

THE SAN DIEGO REGIONAL

2012

Quality of Life DASHBOARD



EQUINOX•CENTER

HEALTHY ENVIRONMENT • STRONG ECONOMY • VIBRANT COMMUNITIES



SNAPSHOT



= IMPROVED



= MOVED IN
WRONG DIRECTION



= NO CHANGE



AIR QUALITY



CLEAN JOBS



CLIMATE



ECONOMIC PROSPERITY



ENERGY
Renewable



ENERGY
Residential Consumption



HOUSING AFFORDABILITY



LAND USE

Conserved Land, Parks & Trails



LAND USE
Residential Development



TRANSPORTATION
Transit



TRANSPORTATION*
Vehicle Miles Traveled



WASTE



WATER
Consumption



WATER*
Quality

*Data quality is a concern

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SPONSORS

We gratefully acknowledge the following organizations, companies and individuals for their support of Equinox Center and the San Diego Regional Quality of Life Dashboard.

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To inquire about Dashboard underwriting opportunities, or other ways you can support Equinox Center's work, contact Ann Tartre at ann@equinoxcenter.org or 760-230-2960.



KEY FINDINGS FROM 2012 DASHBOARD

TODAY OUR REGION STANDS AT A CROSSROADS, POISED TO SHEPHERD IN A NEW ERA IN WHICH SAN DIEGO CAN RISE UP AS A MODEL FOR QUALITY OF LIFE, SUSTAINABILITY AND ECONOMIC PROSPERITY, EVEN AS WE WORK TO ACCOMMODATE 650,000 MORE PEOPLE IN THE NEXT 20 YEARS.

FROM BLEAK ECONOMY, INGENUITY SPROUTS

While the economic recession officially ended in June 2009, job growth moved in disappointing fits and starts, creating an atmosphere of uncertainty throughout the region. In 2011 the poverty rate in San Diego reached an all-time high, the unemployment rate hovered above nine percent, and residents expressed concern about jobs and the cost of living in the region. Other indicators of our region's health and prosperity contained in the 2012 Dashboard represent a mixed bag of progress and decline. We remain a region at risk.

STILL, BLEAK ECONOMIC TIMES GAVE RISE TO A SPIRIT OF RESOURCEFULNESS AND INGENUITY ACROSS BOTH THE PUBLIC AND PRIVATE SECTORS:

- Through its more than 800 clean tech companies, San Diego County is firmly establishing itself among the nation's hubs for the clean economy of the future: our "clean tech cluster" contributes 10,000 jobs and \$2.25 billion in economic activity annually to the region.
- While facing severe budget challenges, cities across the County leveraged economic stimulus funding to complete energy and water efficiency projects, and our County is the first in California to have all jurisdictions complete greenhouse gas inventories. These investments will yield long-term savings for taxpayers, benefit the environment, and create jobs.
- Our air and water quality appear to be improving, although good data that allows us to compare accurately from year to year is another casualty of budget cuts. Unequal access to clean air, water and parks is still a concern for our less fortunate populations.



Photo: lamarpics.com

Our region's challenges are great, but thanks to efforts led by The San Diego Foundation, the region is moving toward a collective vision for the future informed by direct input from its residents. The 2012 Regional Quality of Life Dashboard is a tool to help realize that vision. Proven solutions do exist. Many of these are outlined throughout the 2012 Dashboard in the form of "Bright Spots" and policy options.

NEED FOR INTEGRATED SOLUTIONS CLEARER THAN EVER

This year's Dashboard paints a clearer picture than ever before of how interrelated the 15 Quality of Life Indicators truly are—**underscoring why integrated solutions are the only way to truly chart a more sustainable future for the region.** For example, the electricity blackout of September 2011 resulted in dangerous water pollution that necessitated beach closures and boiled water advisories, a wake-up call for many San Diegans about just how vulnerable and how interlinked our energy and water resources are.

In fact, energy, water and all of the indicators in the 2012 Dashboard are fundamentally linked in many more ways than that. Scan the QR code below for more on how.

WHAT CAN YOU DO

TO HELP MOVE THE DASHBOARD INDICATORS
IN THE RIGHT DIRECTION?

CONSCIENTIOUS RESIDENT

- 1 Use water more efficiently. Watering landscaping less frequently and replacing inefficient toilets will substantially reduce residential water waste.
- 2 "Refuse, Reduce, Reuse, Recycle." Decline single-use plastics like shopping bags or water bottles and instead bring your own.
- 3 Effective government begins with you. Plug into policy decisions impacting our region's quality of life through Equinox e-news. Encourage policy makers to consider long-term quality of life impacts into plans for job growth and economic recovery.
- 4 Support Equinox Center's non-partisan research and analysis through monthly or annual contributions.

POLICY MAKER

- 1 In developing economic and job growth strategies, push for solutions that also enhance stewardship of natural resources and advance quality of life in the region.
- 2 Turn to Equinox Center as a resource for research, policy briefs, best practices and solutions to help guide your decisions.
- 3 Insist that new or existing policies incorporate clear benchmarks and targets so that we learn what's working and what isn't.

BUSINESS LEADER

- 1 Create an employee-led sustainability committee to identify opportunities to cut waste and costs.
- 2 Reduce regional traffic congestion and improve employee morale by allowing flex time or telecommuting.
- 3 Underwrite Equinox Center's non-partisan research or convenings to drive informed decision making on quality of life issues impacting our region's ability to attract and retain the best talent.
- 4 Follow Equinox's online series "The Bottom Line" to explore sustainability best practices among San Diego companies or share your own.

For more on what you can do, scan this QR Code:
or visit www.equinoxcenter.org/Regional-Dashboard



Photo: SANDAG



MEASURING WHAT MATTERS: About the San Diego Regional Quality of Life Dashboard

Equinox Center's annual San Diego Regional Quality of Life Dashboard is the region's most comprehensive, yet accessible tool to guide our region's plans for growth. Backed by empirical research, and using clear metrics, targets and benchmarks, the annual Dashboard tracks our region's performance on critical, interlinking quality of life issues and provides integrated solutions to help us improve. We are grateful to our many partners in the region who support our work and contribute data and ideas for bright spots and policy options. Together we can chart an intelligent course for the future.

For additional references and links:
www.equinoxcenter.org/Regional-Dashboard

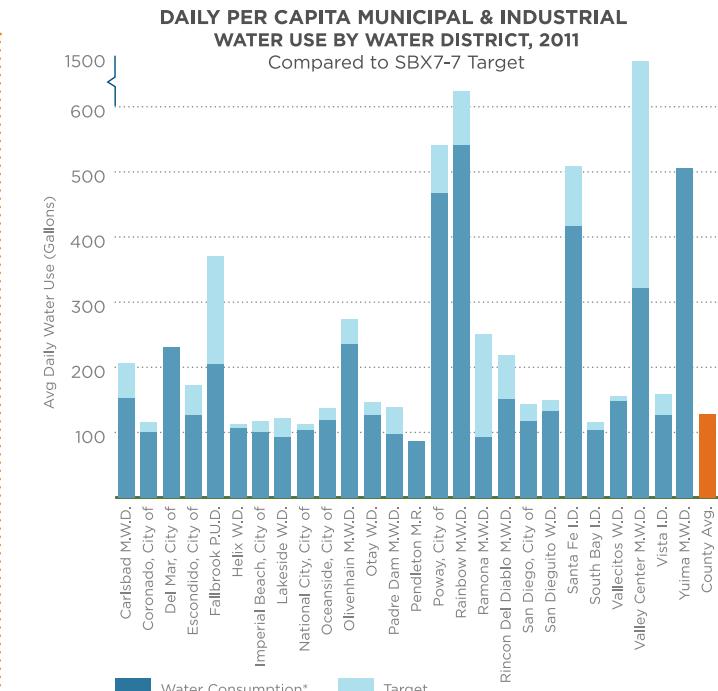
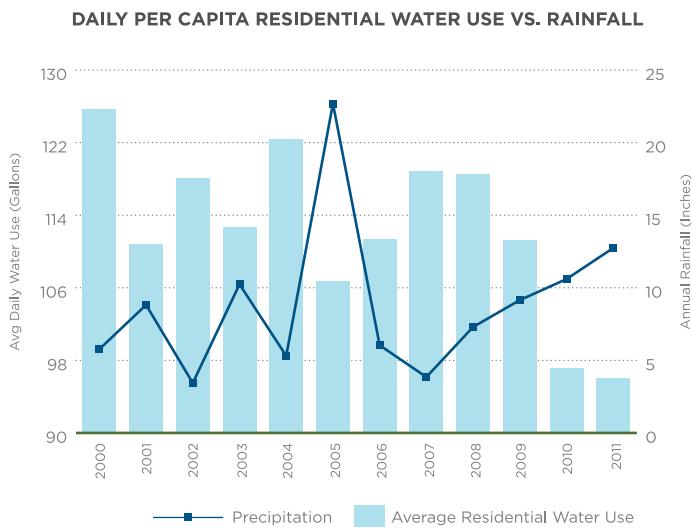
For methodology:
www.equinoxcenter.org/Regional-Dashboard/methodology

WATER CONSUMPTION

HOW ARE WE DOING?

ON AVERAGE, PER CAPITA MUNICIPAL AND INDUSTRIAL WATER USE DECLINED BY 7% FROM 2010 TO 2011.

A new state law (SBX7-7) requires water districts to reduce water use by 20% by 2020 and most districts are currently below their targets as a result of drought-related, mandatory conservation efforts as well as the impact of the recession. **Some of this decline will be permanent** thanks to many homes and businesses installing new technologies or water-efficient landscaping in recent years. However, data suggest there is more opportunity to **use our water resources more efficiently**.



DATA SOURCES: EQUINOX CENTER, 2011; SAN DIEGO COUNTY WATER AUTHORITY, 2011; AMERICAN WATER CO. 2011 (IB, CORONADO)

NOTE: Camp Pendleton, Del Mar and Yuima MWD are exempt from having to set targets.

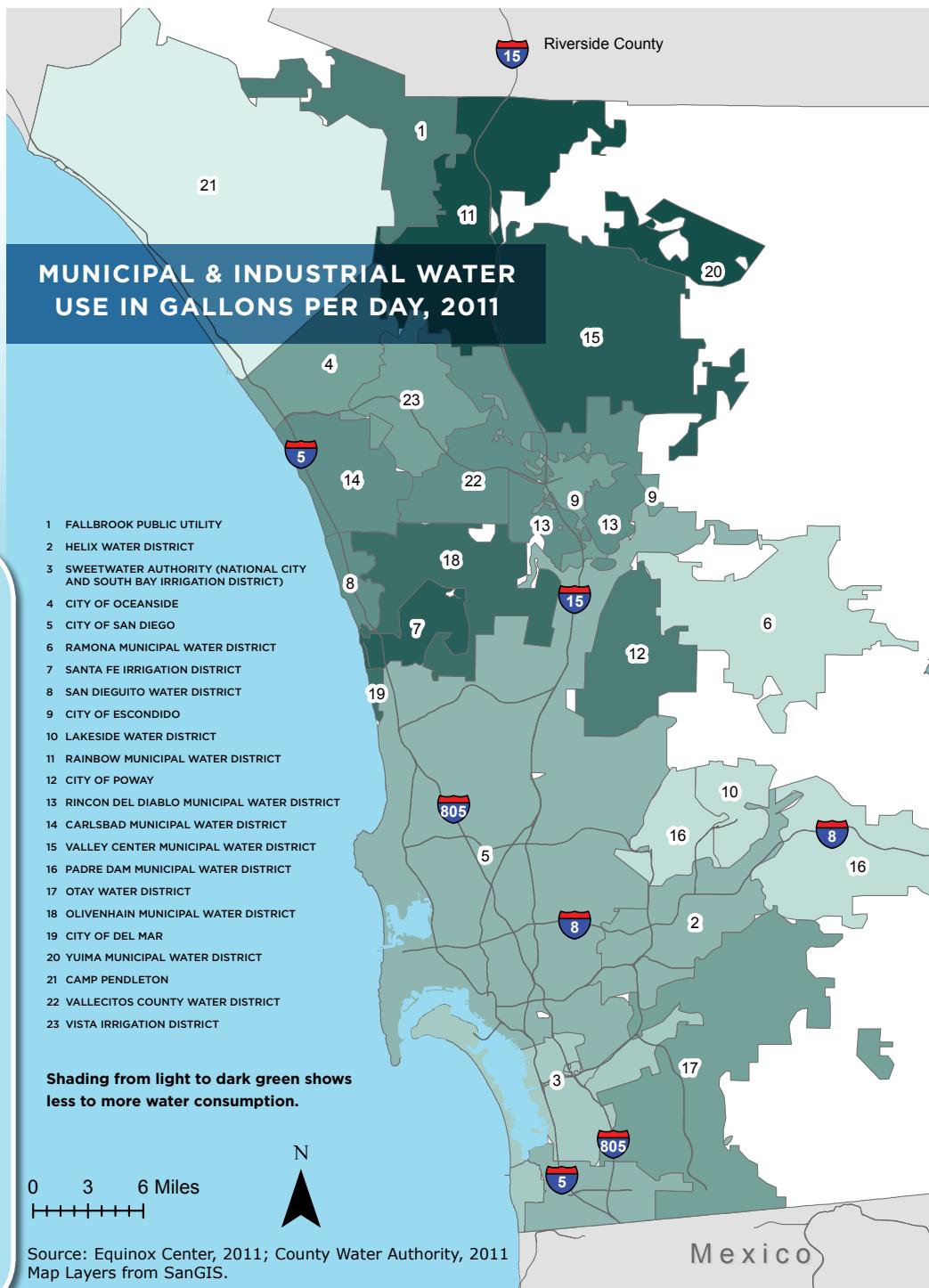
Why is it important?

- San Diego's semi-arid climate means local water sources are scarce, yet our growing population, biotech and pharmaceutical companies, and high-value agricultural sector depend upon a consistent water supply to thrive.
- The region imports approximately 80% of its water from the Colorado River and Northern California, but steadily increasing water rates, extended droughts, aging infrastructure, legal and regulatory concerns, climate change, and the potential for earthquakes put this supply at risk.
- California state law SBX7-7 requires urban water suppliers to achieve a 20% reduction in per capita water use by 2020.

HOW CAN WE IMPROVE?

POLICY OPTIONS:

- Implement pricing structures that accurately reflect the cost of replacing wasted water, and that reward those who conserve.
- Utilize smart meters and billing formats to inform consumers of their water consumption, how they compare to neighbors, and when they have leaks.
- Provide financing options to consumers to use water more efficiently, for example "on-bill" low interest loans to install low-water use landscaping or to retrofit homes with efficient appliances.



BRIGHT SPOT

"Smart" water meters installed throughout the City of Carlsbad allow residents to monitor their water use in real time and better understand, and control, their household consumption and costs.

WHAT IS THE MEASURE?

The average amount of water consumed per person each day in San Diego County (municipal and industrial). This number includes residential, commercial and industrial consumption divided by the population of the water district's service area.

FOR MORE:



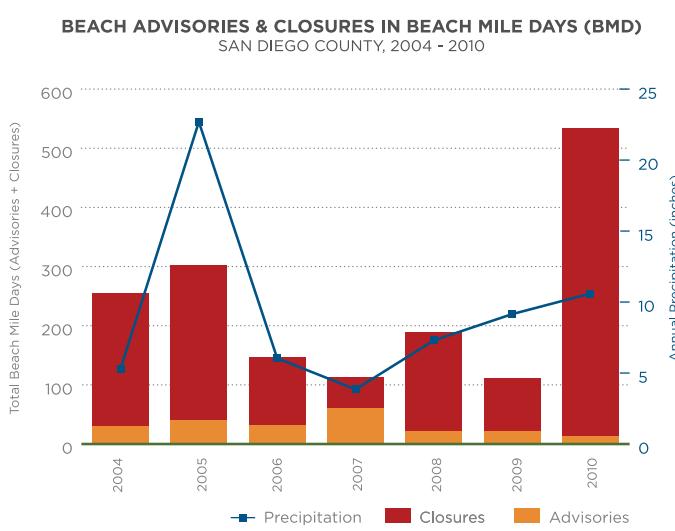
BEACH CLOSURES AND ADVISORIES

WATER

HOW ARE WE DOING?

BUDGET CUTS IN RECENT YEARS HAVE RESULTED IN INSUFFICIENT FUNDING FOR WATER QUALITY MONITORING, MAKING **YEARLY PERFORMANCE COMPARISONS A CHALLENGE.**

While there were fewer beach advisories in 2010, public health, tourism and ecosystems **surrounding the Tijuana River are still threatened.** The chart reflects an increase in closure days in this area as a result of precautions the County took to protect public health during storm events in 2010. SB 482, which was signed into law by Governor Brown in October 2011, should help address funding issues related to water quality monitoring and marks a step in the right direction for our beaches and bays.



BENCHMARK

PERCENTAGE OF BEACHES EARNING A OR B MARKS

SAN DIEGO: **96%**

LOS ANGELES: **75%**

SAN FRANCISCO BAY AREA: **87%**

SOURCE: HEAL THE BAY BEACH REPORT CARD, 2011

Why is it important?

- Protecting our beaches is a key part of protecting San Diego's way of life and regional economy. San Diego's pristine beaches draw tourists from around the world (30 million in 2010), who annually spend more than \$7 billion at local businesses, making tourism San Diego's third largest revenue generator after manufacturing and the military.
- Activities upstream generate storm water and irrigation runoff that pollute our rivers, creeks, bays and oceans, thereby damaging our ecosystems.
- Adverse water quality also threatens the health of local residents, who can catch illnesses from swimming in contaminated waters, and ultimately forces the closure of beaches for surfing, fishing and other activities.

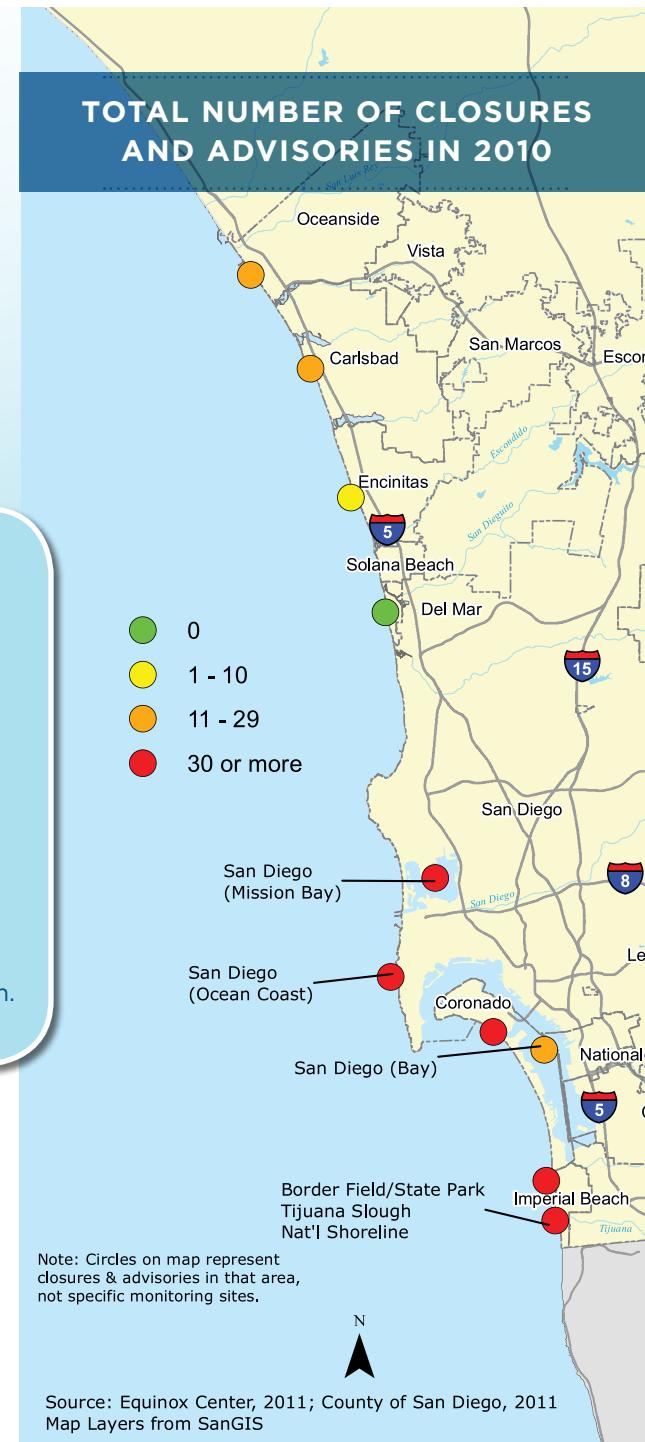
HOW CAN WE IMPROVE?

POLICY OPTIONS:

- Prioritize and support cross-border efforts to improve wastewater and sanitation infrastructure to prevent pollutants from reaching the Tijuana River and ultimately ending up in our ocean.
- Allocate funds to implement more frequent maintenance of storm water infrastructure and installation of emergency back-up energy sources to prevent sewage spills such as the one during the September 2011 blackout.
- Support implementation of low impact development (LID) infrastructure such as natural water filtration to purify urban runoff as it travels downstream.

WHAT IS THE MEASURE?

The number of days San Diego beaches were closed or posted with advisories because of health risks on contact with water, as measured in beach mile days. (Beach Mile Days = # of days X length of beach posted with an advisory or closed)



BRIGHT SPOT

Kellogg Park Green Lot
Infiltration Project in La Jolla uses an innovative drainage system that mimics the natural environment to filter dry-season runoff, silt and pollution before it reaches the beach.



FOR MORE:



LAND USE

CONSERVED LAND, PARKS AND TRAILS

Photo: outdooroutreach.org



HOW ARE WE DOING?

45% OF THE COUNTY'S LAND MASS IS PROTECTED – ON AVERAGE, **ABOUT 460 ACRES PER 1,000 RESIDENTS** – THANKS IN PART TO SAN DIEGO COUNTY'S MODEL CONSERVATION PLANNING PROGRAMS AND AN ACTIVE GROUP OF NONPROFIT ORGANIZATIONS.

Park access across San Diego County has not changed significantly over the past year. The National Recreation and Parks Association recommends 10 acres of park space per 1,000 residents. On average, there are **404 acres of accessible park per 1,000 people** in San Diego County (see Park Access map p. 12).

However, many lower income neighborhoods are considered “park poor,” meaning they have fewer than three acres of green space per 1,000 residents. These communities would benefit significantly from increased investments to create or protect park areas and green spaces.

As a result of state budget cuts, 70 state parks in California, including two in San Diego, have been proposed to be closed in 2012, some with no plans to reopen. Regularly collected data on trails in the region is not available.

HOW CAN WE IMPROVE?

POLICY OPTIONS:

- Encourage joint use and partnering to leverage existing green spaces such as schools and public facilities, especially in “park poor” communities.
- Transform rooftops into parks or public gardens and construct “parklets,” tiny urban public spaces carved out of underused road or sidewalk space to attract tourists and improve business.
- Focus on creation of safe, multi-use parks for multiple age groups within walking or biking distance of dense residential and mixed-use development.

Why is it important?

- Conserved lands and green spaces not only help to preserve wildlife habitat, but also improve air quality and provide flood and water pollution control.
- Green spaces appeal to tourists and locals alike, increase nearby property values and subsequently contribute to our regional economy.
- Parks and trails contribute to improvements in fitness and overall health of our region's residents, and foster a sense of community by providing residents and visitors with social and recreational opportunities.

BRIGHT SPOT

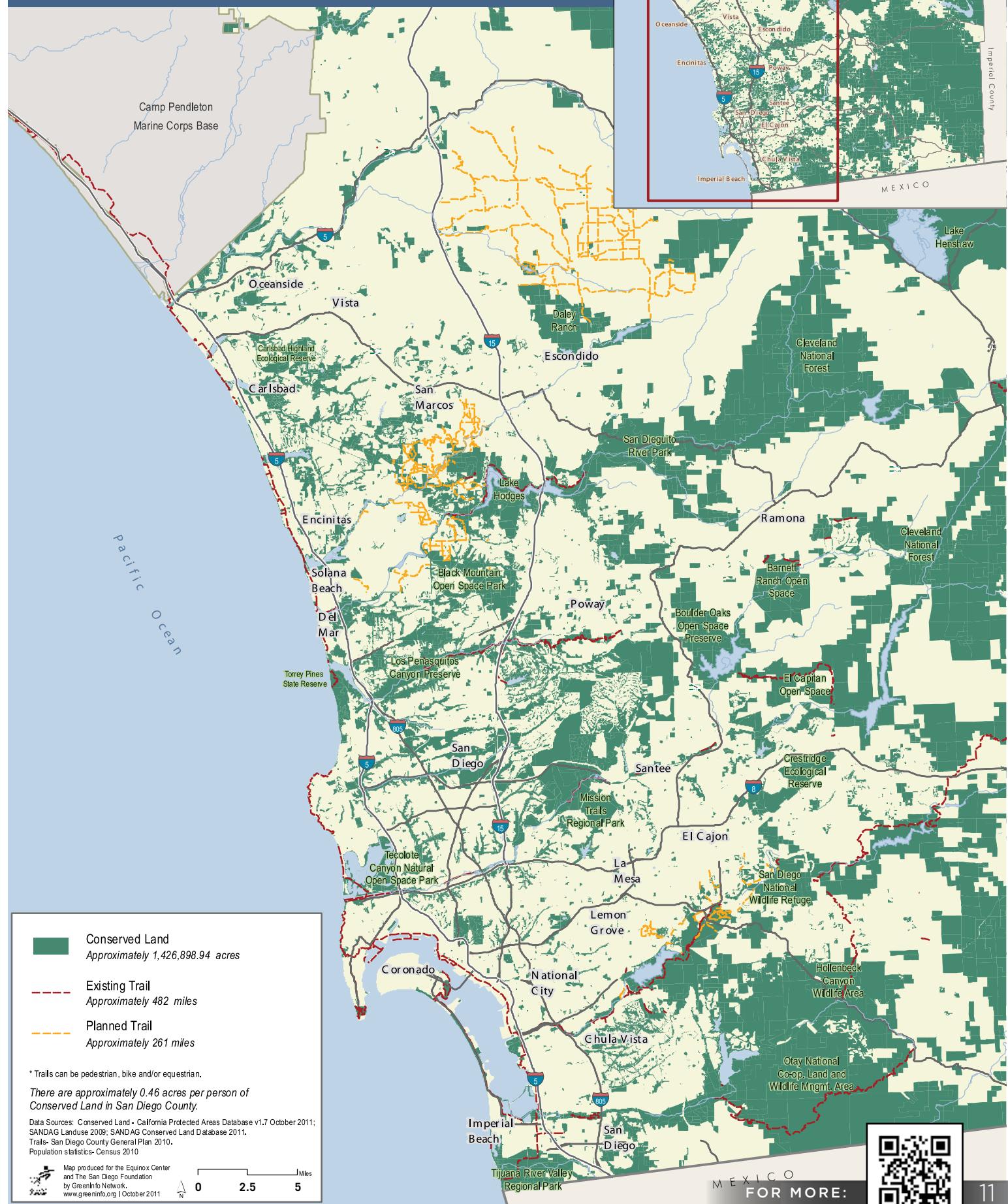
Residents of a previously “park poor” National City neighborhood will soon have waterfront access and recreational opportunities through a new aquatic center developed in partnership with the Port of San Diego.

WHAT IS THE MEASURE?

1. Number of acres of conserved land per 1,000 residents

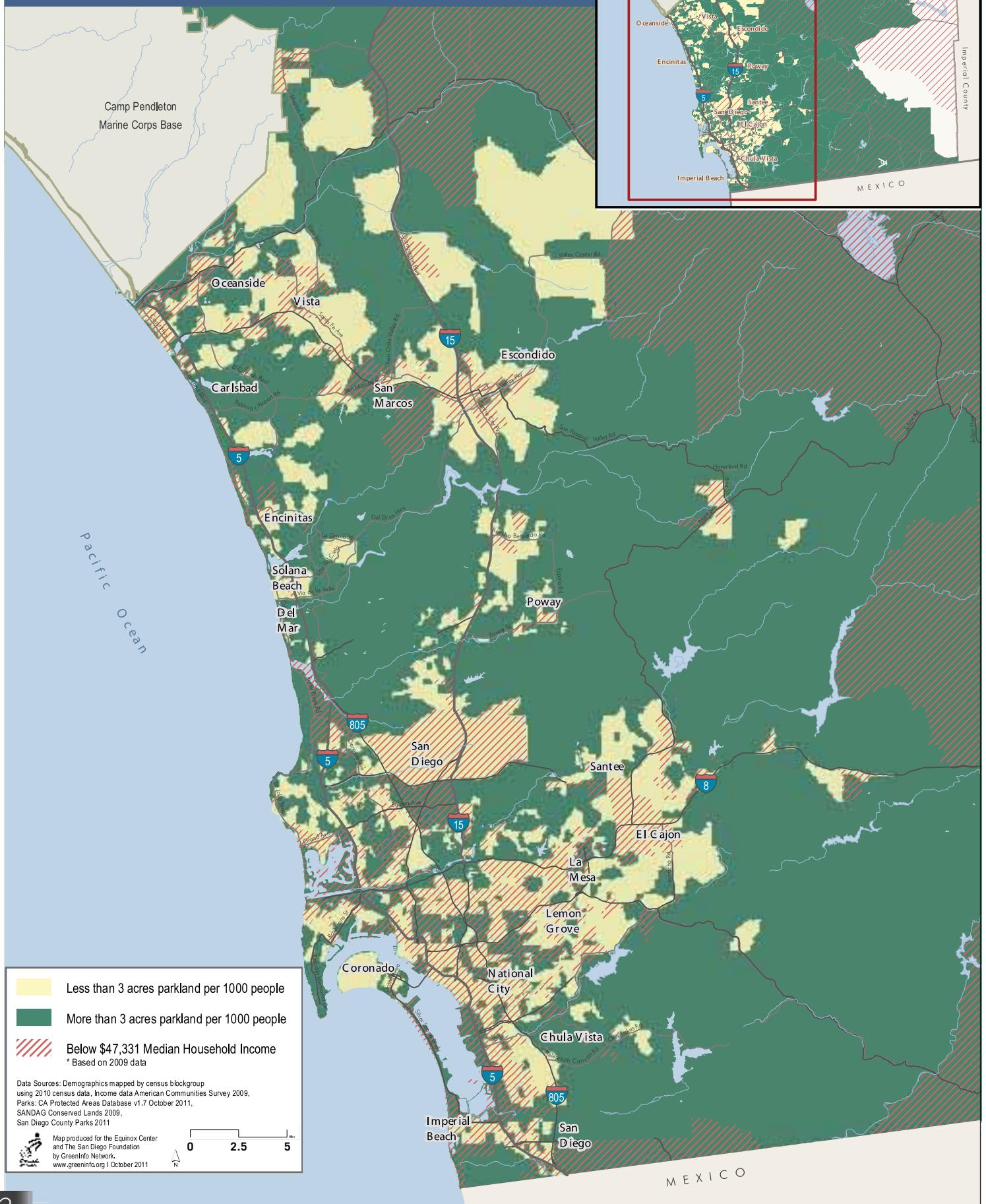
2. Number of acres of park (including parks, schoolyards, beaches, forests, mountains and canyons with public access) per 1,000 residents

San Diego County CONSERVED LANDS



San Diego County

PARK ACCESS



LAND USE

RESIDENTIAL DEVELOPMENT

HOW ARE WE DOING?

FROM 2010-2011, RESIDENTIAL LAND USE DEVELOPMENT **ONCE AGAIN OUTPACED POPULATION GROWTH**, RETURNING TO THE PRE-RECESSION TREND SHOWN IN HISTORICAL DATA FROM THE EARLY 2000S.

While the economic downturn slowed residential development over the past several years, as of September 2011, year-to-date housing building permit totals showed San Diego up 127% compared to the first nine months of 2010, with the **vast majority of new construction in apartments and condos** rather than single-family homes.

HOW CAN WE IMPROVE?

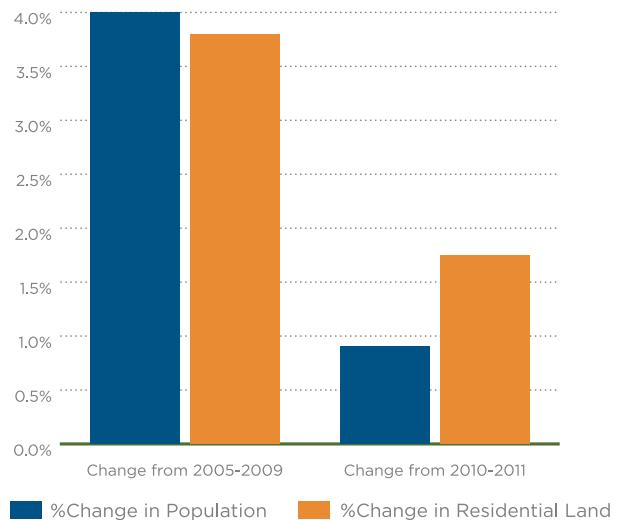
POLICY OPTIONS:

- Streamline permitting, revise zoning ordinances, design guidelines and create incentives to encourage infill development in town centers or urban areas and secondary dwelling units (aka “in-law apartments”) in other neighborhoods.
- Consider flexible parking requirements to reduce the cost and space needed for residential development that is within walking distance of transit.

Why is it important?

- Well-designed, strategic density of land use can make our neighborhoods more livable, affordable and sustainable as we meet the challenge of accommodating another 650,000 people in the region in the next 20 years.
- Providing housing in a range of prices throughout the region is vital to attracting and retaining a diverse workforce.
- Developing compact residential communities near job centers reduces traffic congestion and thereby improves air quality. It also reduces fuel costs and travel time for commuters as well as infrastructure costs associated with less efficient, sprawling patterns of development.

**CHANGE IN POPULATION VS.
CHANGE IN RESIDENTIAL LAND
SAN DIEGO COUNTY**



DATA SOURCES: EQUINOX CENTER, 2011; SANDAG 2011; US CENSUS BUREAU 2011; CALIFORNIA DEPT. OF FINANCE, 2011

WHAT IS THE MEASURE?

*The number of acres developed or zoned for residential use
for every additional 100 persons in San Diego County.*



FOR MORE:

HOUSING AFFORDABILITY

INCOME ALLOCATION TOWARD HOUSING

HOW ARE WE DOING?

A MAJORITY OF RENTERS AND HOMEOWNERS IN SAN DIEGO COUNTY SPEND MORE THAN 30% OF THEIR INCOME ON RENT OR MORTGAGE PAYMENTS, HIGHER THAN BOTH THE U.S. AND CALIFORNIA AVERAGES.

As of 2011, the San Diego region had **approximately 33,670 residences designated as affordable housing**. SANDAG estimates San Diego will need 94,760 additional units of Very Low to Moderate Income housing units for the region in the next decade.

HOW CAN WE IMPROVE?

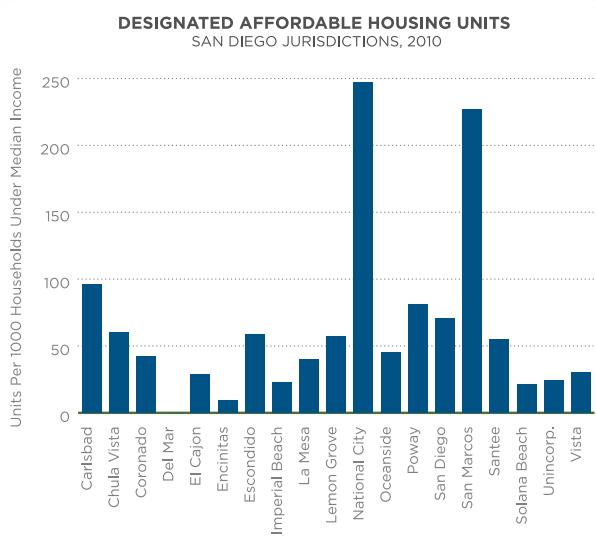
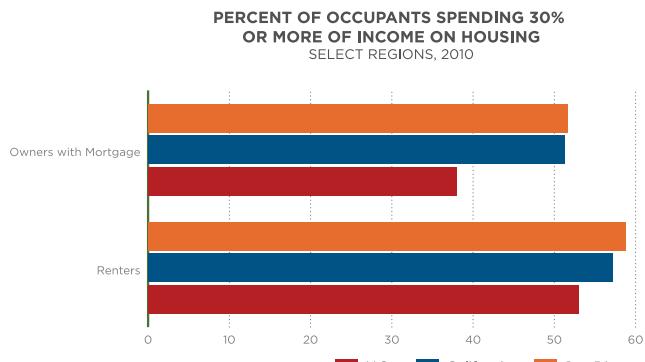
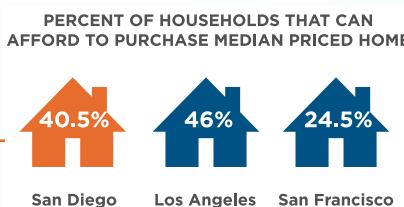
POLICY OPTIONS:

- Reduce red tape and provide parking, density and other building concessions for developments that qualify as affordable.
- Set aside funding to preserve or develop affordable housing near planned transit, as was successfully done in the San Francisco Bay Area.
- Consider development of “shared equity” approaches such as Silicon Valley’s Regional Land Trust to increase the supply of affordable housing.

Why is it important?

- Spending more than 30% of income on housing is believed by financial institutions and creditors to put consumers at financial risk, and means residents have less discretionary income to purchase other goods and services that support local businesses.
- Housing costs influence our region’s competitiveness against other metropolitan regions in attracting or retaining businesses and a talented workforce.
- Housing affordability affects transportation patterns. When housing in core areas is not affordable, people move to less expensive areas, usually farther from jobs and services. This increases traffic congestion and transportation costs and impacts air quality.

BENCHMARK



WHAT IS THE MEASURE?

The percent of residents in the San Diego region who spend more than 30% of gross income on housing.



Photo: greenstockphotos.com

JOB CREATION

HOW ARE WE DOING?

THERE IS LACK OF AGREEMENT ABOUT WHAT CONSTITUTES A “CLEAN” JOB AND DIFFICULTY IN MEASURING THE CLEAN ECONOMY IN A STANDARD WAY, BUT WITH MORE THAN 800 “CLEAN TECH” COMPANIES, SAN DIEGO COUNTY HAS ESTABLISHED ITSELF AS AN IMPORTANT HUB FOR THE CLEAN ECONOMY.

Among 930 total new jobs created by technology start-ups in the San Diego region in 2010, approximately 7% focused on environmental technology, a **decline of about 8%** from the previous year. However, in the first half of 2011, **that number increased to 11%**. In San Diego, the average annual wage for environmental technology jobs in 2010 was more than \$90,000.

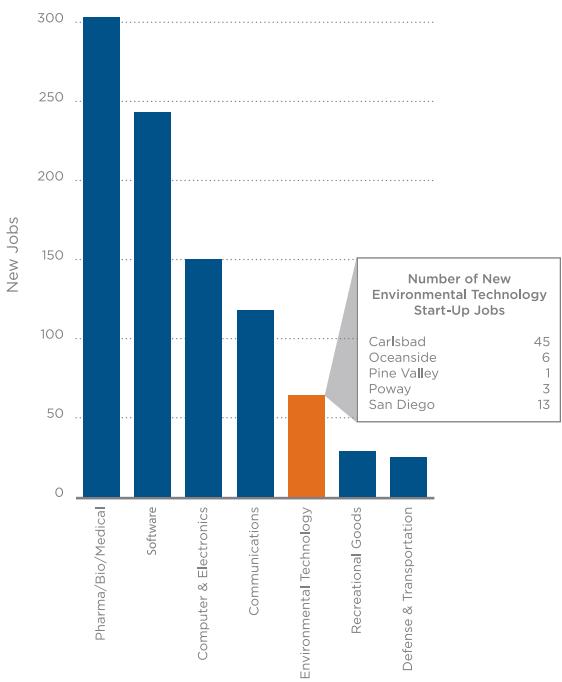
In 2011, The Brookings Institution ranked the San Diego metro area 21st among the 100 largest U.S. metro areas in total number of clean jobs.

HOW CAN WE IMPROVE?

POLICY OPTIONS:

- Support a coordinated regional approach to align workforce training, especially for low-skilled workers, with employer needs in the clean tech sector.
- Support programs that incentivize demand for clean tech services and technologies such as water and energy efficiency upgrades.
- Pursue policies and support programs to rebuild San Diego’s manufacturing sector with a focus on the innovation and clean economy.

SAN DIEGO COUNTY
TECHNOLOGY START-UP JOBS
NEW JOBS, 2010



DATA SOURCES: EQUINOX CENTER, 2011; CONNECT, 2011

Why is it important?

- A “clean” economy is central to our region’s strategy for maintaining global competitiveness.
- Five clean tech sectors are responsible for 10,000 jobs and \$2.25 billion in economic activity annually in the San Diego region, according to recent studies by CleanTECH San Diego and SANDAG.
- The clean economy provides opportunity for a diversity of skill levels, from scientists and engineers to “green collar” jobs (energy or water efficiency retrofits or solar installers), which are high-paying local jobs that often cannot be outsourced abroad.

WHAT IS THE MEASURE?

Percent of new clean technology jobs out of the total number of new technology jobs created in the county.



FOR
MORE:

ECONOMIC PROSPERITY

EMPLOYMENT AND WAGES

Photo: Sam Hodgesson,
voiceofsandiego.org

HOW ARE WE DOING?

SAN DIEGO COUNTY LOST 17,000 JOBS IN 2010, **SHOWING IMPROVEMENT** FROM THE 70,000 JOBS LOST IN 2009. THE DECLINE IN EMPLOYMENT IN THE REGION FROM 2009-2010 WAS SIMILAR TO THE STATE AVERAGE. PRELIMINARY NUMBERS FOR 2011 SHOWED **A SLIGHT DECLINE IN REGIONAL UNEMPLOYMENT.**

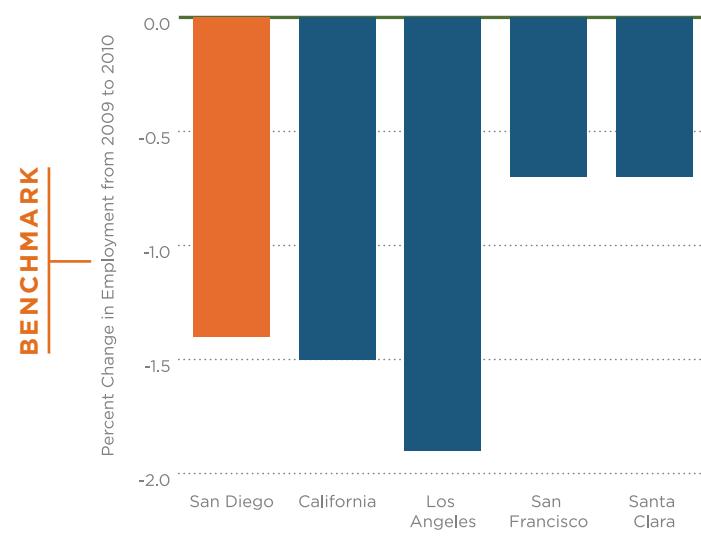
Over the last decade, San Diego has increased the number of jobs in lower paying sectors such as leisure, hospitality and food services, and lost jobs in mid-high paying sectors. This trend is a **cause for concern**, especially as the 2010 Consumer Price Index shows the cost of living in San Diego continues to outpace that of the nation and several other major West Coast cities.



DATA SOURCES: EQUINOX CENTER, 2011; BUREAU OF LABOR STATISTICS, 2011;
U.S. CENSUS BUREAU, 2001-2010

*CIVILIANS AGED 16 TO 64 ARE CONSIDERED "PERSONS OF WORKING AGE"

CHANGES IN EMPLOYMENT SELECT REGIONS, 2009-2010



DATA SOURCES: EQUINOX CENTER, 2011; BUREAU OF LABOR STATISTICS, 2011

HOW CAN WE IMPROVE?

POLICY OPTIONS:

- Support economic development strategies that grow the region's major export sectors by matching buyers with local producers and enhancing training programs for local businesses.
- Invest in public-private partnerships between workforce trainers and employers in high growth, high wage industries such as communications, biotech and health care to advance low-wage, low-skilled workers to higher paying, skilled positions.
- Support a regional "buy local" campaign that results in more dollars circulating through the local economy.

Why is it important?

- Employment is a fundamental determinant of our region's economic prosperity. An adequate supply of jobs that pay enough to support a stable and secure quality of life ensures our region's well-being.
- A sustainable economy offers a diversified mix of jobs to community members of all skills and backgrounds.
- Income inequality contributes to a host of social problems, including higher rates of violent crime, property crime, and teen births.

BRIGHT SPOT

Business incubators such as the one developed by the City of Escondido and San Diego North Economic Development Council and the CommNexus technology incubators supported by the City of San Diego, San Diego Regional EDC, the Downtown Partnership and the Irvine Company attract high-tech businesses and high paying jobs.

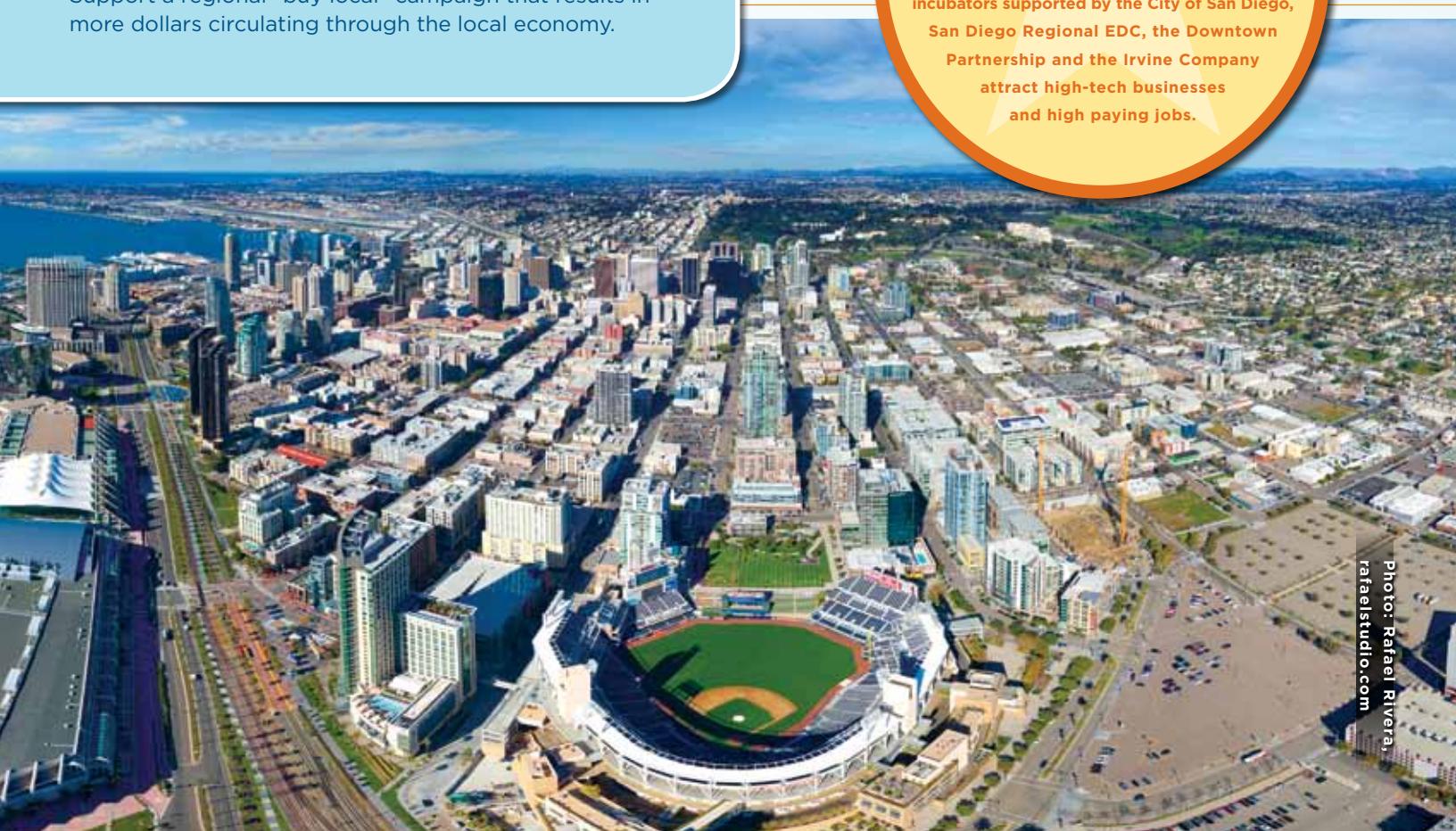


Photo: Rafael Rivera,
rafaelstudio.com

WHAT IS THE MEASURE?

The number of persons employed annually in San Diego County compared to the working age population.

FOR
MORE:



VEHICLE
MILES
TRAVELED

TRANSPORTATION

Photo: Sam Hodgson,
voiceofsandiego.org

HOW ARE WE DOING?

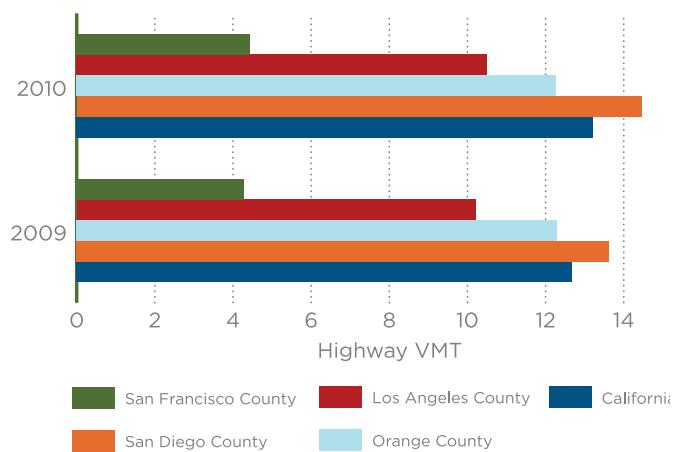
ACCORDING TO CALTRANS DATA, SAN DIEGO'S TOTAL VEHICLE MILES TRAVELED (VMT) IS THE HIGHEST AMONG MAJOR CITIES IN CALIFORNIA. THE 2050 REGIONAL TRANSPORTATION PLAN APPROVED BY SANDAG IN OCTOBER 2011 WILL DO LITTLE TO REDUCE VMT IN THE REGION BY 2050. WITH SOARING GAS PRICES, ENERGY SECURITY CONCERNs, AIR QUALITY RELATED PUBLIC HEALTH ISSUES, AND DEBILITATING TRAFFIC CONGESTION, SAN DIEGO'S HIGH VMT PRESENTS A REGIONAL CHALLENGE TO OVERCOME.

Reliable VMT data is becoming more difficult to obtain due to state and local budget difficulties which hamper collection efforts. However, historical data show a long-term increase in VMT, with a decline from 2007-2009 reflecting decreased traffic volumes due primarily to the recession and high gas prices, and a slight increase in 2010.

California recently authorized "pay as you drive" insurance that rewards customers for driving less through cost savings. This development can have a positive impact on vehicle miles traveled.

HIGHWAY VEHICLE MILES TRAVELED (VMT)
PER CAPITA PER DAY

SELECT REGIONS, 2009 AND 2010



DATA SOURCES: EQUINOX CENTER, 2011; CALIFORNIA DEPARTMENT OF TRANSPORTATION, 2011; DEPARTMENT OF FINANCE, 2011

Why is it important?

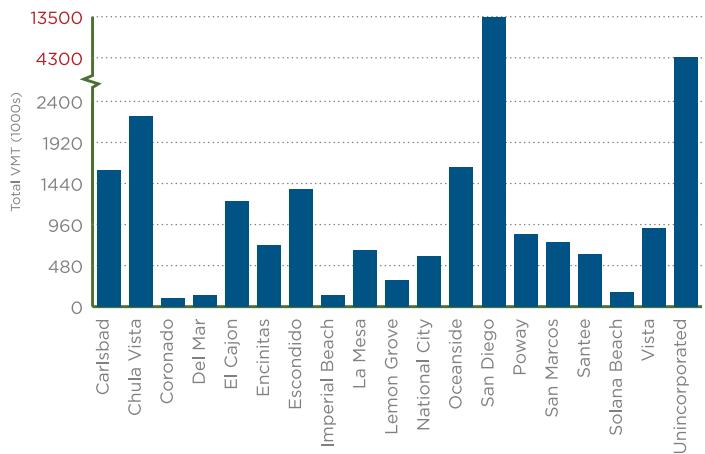
- High VMT and traffic congestion contribute to air pollution, noise pollution, greenhouse gas (GHG) emissions, and increased costs of fuel for drivers.
- Through Senate Bill 375 (2008), the California Air Resources Board (CARB) established GHG emissions targets for the San Diego region, which require innovative solutions to reduce VMT.

HOW CAN WE IMPROVE?

POLICY OPTIONS:

- Adopt and enforce “Complete Streets” policies that make streets safe for all users including pedestrians, cyclists, motorists and transit users, regardless of age or mobility.
- Perform “walk audits” to assess the walkability of cities, with special attention given to landscaping and crosswalks, street width and lighting.
- Encourage local efforts to promote Safe Routes to School, so that students may safely walk or bike to and from school, thus decreasing VMT, increasing physical activity, and improving air quality near schools.

**TOTAL DAILY VEHICLE MILES TRAVELED
ALL ROADS EXCLUDING STATE HIGHWAYS
SAN DIEGO COUNTY JURISDICTIONS, 2010**



DATA SOURCES: EQUINOX CENTER, 2011; CALIFORNIA DEPARTMENT OF TRANSPORTATION, 2011

BRIGHT SPOT

The City of Imperial Beach's Bicycle Transportation Plan implemented a “road diet” through its ECO Bicycle Palm Avenue Traffic Calming Plan, which expands designated bicycle routes and encourages bicycling as an alternative to driving.

Photo: Walk San Diego



WHAT IS THE MEASURE?

Per capita vehicle miles traveled (VMT) is an estimate (based on actual data) of the average number of freeway miles driven by an individual in San Diego County on a daily basis.

FOR
MORE:





Photo: SANDAG

TRANSPORTATION

TRANSIT RIDERSHIP

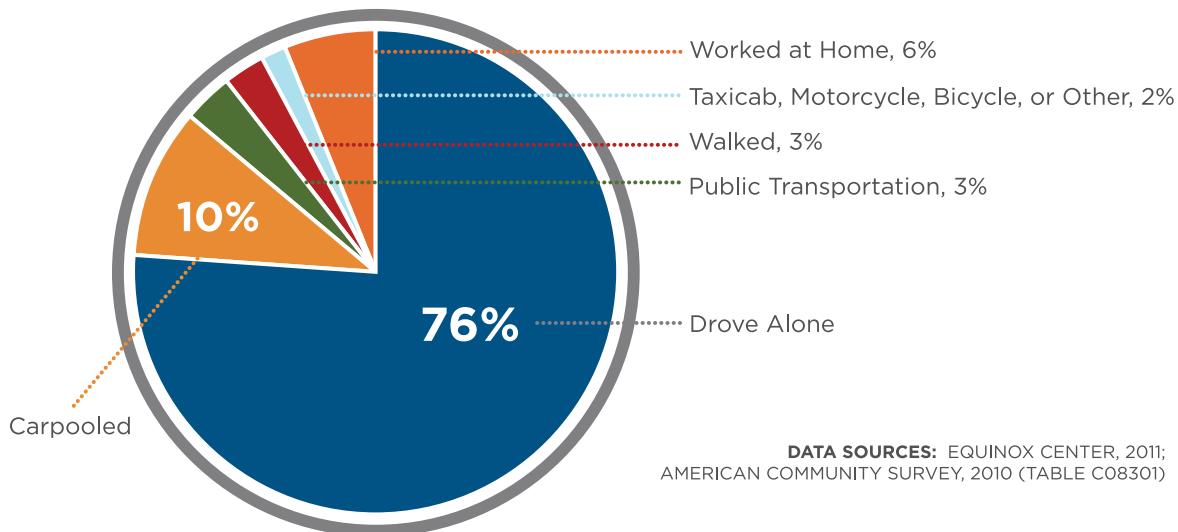
HOW ARE WE DOING?

DESPITE RELATIVELY HIGH GAS PRICES AND ECONOMICALLY DIFFICULT TIMES, THE VAST MAJORITY OF WORKERS STILL COMMUTE TO WORK ALONE IN THEIR CARS.

The 2050 Regional Transportation Plan approved by SANDAG in October 2011 attempts to tackle some of these issues, and includes positive developments such as double tracking the Coaster and Sprinter rail lines and improving bicycle and pedestrian infrastructure, but more needs to be done to reduce the numbers of individuals commuting to work alone in their cars.

TRANSPORTATION TO WORK

SAN DIEGO, 2010



Why is it important?

- Increasing transportation options and unclogging freeways will benefit San Diego's economy by allowing for efficient flow of people and goods.
- Data shows that 17% fewer 16 year olds earn a drivers license now as compared to 1988. Young people increasingly prefer to live in urban areas with good transit infrastructure. A growing senior population will also increase demand for public transit.
- Senate Bill 375 requires every region of the state to reduce vehicle miles traveled and corresponding greenhouse gas (GHG) emissions, and public transit can help achieve this goal.

HOW CAN WE IMPROVE?

POLICY OPTIONS:

- Focus on "transit-oriented development" policies to increase transit ridership and curb VMT.
- Improve vehicle parking near transit hubs, set up bicycle sections and bicycle carriers on all public transit, and promote bike sharing programs in order to improve connectivity for drivers and bicyclists.
- Expand light rail and frequent shuttles in busy downtown areas.



ANNUAL HOURS OF DELAY, PER AUTOCOMMUTER
SAN DIEGO URBAN AREA, 1982 - 2009



DATA SOURCES: EQUINOX CENTER, 2011; TEXAS TRANSPORTATION INSTITUTE, 2010

% OF POPULATION COMMUTING TO WORK VIA TRANSIT FOR 2010
SELECT REGIONS



DATA SOURCES: EQUINOX CENTER, 2011; AMERICAN COMMUNITY SURVEY, 2011



WHAT IS THE MEASURE?

The percent of the population that commutes to work via public transit.

FOR
MORE:



ENERGY

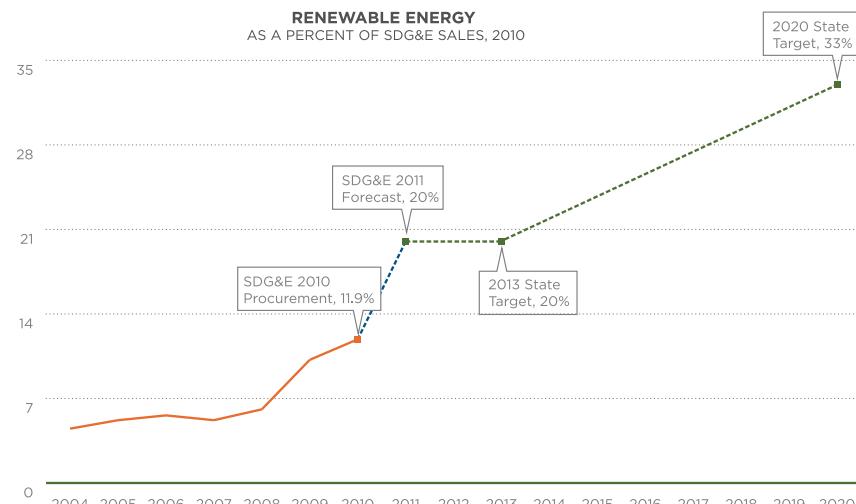
RENEWABLE ENERGY

HOW ARE WE DOING?

IN 2010, SDG&E MADE PROGRESS TOWARD REACHING STATE MANDATED GOALS BY INCREASING RENEWABLE ENERGY TO 11.9% OF TOTAL SALES, AND WAS ABLE TO ACHIEVE COMPLIANCE USING FLEXIBLE CREDITS FROM PREVIOUS YEARS.

The region's energy utility, SDG&E, projected it would reach 20% renewable by the end of 2011 and more gains are expected within the next two years as more projects come on line.

Substantial progress was made in the addition of residential and non-residential solar installations, equaling an overall 28% increase in capacity in the region from the beginning of 2010 to 2011. The complexity of permitting requirements continues to hamper the deployment of both large-scale and more distributed small-scale renewable generation.



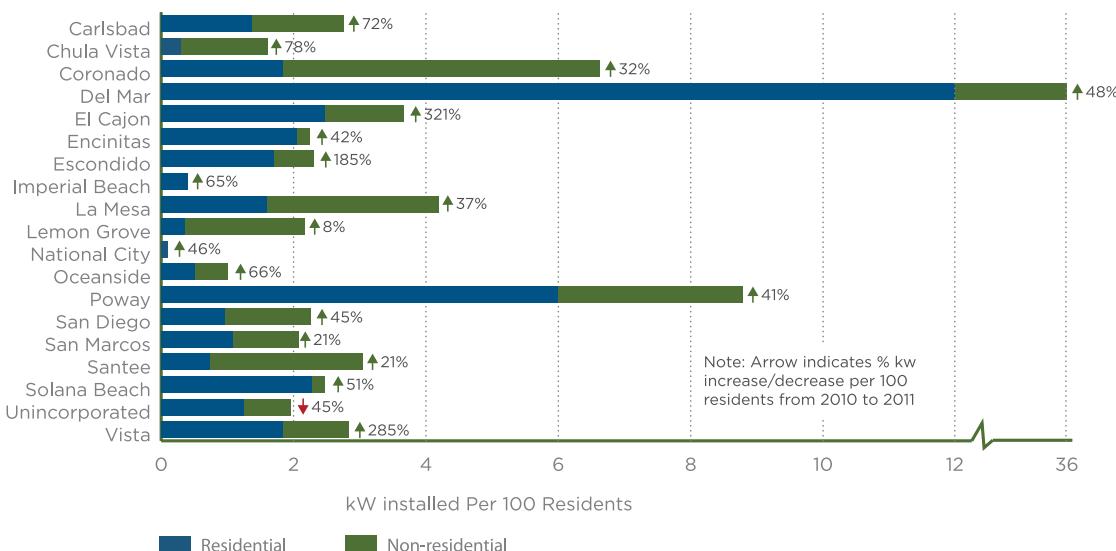
DATA SOURCES: EQUINOX CENTER, 2011; CALIFORNIA PUBLIC UTILITIES COMMISSION, 2011; SDG&E, 2011



WHAT IS THE MEASURE?

Percent of total electricity supply generated from renewable sources for SDG&E's service area.

KILOWATTS OF SOLAR INSTALLED PER 100 RESIDENTS SAN DIEGO JURISDICTIONS, 2011



DATA SOURCES: EQUINOX CENTER, 2011; California Center for Sustainable Energy (CCSE), 2011

Note: decline in unincorporated area is due to an improvement in CCSE's process which led to installations that previously could not be assigned to a jurisdiction getting moved to a specific jurisdiction.

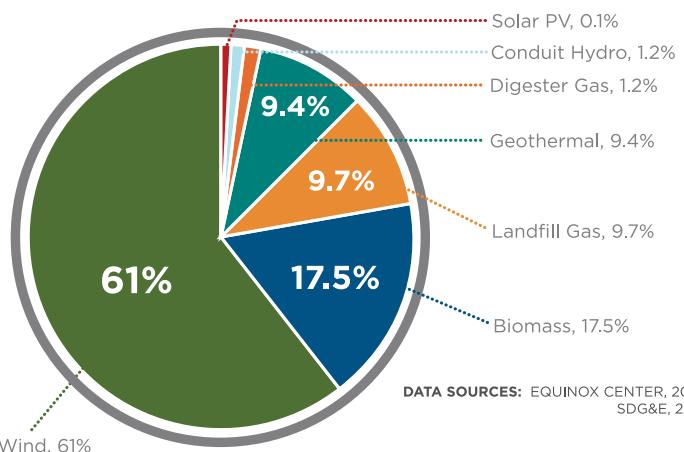


HOW CAN WE IMPROVE?

POLICY OPTIONS:

- Pre-permit regional or multi-jurisdictional “renewable energy parks” in appropriate areas for large-scale projects.
- Pursue a streamlined, uniform permitting process and revise zoning requirements to encourage both small-scale distributed generation and appropriately sited large-scale installations throughout the County.
- Provide more financing options and incentives for consumers and businesses who want to install renewable energy capacity.

2010 SDG&E RENEWABLES MIX



Why is it important?

- The majority of San Diego County's electricity is currently sourced from fossil fuels, primarily natural gas. Although much cleaner than other fossil fuels, burning natural gas produces greenhouse gas and other emissions that contribute to poor air quality and climate change.
- Increasing renewable energy improves air quality, reduces public health costs, and increases energy security for the region by diversifying our energy portfolio.
- The State of California's Renewable Portfolio Standard (RPS) currently requires electric utilities to increase procurement from eligible renewable energy resources to 20% of their retail sales during the 2011-2013 timeframe, and to 33% by 2020.

BRIGHT SPOT

North County's largest wastewater treatment facility, Encina Wastewater Authority, produces more than 60% of the on-site energy it needs using biogas byproduct from the facility's wastewater treatment process.

ENERGY

RESIDENTIAL ELECTRICITY CONSUMPTION

HOW ARE WE DOING?

PER CAPITA RESIDENTIAL ELECTRICITY CONSUMPTION **DECREASED 3.5% IN 2010**, MOVING CLOSER TO SANDAG'S REGIONAL GOAL. CALIFORNIA'S PUBLIC UTILITIES COMMISSION AND THE CALIFORNIA ENERGY COMMISSION RECENTLY SET MORE AMBITIOUS GOALS TO REDUCE RESIDENTIAL ENERGY CONSUMPTION BY 20% BY 2015 AND BY 40% BY 2020.

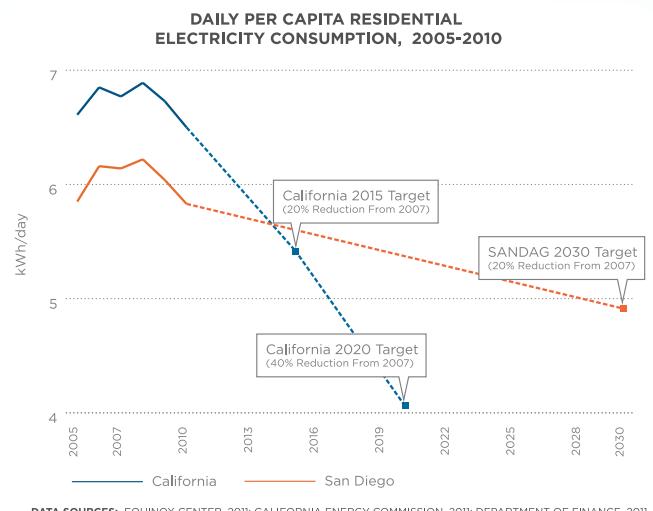
San Diego County consumes an **average of 10% less residential electricity per capita** than the state average, likely due to the temperate climate of the region. The economic downturn continues to play a role in the consumption decline, as did mild weather in 2010.

A **substantial opportunity exists** to increase energy efficiency in nearly 800,000 homes in the County built before the State's 1982 implementation of energy efficiency building performance standards. Even newer buildings constructed in the last two decades can achieve significant savings thanks to recent progress in energy efficiency technologies.

HOW CAN WE IMPROVE?

POLICY OPTIONS:

- Support new financing options to assist residents and businesses to make efficiency improvements by allowing them to repay such investments over a period of time.
- Support a disclosure policy that would provide information to buyers about the energy performance of a home or building.
- Simplify and build awareness for programs that incentivize and educate homeowners to conduct energy audits, implement whole house energy efficiency retrofits, or to use "smart" home area networks linked to smart meters.



Why is it important?

- Meeting our energy needs through efficiency and conservation is 3 to 5 times less expensive than deriving energy from fossil fuels or renewable sources.
- Using less energy reduces greenhouse gas emissions, improves regional air quality and reduces public health spending resulting from air pollution.
- According to a 2010 Department of Defense report, increasing energy efficiency and renewable energy will improve energy security by lessening the impacts of energy price fluctuations, conflicts abroad and natural disasters.

WHAT IS THE MEASURE?

Total per capita per day residential electricity use.

BRIGHT SPOT

The "San Diego Home Energy Upgrade Program" provides incentives for 2,000 low and moderate income families to conduct energy efficiency upgrades, saving them money while creating job opportunities. Partners include: the California Center for Sustainable Energy, City of San Diego, Environmental Health Coalition, SDG&E and others.



FOR
MORE:

CLIMATE CHANGE

GREENHOUSE GAS EMISSIONS

HOW ARE WE DOING?

SAN DIEGO'S LOCAL ACTION AND REGIONAL COOPERATION IN INVENTORYING AND MITIGATING GREENHOUSE GAS EMISSIONS, AS WELL AS PLANNING FOR ADAPTATION, IS NATIONALLY UNPRECEDENTED.

An updated County-wide inventory of GHG emissions has not been available since 2008, but that report showed the County's per capita emissions being nearly 15% below the state average.

Emissions vary among jurisdictions due to the number or types of local businesses, microclimates, traffic, age of the building stock, and presence of municipal facilities like wastewater treatment plants.

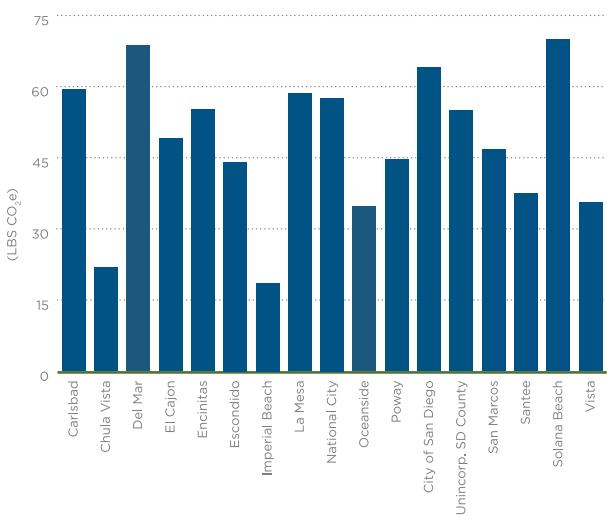
HOW CAN WE IMPROVE?

POLICY OPTIONS:

In addition to options suggested under other related indicators, the following actions will help reduce the greenhouse gas footprint of the region:

- Support installation of low-carbon fueling infrastructure and electric vehicle charging stations.
- Establish "High Performance Building Districts" like Seattle's.
- Take into account the full environmental and economic costs of every product when establishing purchasing guidelines for municipalities or businesses.
- Incorporate existing data on projected climate change impacts into local and regional plans to ensure our communities are more resilient to the likely changes in our region.

JURISDICTIONAL GHG EMISSIONS IN SAN DIEGO REGION
PER CAPITA PER DAY (LBS CO₂e)



DATA SOURCES: EQUINOX CENTER, 2011; ICLEI, 2011; CALIFORNIA DEPARTMENT OF FINANCE, 2011; CITY OF SAN DIEGO, 2011

Note: Jurisdictional GHG Emissions data is based on 2005/2006 inventories, except the City of San Diego's inventory based on emissions from 2007. As of publication date, inventories for Coronado, and Lemon Grove have been completed, but not yet released.

WHAT IS THE MEASURE?

Per capita daily greenhouse gas emissions (GHG), measured in pounds of carbon dioxide equivalent (CO₂e). (Both the State of California and SANDAG have the same GHG reduction target: reducing GHG emissions to 1990 levels by the year 2020.)

Why is it important?

- Climate change can threaten San Diego's quality of life by causing longer and more frequent droughts, reducing water supplies, increasing wildfire risk, causing loss of coastal lands and beaches, and increasing the public health threat of extreme temperature events.
- Reducing GHGs translates into savings in energy, water and transportation costs, as well as improvements in air quality and public health.
- Taking a leadership role in addressing climate change will help the region attract and retain innovative businesses and a high-quality workforce.

BRIGHT SPOT

The San Diego Bay Sea Level Rise Adaptation Strategy, a unique collaboration between The Port of San Diego, the San Diego Airport Authority and 5 cities surrounding the bay, includes a vulnerability assessment and actionable recommendations for adapting to sea level rise and other climate change impacts.



FOR
MORE:

AIR QUALITY

UNHEALTHY DAYS FOR
ELDERLY AND CHILDREN

Photo: Sam Hodgson,
voiceofsandiego.org

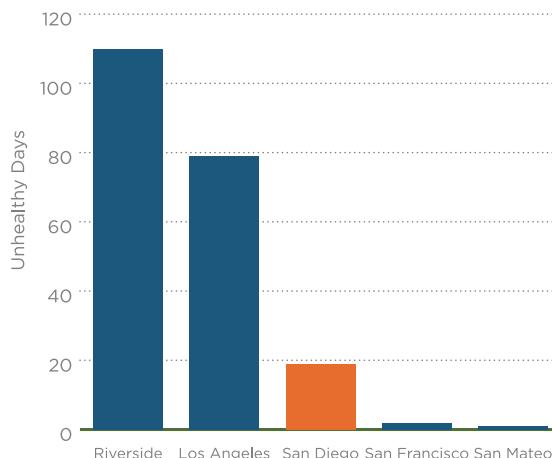
HOW ARE WE DOING?

THE NUMBER OF UNHEALTHY AIR QUALITY DAYS IN SAN DIEGO DUE TO OZONE AND PARTICULATE POLLUTION DECREASED FROM 28 IN 2009 TO 19 IN 2010 — **THE LOWEST IN 10 YEARS.** THE IMPROVEMENT IN AIR QUALITY CAN BE ATTRIBUTED TO REDUCED TRAFFIC VOLUMES AND DECREASED EMISSIONS LINKED TO THE ECONOMIC RECESSION, AS WELL AS FAVORABLE METEOROLOGICAL CONDITIONS.

Despite the overall positive trend, **San Diego County still exceeds federal ozone pollution standards** periodically and some parts of the County, particularly near border crossings, high traffic freeways or major industries, still experience higher levels of certain pollutants that can lead to air pollution-related illnesses such as asthma.

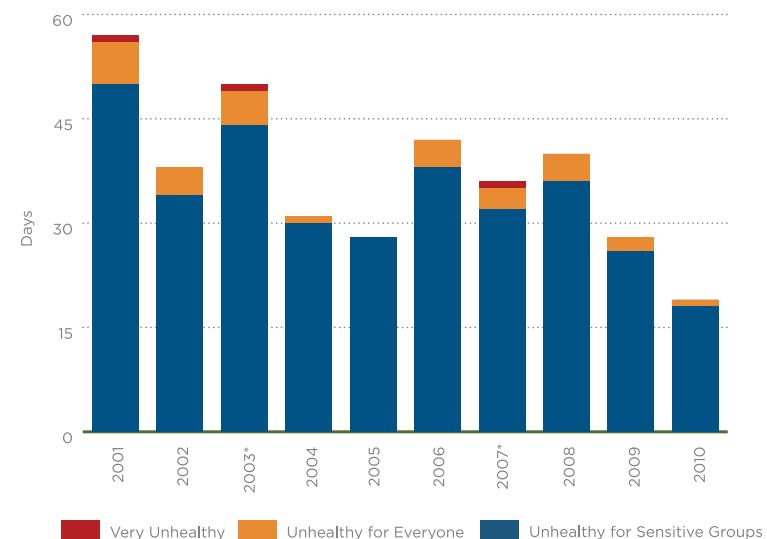
NUMBER OF UNHEALTHY AIR QUALITY DAYS
FOR OLDER ADULTS & CHILDREN
SELECT COUNTIES, 2010

BENCHMARK



DATA SOURCES: EQUINOX CENTER, 2011; US EPA, 2011

NUMBER OF UNHEALTHY AIR QUALITY DAYS
FOR OLDER ADULTS & CHILDREN
SAN DIEGO, 2001 - 2010



DATA SOURCES: EQUINOX CENTER, 2011; US EPA, 2011

*Include days heavily impacted by wildfires

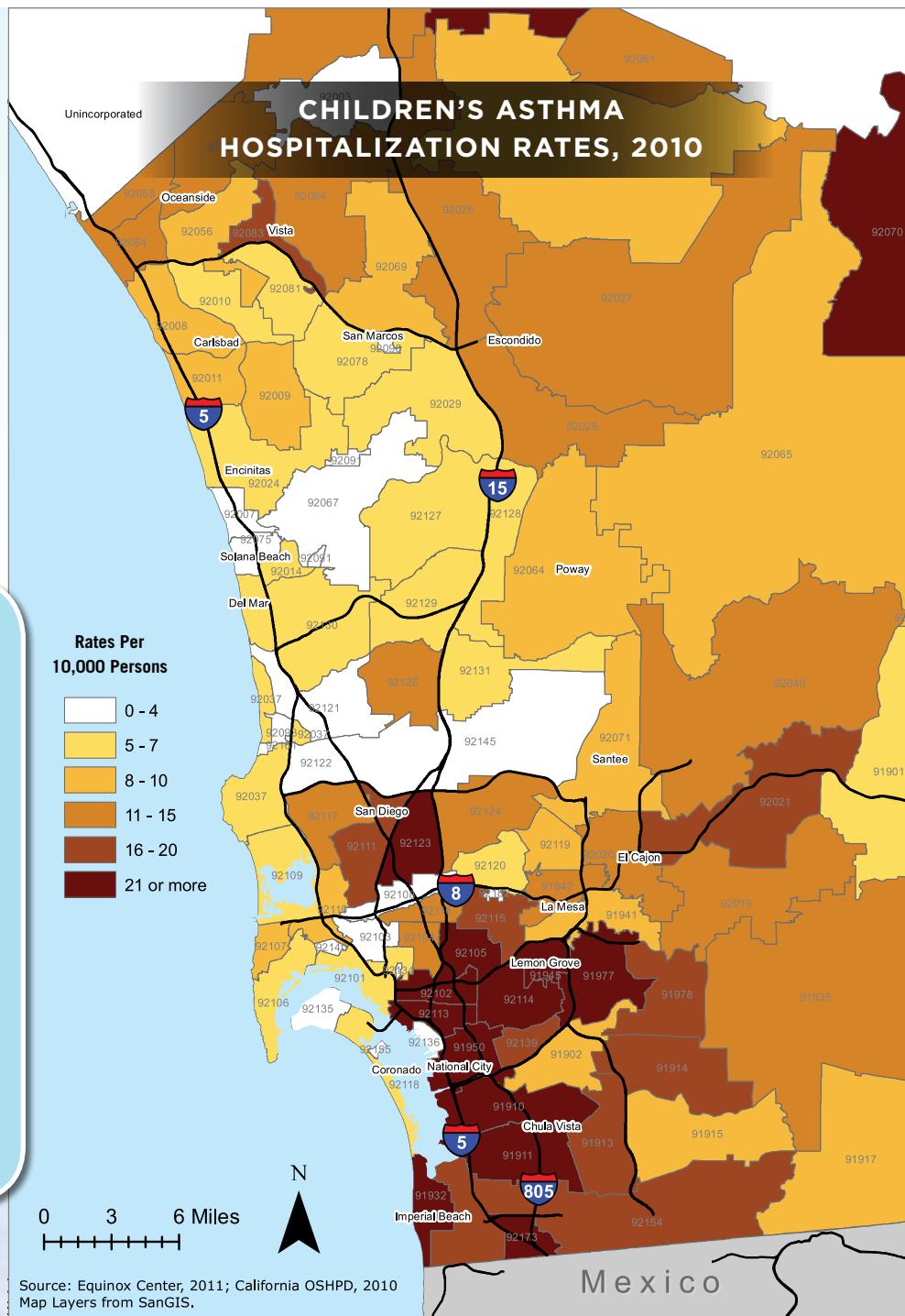
Why is it important?

- Poor air quality resulting from transportation and industry emissions can have harmful effects on the health of residents, particularly children, seniors, pregnant women, and those with limited access to healthcare.
- Healthcare costs for pollution-related illnesses (totaling \$193 million annually in California) impact taxpayers, and drive up health insurance premiums for individuals and employers.
- Children who live in communities with high levels of pollution tend to have higher instances of asthma, often resulting in higher hospitalization rates, missed school and therefore, lower overall opportunity.

HOW CAN WE IMPROVE?

POLICY OPTIONS:

- Support pedestrian and bicycling infrastructure to reduce traffic congestion and decrease pollution near highways.
- Promote the development of local renewable energy sources and less polluting biofuels such as algae.
- Support climate change mitigation and adaptation policies to help reduce fire risk and related air quality impacts (see Climate Change Indicator).



WHAT IS THE MEASURE?

Number of days air quality is considered unhealthy for children and older adults in San Diego County, based on EPA's standards and air quality index.



FOR
MORE:



PER CAPITA WASTE DISPOSAL

WASTE



HOW ARE WE DOING?

IN 2010 SAN DIEGO COUNTY RESIDENTS ON AVERAGE PRODUCED 6.07 LBS OF WASTE PER DAY, UP SLIGHTLY FROM THE PREVIOUS YEAR, AND ABOVE THE STATEWIDE AVERAGE. THIS INCREASE ENDED A FOUR-YEAR TREND OF DECREASES IN WASTE DISPOSAL, AND CONTRIBUTED TO THE REGION'S STATUS AS HAVING THE SECOND HIGHEST PER PERSON DISPOSAL RATE AMONG CALIFORNIA'S MOST POPULOUS COUNTIES.

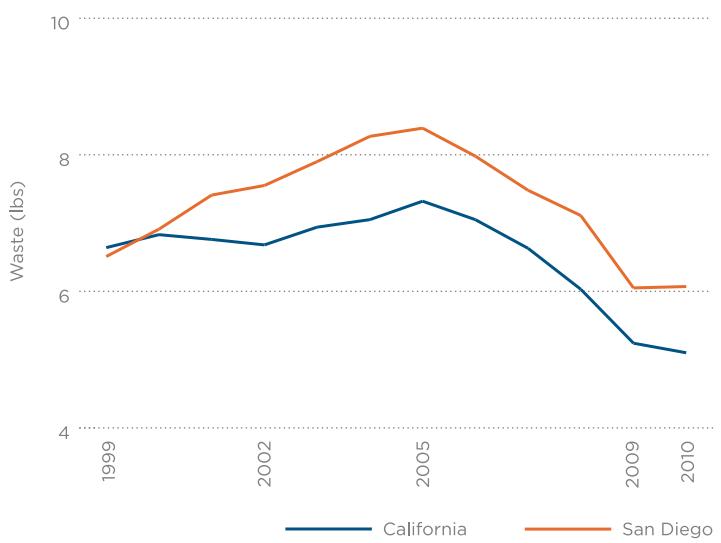
Encouraging developments that can help reduce waste in the future include the addition of new composting facilities in Chula Vista and expanded recycling programs in several jurisdictions. While the County as a whole experienced an increase in waste disposal, several jurisdictions continued on a downward trend.

WHAT IS THE MEASURE?

The average number of pounds of solid waste per capita disposed of each day in San Diego County.

This number includes waste that is brought to landfills, incinerated and exported, and reflects both residential and commercial waste.

Avg Waste Per Capita Per Day, 2010
California State & San Diego County



DATA SOURCES: EQUINOX CENTER, 2011; CALIFORNIA DEPARTMENT OF RESOURCES RECYCLING & RECOVERY, 2011

Why is it important?

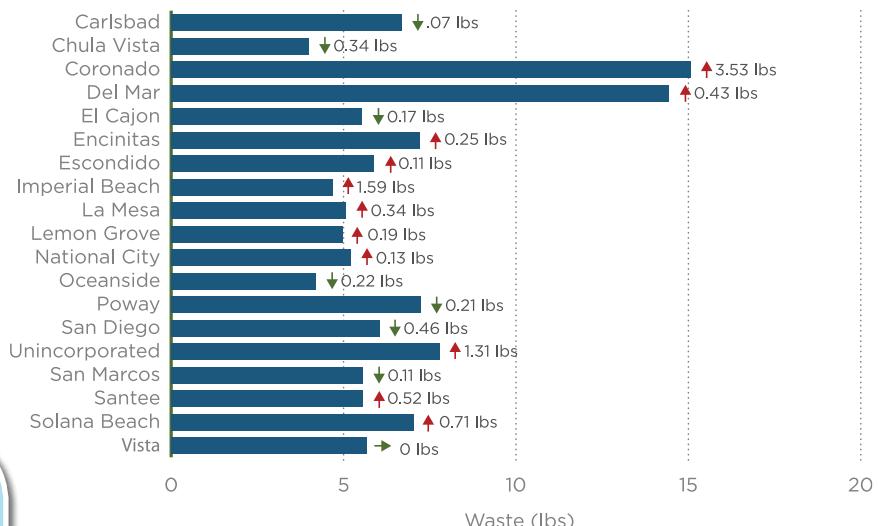
- Excessive waste generation requires more landfills, which can be difficult to site due to environmental, neighborhood and political concerns, and contributes to greenhouse gas emissions.
- The current "cradle-to-grave" life cycle design of many products costs more money in the long run when energy and resources are used to produce the product and again when it is discarded.
- Governor Brown recently signed bill AB 341, setting the state goal of 75% solid waste diversion by 2020 through reduction, recycling or composting.

HOW CAN WE IMPROVE?

POLICY OPTIONS:

- To better target waste reduction and recycling policies, regularly conduct and publish regional or jurisdictional waste assessments to track sources of waste.
- Initiate commercial foodwaste recycling programs in the region and consider expansion into residential curbside pickup, as has been done successfully in Portland, OR.
- Implement Construction and Demolition Recycling Ordinances in cities that do not have them.
- Expand activity in the State Recycling Market Development Zones, to provides loans, technical assistance, and free marketing for businesses that use materials from the waste stream to manufacture their products.

AVERAGE WASTE (LBS) DISPOSED PER CAPITA PER DAY
SAN DIEGO COUNTY JURISDICTIONS, 2010

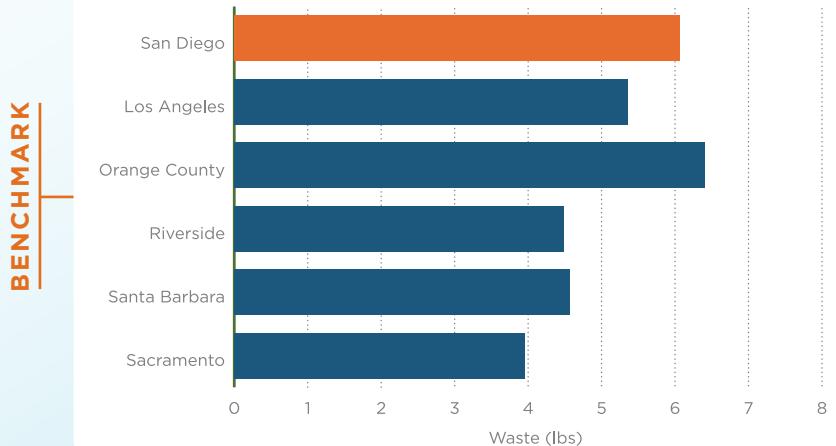


↑ INDICATES INCREASE IN AVERAGE WASTE DISPOSAL FROM 2009 TO 2010

↓ INDICATES DECREASE IN AVERAGE WASTE DISPOSAL FROM 2009 TO 2010

DATA SOURCES: EQUINOX CENTER, 2011; CALRECYCLE, 2011

AVERAGE WASTE (LBS) DISPOSED PER CAPITA PER DAY
SELECT REGIONS OF CALIFORNIA, 2010



DATA SOURCE: EQUINOX CENTER, 2011

BRIGHT SPOT

In partnership with Waste Management, The City of San Diego has launched the first dedicated food waste route in the County, which diverts food waste from supermarkets to be composted.

FOR MORE:



ORGANIZATIONS THAT WERE CONSULTED

Thank you to organizations that provided data and/or were consulted.

[Agri Service, Inc.](#)

[Air Pollution Control District, County of San Diego](#)

[Brookings Institution](#)

[California Air Resources Board](#)

[California Association of Realtors](#)

[California Center for Sustainable Energy](#)

[California Department of Finance](#)

[California Department of Resources Recycling and Recovery \(CalRecycle\)](#)

[California Department of Transportation \(Caltrans\)](#)

[California Department of Water Resources](#)

[California Energy Commission](#)

[California Public Utilities Commission](#)

[City of San Juan Capistrano Water District](#)

[CleanTECH San Diego](#)

[Community Housing Works](#)

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[Construction Industry Research Board](#)

[County of San Diego](#)

[County of San Diego, Department of Parks and Recreation](#)

[Division of Physical Sciences, UC San Diego](#)

[Energy Policy Initiatives Center \(EPIC\), University of San Diego](#)

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[Heal the Bay](#)

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[ICLEI - Local Governments for Sustainability](#)

[La Salle Investment Management](#)

[Move San Diego](#)

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[North County Transit District](#)

[San Diego Association of Governments \(SANDAG\)](#)

[San Diego Coastkeeper](#)

[San Diego County Air Pollution Control District](#)

[San Diego County Taxpayers Association](#)

[San Diego County Water Authority](#)

[San Diego Gas & Electric \(SDG&E\)](#)

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[The San Diego Foundation](#)

[Tijuana River National Estuarine Research Reserve](#)

[University of California, San Diego](#)

[U.S. Census Bureau](#)

[U.S. Environmental Protection Agency](#)

[U.S. Green Building Council](#)

[U.S. Department of Labor, Bureau of Labor Statistics](#)

[Voice of San Diego](#)

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Photo: SANDAG

ABOUT EQUINOX CENTER

TO ENSURE A HEALTHY ENVIRONMENT, VIBRANT COMMUNITIES AND A STRONG ECONOMY FOR THE SAN DIEGO REGION, EQUINOX CENTER RESEARCHES AND ADVANCES INNOVATIVE SOLUTIONS TO BALANCE REGIONAL GROWTH WITH OUR FINITE NATURAL RESOURCES. AS AN INDEPENDENT, NON-PARTISAN, NOT FOR PROFIT ORGANIZATION, EQUINOX HELPS THE SAN DIEGO REGION ACHIEVE AN OUTSTANDING QUALITY OF LIFE FOR ALL ITS RESIDENTS.



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The San Diego Foundation is pleased to partner with Equinox Center to support this publication. The Foundation's Environment Working Group oversees grant making and donor engagement strategies to meet the most critical needs of San Diego's environmental nonprofits, and creates partnerships and initiatives to support those strategies.



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