007, beach warnings occurred on 8 percent of the total beach days in the county, down from 13 percent of days in 2006.
- Warnings occurred more frequently on Bay side beaches than Pacific side beaches (25 percent of beach days compared with only 5 percent).

The source for these bacteria is primarily wildlife fecal matter that is deposited by water fowl or washed to the Bay or the Pacific in waterways during storms.

See appendix page 79. Researchers: Harry Symonds and Joe Rois
**Why Is This Important?**
High quality drinking water is essential to human health. Contaminated water can cause acute disease, birth defects, infant mortality, and increased cancer rates. Federal and state safe drinking water regulations aim to assure the high quality of public water supplies. Maximum Contaminant Levels (MCLs) are drinking water standards or limits of contaminants that are allowed in drinking water. More stringent than MCLs, Action Levels are levels at which water managers must cut off any source of water leading to a drinking water use until remedial steps have been taken.

**What Is a Sustainable State?**
A sustainable state is one where drinking water is safe for all to drink.

**How Are We Doing?**
Three contaminants were chosen as indicators of drinking water quality: trihalomethanes, lead, and coliform. Results are from the 2006 Annual Water Quality Reports from each water district.

**Trihalomethanes**
Trihalomethanes are byproducts of the disinfection process. The health effects of trihalomethanes are unclear; studies have suggested associations with certain cancers, and reproductive and developmental defects, however. The MCL for total trihalomethanes (TTHMs) is 80 parts per billion (ppb).

- All 20 water districts met state and federal standards for TTHMs, with average concentrations ranging from a low of 15.5 ppb in San Bruno to 72.3 ppb in the Coastside County Water District.
- In 2004, water districts switched from chlorine to chloramine for water disinfection. In 2006, the average TTHM concentration of all water districts was 31 percent lower than in 2003, the last full year before the change.
- Although the average reported by Coastside County was below state and federal standards, detected levels ranged from a low of 33 ppb to a high of 120 ppb. The 120 ppb sample was detected at one site and the district is currently working to address the issue. This was the only district to report detected levels above 80 ppb.

**Lead**
Lead can enter the water system from corruption of household plumbing systems. Lead can hinder the physical or mental development of children and can cause adults to develop kidney problems or high blood pressure.

- All water districts reported that 90th percentile concentrations of lead were below the Action Levels of 15 ppb. The 90th percentile concentrations ranged from zero to 7.8 ppb.
- Eight of the 20 water districts had 90th percentile concentrations below two ppb.

**Coliform bacteria**
Coliform bacteria are naturally present in the environment. The test for coliform bacteria serves as a general indicator for the presence of other bacteria, including harmful, disease causing bacteria. The MCL for coliform is 5 percent positive for all test samples per month (or no more than one positive test per month for districts with fewer than 40 sample sites).

- All water districts met state and federal standards for coliform bacteria. Test results ranged from 0 to 2 percent positive per month.
- Seventeen water districts reported detecting no coliform bacteria in their samples.

See Appendix page 79. Researcher: Yi Tin Kao
Local governments play an integral role in building a sustainable future. In October 2007, SSMC asked San Mateo County, the cities within the county, and the San Mateo County Community College District to describe their actions related to three important indicators of sustainability.

**Carbon Emissions**
Carbon emissions are the largest component of human-made greenhouse gas emissions, and Governor Schwarzenegger has established a goal of reducing greenhouse gas emissions in California to 1990 levels by 2020. SSMC asked local governments to describe the actions they have taken or are planning to take to reduce carbon emissions from their own operations or by their residents.

**Disaster Preparedness**
Natural or human-caused disasters can have devastating effects on a community, the economy, and the environment. As communities that are unprepared for a disaster put at risk their future well-being, SSMC asked local governments what programs or policies they have adopted to prepare their staff and citizens for a major disaster.

**Water**
Communities need safe, clean drinking water and adequate supplies to accommodate their residential and nonresidential needs. Sustainability requires water supplies and demand for water resources to be in balance. In San Mateo County, that balance may be threatened because of future population growth and limited sources of water. SSMC asked local governments how they encourage water conservation in their communities.

SSMC believes these three issues represent major challenges to future sustainability. In the following pages are the reports on the cities, the county, and the Community College District, based on their responses to our questions.

**Carbon Emissions**

The Town of Atherton has an Environmental Programs Committee consisting of Town residents and two Council members. The Committee is responsible for programs related to global warming and CO$_2$ emissions, green building, Earth Day, the Association of Bay Area Governments/Pacific Gas and Electric Company Energy Watch partnership, an e-waste collection day, the U.S. Mayors’ Climate Protection Agreement, energy awards for homeowners, and energy consumption reduction in Town and school buildings.

Atherton has joined ICLEI—Local Governments for Sustainability and is working on a CO$_2$ inventory. Members of the Environmental Programs Committee sit on regional boards and also held a Conversation on Climate Change event.

In 2007, the Town hosted an Earth Day Expo with over 30 exhibitors, zero-waste programs, presentations of An Inconvenient Truth and Who Killed the Electric Car?, organic food, and an eco-fashion show. The week-long event concentrated on how homeowners can use fewer natural resources and be more energy efficient.

The Town’s Building Department has a Green Building Certified staff member who provides information on green building techniques to residents remodeling or building new structures. The Town held a green building contest with awards for citizens who used green building techniques and products. It also sponsored a Go Solar drive featuring two evening presentations with resources for using solar energy.

**Disaster Preparedness**

The Town is most concerned with earthquakes, pandemics, fires, and flooding. In 2007, the Town’s Emergency Operations Plan was updated and complies with both the California Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS). The Town also has an Emergency Preparedness Subcommittee and an active citizen disaster preparedness group.

All Town staff have received SEMS and NIMS training. In addition, the Town offers Community Emergency Response Team training to residents and places emergency preparedness articles in its quarterly newsletter.

**Water**

New housing construction in Atherton is required to retain all newly created runoff water onsite in detention ponds that percolate into the ground. This requirement helps replenish the aquifers and lessen the amount of runoff to the Bay.

---

**Carbon Emissions**

In 2007, Belmont completely eliminated fees and streamlined the permit process for photovoltaic (PV) installations. To encourage the use of PVs, Belmont provides contractors and property owners with written guidelines that clarify code and submittal requirements. Plans are currently underway for the installation of PVs at City-owned properties including the Corporation Yard, City Hall, and the Community Center.

Belmont operates four vehicles that run on compressed natural gas, a fuel that produces fewer greenhouse gas emissions than gasoline or diesel fuel. Two of the vehicles are street sweepers that are in extended use daily. The others are a van that provides services to senior citizens and a shared vehicle used by City staff.

In 2007, Belmont began using B5 biodiesel fuel for City vehicles. Additionally, the City has retrofitted a large dump truck with a diesel oxidation catalyst and installed two California Air Resources Board approved diesel particulate filters on large pieces of equipment.

**Disaster Preparedness**

In order to minimize loss of life and property and to ensure uninterrupted essential services such as water, sewer, power, and telecommunications, Belmont has an emergency management program to prepare both the citizens of Belmont and City staff for natural disasters. Of greatest concern to the City are earthquakes, wildland fires, and landslides.

In 2007, City staff took part in two large training exercises. The first trained employees to utilize the Response Information Management System, a web-based system that provides real-time access to federal, state, and local emergency response agencies throughout California. In the second, the City participated in the state-sponsored Golden Guardian homeland security and disaster response exercise.

The Belmont-San Carlos Community Emergency Response Team (CERT) Program provides emergency preparedness training to the community. The program is a cooperative effort between the Belmont Police Department, the San Carlos Police Department, and the Belmont-San Carlos Fire Department.
Brisbane has developed and implemented a number of policies to promote sustainable use of energy, water, and other resources. To help reduce carbon emissions, resource consumption, and waste, the City has adopted a green building ordinance that sets sustainability standards for construction of new private and public buildings. The program will utilize the Leadership in Energy and Environmental Design silver rating system for significant commercial construction and the GreenPoint rating system for new residential developments of 20 units or more.

Ongoing efforts to make City facilities more resource efficient include:

- Replacing office lighting at City Hall with energy-saving fluorescent bulbs and ballasts.
- Installing double-paned windows.
- Upgrading to energy-saving flat panel computer monitors.
- Purchasing recycled paper products.
- Recycling mixed paper, cardboard, glass, aluminum cans, and plastic bottles.
- Applying, where feasible, green building techniques. One example is the solar thermal supplemental heating system at the Brisbane community pool, which produces 6,820 carbon-free therms per year.

Brisbane City Hall also houses containers for citizens to drop off their old batteries, cell phones, and compact fluorescent light bulbs for proper disposal. At Brisbane's annual Day in the Park festival, the City's Open Space and Ecology Committee partnered with Pacific Gas and Electric Company to distribute free compact fluorescent light bulbs and provide energy-saving advice and literature. Other efforts include purchasing parcels in the Brisbane Acres to be preserved as open space, promoting access to public transportation, and developing access to all parts of the City for pedestrians and bicycles.

\textbf{Disaster Preparedness}

Brisbane's Office of Emergency Services (OES) provides disaster preparedness information through the City's website. Specific emergencies covered are earthquakes, building and wildland fires, floods and rainstorms, power outages, and contagious diseases.

In October 2007, Brisbane implemented a new Emergency Operations Plan (EOP). Designed to be readily adaptable to any emergency, the EOP is in compliance with the Federal Emergency Management Agency's National Incident Management System (NIMS).

To be compliant with NIMS, the City trained all City staff on their roles and duties in the event of a large-scale emergency. In addition to staff training, in 2007 the OES and the Fire Department conducted a wildland fire drill designed to test and practice emergency evacuation procedures. As a supplement to the drill, an informational brochure entitled \textit{Operation Wildfire} was mailed to all Brisbane residents and businesses.

The City also has a Community Emergency Volunteers program that trains residents to serve as a resource for first responders in the event of an emergency or natural disaster. Pamphlets and tips for establishing personal and family preparedness and evacuation plans are available at City Hall, and Red Cross three-day disaster preparedness kits are available for sale at a reduced cost.

\textbf{Water}

Brisbane is among the lowest per capita water users in San Mateo County. Brisbane has instituted a water conservation program consisting of public education efforts, a tiered rate structure, and two ordinances aimed at reducing excessive water use. The first is a water-efficient landscaping ordinance requiring large landscape plans show use of drought-tolerant plants and water-efficient irrigation. The second prohibits water waste, such as excessive watering of impervious surfaces.
Brisbane has implemented several of the water conservation best management practices recommended by the California Urban Water Conservation Council, including:

- Metering with commodity rates.
- A residential clothes washer rebate program.
- A public information campaign.
- Conservation pricing.
- Water waste prohibition.

In 2007, the Public Works Department began an audit of the irrigation systems for City-owned parks and turf area to determine ways to improve the technical performance and management of the systems. Other efforts to reduce water use from City operations include regularly scheduled aeration in parks, use of mulch in landscape beds, and the replacement of conventional spray nozzle sprinklers with matched precipitation rotators for all new sprinkler installations.

Additionally, the City was one of the first in the region to install an evapotranspiration weather station to assist irrigation planning. The information from this station could be made available to the public to guide in scheduling their irrigation. This project is useful in providing an environmental benchmark for scheduling and will assist in gauging water use in the future.

Brisbane is a member of the Bay Area Water Supply and Conservation Agency (BAWSCA) and participates in BAWSCA’s numerous water conservation and public outreach programs, including the distribution of the water-wise gardening CD and landscape education classes.

---

**Carbon Emissions**

To reduce carbon emissions, the City of Burlingame has:

- Reduced crane truck usage to 1,500 miles a year.
- Worked with boiler vendor to make boilers more energy efficient.
- Promoted residential recycling, with the result that 90 percent of residents now recycle cans, paper, glass, and plastic bottles.
- Adopted a Bicycle Transportation Plan with strategies to improve bicycle facilities and encourage the use of bicycles for transportation.
- Installed energy-efficient light fixtures in City buildings.
- Purchased two hybrid vehicles for the Public Works Department.
- Developed a shuttle system to the Millbrae BART station, offered an in-town shuttle service, and provided incentives for employees to use alternate transit strategies.
- Approved a high-density residential development near the Millbrae BART station.

Additionally, the wastewater treatment plant acquired a Caterpillar® engine generator that generates electricity onsite by using the methane gas that wastewater treatment produces naturally. The system will provide 20 percent of the plant’s daily electricity use, saving the City $8,000–$10,000 per month. Through a grant program from Pacific Gas and Electric Company and the Bay Area Air Quality Management District, the City is expected to receive a $160,000 rebate from the State of California for the development of this renewable energy project.

**Disaster Preparedness**

For Burlingame, natural disasters are the most common emergencies and of the most concern. The primary events that occur are the winter storms that hit the Bay Area beginning in October and November and continue until spring. Because of Burlingame’s geographic location (near the airport and BART), the City is also vulnerable to a terrorist threat. Potential consequences for the City and its citizens include threats to safety and basic needs as well as economic impacts from loss of business revenues because of damaged or destroyed infrastructure.

The City’s Emergency Operations Plan contains Event Specific Checklists for earthquakes, floods, severe weather storms, wildland fires, neighborhood and community evacuations, major hazardous materials incidents, weapons of mass destruction events, and mass casualty incidents such as aircraft, bus, or train accidents. Checklists assist first responders, personnel, and support staff in managing the emergency response and recovery.

Burlingame and Hillsborough coordinate their response to emergencies in a cooperative effort using a unified command concept and operate out of a collocated Emergency Operations Center (EOC) at the Burlingame Corporation Yard. Each year, City staff participates with staff from Hillsborough in two to three EOC drills. These drills often involve coordination with the San Mateo County Office of Emergency Services and test the City’s working relationships with other cities. All City staff’s regular training includes mandated state and Federal Emergency Management Agency courses.

Through the Central County Fire Department, the City...
conducts 20-hour Community Emergency Response Team trainings for citizens to learn skills to respond to their community’s immediate needs following a disaster. Additionally, each year the City offers a two-and-a-half hour R-U Ready class for the public which provides information on basic citizen preparedness, first aid, and CPR training.

The Fire Department also participated in the San Mateo County Disaster Preparedness Day and Department staff are available to individual neighborhood and community organizations to present a program on request.

With the help of a grant from the Shinnyo-en Foundation, the City is providing family friendly disaster preparedness fliers that will be distributed throughout the community four times each year.

Water
To support water conservation and reduce water consumption, Burlingame has:
- Identified current fiscal year funding for rebates for water-efficient washers and toilets, spray valve installations in restaurants, conservation brochures, and water saver kits.
- Facilitated water conservation among businesses and hotels and hired a consultant to work directly with business owners to reduce water consumption.
- Conducted an employee education program and offered incentives for water-saving ideas.
- Installed rain sensors on existing irrigation controllers to turn irrigation off when it rains.
- Required developers to submit irrigation plans for developments with large landscape areas.
- Installed low-flow toilets in city buildings.
- Established a system to control sprinklers from a main computer.
- Installed artificial turf to reduce water use.

Burlingame’s Water Department also undertakes a variety of outreach and education activities, including providing water conservation tips and distributing landscaping guides and a water-wise gardening CD.

Colma

Carbon Emissions
The Town of Colma promotes conservation efforts to reduce electricity and water use within the community. Conserving electricity means the creation of fewer greenhouse gas emissions resulting from electricity generation. The Town of Colma supports and recommends green building practices, the increased use of public transit, affordable housing, and aggressive infill development as measures to reduce overall emissions in the community. The Town also diverts close to half of its residential waste to recycling rather than depositing it in a landfill.

Disaster Preparedness
Pandemic flu, earthquakes, and hazardous spills are some of the emergencies or disasters of most concern to Colma. Potential consequences include prolonged absence of employees from work, injury or fatalities to residents and Town staff, an increase in burial activities as a result of fatalities, and shutdown of services and facilities to the community.

The Town’s emergency plan allows employees to work from home if necessary and provides for communications with San Mateo County Health Department officials, Town staff, residents, and the Police and Fire Departments. Emergency supplies are stored at Town facilities. Certain identified Town staff have attended California Specialized Training Institute earthquake training and all Recreation and Police Department staff are CPR certified.

In 2007, two Community Emergency Response Team classes were offered to Town residents as well as CPR training.

Water
Colma works with its local water agency on new project approvals. Capital projects within the Town are focused upon water-saving strategies and techniques, including low-flow toilets and plumbing fixtures. The Town’s recently completed Community Center Complex also incorporates water-conserving strategies and irrigation recycling.

The Town of Colma also asks the water agency to comment upon development request applications and to offer comment on draft policy documents the Town considers for adoption.
Carbon Emissions
Daly City is committed to lowering its carbon emissions and reducing its energy consumption. The City, in conjunction with Pacific Gas and Electric Company, is conducting energy audits at City-owned facilities. City Hall was the first building to undergo lighting, heating, and ventilation retrofits, greatly reducing its gas and electricity needs. Daly City is also a member of San Francisco Community Power, an energy curtailment program designed to reduce polluting air emissions on Energy Alert Days by cutting electrical demand during peak consumption hours.

The City has begun using biodiesel to fuel its diesel motor driven equipment, including fire engines and other trucks. The City also replaced five Crown Victoria police vehicles with fuel-efficient hybrids and established a policy for purchasing hybrid vehicles to replace older cars in the City’s fleet.

Disaster Preparedness
Earthquakes, wildfires, landslides, flooding, severe weather, and tsunamis are Daly City’s primary disaster threats. Although severe weather is the most frequent, earthquakes are of most concern, because of their destructive nature and the City’s proximity to the San Andreas Fault. Potential consequences of a disaster include:

• Damage to transportation systems impacting response capability.
• Displaced residents, including vulnerable populations, needing both short- and long-term shelter.
• Damage to City infrastructure and its impact on the response effort.
• Disruption of communications between the City and the public.

The City’s Emergency Operations Plan (EOP) addresses the City’s planned response to emergency situations associated with natural disasters and technological incidents. The EOP provides an overview of operational concepts, and identifies responsibilities of the City’s Emergency Response Team as established by the Federal National Incident Management System, the California Standardized Emergency Management System, and the Incident Command System. By outlining each individual’s roles and responsibilities during an emergency, these systems are designed to minimize duplication of effort, a problem common to many emergency response efforts.

The City’s EOP designates Public Safe Areas (PSAs), locations where citizens can assemble and the City can deliver supplies and services during a catastrophic event. The goal is to have a PSA located within walking distance of each resident in the City.

In addition to the EOP, the City has developed a Strategic Plan for Community Preparedness and Emergency Management. The plan builds upon traditional emergency management as well as the lessons from disasters across the United States. This strategic plan has four planning areas (Mitigation, Preparedness, Emergency Response, and Recovery) and includes planning initiatives that the City will be working towards over the next three years.

The City participates annually in San Mateo County’s Emergency Operations Center exercises, including in 2007, the Health Department’s Pandemic Influenza Tabletop Drill. The City also participates in a variety of local and regional training and planning efforts. In 2006, the City provided eight training sessions to its employees. Also in 2006, representatives from the City attended the Federal Emergency Management Agency’s Integrated Emergency Management Course (All Hazards).

Public education is a critical component of emergency preparedness and the City provides information to help the public learn how to plan for disasters through different ways, including:

• The North County Fire Authority website (www.northcountyfire.org) provides preparedness materials including information on how to develop a family emergency plan and a list of needed disaster supplies.
• Two-hour individual family preparedness classes that provide information on how to develop an emergency plan; how to put together a disaster supply kit; how to turn off gas, electricity, and water; and how to use a fire extinguisher.
• Twenty-hour Community Emergency Response Team (CERT) classes that train members of the community, including students through the “Teen CERT” concept, to respond to situations following a disaster such as undertaking light search and rescue, providing medical care, and putting out small fires.
• A 40-minute individual family preparedness DVD is available free to residents and shown on local cable access Channel 27 (Comcast) or Channel 26 (RCN/Astound).

Water
Since August 2004, Daly City has delivered tertiary recycled water to the Olympic Club, the Lake Merced Golf Club, the San Francisco Golf Club, and landscaped medians along John Daly Boulevard. Through September 2007, a total of 563.2 million gallons of recycled water had been delivered.

Daly City promotes residential and commercial water conservation. Residents are encouraged to utilize free water conservation devices, including low-pressure showerheads, faucet aerators, and garden hose nozzles. Through 2006-07, 1,634 rebates for Energy Star clothes washers have been provided to Daly City residents. Each account that receives a rebate saves roughly 968 gallons of water per month. Clothes washer rebates are also available to commercial businesses.
East Palo Alto

**Carbon Emissions**
East Palo Alto has many different policies and programs that can help reduce energy use and carbon emissions.

- The Ravenswood Business District plan aims to create a pedestrian friendly, dense, efficient, and livable mixed-use district that incorporates energy-efficient and sustainable building design and is sensitive to the character of the City and the adjacent San Francisco Bay. As part of the plan, improvements to Bay Road will create a transit and pedestrian friendly boulevard with enhanced bus stops.
- Over the past few years, the City’s Redevelopment Agency has been working to encourage transit-oriented and mixed-use development consistent with the urban design plan. The East Palo Alto Bay Access Master Plan provides access for residents to the Bay Trail via a comprehensive network of pocket parks and bike trails that will improve circulation, provide recreational opportunities for residents, and lower greenhouse gas emissions.
- The Redevelopment Agency encourages sustainable building practices in redevelopment projects. As a result of these efforts, the most prominent redevelopment project in East Palo Alto, a mixed-use project including 100,000 square feet of Class A office and 20,000 square feet of retail is seeking Gold Leadership in Energy and Environmental Design (LEED) certification.
- East Palo Alto operates free shuttle programs for residents to meet critical transportation needs and reduce reliance on automobiles. The City’s community shuttle connects residents to Caltrain and SamTrans routes, the City’s youth shuttle provides access to jobs for local youth, and the City’s senior shuttles transport seniors to programs, services, and medical appointments.
- In addition, in 2006 the City of East Palo Alto and Canopy, a Palo Alto based nonprofit, launched the East Palo Alto Tree Initiative to plant nearly 1,000 trees in East Palo Alto by 2010. These trees are intended to reduce energy use, improve air quality, provide shade, and enhance the sense of community.

Foster City

**Carbon Emissions**
In 2008, Foster City plans to conduct an inventory of greenhouse gas emissions from City operations. Once completed, this inventory will be used to create an action plan and prioritize future efforts to reduce emissions. The action plan may include the setting of an emissions reduction goal for City operations. The City currently has a number of programs that reduce carbon emissions both from City operations and the community as a whole. Future work will document the estimated reductions from these and new efforts.

**Promotion and support of mass transportation**
- Provides partial funding for the Connections Shuttle, a free in-town shuttle service that provides connections to recreational activities, shopping centers, and to other regional mass transit alternatives for Foster City residents and employees of local businesses.
- Promotes the AC Transit transbay bus service.
- Promotes employer-operated shuttles to and from the San Mateo Caltrain Station and the Millbrae Intermodal Station from three areas of town: Lincoln Centre, North Foster City, and Mariners Island.
- Operates a Senior Express Shuttle to transport residents age 55 and older to events and activities in the region.

**Bicycle alternatives**
- Requires that bicycle racks be installed at all new commercial/office developments in town. Bicycle racks are also on all shuttles.
- Maintains a bicycle/pedestrian path along the bayfront—a leg of the Bay Trail that connects with trails maintained in neighboring cities and allows for an easy commute by bicycle between Foster City and a number of Peninsula cities.

**Foster City employee trip reduction**
- Eighty-eight percent of Foster City employees work an alternative schedule such as a nine day/80 hour schedule or a four 10-hour day per week schedule. This results in an overall 19 percent reduction in employee trips from the traditional five day per week schedule.

**City fleet fuel efficiency**
- The City currently has four hybrid vehicles and plans to increase the percentage of hybrids in its fleet and review other fuel-efficient alternatives as vehicles are replaced.

**Other carbon-reducing policies**
- Eliminated permit fees for installation of solar panels.
- Installed 2,100 high-efficiency, high-pressure sodium vapor street lights that use approximately 35 percent less energy than older mercury vapor or incandescent lights.
- Converted all traffic and pedestrian signals to light-emitting diodes that use approximately 80 percent less electricity than older, halogen lights.
- Installed 25 fully-actuated traffic signals to maximize traffic flow and minimize idling at intersections.
Half Moon Bay

Carbon Emissions
Half Moon Bay’s master plan trail system connects parks, schools, downtown businesses, shopping centers, and other major employers. The City aggressively seeks grants from state and local sources for trails to accommodate alternative means of transportation such as walking, bicycling, and even riding horses. The City is also seeking possible grants to purchase alternative fuel or hybrid vehicles.

The City has noticed more interest and use of solar panels for energy in homes and businesses and supports a solar energy exposition and home tour within the City. Half Moon Bay encourages green design but has no specific requirements. Cost and architectural familiarity seem to be obstacles to the use of green building design. The City has at its City Hall front counter for public use and information the San Mateo Countywide Sustainable Buildings Guide and encourages the application of its principles and guidelines in designing new homes and structures.

Disaster Preparedness
Tsunamis, earthquakes, severe storms, and disasters or traffic related problems that lead to the closure of Highways 92 or 1 are of greatest concern to Half Moon Bay. Along with loss of life, injury to residents, and damage to property, the City could be isolated without adequate food, water, medical assistance, or other necessities for long periods of time.

In 2007, Half Moon Bay added an Emergency Preparedness Advisory Committee to its Disaster Council consisting of local residents and members of the business community. The committee will look at identifying critical assets inside the City and the surrounding unincorporated area that would be available in the event of an emergency. The committee will also make recommendations on emergency planning and outreach in the community. The City is considering sponsoring a Medical Reserve Corp of physicians residing on the coastside who would be available in the event of an emergency.

All City staff and elected officials have received mandatory National Incident Management System training and participate in exercises at the Emergency Operations Center. During 2007, the City took part in a tsunami table top training exercise, a Pumpkin Festival training, and the statewide Golden Guardian exercise.

The City provides Community Emergency Response Team training with the Coastside Fire District, Storm Spotter training in conjunction with the National Weather Service, and Neighborhood Watch meetings.
Water
The Coastside County Water District supplies all potable water to Half Moon Bay. In 2005, the citizens of Half Moon Bay approved Measure P which promoted and supported the use of recycled water wherever possible and feasible. Sewer Authority Mid-Coastside representatives are currently researching the possibility of providing treated sewage water for agriculture, public parks, or golf course landscaping. To conserve potable water, the City encourages the use of drought-tolerant landscaping.

Hillsborough

Carbon Emissions
In 2007, Hillsborough significantly expanded efforts to reduce carbon emissions and implemented the following initiatives:

- Converted its Public Works' fleet to biodiesel.
- Approved a Sustainable Hillsborough Task Force (the Task Force) to develop a Sustainable Hillsborough Plan, focusing on program recommendations to reduce greenhouse gas emissions and increase energy efficiency.
- Expanded its Environmental Preferable Purchasing Policy.
- Began developing a Civic Green Building Policy and a Green Building Program for residential construction.

The Town’s General Plan embodies the community’s efforts to promote energy conservation and recycling by the private and public sectors. As a result of the successful Construction and Demolition Recycling Policy, over 89 percent of construction materials are diverted from landfills. Success of this policy is largely due to the effective monitoring and enforcement of the policy and the successful collaboration between the Town’s Public Works, Building, and Planning Departments.

Since Hillsborough is primarily a residential community, Town staff focused its efforts on residential green building promotion and education, energy efficiency, and renewable energy. The Hillsborough Green Building Section on the Town’s website provides residents and building professionals with green building, energy efficiency, water conservation, and renewable energy information. Hillsborough is a member of Build it Green (BIG), a professional, nonprofit organization dedicated to resource efficiency and durable, healthy homes and buildings. The Town partners with BIG in the utilization of the Green Building Guidelines for New Construction, Green Building Guidelines for Remodeling, and the GreenPoints Checklist.

Hillsborough closely evaluates its municipal facilities to increase energy efficiency, water conservation, and overall sustainability. The Town recently completed an energy efficiency audit with the California Energy Commission (CEC) and hopes to implement recommendations such as installing solar photovoltaics at the Municipal Service Center, fire stations, and other municipal facilities through CEC low-interest loans.

Hillsborough is currently compiling its greenhouse gas inventory and has joined ICLEI—Local Governments for Sustainability, who will provide technical assistance to the Task Force. The Task Force will periodically assess the Town’s carbon footprint, reevaluate the Sustainable Hillsborough Plan and its greenhouse gas emission goals, and discuss additional programs that can be implemented to reduce greenhouse gas emissions.

The City Council amended an ordinance regarding the installation of solar panels and streamlined the permitting process. Hillsborough publishes a quarterly newsletter with a Green Corner promoting sustainable practices for residents and the entire community. In 2007, an article was published in the Town’s newsletter explaining the benefits of, and process for, using solar energy systems and green building techniques. The Town will also be evaluating additional sustainable programs for public works, including pavement recycling.

Disaster Preparedness
Of most concern to the Town of Hillsborough is the threat of earthquakes and wildfires. The Town’s Emergency Operations Plan is focused on working cooperatively with surrounding communities to meet mutual needs during a disaster. The Town works in a unified command concept and makes the best use of available personnel and resources. Hillsborough shares an Emergency Operations Center with Burlingame.

In 2007, all of the Town’s staff participated in emergency training including:

- National Incident Management System classes. All 112 Town employees completed the basic course.
- Incident Command System (ICS) Training (Management and Supervisory level). Ten employees completed ICS 300
Carbon Emissions
In 2007, Menlo Park endorsed the U.S. Mayors' Climate Protection Agreement and completed a greenhouse gas emissions inventory of both community-wide and municipal sources. Carbon emissions for the community totaled 440,026 metric tons. The inventory’s analysis showed that only half of 1 percent of carbon emissions comes from municipal operations (2,183 metric tons). The highest contributors in the community are transportation (40 percent) and energy used in commercial buildings (27 percent). Other contributors include residential energy use (13 percent), solid waste (4 percent), the closed Marsh Road Landfill (10 percent), and direct access energy customers (7 percent).

Menlo Park continues efforts to reduce carbon emissions through the following:

• Exhibiting green building materials, information, and resources.
• Providing comprehensive recycling information and collection services for residents and businesses. Over 70 businesses now participate in the compost collection service.
• Requiring that at least 60 percent of construction and demolition debris at large projects be salvaged and/or recycled.
• Sponsoring a Bike to Work Day and establishing a comprehensive bicycle development plan.

Water
A citizens’ Water Conservation Committee developed a special water conservation ordinance that was adopted by the City Council. The ordinance encourages voluntary water conservation strategies, promotes conservation by specifying a tiered system for water billing, and provides incentives for those who conserve. The Town limits the amount of hardscape and high water-use plant materials that can be included in a landscape plan.

The Urban Water Management Plan, adopted in 2005, describes the Town’s response to water shortages and the potential for effective conservation programs. Current conservation plans include a clothes washer matching rebate program that has saved over two million gallons of water since inception, an irrigation audit program, free landscape water audits and conservation recommendations for residents, and a water-wise educational program targeted at fifth grade students. Additionally, the Town provides a free water-wise CD to assist residents with selecting climate appropriate landscaping materials.

Hillsborough provides emergency preparedness training and information through the Central County Fire Department (the merged fire departments of Hillsborough and Burlingame) including:

• Community Emergency Response Team training. This is a 20-hour course.
• Two-hour R-U-Ready preparedness classes.
• Public outreach through the Town’s website, newsletter, and schools.

In September 2007, the Town’s Disaster Preparedness Coordinators participated in the San Mateo County Disaster Preparedness Day.

Disaster Preparedness
The most common natural disaster in Menlo Park is flooding, with San Francisquito Creek representing the greatest hazard. The consequences of a flood include care of evacuees and property damage. Menlo Park’s emergency operation plan addresses these concerns with a Creek Watch policy that remains in place throughout the rainy season, an emergency notification system, and temporary shelters.
City staff attends training on the Incident Command System portion of the National Incident Management System and participates in the annual Golden Guardian regional disaster response exercise. City staff participates in basic emergency preparedness training in order to prepare their own families should staff need to remain at work.

Menlo Park’s outreach programs provide the public with general disaster preparedness information. The City’s website has an emergency preparedness link where citizens can print a document called It's up to you for 72 that provides how-to guidelines to assist in emergency preparedness. Additionally, police personnel have provided emergency preparedness lectures to several neighborhood associations and assist the Menlo Park Fire Department in training and developing a very active Community Emergency Response Team (CERT) Program. The City currently has over 450 community residents trained as CERT members who can assist their neighborhoods in a disaster and offer individual specialized skills.

**Water**
In 2007, efforts to increase water conservation by customers in the Menlo Park Municipal Water District included:
- Increased funding for a residential washing machine rebate program.
- Increased funding for water conservation outreach.
- A water-wise school education program (free kits provided to teachers with water-saving devices and lesson plans).
- The installation of commercial spray valves in food service institutions by the Municipal Water District.
- Distribution of a water-wise gardening CD to residents and businesses.
- Purchase and distribution of water conserving showerheads and faucet aerators at no charge.

The City of Menlo Park works with local water agencies by being a member of the Bay Area Water Supply and Conservation Agency (BAWSCA), and by attending regional water conservation meetings. BAWSCA represents the interests of 25 cities and water districts in the Bay Area and coordinates regional water conservation programs. In 2007, Menlo Park Mayor Kelly Fergusson served on the BAWSCA Board of Directors.

---

**Millbrae**

In 2007, Millbrae launched a “Sustainable Millbrae” program that includes guiding principles to improve the health of its community and environment. Details are posted at www.ci.millbrae.ca.us.

**Carbon Emissions**
In June 2007, Millbrae adopted two climate protection pledges: the U.S. Mayors’ Climate Protection Agreement and ICLEI—Local Governments for Sustainability’s Cities for Climate Protection® Campaign.

Millbrae is working with ICLEI to calculate greenhouse gas emissions from City government and community-wide activities and operations. After the inventories are completed, the City will develop reduction goals and an action plan to achieve them.

Since adoption of the pledges, the City:
- Conducted an educational campaign with handouts at City Hall and public service announcements on the local government access station.
- Published tips in the City’s newsletter and Recreation Leisure Guide.
- Started a solar rebate program.
- Adopted the first Sustainable Food Service Ware Ordinance in the county banning use of polystyrene (foam and solid) food ware by food vendors and requiring use of biodegradable, compostable, reusable, or recyclable food service ware.
- Developed and distributed green building brochures.
- Helped businesses become certified as Green Businesses.
- Provided hotels with linen and towel reuse cards for guest rooms.
- Participated in the regional Joint Venture Climate Protection Task Force and partnered with local Sierra Club members to distribute compact fluorescent light bulbs and reusable shopping bags made from recycled plastic bottles.

In 2007, Millbrae also achieved a 67 percent waste and recycling diversion rate, planted 300 trees on El Camino Real and 100 at the local high school for Arbor Day, continued implementing energy efficiencies in City facilities, and increased the amount of energy created from waste grease at its wastewater treatment plant.

**Disaster Preparedness**
Millbrae is most concerned with the following emergencies and disasters:
- Earthquakes: A major earthquake could affect the infrastructure and economic well-being of the City.
- Weapons of Mass Destruction/Terrorist Attack: The BART Intermodal Station and the proximity of the San Francisco International Airport put the City at risk for terrorist activity.
- Flooding/Land Slide: Winter storm runoff can overwhelm the City’s storm drain capacity, potentially impacting continued
The City also has experienced land/mud slide activity in its hillside areas.

• Avian Flu Pandemic: This could impact the delivery of City services if City employees are exposed and adversely affect economic activity.

• Major Fire: A major fire in either a large structure (such as a hotel or in the downtown) or in the wildlands of one of the City's canyons could impact life, property, and the economy.

• Hazardous Materials Spill: A hazardous material spill on one of the City's several transportation corridors could lead to evacuation of neighborhoods and/or closure of businesses.

The City's emergency plan, which is compliant with the National Incident Management System, specifically addresses each of these and other concerns.

The City participates in at least one table top or functional training exercise annually, typically in coordination with the county. Last year the City exercised the earthquake portion of the emergency plan and more recently training was provided to City employees who staff the Emergency Operations Center.

The Fire Department regularly provides information on emergency preparedness to the community and has initiated a citizen participation program to assist in gathering information and identifying impacted areas in the City during an emergency. The City also participated in the San Mateo County Preparedness Day at the San Mateo Fairgrounds, and conducted a preparedness presentation for City employees.

Water

Programs for residents include workshops on water-wise landscape design, irrigation systems, and landscaping with native plants, as well as rebates for ultra low-flow and high-efficiency toilets and clothes washers. The City distributes a variety of water-saving devices and educational material, including a water-wise garden CD. In 2007, the City’s Community Preservation Committee presented its first water-wise garden award to a homeowner.

For businesses, the City provides rebates for low-flow toilets and aerators and has a commercial clothes washer program. Some of the larger water users, including the City, are participating in a water audit program that charts water use and notes over-watering and dollars lost.

To conserve water at City Hall and in its parks, the City uses the Calsense water irrigation management program, a computerized system with remote radio capabilities that continually monitors irrigation systems for broken equipment and provides automated controls to turn off systems when prudent, such as when it rains.

The City also planted water-wise gardens and installed interpretive signage at City Hall and its library, and created a walking tour brochure highlighting the types and locations of plants. Millbrae is currently developing an overall water conservation program for City facilities.

As a member of the Bay Area Water Supply and Conservation Agency, the City participates in their rebate programs, and obtains a number of educational materials from them.

Pacifica

Carbon Emissions

Pacifica has undertaken several projects to generate clean energy locally. The City has a photovoltaic (PV) power generation system installed at the Calera Creek Water Recycling Plant with a peak generating power capacity of 350 kilowatts per day. The City is currently installing a PV power generation system at an existing water recycling pumping station. That system will generate approximately 60 kilowatts per day.

The City is close to entering in a lease agreement with Whole Energy to build and operate a biodiesel production plant at the Calera Creek Water Recycling Plant fueled by waste cooking oil that Whole Energy will collect throughout the county. The exhaust from the cogeneration plant will be treated through a feed stock tank, quench tower, and then a bio-filter resulting in zero emissions.

The Calera Creek Water Recycling Plant will soon be installing a new ultraviolet disinfection system that will reduce the plant’s total energy consumption by 30 percent. With savings of $300,000 per year (2.5 million kilowatts), the project is expected to fully pay for itself within seven years.

The City is currently in the process of complying with the state's diesel vehicle fleet rule for public agencies. The City is currently 60 percent compliant and has a goal to be 100 percent compliant by 2011. The City uses two electric vehicles daily and is purchasing a newer fleet of cars, trucks, and equipment that produce fewer emissions.

Disaster preparedness

Because of Pacifica’s location, it is susceptible to natural disasters such as earthquakes, flooding, mudslides, and tsunamis. The City is also in danger of being isolated during a major event because of the location of the San Andreas Fault.

The City's Emergency Preparedness and Safety Commission advises the City Council on programs and activities related to emergency preparedness. At year end 2007, the City’s...
Emergency Operations Plan was in the process of being updated.

Disaster exercises are conducted in conjunction with the San Mateo County Office of Emergency Services. There are on average two large exercises per year. Personnel assigned to emergency preparedness are also trained in accordance with California’s Standardized Emergency Management System.

In January 2008, the City began providing Community Emergency Response Team training to its residents in conjunction with the North County Fire District. The City maintains a detailed web page with general emergency preparedness information as well as information related to specific disasters. Pacifica also provides the public with information on disaster preparedness through articles and booths at community events.

**Water**
The City has undertaken a number of water recycling and street water runoff treatment projects. The Calera Creek Water Recycling Plant recycles approximately four million gallons of water per day to near drinking water standards. The water is used in wetland restoration and for landscape irrigation. Pacifica is also currently working with the North Coast County Water District (NCCWD) to finish the needed infrastructure for a recycled water distribution system. This system will provide irrigation water to a golf course, schools, parks, and other city landscaped areas.

The City partners with the NCCWD on water conservation programs including:

- Offering water audits to check for leaks and provide information on how to repair the leaks and other water tips.
- Providing a range of conservation devices free of charge.
- Providing rebates for low water use washing machines and toilets.
- Providing brochures advising the public on water reduction ideas.
- Offering rebates to restaurants to install low-spray rinse nozzles.

NCCWD identified the top 100 commercial water users in Pacifica and is developing a program to address commercial water waste. The program is expected to include offering water audits to locate the cause of high water use and identifying leaks.

---

**Portola Valley**

**Carbon Emissions**
In October 2007, the Portola Valley Town Council adopted a resolution in support of AB 32, the California Global Warming Solutions Act of 2006. The Town Council proposes to follow the measurement protocols that will be developed by the California Air Resources Board. Also, the Planning Commission is developing a new Sustainability Element for the Town’s General Plan. Goals for emissions reductions include:

- Reduction of vehicular traffic that relies on nonrenewable energy.
- Development of transportation alternatives that use renewable energy sources.
- Encouragement of consolidation of vehicular trips related to activities in Town.
- Defining land uses with the objective of reducing the need for transportation.
- Establishment of baseline data on greenhouse gas emissions and energy use.

Specific programs and proposals include:

- Analyzing a school-busing program or other local transportation system to reduce the amount of in-town vehicular traffic and resulting CO₂ emissions.
- Working with contractors to encourage or require consolidation of trips by employees, for delivery of materials, and for the removal of waste and recycling.
- Considering possible linkages with existing bus services.
- Considering the consolidation of trips of persons coming into the town for domestic services and of trips by regular delivery services such as UPS and other delivery services.
- Establishing an electrical charging station at Town Center.
- Using electric vehicles for Town business.
- Exploring options to encourage the use of electric vehicles by residents.
- Studying the trails and paths in Town with the objective of providing safer all-weather facilities for children going to school.
- Encouraging the establishment of a biofuel pump in town.

Green building proposals for new and existing buildings include:

- Encouraging residents to undertake energy audits of their homes.
- Requiring all new buildings to be evaluated through a point system to determine their “greenness.” Specific requirements are under consideration.
- Requiring an evaluation of construction projects to determine opportunities for the conservation of non-continued
renewable resources and the use of renewable resources.
• Conserving energy from non-renewable sources in design, improvement, reconstruction, and remodel projects.
• Using solar energy as well as geothermal energy.
• Conserving water in existing and new buildings.
• Reconsidering the maximum permitted floor areas for new residences.

Disaster Preparedness
The Town of Portola Valley is situated along the San Andreas Fault, making the community susceptible to earthquakes. Another significant potential threat is wildfire. The area features rolling hills densely covered with grass, trees, and other combustible vegetation. The topography could present a challenge to emergency personnel in a wildfire disaster.

Because of its rural nature, the roadway system in and out of Portola Valley is minimal, with only two major arteries into and out of the area. There are concerns about ingress and egress, not only for residents, but to accommodate emergency vehicles. The Town has identified and maintains additional emergency routes for emergency vehicle access.

The Town staff undergoes basic training offered by California’s Office of Emergency Services upon employment and participates in periodic mock disaster exercises involving activation of the Emergency Operations Center. The most recent drill was conducted during the spring of 2007, and plans are underway for the next exercise to take place during 2008.

The Town has an active group of CERPP (Citizens for Emergency Response and Preparedness Program) volunteers and a Council-appointed Emergency Preparedness Committee that meets regularly to discuss and implement strategies to address community needs in the event of a disaster. All residents of Portola Valley and areas immediately adjacent receive periodic reports from the CERPP and are invited to participate in preparedness exercises, where appropriate.

The Town regularly communicates with its residents through a bi-annual newsletter and through informational inserts included with quarterly refuse service billings. Plans are being developed to utilize these outreach tools to provide information concerning what private residents can do to prepare for an emergency.

Water
The Town is served by the California Water Service–Bear Gulch District. Goals and policies to protect water resources in the Town include:
• Using native plants in developments.
• Preventing the pollution of sources of water.
• Collecting rainwater for reuse.
• Recycling water when possible.
• Encouraging groundwater recharge areas and facilities.
• Protecting the watershed.

The Planning Commission has recommended amending the zoning ordinance to establish certain required setbacks for construction along creeks. The ordinance would apply the setback provisions to Los Trancos Creek, Corte Madera Creek, and Sausal Creek.

Redwood City

Carbon Emissions
Redwood City is partnering with Joint Venture: Silicon Valley Network, Sustainable Silicon Valley, and ICLEI—Local Governments for Sustainability to calculate a community-wide carbon inventory. The inventory will include carbon emissions from City operations as well as from the residential, commercial, and transportation sectors. To be completed by the spring of 2008, the inventory will be utilized to establish greenhouse gas emissions reduction goals in accordance with standards set by the State of California.

Redwood City has also hired staff to implement “Community Solutions to Climate Change,” a collaborative effort designed to engage residents to take action together with the City to lower community-wide carbon emissions. The City established the following goals for the initiative:
• Citywide carbon emissions will be reduced.
• Sustainable living programs/policies and personal actions will be put into practice.
• Residents will develop community-building and cooperative problem-solving skills.

Project deliverables will include:
• Strategies for effectively engaging community residents in climate change and sustainable living practices.
• Neighborhood-based activities to reduce carbon emissions and promote sustainable living practices.
• Environmental education events and activities for children, youth, and the community.

Disaster Preparedness
The most likely major disaster to strike Redwood City is an earthquake. Flooding during heavy winter storms is the most common less destructive disaster. Flooding is easier to
manage than a large scale incident because it is generally local in nature. While no specific sites in Redwood City have been identified as likely terror targets, the City has the ability to respond effectively.

The City plans to prepare appendices to its Emergency Operations Plan specific to biological events, levee and dam releases, transportation and hazardous materials emergencies, and large scale wildland and structure fires.

At the end of 2007, the following training had been completed during the previous 18 months by Redwood City staff:

- Approximately 80 percent of City employees completed National Incident Management System training.
- Six employees completed or were scheduled to complete six one-week courses at the California Specialized Training Institute. Participating employees were from the Fire Department, the City Manager’s Office, and the Public Works Department.
- Four employees received finance section training.
- Community Development Services and Library staff received Plans Section training from the California Department of Forestry and Fire Protection.
- Staff participated in the Golden Guardian regional disaster response exercise.
- Staff attended and participated in the California Emergency Services Association conference.
- Fire Department staff attended Emergency Operations Center training at the San Francisco International Airport.

The City’s Community Emergency Response Team (CERT) Program educates citizens about disaster preparedness and basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations. The City has 86 trained CERT members who can assist their neighbors or fellow workers following a disaster. An additional 50 residents have taken the City’s two-hour Are You Ready? course, a quick informative introduction to disaster preparedness.

Water

In January 2008, Redwood City began an 18-month community engagement process to create a new General Plan. A Water Supply Element has been drafted and will be included. This element, in concert with the City’s 2005 Urban Water Management Plan, establishes policies for water conservation and discusses opportunities for more widespread use of recycled water.

All of Redwood City’s potable water comes from the San Francisco Regional Water System. The City’s contractual supply assurance is 12,243 acre feet of water per year (10.9 million gallons per day) which it has exceeded regularly since FY 1998-99.

Since 2001, the City has implemented important water conservation programs that have achieved significant, ongoing water savings.

- Incentives and rebates, free conservation devices, one-on-one residential conservation consultations, site water use analysis, and education and public outreach to increase water efficiency in homes, businesses, and institutions. Cumulative indoor water savings through mid-2007 totaled 403 acre feet (131.5 million gallons).
- In 2006, a Large Landscape Conservation Program saved 543 acre feet (177 million gallons) measured against a base year of 2002. Reductions were achieved at 66 of 75 homeowner association sites and 22 of 28 City parks.
- In 2007, the First Step Recycled Water Project and the startup of the Citywide recycled water project saved 93 acre feet (30.4 million gallons).

The City is on track to reduce demand by 815 acre feet per year (266 million gallons) by the end of 2009. Combined with a projected 900 acre feet per year (293 million gallons) from the recycled water project for irrigation and industrial uses, the City will have erased its supply assurance deficit and will provide additional water supply reliability for future water users.

Looking to share best practices and exchange knowledge on climate protection issues, the City has joined with local governments in both Santa Clara and San Mateo County to form the Climate Protection Task Force, facilitated by Joint Venture: Silicon Valley Network. In 2008, the Task Force plans to provide a method for its member cities to work with ICLEI to determine the amount of annual carbon emissions attributable to City operations.

The City has also established a Citywide employee working

---

San Bruno

Carbon Emissions

In 2007, San Bruno attended workshops sponsored by the Bay Area Air Quality Management District and ICLEI—Local Governments for Sustainability to determine its community-wide carbon footprint. Results from the workshops showed that for 2005 the City’s emissions inventory of carbon dioxide equivalents was 249,000 metric tons. The major contributors were vehicle transportation (61 percent), natural gas use (18 percent), electricity consumption (17 percent), and landfill waste (4 percent).
group to address environmental issues both within City operations and the wider community. While the City has already engaged in several initiatives (e.g., the purchase of hybrid-electric vehicles, installation of energy-efficient lighting throughout its facilities, conversion of its traffic signal lights to light-emitting diode), the new working group, in collaboration with the City Council and local residents, will research various policies or programs to further reduce carbon emissions. With this research and the data from the emissions inventory, the City can establish a meaningful and achievable emissions reduction target.

**Disaster Preparedness**

Maintaining the safety, security, and economic well-being of its residents is among the City’s highest concerns. Taking into account its terrain and proximity to the San Francisco International Airport and mass transit stations, the City is prepared to respond to major earthquakes, landslides, terrorism events at the BART station or surrounding shopping facilities, and off-field airplane crashes. The City plans to adopt a revised emergency operations plan (EOP) in the spring of 2008 to address these and other concerns.

The City also completed a comprehensive upgrade and modernization of its Emergency Operations Center (EOC). New computer hardware, software upgrades, and improved radios ensure communication interoperability between the Fire, Police, and Public Works Departments. In addition, the EOP and EOC provide for the use of shortwave ham radios should a major earthquake or other disaster disable traditional radio and cell phone towers.

City staff receives fire and life safety training, including CPR and the use of automated external defibrillators; additional staff training on the newly updated EOP will begin in 2008. San Bruno also has the county’s longest standing disaster preparedness committee that sponsors workshops at local community events and City facilities to educate the public on disaster planning.

**Water**

With nearly half of San Bruno’s water acquired through groundwater pumping, careful stewardship of water resources is a high priority. The City has been coordinating with South San Francisco, Daly City, and the San Francisco Public Utilities Commission to develop a regional water use plan to efficiently manage both local groundwater sources and surface water from the Hetch Hetchy Reservoir.

To conserve water the City uses drip irrigation for landscape watering. New medians planned for San Bruno Avenue and El Camino Real will feature drip irrigation and drought-tolerant plants. Additionally, each year the City funds a rebate program for local businesses that purchase water-efficient clothes washers.

In 2007, the City partnered with the Bay Area Water Supply and Conservation Agency to pilot a water-wise education program to 62 fifth grade students at Belle Air Elementary School. Each student was sent home with a kit containing water conservation instructions and high-efficiency water devices (such as water-saving showerheads) to be installed by their family. A post-program audit revealed that half of the students used the conservation products and methods, netting annual water savings of 500,000 gallons. Given such success, the City plans to expand this program to fifth graders at all of its elementary schools. This will result in estimated annual water savings of 4.5 million gallons.
Carbon Emissions
In May 2007, the San Carlos City Council approved a Green Initiatives and Climate Protection program. The three-pronged program includes a City Coordinator for City programs, a Green Business Task Force hosted by the San Carlos Chamber of Commerce for business programs, and San Carlos Green, a resident-led community task force that works on residential efforts with a goal of inspiring a more environmentally conscious and sustainable community.

During 2007, the City enjoyed several successes from its Green Initiatives and Climate Protection effort. A greater percentage of San Carlos residents and businesses signed a green practices pledge than in any California city. As a result, Yahoo! named San Carlos the Greenest City in California and the third Greenest City in the nation. Yahoo! awarded a prize of 5,000 compact fluorescent lights to the City and San Carlos Green to distribute to local residents and businesses.

Another successful project was the community solar purchase program with Solar City and San Carlos Green. In 2007, 18 homes signed up to install photovoltaic systems at a 20 percent group discount. These systems will generate 83 kilowatts of power and offset 1.7 million pounds of carbon emissions over the next 30 years.

The City played a key role in launching the regional Joint Venture: Silicon Valley Network Climate Protection Initiative to encourage the cities and two counties in Silicon Valley to develop community-wide greenhouse gas (GHG) inventories. A second project to fund city government GHG inventories for San Carlos and 20 additional cities in Silicon Valley is now underway.

In 2007, the City received a $75,000 grant from the Bay Area Air Quality Management District to integrate carbon footprint data into its upcoming San Carlos: Envision 2030 General Plan. This will include several efforts such as a short- and long-term Climate Action Plan and a Green Building Code. Additional community activities included work on the Bay Area Green Business Certification Program. In 2007, San Carlos had more businesses certified in the program than any other city in the county.

Disaster Preparedness
In 2007, San Carlos entered into an arrangement with the City of Belmont and the Belmont-San Carlos Fire Department to share Disaster Preparedness Services. The Police Chiefs from the two cities and the Fire Chief from the Belmont-San Carlos Fire Department recommended the new model to their respective Councils because of an overlap in what they provided as individual agencies.

In early 2008, the cities hired a new Emergency Preparedness Coordinator to provide disaster-related services for both communities. Working out of the Fire Department, the Emergency Preparedness Coordinator will work to increase the preparedness levels of individual homes and businesses.

Another priority will be to increase the size and scope of the successful Community Emergency Response Teams (CERT) serving the two cities. In 2007, over 80 residents graduated from CERT training held by the three agencies. San Carlos also hosted four Emergency Preparedness Workshops in the community, two Build a Neighborhood Emergency Association training sessions, and the South County Pandemic Flu Orientation in conjunction with the San Mateo County Office of Emergency Services.

In 2007, San Carlos conducted table top and full scale exercises designed to refine the emergency response skills of City staff members as well as update the City Manager and City Council on Emergency Operations Center training and procedures. This is an ongoing program conducted every year to ensure that this training reaches as many members of City staff as possible. San Carlos also participated in Association of Bay Area Governments’ workshops on disaster mitigation and completed a comprehensive emergency mitigation plan.

Water
The City has explored different opportunities to conserve water at City facilities. A 32-member Citizens Advisory Committee on Athletic Fields recommended the installation of synthetic turf athletic fields at three sites in San Carlos which could save two to three million gallons of water per year. The City also conducted a water use audit at the San Carlos Youth Center as part its efforts to become the first facility in San Carlos to earn a Bay Area Green Business Certification from the county.
The City of San Mateo continues to make significant progress in addressing sustainability issues and has taken critical steps towards addressing the City’s impact on the environment.

**Carbon Emissions**
San Mateo was one of the first cities in San Mateo County to begin work on climate action planning. In October 2007, the City completed its greenhouse gas emissions inventory. The charts below show the entire City's carbon emissions and its sources.

<table>
<thead>
<tr>
<th>Source of CO₂</th>
<th>Metric Tons of CO₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>121,055</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>141,657</td>
</tr>
<tr>
<td>Transportation</td>
<td>346,201</td>
</tr>
<tr>
<td>Waste Disposal</td>
<td>16,096</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>625,009</strong></td>
</tr>
</tbody>
</table>

Data source: City of San Mateo

Although the City’s operations make up less than 2 percent of community-wide emissions, the City has adopted policies to reduce that impact, including:

- A green purchasing policy.
- Sustainable building guidelines for new City facilities.
- The use of alternative fuel vehicles (a portion of the City fleet, including fire engines, runs on B20 biodiesel).
- Regularly conducted energy audits.
- Employment of a recycling coordinator.
- Equipment upgrades and retrofits.

Expected for 2008 is a climate action plan for City operations and facilities that will provide a schedule for changes and upgrades to help the City meet its CO₂ reduction goals.

**Disaster Preparedness**
The City’s Office of Emergency Services is committed to preparing the community and City staff for a local emergency. Disasters that are of most concern to the City are earthquakes, flooding, and hazardous material exposure. In the event that one or more of these disasters occur, some consequences may be dam failure, traffic and transportation issues involving major freeways and railroads, and multiple fires.

Employee and community readiness are keys to timely response and recovery from such incidents. City employees are trained to respond to local disasters according to standards in the National Incident Management System. Additional trainings are provided to specific employees based on their functional role in the event of an emergency.

The City provides a number of programs and services to educate the public about how to protect their families and property during an emergency. In 2007, over 150 citizens completed Community Emergency Response Team (CERT) training. CERT training teaches residents how to ensure the safety of themselves, their families, and their community in the aftermath of a major disaster. CERT-trained residents are taught safety and survival techniques including identifying hazards and conducting searches and rescues. In 2007, about 400 citizens took the City’s R-U Ready disaster preparedness class on how to prepare themselves, families, homes, and workplaces for a major disaster.
**Water**

The City has made it standard practice to identify and implement methods that promote efficient water management such as upgrading water faucets to automatic sensors and requiring new development to meet water conservation design standards.

Water conservation is an essential piece of the City’s park operations. Most of the City’s largest turf areas use a centrally controlled sprinkler system that conserves water by adjusting the timing and flow of irrigation based on weather conditions. Three of the City’s major turf areas, including the golf course, are irrigated with well water, saving the City from burdening the public water supply.

In 2007, the City worked with the California Water Service to provide water conservation audits for businesses participating in the Green Business program.

**Carbon Emissions**

To reduce carbon emissions, South San Francisco continues to convert existing City-owned vehicles to biodiesel fuel. In 2007, the City reached its goal of retrofitting 20 percent of its fleet, with a goal of 60 percent by 2009 and 100 percent by 2011. Currently a fire engine, an ambulance, a new Fire Command vehicle, and a Senior Services van use biodiesel. Staff monitors the mileage and emissions performance of these vehicles for any changes and advantages. The City has two dedicated aboveground biodiesel tanks with a total of 1,500 gallons of capacity and is in the process of negotiating with a biodiesel provider for onsite facilities which can reduce fuel use.

In 2007, the City also purchased several alternative-fueled vehicles in an effort to conserve fuel as well as funds. The vehicles purchased included four hybrid vehicles, three electric carts, a propane-operated sweeper, and four patrol units capable of running on ethanol. These purchases bring the City into compliance with the California Emissions Law well before the 2020 deadline.

South San Francisco has signed on to the Cities for Climate Protection Campaign to calculate a greenhouse gas baseline for the City with the goal of reducing greenhouse gas emissions consistent with the requirements of AB 32.

**Disaster Preparedness**

The disasters of most concern to South San Francisco are severe winter storms, hazardous materials incidents, earthquakes, and acts of terrorism. As a result, the City is using an all-risk approach to disaster preparedness, which means many of the preparations the City is undertaking for severe winter storms are equally applicable for an earthquake or other emergency.

In 2007, examples of training that City staff undertook included a pandemic flu exercise, National Incident Management System training (NIMS 100 and 200 for over 400 City employees), and the Golden Guardian regional disaster response exercise.

The City has several outreach and education programs to promote disaster preparedness. The Fire Department’s website has disaster preparedness information that can be easily downloaded, and materials are available at every service counter in the City. In addition, at major City events, handouts on disaster preparedness are made available. At many of these events (e.g. Day in the Park, community cleanups) there are demonstrations to show citizens how to shut off their electricity, gas, and water in the event of an emergency and how to create a home disaster kit.

In 2007, a presentation on Channel 26, the local public access channel, promoted disaster preparedness and encouraged citizens to become a member of the City’s Community Emergency Response Team (CERT). Since CERT’s inception in 1994, the City has trained over 300 persons. Each year two CERT classes are scheduled. Once participants have completed the course, they can attend monthly meetings at their local fire stations to practice their knowledge and skills and learn more about how they can help themselves, family, friends, or neighbors following a disaster. The goal is to have 1,000 active CERT members.

The City also encourages businesses to participate in similar training. In 2007, the City’s Business Emergency Response Team (BERT) program trained over 100 employees of local businesses in the use of a fire extinguisher, building evacuation, and first-aid/CPR. The goal is to have 10 percent of the employees in businesses with more than 100 employees complete the BERT training program.

**Water**

The City conserves water through proper landscape design, utilizing drought-tolerant native plants in new and replacement landscaping. Recycled water is incorporated in some new irrigation systems such as the new Centennial Way linear park. Regular maintenance and irrigation system checks help identify problems that could go unnoticed as most watering occurs at night. These checks identify broken or misadjusted heads and mainline or lateral breaks in sprinkler lines.
Other conservation strategies include:

- Turning off water in the park system from November to February.
- Remotely adjusting irrigation clocks to compensate for wet weather conditions.
- Recycling of tree trimming chips as mulch to reduce water evaporation and suppress weeds.
- Upgrading City facilities with low-flow toilets or faucets.

South San Francisco’s Source Control Inspectors work closely with businesses to monitor their water consumption and its relationship to their annual sewer charges. Since that cost can be high, the inspectors work with businesses to lower costs through conservation. The City also works closely with the California Water Service and the Westborough County Water District to identify unusual water patterns and excessive use from various meters, which allows for investigation and followup repairs.

---

**Woodside**

**Carbon Emissions**
To help the State of California achieve its greenhouse gas emissions reduction goals, Woodside’s Town Council has made significant commitments to reduce the Town’s emissions, including:

- Funding in the 2007-08 budget to install solar power technologies at the Town Hall Complex and the library based on findings from an energy audit of the Town Hall. A similar audit of the library is currently in progress.
- Funding for a design study to upgrade the Town Hall that will incorporate green building concepts.
- Funding to replace windows and upgrade lighting fixtures to make the Town Hall more energy efficient.
- Approval of the purchase of a new truck for the Town’s vehicle fleet fueled by an alternative energy source. Currently, the staff favors the purchase of a biodiesel truck.

Town staff is reviewing the Town’s existing design guidelines and is incorporating green building concepts where appropriate. The Town also sponsors workshops for Town residents and building professionals on the guidelines and other aspects of green building. For example, in October 2007, the Town sponsored a workshop to provide information regarding the installation of solar photovoltaic systems.

The Town also works with an independently formed citizens group, Woodside Green, to jointly sponsor additional public education forums and events. One such event that is funded in the 2007-08 budget is the annual Environment Fest. A Global Warming theme will be at the center of the upcoming year’s Fest.

**Disaster Preparedness**
Woodside is most concerned about earthquakes and wildfires. The immediate loss of life and damage to property are of most concern, as is the Town’s ability to respond to disasters and to affect an adequate recovery and restoration to normal operations. Training exercises occur on average about twice a year.

The Town was a founding member of the Citizens for Emergency Response and Preparedness (CERPP), a neighborhood-based nonprofit organization that serves the Woodside Fire Protection District. Outreach and education occurs through CERPP and the Town participates in CERPP’s emergency drills, which occur twice a year. The Town has radio communications capability with each of its 13 neighborhood divisions.

**Water**
Woodside does not have formal policies regarding water conservation for either Town operations or private properties. The Town is currently undertaking a water recycling feasibility study at the Town Hall complex, however, with treated water to be used for landscape purposes. If feasible, this undertaking would have several benefits. The Town’s water usage pattern would be modified, with less demand upon primary water sources. The Town’s sewer flow would be somewhat reduced by that portion diverted to be recycled, something that is becoming an increasingly significant issue as private systems around Town start to age and fail.

The Town is served by California Water Service, the City of Redwood City, and several small private water companies. The Town has an established pattern of effective working relationships with all these agencies and communications are frequent, with information and support flowing both ways.
**Carbon Emissions**

San Mateo County is a member of Sustainable Silicon Valley and has pledged to reduce CO₂ emissions from County facilities by 10 percent. In 2007, the County adopted the Sierra Club’s Cool Counties Initiative and will use the Cities for Climate Protection software from ICLEI—Local Governments for Sustainability to complete an emissions inventory for government operations. The County Manager’s Office created a Cool Counties committee and a Green Task Force comprising one representative from each County department. This task force will help build individual and organizational knowledge and commitment to CO₂ emissions reductions, water conservation, and source reduction/recycling opportunities both at home and at work. County staff has also taken part in two Bay Area Air Quality Management District community-wide inventory workshops.

Ongoing CO₂ emissions reduction policies in County government include:

- Building Temperature Policy
- Commute Alternatives Program
- Concrete Fly Ash Policy
- Environmental Purchasing Policy
- Leadership in Energy and Environmental Design (LEED) Green Building Policy
- Association of Bay Area Governments’ (ABAG) Energy Watch Partnership
- Recycled Concrete Policy
- County Facility Recycling Program
- Green Business Program
- Alternative Vehicle Purchasing and Fleet Gas Mileage Policy
- County Facility Deconstruction Policy

Through the ABAG Energy Watch Partnership, three major projects have been completed that will reduce CO₂ emissions by an estimated 700 tons per year. The County has four additional projects in various stages of completion that will further reduce emissions by an estimated 288 tons of CO₂ per year. The Energy Watch team meets quarterly to review and update progress.

In 2007, the County began a six-month pilot phase of a new Green Business Program. Countywide, approximately 100 businesses signed up for the program. By year end 2007, 16 businesses became certified Green Businesses, 35 were in queue, and the rest were beginning the processing. Energy and water conservation play major roles in the certification requirements of the Green Business Program.

The County Planning and Building Department convened a Green Building Task Force to develop a policy using both the Build It Green and LEED checklists for certain unincorporated projects. The County Board of Supervisors will review the proposed policy in 2008.

RecycleWorks, the Waste Management and Environmental Services section of the County’s Public Works Department, offers numerous programs that have CO₂ reduction and water conservation benefits. These include backyard, vericomposting (worms), and master composter programs; the RecycleWorks Hotline and website (www.recycleworks.org); schools programs; a green building program; and a construction and demolition recycling program.

**Disaster Preparedness**

In San Mateo County, the most common disasters are associated with winter storms. Adopted in 2007, the County’s Emergency Operations Plan (EOP) contains event-specific checklists to cover these and other disasters. The EOP is a multihazard plan that uses concepts from the state’s Standardized Emergency Management System and the National Incident Management System.

The top three priorities for the County’s emergency management response are life safety, protection of property, and protection of the environment. In the event of an emergency, resources would be dedicated to these priorities with goals set by the incident commander. Once the goals are reached, the next set of priorities would be addressed until the community is returned to normal.

The County provides Community Emergency Response Team training and maintains a website (www.smcready.org) with extensive information on disaster preparedness for homes and businesses. The County also operates an electronic alert notification system (www.smcalert.info) whereby residents who are signed up receive e-mails and/or text messages during emergency situations.

**Water**

The County is working with the Bay Area Water Supply and Conservation Agency and the City/County Association of Governments’ Utilities & Sustainability Task Force to develop a plan for cost-effective and feasible water conservation, water recycling, and development of local water supplies. Additionally, the County intends to support local water utilities’ efforts to meet commitments of an additional 5.2 million gallons per day of conservation by 2030, and to support other Hetch Hetchy regional water system customers in activities to preserve the Lower Tuolumne River through agricultural water conservation efforts.
Approximately 40,000 people attend the three colleges in the San Mateo County Community College District (the District): Skyline College in San Bruno, Cañada College in Redwood City, and the College of San Mateo (CSM).

**Carbon Emissions**
The District has undertaken a number of projects to reduce energy use in college buildings as part of its Capital Improvement Program. Electricity use has declined by 22 percent and natural gas use by 15 percent. Specific measures undertaken include:

- Implementation of energy conservation measures including lighting retrofits, mechanical system repair/replacement, installation of a digital building management control system, and conversion to variable speed pumping and fan systems. Measures such as these have generated $30 million in savings over the past four years.
- Installation of two natural gas cogeneration systems that allow the District to generate 50 percent of its power, reducing annual electric grid consumption by more than 6.7 million kilowatt hours. Generators are high-efficiency engines that ensure minimal production of greenhouse gases. Heat byproducts captured in the District’s heating water lines reduce boiler plant loads. Generating onsite electricity also allows the District to avoid transmission losses that occur over distant utility lines.
- Installation of motion-controlled lighting throughout all new construction and modernization projects.
- Use of ozone-friendly R134 or R123 refrigerant and cool roofing systems, reducing solar heat gain and decreasing overall energy consumption.
- Installation of digital control/energy information systems enabling the District to shed/shift demand for improved power load management.
- Use of green construction materials in standard products (e.g. window treatments, carpeting, acoustical ceiling panels, flooring, etc.).

New building construction and modernization has exceeded and will continue to exceed the state’s 2005 Title 24 energy requirements by a minimum of 25 percent (e.g. CSM’s new science building is 42 percent more energy efficient; Skyline College’s Student/Community Center, 28 percent; and Cañada College’s new Library/Student Resource Center, 30 percent). This was accomplished by combining many elements of sustainable design. The District also participates in Pacific Gas and Electric Company’s Savings by Design program and six new buildings in design and construction at the three colleges adhere to the U.S. Green Building Council’s Leadership in Energy and Environmental Design standards.

**Disaster Preparedness**
While incidents of hazardous material/waste release, fires in buildings, wildfires, and civil unrest pose concerns, the major focus of emergency preparedness at the District has been response to an earthquake. An earthquake’s consequences could have far-reaching impacts and could necessitate closure of all or part of a campus. In developing its Emergency Operations Plan (EOP), the District has adopted the National Incident Management System/Standardized Emergency Management System model. The District’s EOP contains detailed information on emergency/disaster response, including delineation of roles and responsibilities, event-specific response procedures, checklists, and followup actions.

The District conducts ongoing training and disaster scenario exercises in partnership with local law enforcement, fire, emergency medical, and Office of Emergency Services personnel. Training has also occurred for college safety leaders through the California Community College System’s Office of Emergency Planning and Preparedness. In 2007, the District provided active shooter training for all college personnel, preparing them for the presence of an armed and threatening person on campus.

Each college has a Carillon System which provides for widespread outside/exterior notification of emergencies. The District also implemented a voluntary text message emergency notification system for all students and staff and deployed a Voice over Internet Protocol (VOIP) phone system enabling Districtwide phone notification of emergencies.

**Water**
Since 2004, the District has realized a 35 percent savings in water consumption (approximately 5.8 million gallons) attributable in large measure to the conversion of most of the colleges’ natural turf athletic fields to synthetic turf and to reformed landscaping, focusing on climate-appropriate and drought-tolerant plant materials and efficient irrigation systems. Conservation of water is also realized from installation of modern low-flow restroom fixtures.
KEY INDICATOR: WATER—SUPPLY AND DEMAND, page 7:

Information on the current and projected supply and demand for water in San Mateo County and the assured level of supply under the Master Water Sales Agreement is from the Bay Area Water Supply and Conservation Agency’s (BAWSCA) Annual Survey FY 2005-06, March 2007 found at http://www.bawsca.org/almanac.html and previous annual surveys provided by BAWSCA. Information on the sources of water for the San Francisco Public Utilities Commission’s (SFPUC) regional water system is from the SFPUC found at http://sfwater.org/.


The following are the water agencies in San Mateo County matched with their service area. Brisbane serves the City of Brisbane. Burlingame serves Burlingame plus portions of the unincorporated Burlingame Hills area and a few properties in San Mateo and Hillsborough. California Water Service Bear Gulch District serves Atherton, Portola Valley, Woodside, portions of Menlo Park, and adjacent unincorporated portions of San Mateo County including West Menlo Park, Ladera, North Fair Oaks, and Los Trancos Valley. California Water Service Mid-Peninsula District serves San Carlos and San Mateo and adjacent unincorporated areas including The Highlands and Palomar Park. California Water Service South San Francisco District serves South San Francisco, Colma, a small portion of Daly City, and the unincorporated area known as Broadmoor. Coastside County Water District provides water to the City of Half Moon Bay and several unincorporated coastal communities in San Mateo County, including El Granada, Miramar, and Princeton by the Sea (Pillar Point Harbor). Daly City serves Daly City and some unincorporated portions of the county. East Palo Alto serves the City of East Palo Alto. Estero Municipal Improvement District serves the City of Foster City and part of the City of San Mateo. The Guadalupe Valley Municipal Improvement District consists primarily of an industrial park development located within the Brisbane City limits, and a small residential enclave. Hillsborough serves the Town of Hillsborough and portions of the unincorporated San Mateo County. The Menlo Park Municipal Water Department serves portions of Menlo Park. Mid-Peninsula Water District serves Belmont and portions of San Carlos and unincorporated county areas. Millbrae serves Millbrae and Capuchino High School in San Bruno. North Coast County Water District serves Pacifica. Redwood City serves Redwood City, unincorporated areas of the county, and portions of the City of San Carlos and the Town of Woodside. San Bruno serves San Bruno and unincorporated areas of the county. Skyline County Water District serves a portion of the Town of Woodside and unincorporated areas of San Mateo County along Skyline Boulevard. Westborough County Water District serves parts of South San Francisco. For more information about the 19 BAWSCA-member water agencies serving San Mateo County, see the BAWSCA website, http://www.bawsca.org/profiles.html.

AGRICULTURE, page 12:

Data on San Mateo County agricultural production and economic impacts are from the San Mateo County Department of Agriculture/Weights and Measures, San Mateo County: 2006 Agricultural Crop Report, found at www.co.sanmateo.ca.us/agwm and conversations with Gail Raabe, Agricultural Commissioner/Sealer; Jack Olson, Executive Administrator, Farm Bureau of San Mateo County; and Tim Frahm, Director of Conservation and Water Quality Program, San Mateo County Farm Bureau. Inflation adjusted figures were derived using the Consumer Price Index (CPI) for the San Francisco-Oakland-San Jose, CA region from the U.S. Department of Labor, Bureau of Labor Statistics found at http://data.bls.gov/PDG/outside.jsp?survey=cu. Data on the acres of county land that are used for agriculture and grazing are from the California Department of Conservation, Division of Land.

AIR QUALITY, page 13:
Data on the number of days that concentrations of PM10, PM2.5, ozone, carbon monoxide, and nitrogen oxide exceeded state or federal standards at the Redwood City monitoring station for the years 1998-2006 are from the Bay Area Air Quality Management District's (BAAQMD) Annual Air Quality Summaries found at http://www.baaqmd.gov/pio/aq_summaries/index.htm. Information for 2007 is from the BAAQMD Air Quality Data page at http://gate1.baaqmd.gov/aqmet/aq.asp. and a discussion with Ken Crysler with BAAQMD. PM10 is tested every three days from January through March and October through December and every six days from April through September. Ozone is tested daily. Information on the health effects of particulate matter is from the American Lung Association’s (ALA) Particle Pollution Fact Sheet found at http://www.lungusa.org/site/pp.asp?c=dvLUK900E&b=50324 and the Environmental Protection Agency found at http://www.epa.gov/particles/. Information on the health effects of ozone is from the ALA found at http://lungaction.org/reports/sota07_heffects.html. The ALA grades for particulate matter and ozone for San Mateo County and the Bay Area are from the State of the Air Report 2007 found at http://lungaction.org/reports/stateoftheair2007.html. In the 2007 Indicators for a Sustainable San Mateo County report, we used preliminary figures for PM10 and ozone for 2006. These were revised and those revisions are reflected in this year's report.

CARBON DIOXIDE EMISSIONS, page 14:

We are using metric tons (2,204.6 pounds) for CO₂ emissions as metric tons are the standard convention for reporting CO₂ and other greenhouse gas emissions. Information on gasoline consumption in San Mateo County is from the California Department of Transportation (Caltrans), Office of Transportation Economics found at http://www.dot.ca.gov/hq/tpp/offices/ote/links_files/countygas.pdf. Gasoline is converted to CO₂ using an emission factor of 19.43 pounds of CO₂ per gallon of gasoline, which comes from the U.S. Environmental Protection Agency, State Workbook: Methodologies for Estimating Greenhouse Gas Emissions, November 1992, found at http://nepis.epa.gov/EPAA/html/Pubs/pubtitleOther.htm. Diesel fuel consumption is from Caltrans, California Motor Vehicle Stock, Travel, and Fuel Forecasts found at http://www.dot.ca.gov/hq/tpsp/mvstafhtml and from Caltrans staff. Diesel is converted to CO₂ using an emission factor of 21.05 pounds of CO₂ per gallon of diesel, calculated using the following data: 130,500 Btu/gallon (source: http://bioenergy.ornl.gov/papers/misc/energy_conv.html), 44 pounds of carbon per MMBtu (source: http://www.energy.ca.gov/reports/600-02-001F/2002-09-14_600-02-001F.PDF), 44/12 = molecular weight of CO₂/C. Calculation: 44/12 * 44.0 * 0.1305 = 21.05 pounds. Using gasoline and diesel fuel is one method to calculate transportation-related emissions. An alternative methodology is using the California Air Resources Board’s EMFAC (EMission FACtors) model found at http://www.arb.ca.gov/msei/onroad/latest_version.htm to generate an estimate of tons of CO₂ emitted based on vehicle miles traveled. Using the vehicle-miles-traveled methodology, we calculated 3.2 million metric tons and 3.1 million metric tons of CO₂ emissions in San Mateo County for 2005 and 2006. Each of those figures was below the figures we calculated using fuel use (3.5 and 3.4 million metric tons for 2005 and 2006 respectively). The proportion of total emissions from transportation was less as well, accounting for 56 percent in 2005 and 54 percent in 2006 (compared with 58 percent).

Countywide emissions can be allocated to individual cities in different ways (e.g. population, miles of roadway, estimates of vehicle miles traveled, and others). We have not chosen one particular allocation as we feel cities should use whatever allocation makes most sense for their planning needs. We have instead assumed that the proportions of total CO₂ emissions that come from transportation were the same for the cities as were calculated for the county as a whole. For this reason we may overstate or understate transportation-related emissions for individual cities. Regardless of methodology, two key points are made: (1) transportation-related emissions are the largest component of the county’s and any individual city’s carbon inventory, and (2) transportation-related emissions account for over half of all CO₂ emissions in the county.

Electricity and natural gas consumption data are from the
Data on solid waste generated in San Mateo County are from the California Integrated Waste Management Board’s (CIWMB) Disposal Reporting System found at http://www.ciwmb.ca.gov/LGCentral/DRS/Reports/default.asp?Origin. CO\textsubscript{2} from solid waste was calculated using the U.S. Environmental Protection Agency’s Waste Reduction Model (WARM) http://www.epa.gov/climatechange/wycd/waste/calculators/Warm_home.htm. The total tonnage of waste disposed and material used as alternative daily cover was converted to CO\textsubscript{2} by using the general municipal solid waste conversion in the WARM model. The CO\textsubscript{2} generated from waste being transported to landfills outside of the county is not included in either the waste or the transportation numbers.

We are grateful for Jill Boone’s help with our methodology for calculating CO\textsubscript{2} emissions in San Mateo County.

**CHILDMEN: CHILD ABUSE, page 16:**

Data on child abuse referrals and foster care entries are from the University of California at Berkeley, School of Social Welfare, Center for Social Research’s Child Welfare Services/Case Management System Reports found at http://cssr.berkeley.edu/ucb_childwelfare/default.aspx. Data represent unduplicated counts of children per year who have been identified as a victim in a child abuse referral. Previous years’ data have been adjusted to reflect changes in the estimated populations of children in San Mateo County and the State of California for the years 1998-2005.

**CHILDMEN: HEALTH, page 18:**

Data on children meeting the California Fitness Test Standards are from the California Department of Education Dataquest web page at http://data1.cde.ca.gov/dataquest/. Data on children enrolled in kindergarten who had received all of their required immunizations by the age of two are from Robyn Ziegler, Program Coordinator, Immunization Program, San Mateo County Department of Public Health and www.kidsdata.org. Information on the percentage of children covered by health insurance is from the UCLA Center of Health Policy Research, 2001 and 2005 California Health Interview Surveys found at http://www.chis.ucla.edu/. Information on the Teen Health Spa and Shapedown...
are from the San Mateo County Public Health Department at http://www.smhealth.org/smc/department/home/0,,1954_192521_200127,00.html.

**CONTAMINATED SITES, page 19:**
Data on contaminated sites are from the California State Water Resources Control Board's Geotracker database found at http://geotracker.swrcb.ca.gov/. Total contaminated sites reported is the total number of sites found in the Geotracker database for Leaking Underground Fuel Tanks (LUFT) and sites in California's Spills, Leaks, Investigations, and Cleanups (SLIC) program. As there are other potential sites that may not be included in either the LUFT or SLIC databases (e.g., former Department of Defense sites, land disposal sites, etc.), we may underreport the number of contaminated sites in San Mateo County. In previous years, the number of total LUFTs and other chemical leaks by city was overstated because of the inclusion of SLIC sites in the LUFT data. Information on the Superfund site in East Palo Alto is from the California Department of Toxic Substances Control online database at http://www.envirostor.dtsc.ca.gov/public/. Additional information was from Mark Johnson with the California Environmental Protection Agency.

**CRIME, page 20:**
Data on total violent crimes and juvenile crimes for the years 1997-2005 are from the California Department of Justice, Office of the Attorney General, Criminal Justice Statistics Center found at http://ag.ca.gov/cjsc/datatabs.php. Data for violent crimes and juvenile crimes for 2006 and gang related homicides for years 1997-2006 are from Umash Prasad, Special Requests Unit, Criminal Justice Statistics Center. Violent crimes include homicide, forcible rape, robbery, and aggravated assault (the unlawful attack or attempted attack by one person upon another for the purpose of inflicting severe or aggravated bodily injury).

**DISASTER PREPAREDNESS, page 21:**

**ECOLOGICAL FOOTPRINT, page 22:**
Global and U.S. Ecological Footprints are from the Global Footprint Network, 2006 National Footprint Accounts found at http://www.footprintnetwork.org/gfn_sub.php?content=national_footprints. Data for San Mateo County are from Redefining Progress, San Francisco Bay Area Ecological Footprint, 2004, found at www.regionalprogress.org. The San Mateo County 2001 Ecological Footprint was calculated by multiplying the per capita Ecological Footprint (20.9 acres) by the county population for 2001 (714,000) found at http://www.dof.ca.gov/HTML/DEMOGRAF/ReportsPapers/Estimates/E2/E_2_2000-06.php. The total of 14,922,600 acres was converted to square miles by dividing by 640 (one square mile equals 640 acres). The county’s area of 531 square miles is from San Mateo County, County of San Mateo Profile, 2007-2008, found at http://www.co.sanmateo.ca.us/bos/dir/budget/recommend2007/A-33.pdf.

**ECONOMY: INCOME DISTRIBUTION AND POVERTY, page 23:**
Information on the distribution of household incomes and the number of individuals in households with earnings below the poverty threshold is from the U.S. Census Bureau, American Community Surveys found at http://factfinder.census.gov/home/saff/main.html?_lang=en. Information on median household income by city is from ESRI, 2007 Community Sourcebook of Zip Code Demographics, 21st Edition; 2007, and is derived from data by zip code. In some cases the zip code data may not correspond with actual city boundaries, thereby skewing the income figures. Information on the federal poverty threshold is from the U.S. Census Bureau found at http://www.census.gov/hhes/www/poverty/threshld/thresh06.html. Information on the income necessary to be self sufficient in San Mateo County is from Jennie Hwang Loft, Public Information Officer/Legislative Liaison, San Mateo County Human Services Agency. The self-sufficiency level is...
based on monthly cost estimates in the county for household expenses (rent, utilities, food, transportation, personal care, housekeeping supplies, clothing, health care, and child care).

**ECONOMY: JOBS page 24:**
Data on jobs in San Mateo County are from the California Employment Development Department’s (CA EDD) monthly Current Employment Statistics survey given to a sampling of California employers. These estimates do not represent the number of San Mateo County residents with jobs, but rather the number of people employed in the county. The resulting reported number of jobs may underestimate the actual number of workers as self-employed persons, unpaid family workers, and private household workers are not counted. Specific data are found at [http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/?PageID=4&SubID=166](http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/?PageID=4&SubID=166). Data from previous years have been updated to reflect revised estimates from CA EDD. Employment projections are found at [http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/?PageID=145](http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/?PageID=145).

**ECONOMY: UNEMPLOYMENT, page 25:**
Unemployment rates for California, San Mateo County, and at the subcounty level are from the California Employment Development Department (EDD), Labor Market Information division found at [http://www.labormarketinfo.edd.ca.gov/](http://www.labormarketinfo.edd.ca.gov/). The national unemployment rate is from the U.S. Department of Labor, Bureau of Labor Statistics found at [www.bls.gov](http://www.bls.gov). The unemployment rate is the number of unemployed persons as a percentage of the labor force. 2007 figures are preliminary and have been derived by averaging unemployment rates for each month during the year. Previous years' unemployment rates have been changed to reflect revisions made by the EDD. A census-designated place (CDP) is an area identified by the U.S. Census Bureau for statistical purposes. CDPs are delineated to provide data for settled concentrations of populations that are identifiable by name but are not legally incorporated. The North Fair Oaks Census-Designated Place (CDP) is located adjacent to Redwood City, Menlo Park, and Atherton. The Broadmoor CDP is located in northern San Mateo County near Daly City. El Granada CDP is located on the coastside of San Mateo County north of Half Moon Bay.

**EDUCATION, page 26:**
The San Mateo County public school system contains 23 school districts which serve the following communities: Bayshore Elementary serves portions of Daly City and Brisbane; Belmont-Redwood Shores Elementary serves Belmont, Redwood Shores, and portions of Redwood City, San Carlos, and San Mateo; Brisbane Elementary serves Brisbane, the southern hills portion of Daly City, and the northeastern corner of South San Francisco; Burlingame Elementary serves Burlingame; Cabrillo Unified serves an area south of San Francisco on the Pacific Coast including Half Moon Bay; Hillsborough City Elementary serves Hillsborough; Jefferson Elementary serves Daly City, Colma, unincorporated Broadmoor Village, and a small portion of Pacifica; Jefferson Union serves Daly City, Colma, and Pacifica; La Honda-Pescadero Unified serves the south coast of San Mateo County; Las Lomitas Elementary serves portions of Menlo Park and Atherton; Menlo Park City Elementary serves portions of Atherton, Menlo Park, and unincorporated San Mateo County; Millbrae Elementary serves Millbrae; Pacifica serves Pacifica and the north coast of San Mateo County; Portola Valley Elementary serves Portola Valley; Ravenswood City Elementary serves portions of East Palo Alto and Menlo Park; Redwood City Elementary serves Redwood City; San Bruno Park Elementary serves San Bruno; San Carlos Elementary serves San Carlos; San Mateo-Foster City Elementary serves San Mateo and Foster City; San Mateo Union High serves Burlingame, Foster City, Hillsborough, Millbrae, San Bruno, and San Mateo; Sequoia Union High serves portions of Belmont, Atherton, East Palo Alto, Menlo Park, Portola Valley, Redwood City, San Carlos, and Woodside; South San Francisco Unified serves South San Francisco and portions of San Bruno and Daly City; and Woodside Elementary serves Woodside.

Information on the Academic Performance Index (API) is from the Education Data Partnership, Understanding the Academic Performance Index found at [http://www.ed-data.k12.ca.us/](http://www.ed-data.k12.ca.us/). The API scores are from the California Department of Education found at [http://www.cde.ca.gov/ta/ac/apireports.asp](http://www.cde.ca.gov/ta/ac/apireports.asp). Socio-economically disadvantaged is defined as a student whose parents have not received a high school diploma or a student who participates in the free or reduced price lunch program (also known as the National School Lunch Program). Data on high school students meeting University of California and California State University eligibility requirements are from the California Department of Education and the Education Data Partnership found at [http://www.ed-data.k12.ca.us/](http://www.ed-data.k12.ca.us/). Data on math and English proficiency levels of incoming freshmen at California State Universities are from California State University, Division of Analytic Studies found at [http://www.asd.calstate.edu/performance/proficiency.shtml](http://www.asd.calstate.edu/performance/proficiency.shtml). Data on expenditures per student, average teacher salaries, and pupil-teacher ratios are from the California Department of Education and the Education Data Partnership found at [http://www.ed-data.k12.ca.us/](http://www.ed-data.k12.ca.us/). The number of fully credentialed teachers is from the California Department of Education DataQuest web page at [http://dq.cde.ca.gov/dataquest/](http://dq.cde.ca.gov/dataquest/). Information on the benefits of arts education is from National Governors Association, The Impact of Arts Education on Workforce Preparation, May 2002.
on the benefits of career technical education is from EdSource, *The Evolution of Career and Technical Education in California*, June 2005, found at http://www.edsource.org/pub_edfct_careertech.cfm. Career technical education is defined as a program of study that involves a multiyear sequence of courses that integrates core academic knowledge with technical and occupational knowledge to provide students with a pathway to postsecondary education and careers. Information on the San Mateo Outdoor Education Program is from the San Mateo County Office of Education found at http://www.smcoe.k12.ca.us/outdoored/index.html and Mark Nolan, Director, San Mateo Outdoor Education Program.

**ENERGY USE, page 28:**

Data on electricity and natural gas use in San Mateo County are from the California Energy Commission. Electricity and natural gas consumption figures have been adjusted for the years 2001-2005 to reflect revisions made by the California Energy Commission. Electricity and natural gas figures are converted from therms and kilowatts to British thermal units (100,000 BTU per therm of natural gas and 3,413 BTU per kWh of electricity). Data on the average residential use of electricity and natural gas for each city in San Mateo County are from Pacific Gas and Electric Company (PG&E). Data on the mix of energy sources for PG&E’s and California’s delivered electricity are from the California Energy Commission found at http://www.energy.ca.gov/electricity/electricity_resource_mix_pie_charts/index.html. Data on solar photovoltaic systems in San Mateo County are from the California Energy Commission’s Emerging Renewables Program found at http://www.energy.ca.gov/renewables/emerging_renewables/index.html. Generating capacity refers to maximum peak generating capability based on manufacturer output ratings. In the 2007 *Indicators for a Sustainable San Mateo County*, we mistakenly recorded solar installations that had been permitted and were in the process of being installed as completed in 2006, overstating the amount of total installed generation capacity for the year end 2006. Those installations occurred in 2007.

**GREEN BUILDINGS, page 30:**


**HABITAT PROTECTION, page 31:**

Information on threatened and endangered species is from the United States Fish and Wildlife Service (USFWS) found at http://www.fws.gov/sacramento/es/spp_lists/auto_list_form.cfm. Information on individual species is found at http://www.fws.gov/sacramento/es/spp_info.htm and from Lucy Triffleman, USFWS, Sacramento Field Office. In the 2007 *Indicators for a Sustainable San Mateo County* report, we wrote that the county was home to over 30 species of state or federally listed threatened or endangered species. The difference is due to the inclusion of some species of migratory marine animals. Information on invasive species is from the California Department of Food and Agriculture, San Mateo County Weed Management Area found at http://www.cdfa.ca.gov/phpps/ipc/weedmgareas/SanMateo/SanMateo_hp.htm. Information on the Christmas Bird Counts at Año Nuevo and Crystal Springs is from Robin Smith and Al DeMartini with the Sequoia Audubon Society and the Sequoia Audubon Society web page at http://www.sequoia-audubon.org/home.html. Data from the counts are found at the National Audubon Society’s Christmas Bird Count web page at http://www.audubon.org/bird/cbc/hr/index.html. Habitat restoration work on Bair Island is from the USFWS, found at http://www.fws.gov/desfbay/Bair_Intro.htm and Lisa Stallings with Life Science!, Inc., Project Manager for the Bair Island Restoration Project.

**HEALTH CARE: COMMUNITY HEALTH, page 32:**


**HEALTH CARE: INSURANCE AND COST, page 33:**

Data on residents lacking health care and the types of health coverage residents may have in San Mateo County, the Bay Area, and California are from the UCLA Center for Health Policy Research, Community Health Information Survey found at http://www.chis.ucla.edu/. In the 2007 *Indicators for a Sustainable San Mateo County*, we reported that 70 percent of county residents received health benefits through their employer. The 70 percent actually represented the percentage of wage earners who received health benefits through their employer. Data on health care costs are from the U.S. Department of Labor, Bureau of Labor Statistics found at http://stats.bls.gov/. The Consumer Price Index (CPI) is...
a measure of the average change over time in the prices paid by consumers for a market basket of consumer goods and services. Items included in the medical care category include prescription drugs and medical supplies, physicians' services, eyeglasses and eye care, and hospital services. The data represent the Bay Area CPI for all urban consumers for the San Francisco-Oakland-San José Combined Metropolitan Statistical Area (CMSA).

**HOUSING: AFFORDABILITY, page 34:**

Information on the percentage of households that can afford an entry-level home is from the California Association of Realtors' First-time Buyer Housing Affordability Index for the third quarter of 2007, found at http://www.car.org/index.php?id=Ms2wMTY=. Information on the median sales price of a single-family home and condominium are from the San Mateo County Association of Realtors and the San Mateo County Department of Housing. Information on the median sales price of a single-family home at the national level is from Home Sales Plunged 13% in 2007, by Noelle Knox, January 24, 2008, USA Today. The U.S. Housing and Urban Development (HUD) median family income estimates are for a four-person household and are from the Federal Financial Institutions Examination Council website found at http://www.ffiec.gov/hmda/censusproducts.htm#MSAIncome. The income needed to afford a home, condominium, or apartment was calculated based on the following assumptions: (1) local lender’s guidelines that homeowners not pay more than 35 percent of gross household income per year for housing, (2) a 20 percent down payment and 30-year fully amortized loan, and (3) an interest rate on a 30-year fixed rate mortgage of 6.34 percent (according to Freddie Mac at http://www.freddiemac.com/pmms/pmms30.htm). Average rents in the county are from the San Mateo County Department of Housing. Information on housing production in San Mateo County is from the Association of Bay Area Governments, A Place to Call Home: Housing in the San Francisco Bay Area, August 2007, found at http://www.abag.ca.gov/planning/housinneeds/aplace.html. Information on the Regional Housing Need Allocation process and San Mateo County allocations is from A Place to Call Home: Housing in the San Francisco Bay Area and Revised Technical Documentation for Regional Housing Needs Allocation Method, August 2007, Association of Bay Area Governments found at http://www.abag.ca.gov/planning/housinneeds/ and Dorcas Cheng-Tozon, Housing Policy and Development Specialist, San Mateo County Department of Housing.

**HOUSING: HOMELESSNESS, page 36:**


**LAND USE, page 37:**

Data on the percentage of urban and non-urban land in San Mateo County and the Bay Area are from the Association of Bay Area Governments (ABAG), Existing Land Use in 2000: San Francisco Bay Area, December 2002, and Existing Land Use in 2005: Data for Bay Area Counties, January 2006. In previous editions of the Indicators for a Sustainable San Mateo County, we used data on land use from the California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program. The Farmland Mapping and Monitoring Program's primary mission is mapping agricultural land and range land suitable for grazing and as such does not provide the same level of detail on urban, non-agricultural, or non-grazing lands as the ABAG land use inventories. We likely underreported the total acreage of urban lands in previous reports, but not the overall trend. Population projections were from the California Department of Finance, Population Projections for California and Its Counties 2000-2050, by Age, Gender and Race/Ethnicity, July 2007, found at http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/Projections/P3/P3.php. Information on the American Planning Association (APA) Policy Guide on Planning for Sustainability was from the APA website at http://www.planning.org/policyguides/sustainability.htm.

**PARKS AND OPEN SPACE, page 38:**

Data on the total number of acres of parks and open space, total acreage of state parks, and breakdowns by type of ownership are from the Bay Area Open Space Council's Bay Area

**PESTICIDE USE, page 39:**
Data on the size and growth rate of the organic food industry in the United States are from *The Organic Trade Association's 2007 Manufacturer Survey*, found at [http://www.ota.com/organic/mt.html](http://www.ota.com/organic/mt.html). Data on the pounds applied, types, and uses of pesticides in San Mateo County are from the California Department of Pesticide Regulation Annual Pesticide Use Reports, [http://www.cdpr.ca.gov/docs/pur/purmain.htm](http://www.cdpr.ca.gov/docs/pur/purmain.htm). Information on the most toxic pesticides is from the Pesticide Action Network (PAN), [http://www.pesticideinfo.org](http://www.pesticideinfo.org). The term "most toxic" refers to "PAN Bad Actor Pesticides" and is defined as those that contain registered pesticide active ingredients that are one or more of the following: (1) known or probable carcinogens, as designated by the International Agency for Research on Cancer (IARC), U.S. Environmental Protection Agency (EPA), U.S. National Toxicology Program, and the State of California's Proposition 65 list; (2) reproductive or developmental toxicants, as designated by the State of California Proposition 65 list; (3) neurotoxic cholinesterase inhibitors, as designated by the California Department of Pesticide Regulation, the Materials Safety Data Sheet for the particular chemical, or PAN staff evaluation of chemical structure (for organophosphorus compounds); (4) known groundwater contaminants, as designated by the State of California (for actively registered pesticides) or from historic groundwater monitoring records (for banned pesticides); (5) pesticides with high acute toxicity, as designated by the World Health Organization (WHO), the U.S. EPA, or the U.S. National Toxicology Program. The list of most toxic pesticides used in this report is based on the list of PAN Bad Actor Pesticides downloaded in December, 2007. Structural pest control represents any pest control work performed within or around buildings or other structures.

**POPULATION, page 40:**

**PUBLIC LIBRARY USE, page 41:**
The County Library System includes the following 11 libraries: Atherton, Belmont, Brisbane, East Palo Alto, Foster City, Half Moon Bay, Millbrae, Pacifica, Portola Valley, San Carlos, and Woodside. The City of San Mateo Library also serves one-third of Hillsborough. The Burlingame Library also serves two-thirds of Hillsborough. Data are from the California State Library, Library Development Services Bureau, *California Library Statistics* annual reports, for the fiscal years 1996-97 through 2005-06, found at [http://www.library.ca.gov/lds/librarystats.html](http://www.library.ca.gov/lds/librarystats.html). The *California Library Statistics* reports list the number of borrowers for each library system. Borrowers are defined as the number of persons registered with the library for circulation and other services. We have used the term library card holder rather than borrower so as not to confuse the figure with the circulation figures. Inflation adjusted figures were derived using the Consumer Price Index (CPI) for the San Francisco-Oakland-San Jose, CA region region from the U.S. Department of Labor, Bureau of Labor...
SOLID WASTE, page 42:
Data on solid waste generated in San Mateo County are from the California Integrated Waste Management Board’s (CIWMB) Disposal Reporting System found at http://www.ciwmb.ca.gov/LGCentral/DRS/Reports/default.asp#Origin. Information on the percentage of waste generated that is residential versus commercial is from the CIWMB’s Waste Stream Profiles found at http://www.ciwmb.ca.gov/Profiles/. We used 2005 figures for our 2006 residential and commercial estimates. Components of the waste stream are from the CIWMB Waste Stream Profiles as well as the CIWMB Statewide Characterization Study, December 2004, found at http://www.ciwmb.ca.gov/Publications/default.asp?pubid=1097.

TRANSPORTATION: GASOLINE USE AND FUEL EFFICIENCY, page 43:

TRANSPORTATION: VEHICLE TRAVEL AND PUBLIC TRANSIT, page 44:
Data on the daily vehicle-hours of delay (DVHD) for 2006 are from the California Department of Transportation (Caltrans), 2006 State Highway Congestion Monitoring Program (HICOMP), Annual Data Compilation, November 2007, found at http://www.dot.ca.gov/hq/traffops/sysmgtpl/HICOMP/pdfs/2006HICOMP.pdf. Daily vehicle hours of delay for previous years are from previous years’ HICOMP reports issued by Caltrans. DVHD is the term to express the magnitude of delay as measured by the difference between the time it takes to travel a segment at a recorded congested speed and the travel time at 35 mph. Total costs from traffic delays were calculated as the sum of excess fuel costs per day and the cost of travel time per day. Per Caltrans 2006 HICOMP report, 1,000 vehicle-hours of delay resulted in 1,719 gallons of wasted fuel. For San Mateo County, its 7,700 DVHD resulted in 13,236.3 wasted gallons of fuel (7,700/1,000 X 1,719 = 13,236.3). Multiplying this with the average cost of a gallon of gasoline in 2006 in the Bay Area ($2.81/gallon) resulted in $37,194 total excess fuel costs (13,236.3 X 2.81 = 37,194). Travel time per day was calculated by multiplying DVHD by average vehicle occupancy in Caltrans District 4 for 2006 (1.1 persons/vehicle) to arrive at 8,470 average daily person-hours of delay (7,700 X 1.1 = 8,470). To calculate the cost of travel time per day, we multiplied the average person-hours of delay by the estimated average cost of travel time per person-hours of delay ($13.23). This resulted in costs of travel time per day of $112,058 (8,470 X 13.23 = 112,058). The sum of the excess fuel costs per day and the cost of travel time per day equaled $149,252 (37,194 + 112,058 = 149,252). Figures for average gallons of wasted fuel per 1,000 vehicle-hours of delay, average vehicle occupancy, and average cost of travel time per person-hours of delay are from Caltrans 2006 HICOMP report. The average cost of a gallon of gasoline in 2006 is from the Metropolitan Transportation Commission found at http://www.mtc.ca.gov/maps_and_data/datamart/stats/gasprice.htm.


VOTER PARTICIPATION, page 45:
Data on San Mateo County voter turnout are from the San Mateo County Elections Office, Statement of the Vote, 1998-2007, found at http://www.shapethefuture.org/elections/results/default.asp. Data on statewide turnout are from the California Secretary of State, Statement of the Vote, 1998-2006, found at http://www.ss.ca.gov/elections/elections_electionshtm. Registration data are from the California Secretary of State, Report of Registration, 1998-2007, found at http://www.ss.ca.gov/elections/elections_uhtm. Data on percent of registrants by age group were derived from the registration files supplied to SSMC by the County Elections Office on 12/11/06. The data were sorted by registrants’ date of birth to determine the number of individuals falling within each age grouping. Data on percentage of county residents within various age ranges are from the U.S. Census Bureau, 2006 American Community Survey, found at http://www.census.gov/acs/www. For purposes of our calculations, when age groupings in the tables were not consistent with our groupings, we estimated that the populations within the groupings were evenly divided between individual ages.

WATER: BAY AND OCEAN WATER QUALITY, page 46:
Information on pollutants in the San Francisco Bay is from the San Francisco Estuary Institute, The Pulse of the Estuary: Monitoring and Managing Water Quality in the San Francisco Estuary, 2007, found at http://www.sfei.org/rmp/pulse/index.html. Information on fish consumption advisories is from the California Office of Environmental Health Hazard Assessment found at http://www.oehha.ca.gov/fish/general/sfbaydelta.html. Information on sources of new pollution entering the Bay is from the San Mateo Countywide Stormwater Pollution Prevention Program found at http://www.flowstobay.org/about/index.html. Information on beach closures and beach warning postings is from the San Mateo County Health Department, Environmental Health Division and Gregory J. Smith P.G., Supervisor Water Protection Programs, San Mateo County Environmental Health Division.

WATER: DRINKING WATER QUALITY, page 47:
Data are from the 2006 Water Quality Reports issued by each water district: Brisbane and Guadalupe Valley Municipal Improvement District found at http://www.ci.brisbane.ca.us/html/cityDeptpw/water.asp; Burlingame found at http://www.burlingame.org/index.aspx?page=173; Cal Water-Bear Gulch and Bayshore (San Mateo), (San Carlos), (South San Francisco) found at http://www.calwater.com/WaterQualityReports2006.html; Coastside County found at http://www.coastsidewater.org/water-district-map.html; Daly City found at http://www.dalycity.org/city_services/depts/wwr/report2006.htm; East Palo Alto provided by Gopi Nathan, Superintendent, American Water; Estero Municipal Improvement District found at http://www.fostercity.org/Services/water/Current-Water-Quality-Report.cfm; Hillsborough found at http://www.hillsborough.net/about/displaynews.asp?NewsID=233; Menlo Park found at http://www.menlopark.org/departments/pwk/mpmwrd.html; Mid-Peninsula found at http://www.midpeninsulawater.org/view/55; Millbrae found at http://www.ci.millbrae.ca.us/whatsnew.html; North Coast County found at http://www.nccwd.com/ccrr.htm; Redwood City found at http://www.redwoodcity.org/publicworks/water/water_quality.htm; San Bruno found at http://sanbruno.ca.gov/pw_utility_water.html; Skyline County found at http://www.skylinewtr.org/water.html; Westborough found at http://www.westboroughwater.com/waterquality.htm. Note that in the appendix entry for the Key Indicator: Water—Supply and Demand we mention 19 water agencies but refer to 20 in this indicator. This is because Cal Water, which serves San Carlos and San Mateo, report separately on water quality for these two service areas. The supply and demand figures for these two service areas are summed and reported together in the BAWSCA Annual Surveys, however.

Information on trihalomethanes is from the San Francisco Public Utilities Commission (SFPUC) found at http://sfwater.org/detail.cfm/MC_ID/13/MSC_ID/166/MTO_ID/298/C_ID/654/Keyword/trihalomethane. Information on lead is from Daly City Online at http://www.dalycity.org/city_services/depts/wwr/report2006.htm#7. Not all lead testing results were from current year. Districts that received reduced triennial monitoring frequency from previous favorable results were only required to conduct a test every three years. Information on coliform is from Daly City Online at http://www.dalycity.org/city_services/depts/wwr/report2006.htm#7 and the SFPUC, San Francisco Public Water System: 2007 Public Health Goal Report found at http://sfwater.org/detail.cfm/MC_ID/13/MSC_ID/166_C_ID/3593.
WILL YOU HELP?

Yes, I want to contribute money to support the research and publication of the Indicators report and other activities of Sustainable San Mateo County.

- [ ] Benefactor $1,000
- [ ] Sustainer $500
- [ ] Sponsor $250
- [ ] Friend $100
- [ ] Member $50
- [ ] Senior/Student/Low Income $25

Yes, I want to contribute time and effort.

- [ ] Help with presentations
- [ ] Help research the Indicators
- [ ] Participate in presenting the Annual Sustainability Awards
- [ ] Work on one of SSMC’s committees or projects
- [ ] Promote sustainability through other actions or proposals

SSMC is a nonprofit public charity exempt from federal income tax under IRS Code Section 501c(3)

Would you like a copy of our newsletters/announcements, volunteer opportunities, and the next Indicators report?

Your Name___________________________________________________________________________________________________
Address___________________________________________________________________________________________________
City____________________________________________________________________________Zip____________________________
Daytime Phone_________________________________________________E-mail_________________________________________

Yes, I can give you names and contacts.

- [ ] Here are names of businesses, organizations, agencies, or individuals who are practicing sustainability in some way (candidates for Sustainability Awards).

Name_______________________________________________________Daytime Phone_____________________________________
Business, organization ________________________________________________________________________________________
Address____________________________________________________________________________________________________
City_________________________________________Zip ____________Daytime Phone______________________________________

- [ ] Here are names of individuals who have expertise relevant to__________________________indicator.

Name_______________________________________________________Title (if any) _______________________________
Business/Organization__________________________________________________________
Address____________________________________________________________________________________________________
City_________________________________________Zip ____________Daytime Phone______________________________________

Please return this form to:
Sustainable San Mateo County Indicators Project
177 Bovet Road, Sixth Floor, San Mateo, CA 94402

Questions: Call us at 650-638-2323, email advocate@sustainablesanmateo.org, or visit www.sustainablesanmateo.org