

City of Thousand Oaks

Sustainability & Climate Action Overview

July 2016 Update

Introduction

The purpose of this report is to share actions taken by the City of Thousand Oaks to protect the health of its residents and the environment. The following overview provides a list of recent activities and projects that address sustainability issues and climate change resilience or adaptation in our community.

The City of Thousand Oaks has a long-standing reputation as an environmental leader and this commitment to preserve our natural resources is reaffirmed annually with the adoption of the City's Top Priorities and Citywide Goals as shown below.

Citywide FY 2014-2015 Top Priorities – Approved by City Council on April 8, 2014

Priority 3 is to *“implement and enhance environmental programs, including obtaining 100% energy self-sufficiency at Hill Canyon Wastewater Treatment Plant and promoting effective water conservation throughout the City. Priority 10 is to “Acquire more open space and effectively manage existing open space parcels,...and advocate for wildlife corridors at Liberty Canyon Road.”*

Citywide Goals for FY 2013-2014 & FY 2014-2015 – Approved by City Council on April 23, 2014

Citywide Goal E. for FY Year 2013 – 2014 & FY 2014-2015 approved by City Council on April 23, 2013: Provide and enhance essential infrastructure to ensure that the goals and policies of the Thousand Oaks General Plan are carried out and the City retains its role and reputation as a leader in protecting the environment and preserving limited natural resources.

In keeping with this long-standing commitment the City was an early signatory on the U.S. Mayors Climate Protection Agreement. This agreement urged the federal and state governments to enact policies and programs to reduce greenhouse gases and pledged to take action in the signatories communities to meet or exceed the Kyoto Protocol targets.

The Agreement included a number of specific provisions and is included below for reference.



The U.S. Mayors Climate Protection Agreement
(As endorsed by the 73rd Annual U.S. Conference of Mayors meeting, Chicago, 2005)

- A. We urge the federal government and state governments to enact policies and programs to meet or beat the target of reducing global warming pollution levels to 7 percent below 1990 levels by 2012, including efforts to: reduce the United States' dependence on fossil fuels and accelerate the development of clean, economical energy resources and fuel-efficient technologies such as conservation, methane recovery for energy generation, waste to energy, wind and solar energy, fuel cells, efficient motor vehicles, and biofuels;
- B. We urge the U.S. Congress to pass bipartisan greenhouse gas reduction legislation that 1) includes clear timetables and emissions limits and 2) a flexible, market-based system of tradable allowances among emitting industries; and
- C. We will strive to meet or exceed Kyoto Protocol targets for reducing global warming pollution by taking actions in our own operations and communities such as:
 - 1. Inventory global warming emissions in City operations and in the community, set reduction targets and create an action plan.
 - 2. Adopt and enforce land-use policies that reduce sprawl, preserve open space, and create compact, walkable urban communities;
 - 3. Promote transportation options such as bicycle trails, commute trip reduction programs, incentives for car pooling and public transit;
 - 4. Increase the use of clean, alternative energy by, for example, investing in "green tags", advocating for the development of renewable energy resources, recovering landfill methane for energy production, and supporting the use of waste to energy technology;
 - 5. Make energy efficiency a priority through building code improvements, retrofitting city facilities with energy efficient lighting and urging employees to conserve energy and save money;
 - 6. Purchase only Energy Star equipment and appliances for City use;
 - 7. Practice and promote sustainable building practices using the U.S. Green Building Council's LEED program or a similar system;
 - 8. Increase the average fuel efficiency of municipal fleet vehicles; reduce the number of vehicles; launch an employee education program including anti-idling messages; convert diesel vehicles to bio-diesel;
 - 9. Evaluate opportunities to increase pump efficiency in water and wastewater systems; recover wastewater treatment methane for energy production;
 - 10. Increase recycling rates in City operations and in the community;
 - 11. Maintain healthy urban forests; promote tree planting to increase shading and to absorb CO₂; and
 - 12. Help educate the public, schools, other jurisdictions, professional associations, business and industry about reducing global warming pollution.

Climate Change in General Plan

In 2013, the City updated the Conservation Element of the General Plan (City's guiding document) and added a new chapter on Climate Change and included an overview of specific climate change impacts expected to impact the City.

CHAPTER 7: CLIMATE CHANGE

Climate change refers to significant and long-term changes in weather patterns, which may result in a change in average conditions, i.e. average temperatures, or affect variation from typical conditions, such as extreme heat events.

Assembly Bill 32 (AB 32), the California Global Warming Solutions Act, was signed into law by Governor Schwarzenegger in 2006. This legislation seeks to address global climate change from the perspective of greenhouse gas reduction. Greenhouse gases (GHGs) are those that trap heat in the atmosphere that would otherwise radiate into space. Some GHGs occur naturally in the atmosphere, while others result from or are concentrated by activities including the burning of fossil fuels such as oil, natural gas, and coal. Since the industrial revolution, there has been a steady increase in the quantity of GHGs being discharged into the air, accompanied by a gradual increase in average world temperature. Carbon dioxide and water vapor are the primary GHG components, and carbon dioxide is the primary target for reducing GHGs and addressing global climate change as this is more effectively regulated than some of the *other GHGs*.

The State of California has coordinated the preparation of three assessments of climate change in the State, the most recent entitled “Our Changing Climate 2012: Vulnerability and Adaptation to the Increasing Risks from Climate Change in California”. This study predicts two key trends:

- A significant rise in temperatures in California during this century: 2.7°F above 2000 averages by 2050, and up to 4.1°F-8.6°F by 2100, depending on emission levels.
- Drying trend due to reduced precipitation by the mid-to-late 21st century.

These trends are likely to result in a variety of impacts. Effects most relevant to Thousand Oaks include:

- Increases in extreme precipitation and runoff from periodic storms. These fluctuations in normal winter rainfall are caused by warmer storms and narrow bands of clouds over the Pacific Ocean that carry large amounts of moisture called “atmospheric rivers”.
- Decreased water supplies statewide. Climate change effects on water supplies and stream flows are expected to increase competition between urban and agricultural water users and environmental needs.
- Increased energy demand. Increases in average temperature and higher frequency of extreme heat events combined with additional residential development across the state will drive up the demand for air-conditioning in the summertime.
- Critical importance of wildlife corridors. Migration corridors may allow wildlife to reach more suitable habitat as climatic conditions change.

- Increased likelihood and extent of wildfires. Wildfire risk will increase as a result of climate change which can lead to conversion of native plant communities to weedy, more flammable vegetation.

Developing an effective response to the challenge of climate change will require new strategies. One of the ways in which the City has begun this process is through the Energy Action Plan (EAP) for City facilities, which was adopted in 2012.

The EAP was initiated by the City's participation in Southern California Edison's 2010 – 2012 Energy Leadership Partnership program. The program identifies levels of achievement through the implementation of energy-saving measures and outreach activities. The objective of the EAP is to develop energy efficiency, renewable energy, and carbon emission reductions at City facilities. The overall goal of the EAP is to reduce carbon emissions by two percent annually over the next five years and the plan includes specific objectives to accomplish this through reducing energy usage. City departments and facilities will employ a range of strategies to reduce energy demand, improve efficiency, and transition to renewable energy sources.

With respect to climate change and its effect on natural resources, the most important strategy that can be implemented is to maintain the health and viability of our local ecosystems. The Nature Conservancy has commissioned research on climate change and its effects on wildlife. More than a decade of research has determined that wildlife diversity is directly related to diverse landscapes and plant communities. Healthy ecosystems provide a refuge for an array of plants and animals. Although we do not know how species and habitats will respond to climate change, the city's extensive open space system, which provides more than 15,000 acres of natural habitat, provides the best opportunity for species affected by climate change.

END CHAPTER 7

Residents Share Their Environmental Vision

As we celebrate our 50th year as a City, the City Council is looking forward to what the next 50 years might look like. The “2064 Visioning Program” is a community exercise to develop a general road map with guiding principles for the City through the year 2064. Five focus areas have been identified and each Councilmember selected a Committee to facilitate.

Mayor Fox has been leading the Environmental Committee. However, the meetings are being driven by the community members who come and participate. They are sharing their vision for and perspective of what Thousand Oaks should look like in 2064.

In addition, City Staff asked residents to share their environmental vision at the April 5th, 2014 Arbor/Earth Day. Staff received 642 comments that were sorted into categories.

An infographic was produced that reflected these comment. The numbers of comments in the larger categories were also included as a reference.

Arbor Earth Day Attendees Share Their Environmental Vision City of Thousand Oaks 2014

INFOGRAPHIC REPRESENTS 642 COMMENTS

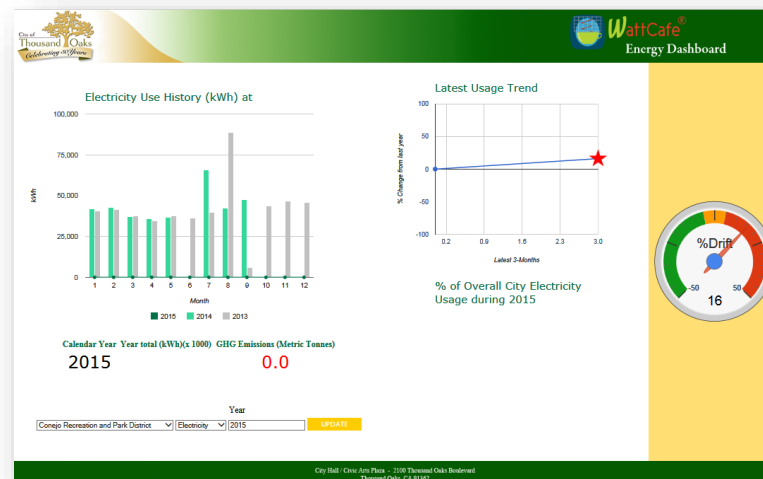


Tracking and Reporting: Environmental Dashboard & Utility Management System

To help track our progress in meeting environmental goals and to help in reducing the City's Carbon footprint the City has been working to develop an Environmental Dashboard and a Utility Management System (UMS).

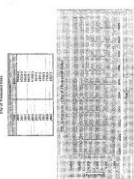
The Environmental Dashboard is in the development phase and expected to go live in 2016. It will provide an overall look at the City's Sustainability status in one easy to access panel via web page. Each dial on the panel will be linked to deeper data, updated regularly and accessible to the public. It will include a link to the UMS.

The Utility Management System is a live data tool for internal monitoring and adjusting of utility consumption (gas, electricity and water) as well as benchmarking. The UMS also provides a visual representation of the City's municipal utility conservation progress made available to the public for transparency and accountability. Below is a web page view of the UMS being developed for the City of Thousand Oaks.



GHG Reduction

In 2009, the City of Thousand Oaks made a commitment to reduce carbon emission (goal of 2% annually) through 2017. The City became a member of the California Climate Registry (CCAR) in 2009. Through the CCAR, the City analyzed Green House Gas (GHG) records from 2000 to 2011. During that time, the City saw an overall 35% reduction in GHG emissions. The Hill Canyon Wastewater Treatment Plant (HCTP) saw a 74% GHG reduction. The attached memorandum provides an overview of the City's progress through 2011.



The City will continue tracking GHGs through the Climate Registry in 2016, using 2010 as its baseline to achieve current GHG reduction goals.

Factors that have contributed in the continued reduction of CO2 Emissions in the City of Thousand Oaks include:

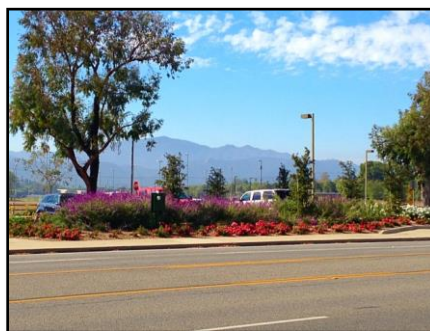
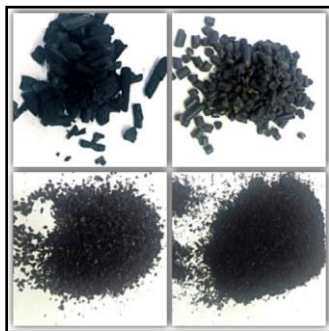
1. Direct Access – The City has purchased renewable energy for 16 of the top 17 municipal energy accounts from wind and cogen production facilities.
2. Solar Projects and Renewable Energy Generation at City Facilities – 401/403 Hillcrest, CRPD, and Hill Canyon Treatment Plant are all providing solar power input.
3. Green Fleet – the City has converted more vehicles to natural gas and electric in recent years.
4. Additional conservation and optimization efforts – solid waste management, water conservation efforts, water pump and energy efficiency measures taken within the last few years, bike lane expansion/public transportation/walkability improvements and many more.

Biochar

Since 2012 the City of Thousand Oaks has used Biochar (biological material converted to carbon sequestering charcoal within a controlled oxygen-deprived atmosphere) as a soil conditioning amendment along with aided soil compost and top mulch. The result of using biochar on various locations throughout the City and in new plantings is improved soil structure, subsurface microbial activity, overall plant root and foliage health, ph healthy soil, and a reduced need for fertilization and irrigation.

The City has no need for and stopped the use of all synthetic fertilizers, cut its water use by 50% in turf areas and paid for the biochar in just a couple of billing cycles. To date, the City has utilized approximately 31 cubic yards of biochar as a soil amendment throughout the City, including landscape improvement projects and individual tree plantings. A pound of biochar sequesters approximately 3 pounds of carbon, thus, the City has sequestered approximately 93,000 pounds of carbon within its soil.

Below are photo samples of biochar pellets and powder, as well as a photo of one of the locations where biochar has been applied to an area that once had poor soil quality but now thrives within the City of Thousand Oaks.



Green Vehicles (city)

The City set a goal in 2009 to convert 2/3 (or 67%) of its fleet to alternative/renewable fuel by 2017. In 2010 37% of the fleet was alternative/renewable. By October 2015, 63% percent of City fleet vehicles were powered by alternative/renewable fuel sources, just shy of the 67% goal. This number is independent of the City's 19 public transit city buses and vans, which are 100% natural gas powered.

Solar

Solar powered lighting has been installed at 13 city bus shelters, including, the very first installed solar powered shelter located in front of City Hall. The City Hall shelter is fully self-contained, using bright, LED lighting fixtures. Grant funds were used to install 12 additional solar shelters as a cost effective, clean energy, lighting option for bus shelters. These 13 solar powered shelters comprise approximately 1/3 of the city's total bus shelters. The remaining shelters are located in heavily lit areas that make solar lighting ineffective and in other locations where the urban tree canopy doesn't permit enough light to reach the solar panels, making solar impractical.

The city developed renewable energy generation at the Hill Canyon Wastewater Treatment Plant (HCTP) that is 100 percent onsite self-sufficient. The HCTP has a single-axis 500 kW solar array and 300kW cogeneration units. Any excess energy is fed back into the grid.

In 2012, the city's installed its first fully-owned solar 300 kW array, located atop the Conejo Recreation & Park District and the National Park Service offices. The system provides over 40 percent of the facilities' electricity needs.

Environmental Sustainability

The City has accomplished much as an environmental leader, including the planting of several hundred new trees every year, creation of a nationally recognized green vehicle fleet, renewable energy generation at the Hill Canyon Wastewater Treatment Plant (HCTP), using recycled tires in asphalt to pave roads, incorporating greenhouse gas absorbing biochar into landscaping maintenance, continually expanding the extensive award-winning bike lane system, procuring over 7 mWh of green power per year through Direct Access (a mix of renewable energies), and many more environmentally-conscious practices. The City continues to make strides in resource conservation, process optimization, and renewable energy generation.

Energy

In May 2012, the City Council approved an Energy Action Plan (EAP 2012) and established the Energy Management Team, a group of staff from various departments.

- The City of Thousand Oaks EAP 2012 Objectives:
 1. Establish a centralized energy policy.
 2. Establish an energy management team.
 3. Commit to exploring sustainable sources of funding.
 4. Track and monitor progress.
 5. Engage community through outreach and education
- Goal: 10% energy and greenhouse gas reduction by 2017 (EAP 2012)
- Current Initiatives:
 - Reduce energy by 10% by 2017
 - Conduct audits for energy and gas for top 17 demand facility
 - Save at least 128, 475 kWh through Southern California Edison's Energy Leader Partnership program.
 - Increase offsite utility delivery of renewable energy through Direct Access by 10%.
 - Convert two-thirds of City's vehicle fleet to alternative fuel vehicles.
 - Increase onsite renewable energy generation by two percent by 2017.
- Snapshot of current status:
 - In 2012, the City's first fully-owned solar 300 kW array, located atop the previous City Hall and currently occupied by the Conejo Recreation & Park District and the National Park Service, provides over 40% of the facilities' electricity needs.
 - At the Newbury Park and Thousand Oaks Libraries, each central plant was upgraded with higher efficiency rated equipment.
 - In 2013, ISDM and Direct Install energy audits were conducted. The provided recommendation resulted in an annual savings of \$72,102.
 - Three facilities enrolled in SCE Demand Response energy savings programs.
 - Multiple LED conversion projects are currently in the works at various City facilities, saving approximately 300,000 kWh per year, including the replacement of 700 high pressure sodium and metal halide fixtures and parking lot lighting at major facilities that offer high-efficient lighting and the added benefits of safety and reducing night-sky intrusion.

- LED lighting was incorporated in the Kavli theatre lobby renovation at the Civic Arts Plaza for energy conservation expected to save thousands of dollars over the life of the fixtures.
- A plan for mechanical systems upgrades at the Civic Arts Plaza is scheduled for 2015/16 expected to save tens of thousand of dollars annually. New monitoring tools will ensure occupant comfort and energy savings.
- With the onset of new electric vehicles, the City has 20 charging stations strategically placed at eleven locations throughout the City. To augment this network, the City's Transportation Center became home to Ventura County's first Level III fast charging station in June 2013.
- At HCTP a new air conditioning chiller replacement as part of energy improvements were approved for efficiency.
- As directed by City Council Priority 8B, HCTP has completed a cogeneration upgrade.
- With its single-axis 500 kW solar array and cogeneration units, the HCTP is 100% onsite self-sufficient with excess energy being fed back into the grid.
- The City will achieve the second tier level, "Silver" of the SCE Energy Leadership Partnership for energy savings projects by the end of 2014. It is anticipated that the current and planned energy efficiency projects will save the City close to 300,000 kWh, well surpassing the required savings.
- In May 2013, Thousand Oaks received a grant for the installation of a Utility Management and Sub-metering System. The new system will allow staff and residents to see energy usage at select public facilities in real-time. This data is tremendously useful for identifying when high usage occurs, where additional savings can be realized, and benchmarking EAP progress.
- A small solar array is planned for the roof of the Newbury Park Library in the Capital Improvement Program Budget for 2015. Other projects will be determined as costs are evaluated with potential future sites.
- Direct Access electricity is currently being evaluated through a formal RFP process.

Despite this current wave of projects, there is still much progress to be made in the near future. Some of the primary objectives will be to work with the energy utility to receive credit for the excess energy produced at HCTP, expanding the current network of electric vehicle charging stations, and encouraging the community to pursue energy efficiency projects at home. Thousand Oaks is well-positioned to navigate the challenges ahead successfully and remain among our Nation's greenest cities.

- Background documents/references
 - 2012 Energy Action Plan (EAP)
 - <http://71.165.173.179/WebLinkPublic/DocView.aspx?id=730535&dbid=0>

Open Space

The goal of Conejo Open Space Conservation Agency (COSCA) is to preserve, promote, and protect our open space. COSCA and the Conejo Recreation & Park District (CRPD) work cooperatively to provide protection and management of local open space. Benefits such as urban heat island effect abatement, noise pollution abatement, and a reduction in air pollution are enjoyed by residents. Open space within the City includes 150 miles of existing trails, stretching across approximately 15,000 acres, equating to 40% of the City, providing a variety of recreational opportunities, supporting a healthy local ecosystem, and creating solidarity within the community.

Snapshot of current status: Approximately 1,000 additional acres of open space will be incorporated, including 63 miles of planned trails.

Background documents/references: COSCA was launched as a cooperative agreement between the City and Conejo Recreation and Park District through a joint powers agreement that dictates the agencies “jointly exercise their legal powers to create jurisdictional framework for the conservation of natural open space lands, assure coordination of local land use and resource management decisions and establish an entity to focus community resources toward achievement of adopted General Plan goals.” For the rules and regulations that apply to COSCA open space, please see COSCA Ordinance No. 01-2009.

Solid Waste & Recycling

Goals

- 75% of solid waste source-reduced, recycled or composted by 2020 (AB 341)
- Mandatory Commercial Recycling Compliance (AB 341)
 - Requires businesses generating 4 cubic yards (cy) or more of solid waste per week to arrange for recycling services.
 - Requires multi-family residential dwellings of five units or more to arrange for recycling services.
- Mandatory Commercial Organics Recycling Compliance (AB 1826)
 - Requires the City to implement an organic waste recycling program for businesses by January 1, 2016.
 - Requires businesses to arrange for recycling service for organic waste according to the following schedule:

- April 1, 2016 – businesses generating 8 cy or more of organic waste per week
 - January 1, 2017 – 4 cy or more of organic waste
 - January 1, 2019 – 4 cy or more of commercial solid waste (aligns with AB 341 thresholds thereafter)
- **Current Initiatives**
 - Collaboration with franchised waste haulers to meet the waste diversion rate goal of 75% by the year 2020.
 - Outreach and education to non-compliant businesses and multi-family complexes.
 - Working with waste haulers to develop programs to meet AB 1826 mandates.
 - Pilot commercial organic waste diversion program serving 7 business accounts.
 - Green Business Certification Program incentivizes and rewards businesses that demonstrate a substantial and purposeful commitment to environmental stewardship.
- **Snapshot of current status**
 - Dual-stream trash and recycling service available to commercial and multi-family residential customers.
 - Curbside trash, recycling and greenwaste standard for single-family residential customers.
 - Free curbside bulky item pick-up, neighborhood cleanup program and free landfill days supplement residential curbside recycling and disposal needs.
 - “Pay-as-you-throw” style rate structure incentivizes recycling and discourages disposal to maximize waste diversion from landfill disposal.
 - City-subsidized backyard compost bins encourage on-site residential organics recycling.
 - Residential greenwaste processed within Ventura County
 - Permanent Hazardous Waste Disposal Facility provides weekly drop-off of residential and small business hazardous waste.
 - City-wide household battery recycling drop bins
 - Pharmaceutical collection bin at East County Sheriff’s Station
 - 23 used-oil drop-off collection locations throughout the City
 - Construction & Demolition Ordinance requires diversion of at least 60% of project-generated waste from qualifying projects.
- **Background documents/references**
 - AB 341 (Mandatory Commercial Recycling):
<http://www.calrecycle.ca.gov/Recycle/Commercial/>

- AB 1826 (Mandatory Commercial Organics):
http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB1826
- [Green Business Certification Program \(City Website\)](#)
- [Residential Curbside Collection \(City Website\)](#)
- [Business Waste Collection \(City Website\)](#)

Household Hazardous Waste (HHW) Facility – LEED Certified

- Staff Lead – John Brooks, Senior Analyst
- **New Facility**
- Opened June 2014, the permanent City of Thousand Oaks Household Hazardous Waste Facility is a state of the art structure. Weekly events are open to offer hazardous waste disposal support to citizens and small businesses of the City of Thousand Oaks, Newbury Park, and unincorporated Ventura County areas. The facility offers landfill reduction and protection from hazardous materials, e-waste recycling, sharps containers, oil care kits and recycling, battery recycling, and a materials re-use program...

In 2013, prior to the establishment of the permanent HHW facility, the City provided 11 free residential HHW collection events in 2013, collecting 162.45 tons of hazardous waste from a total of 3,767 residents.

- The facility has solar on-site energy production, natural lighting, operable ventilating windows for natural air flow cooling, concrete block construction for durability and insulation and is LEED certified.
- Water management inclusion of permeable pavers for runoff reduction and bioswale for storm water control.
- Roofing design – angled roof for solar gain, and directionally sited to capture prevailing wind, cooling roof material and color, heat island reduction,
- Materials diverted (lbs or tons) – in 2013, 162.45 tons of hazardous waste from a total of 3,767 residents.
- Years the program has been operating: 18 (temporary events since 1998)
Permanent facility opened Summer 2014.

Transportation:

Goals:

- Solar parking canopies at the recently constructed MSC Bus Parking and Fueling
- New CNG fueling station is proposed for the Transportation Center; a preliminary design and proof of concept has been completed
- Proposal for the installation of a wind turbine at the Center to generate electrical power. The location is currently undergoing testing to determine if the location is suitable.
- Expand the number of vehicle charging stations.
- Equip all bus shelters at the Transportation Center and Thousand Oaks Mall with solar powered lighting by end of FY 16/17
- Pursuing proposals and funding to bring electric buses to Thousand Oaks Transit

Current Initiatives: The LEED Certified Transportation Center is home to Ventura County's first Level III rapid EV charging station. The City offers public transit including [Thousand Oaks Transit \(TOT\)](#), [VISTA](#) and the City's Dial-a-Ride. The routes connect to the Thousand Oaks Transportation Center, Park and Ride lots, the Moorpark Metrolink Station and Moorpark College.

- Solar powered destination signs at the Oaks Mall bus stop

Bike Facilities

A Bicycle Master Plan was adopted by the City of Thousand Oaks in 2010. At that time, the following inventory of bike lanes was tallied in the City:

- Class 1: 1.8 miles
- Class 2: 31.2 miles
- Class 2/3: 5.5 miles
- Class 3: 26.8 miles
- The Bicycle Master Plan commits the City to creating an integrated and comprehensive network of bikeway facilities and programs totaling approximately \$12,640,000 to be invested over 20 years.

Snapshot of current status: The City has over 63 miles of on-street bike lanes. The [BikeSafe](#) program provides bicycle safety support and information for riding in the Thousand Oaks community. The [Bicycle Facilities Master Plan](#) provides long range planning for bicycle infrastructure, signage and education. For example, the city has constructed pavement markings on Thousand Oaks Boulevard called "sharrows" to remind residents to share the road with cyclists. Additionally, there are over 75 miles of multipurpose hiking, biking and equestrian trails in the City's open space. The City is

purchasing 8 new, CNG powered Dial-a-Ride vans which will be in service within the next 60 days. With this purchase, all City owned transit vehicles will be alternatively fueled. The City also has two next generation CNG buses on order which will be delivered this December.

Transportation Center—LEED Certified: Staff Lead - Mike Houser, Associate Analyst

- 12 bus shelters equipped with solar powered lighting

Water

The city participates in the emPower Central Coast program, including the Energy Coach program where coaches spend up to two hours with a homeowner at their residence, providing them with information on green building techniques and recommendations and free faucet aerators and water-efficient shower heads. emPower gives away aerators and shower heads, provided by the SoCal Gas Company, at community events as well. The City of Thousand Oaks also provides free showerheads, faucet aerators and dye tabs to test for toilet leaks at community events and upon request.

The city is currently preparing a new Landscape Master Plan and updated Forestry Master Plan for City-maintained trees and plantings in the public right-of-way. The overall goal of the project is to incorporate drought-tolerant and water-wise landscaping into public medians and the public right-of-way, while maintaining aesthetic integrity.

- Snapshot of current status
 - At the Thousand Oaks Library, a bio-swale has been installed for water retention/detention.
 - At the 401 and 403 Hillcrest facilities, a chemical-free water treatment has reduced over-all chemical use to significantly reduced water use in the mechanical closed water loop.
 - At the Newbury Park Library, a bio-swale was installed for water retention/detention, pervious pavers in main parking lot for water infiltration for ground water recharge, water cisterns installed for water retention, and post-storm distribution to aid in ground water recharge and bio-swale irrigation, and drought-tolerant planting to reduce potable water use.
 - Low-flow plumbing fixtures have been installed at the city's Municipal Service Center (MSC). Water use has been reduced by over 30 percent as a result of the high-efficiency fixtures.

Economic Sustainability

- Green Business Certification Program
- Clean/Green Jobs
- Green/BioTech Innovation Hub

Awards/Recognition

- ***America's 50 Greenest Cities—Popular Science (2008):*** The City is one of America's Greenest Cities, maintaining cutting edge procedures and protocol across four categories related to sustainability including electricity, transportation, green living, recycling, and green perspectives.
- ***50 Safest Cities in California—Safewise (2013):*** Based on excellent entertainment venues, including touring Broadway musicals and award-winning children's programs, robust environmental programs, wide open-space, and vigilant law enforcement, Thousand Oaks ranks among the safest cities in California to live.
- ***13 Safest Cities in America—Business Insider (2011):*** With a consistently low crime rate, the City is a rated one of the safest cities in America to live in.
- ***10 Great Cities to Raise Your Kids in—Kiplinger (2012):*** Ranked as the fourth best city to raise your kids in, Kiplinger assessed the great schools, multiple playgrounds, incredible libraries, vast open space, and neighborhood safety that the City has to offer. With more than forty public playgrounds, and multiple award-winning schools, the City is an exceptional to raise your children in.
- ***Countywide Climate Change Action Award—Ventura County Board of Supervisors (2012):*** The City's Green Business Certification Program is recognized for encouraging businesses throughout the City to take proactive measures to increase the health and environmental wellbeing of the community, promoting long-term sustainability through a commitment to environmental stewardship.
- ***Top 50 Bike-Friendly Cities in America—Bicycle Magazine (2012 & 2014):*** The City is recognized as a bike friendly community based on the overall percentage of bicycle commuters, cycling infrastructure, great bike shops, exciting cycling events, and a reversal in the overall trend of decreased youth ridership in suburban areas. Specifically, the City was also recognized for creating a 1.2 mile bike path that allows people easy access to the teen center, Goebel Senior Center, library, and more, from the intersection of Janss Road which proceeds through Conejo Creek Park South.

- **Government Green Fleet Award—Clean Cities California and National Alternative Fuels Training Consortium (2011-2014):** The City's vehicle fleet ranked among the top 50 greenest fleets based on the exclusive use of re-refined oil, antifreeze, recap tires, and natural gas. The City also recycles all used oil filters, and has replaced all lead wheel-balancing weights with lead-free alternatives.
- **Solar Champion Award—Environment California Research and Policy Center (2014):** This accomplishment was awarded to Mayor Andy Fox and the Conejo Park and Recreation District (CRPD) for groundbreaking and innovative efforts to support local solar power, including installing solar on municipal buildings, resulting in a 1.136 megawatts of installed solar power across the City of Thousand Oaks.
- **Tree City USA—Arbor Day Foundation (1987-2013):** Specific urban forestry preservation guidelines include a tree board/department, a tree-care ordinance, a comprehensive community forestry program, Arbor Day observances, and proclamation to maintain these urban treasures.
- **Trail City USA National Hall of Fame—American Hiking Society:** Conejo Open Space stretches 15,000 acres and incorporates 150 miles of open space trails that can be used by hikers, mountain bikers, and equestrians.
- **Best of California Technology Green IT—Center for Digital Government (2012):** The City created California's first fully automated Green Business Certification Program, Recycling Permitting System, and the Grant Management System. The systems use a cloud database service for technological innovation and to reduce program costs..
- **Safety and Health Achievement Recognition Program (SHARP) Award—California Occupational Safety and Health Administration (CAL/OSHA) (2012):** Hill Canyon Waste Water Treatment Plant (HCTP) was the first public agency to receive SHARP status by maintaining and developing an advanced health and safety program that meets/exceeds the California Occupational Safety and Health Administration (CAL/OSHA), in conjunction with ongoing commitment to health and wellness of employees.
- **Gold Peak Performance Award—National Association of Clean Water Agencies (2004, 2006, 2007, 2009, and 2010):** Awarded to the Hill Canyon Waste Water Treatment Plant on the basis of registering no discharge permit violations.

- Energy Action Plan (EAP)
- SRRE
- HHWE
- Climate Change: Chapter 7 of Conservation Element in General Plan