

Orange County, Florida



SNAPSHOT

Country	USA
Project Area	5,79,200 acres 2344 sq.km
Population	1,429,908 (2020)
Demographics	68% White; 22.8% Black or African American; 0.6% American Indian; 8.6% Other
Leadership	Mayor Jerry L. Demings
Key Stakeholders and Partners:	Utilities Department, Environmental Protection, Neighborhoods and Housing, Planning and Development

PROJECT DETAILS

Certified on: March 21, 2022

Certification level: Gold

Orange County, Florida achieved LEED GOLD certification for its ongoing commitment to enhancing sustainability & community resilience for all.

“The LEED certification criteria helped Orange County use data-driven performance indicators to compare ourselves to others around the world and track progress towards sustainability goals,” said Mayor Demings.



SUSTAINABILITY PRIORITIES

- Reduce County operations' greenhouse gas emissions by 30% from the 2015 baseline by 2030.
- Align energy management strategies across County departments to reduce 30% of building and infrastructure energy use by 2025.
- Reduce risks for County services and infrastructure based on regional resilience indicators and updated mitigation plans.
- Protect water quality through innovative technology and integrated water management audits at County facilities.
- Deploy EV-ready infrastructure and convert 100% of the light-duty County fleet to electric or alternative by 2030.
- Preserve an additional 23,000 acres of environmentally sensitive lands and increase County natural land assets by 2030. Protect and enhance tree canopy and wildlife habitats on County properties.

Certification Overview

Orange County, Florida achieved LEED Cities Gold certification by earning 68 points out of the possible 110 points available across nine credit categories as illustrated. Some of the most significant strategies that contributed to the certification include the county's regional approach toward preserving environmentally sensitive areas, reducing the county's per-person greenhouse gas emissions, smart transportation policies, reducing pollution, and creating affordable housing, all aimed at the improved quality of life for all its residents.



Performance Score | Key Metrics

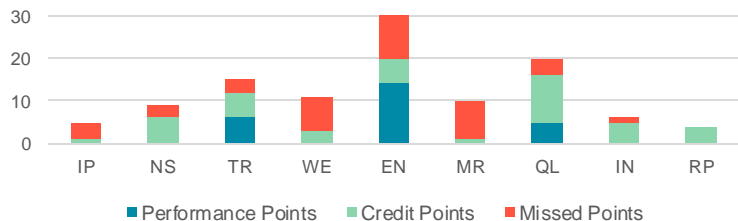
94/100 | Transportation Performance

40/100 | Water Performance

100/100 | Energy and Emissions Performance

38/100 | Waste Performance

87/100 | Quality of Life Performance



Category	Points Achieved/ Points Available
INTEGRATIVE PROCESS (IP)	1/5
NATURAL SYSTEMS AND ECOLOGY (NS)	6/9
TRANSPORTATION AND LAND USE (TR)	12/15
WATER EFFICIENCY (WE)	3/11
ENERGY AND GREENHOUSE GAS EMISSIONS (EN)	20/30
MATERIALS AND RESOURCES (MR)	1/10
QUALITY OF LIFE (QL)	16/20
INNOVATION (IN)	5/6
REGIONAL PRIORITY (RP)	4/4
TOTAL POINTS ACHIEVED	68/110

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INTEGRATIVE PROCESS

1/5

INTEGRATIVE PLANNING PROCESS

Orange County, FL formed an interdisciplinary LEED team led by the Chief Sustainability and Resilience Officer along with representatives from several departments and areas of expertise such as energy, water, waste, transportation, housing, planning, etc.

The team held meetings with Mayor Demings as well as County Administration and several County Commissioners to review the intent of the LEED for Cities and Communities certification and how beneficial it will be to achieve the County's goals to be an innovative, collaborative, and inclusive community for all.

These were followed by more detailed reviews of the scorecard, the LEED guide, and the crosswalk tool. These tools and re-occurring meetings helped the team to assess the existing status of the County against the parameters outlined in the LEED prerequisites and other credit requirements, to identify potential credits and the targeted LEED rating, and determine the staff necessary to gather required information. The team developed and used an internal tracker to monitor and track the status of the items started, completed, or stalled.



NATURAL SYSTEMS AND ECOLOGY

6/9

NATURAL RESOURCE ACREAGE

Orange County, FL has around 36,511 acres of area under preserved green lands and natural resources which translates to 1,141 sq ft (.026 acres) of natural resource acreage per capita.

The County has a long-standing commitment towards the preservation of natural lands which it demonstrates through programs such as [Green PLACE program](#) launched in 2002 whose mission has been "To preserve and manage environmentally sensitive lands, protect water resource lands and to provide a quality passive recreational outdoors experience for existing and future generations." County has around 23,400 acres of Green PLACE properties and about 13,111 acres of green parks which have been achieved through the [County's Parks Program](#).



RESILIENCE PLANNING

Orange County, FL resilience planning is outlined in the Comprehensive Emergency Management Plan 2018 (CEMP), and the Local Mitigation Strategy (LMS). Actions identified to strengthen the County Resilience are found in the [Sustainable Operations & Resilience Action Plan](#).

The county's CEMP outlines fundamental emergency planning and preparedness by identifying the twenty Emergency Support Functions (ESF)s that are common to all disasters. The LMS assesses risk and vulnerability factors and intended mitigation actions. Both of these documents ensure critical support, community-wide, in a time of disaster. However, the County continues to be forward-thinking in the [Sustainable Operations & Resilience Action Plan](#) to not only list the 108 'critical' facilities for which an all-hazard assessment approach is reviewed regularly, but to identify the new risk mitigation projects to ensure facility hardening throughout all buildings and infrastructure.

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TRANSPORTATION AND LAND USE

12/15

TRANSPORTATION PERFORMANCE

Orange County, FL achieved a transportation performance score of 94/100 based on the 2019 measured value of 18.68 (2019) vehicles miles travelled per person per day.

CONNECTIVITY

Orange County's Sandlake Sunrail Station, Lynx Central Station, and Sunrail Winter Park Station serve as public transit options to provide intermodal connectivity for residents and guests. The stations are connected to three modes of transportation and demonstrate interconnectivity features such as three or more bus routes at the station, airport connectivity with a total transit travel time of less than 1.5 hours, vehicle parking at the station with carpool services provided, and bicycle storage spaces.



ELECTRIC VEHICLE CHARGING FACILITIES

As of 2021, Orange County is home to the largest inventory of public Electric Vehicle Charging Infrastructure (EVCI) statewide. Orange County currently exceeds the LEED requirements at a current total of 3.44 EV Charging stations per 10,000 residents. According to the [Department of Energy Alternatives Fuel Data Center](#), the County has around 450 Level 2 and 49 Level 3 EV charging stations.

SMART MOBILITY AND TRANSPORTATION POLICY

Orange County's public transit systems adopt the following four major smart solutions: traffic surveillance through CCTV cameras, Global Positioning System (GPS), Passenger Information System (PIS), and Integrated Ticketing System. These last three solutions are available to customers for both major public transit systems; LYNX buses, and the Sun Rail Commuter Train.



WATER EFFICIENCY

3/11

WATER PERFORMANCE

Orange County, FL achieved a water performance score of 40/100 based on the daily per capita domestic water consumption value of 90 gallons (2015).

INTEGRATED WATER MANAGEMENT

Orange County, Florida demonstrates an integrated water management approach by achieving the ratio of water withdrawals for human use to the total freshwater resources at less than 0.2. In fact, for 2019, Orange County's ratio was estimated as 0.075, showing the strong commitment Orange County has made to effectively manage the water demand of increasing populations with the water supply availability.



WATER AUDIT AND AUTOMATION

Orange County Utilities (OCU) annually conducts the American Water Works Association (AWWA) Water Audit by utilizing the AWWA Free Water Audit Software (FWAS). OCU scored 89 for water provided to customers in the calendar year 2020 reflecting OCU's commitment to continuous refinement of data collection, implementation of best management practices, and adjusting policies that will propel the agency into the top tier in the future years. These water audits help to reduce water losses and improved efficiency.

In addition to completing the water audits, OCU uses multiple automated systems to manage the water and infrastructure that provides potable water to their customers. The SCADA (Supervisory Control and Data Acquisition) system covers over 99% of OCU's total water supply system. Continuous monitoring through SCADA facilitates compliance with the USEPA Ground Water Rule and ensures that the treatment technology used to treat drinking water reliably achieves 99.99% inactivation or removal of viruses.

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ENERGY AND GREENHOUSE GAS EMISSIONS 20/30

ENERGY PERFORMANCE

Orange County, FL achieved an energy performance score of 100/100 based on the total annual per capita scope 1 and scope 2 greenhouse gas emissions from all sectors measured as 7.64 MTCO₂ (2015).

Orange County is committed to become carbon neutral by 2040 with several aligning strategies to include increased renewable sources of energy, energy reduction in buildings, increased use of mass transit in conjunction with reduced annual VMT, increased usage and ownership of alternative fuel vehicles, and sustainable practices within county operations and the tourism industry. The County just completed its 2019 GHG inventory and plans to conduct GHG inventories every three years moving forward.



REDUCTION IN GREENHOUSE GAS EMISSIONS INTENSITY

Since 2005, Orange County has collected and evaluated greenhouse gas (GHG) emissions based on strong climate commitments made by resolution in 2007 to join the International Council for Local Environmental Initiatives (ICLEI) as a full member and participate in the Cities for Climate Protection® Campaign. Based on the decade of the GHG inventories collected, the County demonstrated a reduction of around 8% in carbon emissions intensity from 2013 to 2015 with respect to measured Gross Domestic Product (GDP) for the area.



MATERIALS AND RESOURCES 1/10

WASTE PERFORMANCE

Orange County, FL achieved the waste performance prerequisite through the Alternative Compliance Path. Though the County indicated the fluctuating amounts of total MSW tonnage for the three reporting years 2017 to 2019, they showed an upward trend for overall diversion by adopting strategies such as:

- Community recycling education
- Recycling Improvement Pilot Program where recycling carts were tagged informing residents when they put the correct and incorrect items in the cart for recycling.
- Two initiatives beginning in FY21: to develop a Sustainable Materials Management Plan (SMMP) and to build a new Materials Recovery Facility (MRF) that will allow for local recycling processing and for technology innovation to plan for improved recycling.



SPECIAL WASTE STREAMS MANAGEMENT

In addition to the waste from residential collection, the County receives and separates several different categories of special waste such as industrial, construction & demolition, hazardous, electronics, tires, white goods, batteries, and yard waste. The County has an established contracts focused on the proper handling and maximum of diversion of special waste materials as allowable by Florida Administrative Code. About 59% of the special wastes identified were diverted from the landfill in 2019.

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QUALITY OF LIFE

16/20

QUALITY OF LIFE PERFORMANCE

Orange County, FL achieved the quality of life performance score of 87/100 by tracking and measuring key indicators of education, equitability, prosperity, and health to elevate the living standards of all people in the County.

2019 Data of Orange County:

- Population with high school degree: 88.20%
- Population with bachelor's degree: 35.20%
- Median household income: \$63,461
- Median gross rent as % of household income: 32.40%
- Violent crime rate per capita per year: 0.0035
- Unemployment Rate: 4.0%
- Gini coefficient: 0.47
- Median air quality index: 36
- Air quality days unhealthy for sensitive groups: 0



AFFORDABLE HOUSING

Orange County adopted a Housing For All 10-year Action Plan in 2019 which identifies 15 specific actions with the intention to create 30,300 units of affordable housing units throughout the County by 2030. In March 2020, the Orange County Board of County Commissioners unanimously adopted Ordinance No. 2020-09 and established the Affordable Housing Trust Fund Program (AHTF Program) and the Affordable Housing Trust Fund (Trust Fund) for the purpose of creating and preserving affordable rental and ownership housing for very-low-income (30-50% AMI), low-income (50-80% AMI), and moderate-income (80-120%AMI) persons and households in the county.



INNOVATION

5/6

INNOVATIVE PERFORMANCE

Orange County, FL demonstrated innovative performance by implementing the following innovative programs:

1. Community repair program:

Fix-It. Don't Pitch It! is a community repair concept which promotes repairing broken household items to reduce landfill waste with the help of skilled volunteer 'fixers' from the community.



2. GBAC Star Accreditation: The GBAC (Global Biorisk Advisory Council) Star Accreditation program is the cleaning industry's outbreak prevention, response, and recovery accreditation intended to provide a safe environment for convention/event attendees. The Orange County Convention Center (OCCC) achieved this accreditation in June 2020 to positively impact over 1.5 million people annually during normal operations.

3. Energy efficiency and home resilience programs: Senior Climate Efficiency Program (SCEP) launched in 2020 is aimed at providing low-income seniors in Orange County, with high-efficiency air conditioning replacements and deep-energy retrofits aimed at overall energy savings of 30%. The second program, Solar Energy Loan Fund (SELF) also launched in 2020 provides access to flexible and affordable micro-loans for working-class, low-to-moderate (LMI) homeowners for home improvements and solar energy systems.

4. Solar co-op program: Orange County has partnered with Solar United Neighbors of Florida, a nonprofit, to provide technical assistance to neighborhood solar co-ops at no charge to participants. The co-op is designed to have community members utilize the power of bulk purchasing to obtain solar energy systems for their homes at a discounted price (15 to 33 %).

5. Funded and extensive septic to sewer conversion projects resulting from inclusive community engagement and a collaborative approach among elected officials, utility departments, and neighborhood organizations to secure funding.

Performance + Strategies



REGIONAL PRIORITY

4/4

Orange County, FL achieved a significant, measurable socio-economic and environmental Regional performance for the following programs:

1. Environmentally Sensitive Land

Acquisition Program– is one example of how Orange County fulfills the roles of preserving and protecting the resources of the region including wildlife, agriculture, water quality, and public health. Contiguous lands beyond the County's boundary are also preserved through regional collaboration and partnership.



2. Housing for All: In May 2018, Orange County, in cooperation with Seminole and Osceola counties and the City of Orlando, completed a Regional Affordable Housing Initiative to address the housing needs and opportunities in Central Florida. As part of the Orange County implementation efforts for that initiative, a 2019 Housing for All Action Plan was created and supported with dedicated funding with \$10M in general revenues.

3. Regional Resilience Collaborative: In 2018, the East Central Florida Regional Planning Council adopted a resolution recommitting to regionalism and supported a program to convene stakeholders across the region to develop a structure and framework for a Regional Resilience Collaborative (R2C). Eight counties (Orange, Osceola, Seminole, Volusia, Brevard, Sumter, Marion, and Lake) and 78 municipalities are a part of the regional resilience collaborative.

4. Thrive Initiative: Thrive is an initiative created by the Central Florida Foundation (CFF), a non-profit foundation with a framework to localize and implement the Sustainable Development Goals (SDGs) through grant-making priorities in support of five shared community goals; economic stability, healthcare, livability, education, and community and social connection. Orange County supports the framework and is partnering on technical assistance to align the funding needs of small to medium agencies with current County programs.