



City Commission Work Session

Agenda

December 15, 2022 @ 1:00 pm

City Hall - Commission Chambers
401 S. Park Avenue

welcome

Agendas and all backup material supporting each agenda item are accessible via the city's website at cityofwinterpark.org/bpm and include virtual meeting instructions.

assistance & appeals

Persons with disabilities needing assistance to participate in any of these proceedings should contact the City Clerk's Office ([407-599-3277](tel:407-599-3277)) at least 48 hours in advance of the meeting.

"If a person decides to appeal any decision made by the Board with respect to any matter considered at this hearing, a record of the proceedings is needed to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based." (F.S. 286.0105).

please note

Times are projected and subject to change.

-
1. **Call to Order**
 2. **Discussion Item(s)**
 - a. [Sustainability Action Plan](#) 2 Hours
 3. **Adjournment**



City Commission **agenda item**

item type Discussion Item(s)	meeting date December 15, 2022
prepared by Victoria Tabor	approved by
board approval	
strategic objective	

subject

Sustainability Action Plan

motion / recommendation

background

Work session to discuss city-wide initiatives related to sustainability and present updates to the Sustainability Action Plan.

alternatives / other considerations

fiscal impact

ATTACHMENTS:

[SAP Update FINAL](#)

ATTACHMENTS:

[Sustainability Action Plan 2022_Final Draft](#)



Sustainability Action Plan

2022 Update



Sustainability Program Staff



Gloria Eby
Natural Resources & Sustainability
Director
Master of Science – BS, Biology
Bachelor of Science – BS, Biology



Sara Miller
Sustainability Manager
B.A. Environmental Studies

Mia Brady
Sustainability Specialist
Environmental Studies

Keep Winter Park Beautiful & Sustainable Advisory Board

To improve the quality, sustainability and aesthetics of our environment in order to create a healthier, more beautiful place to live, work, and play for today's residents and future generations.

Appointee	Commission Member
Carey Bond	Commissioner DeCiccio
Ben Ellis	Mayor Anderson
Mark J Yonker	Commissioner Cruzada
Stephen Pategas	Commissioner Weaver
Rishona S Teres	Commissioner Sullivan
Laura Gustafson-Hullinger	Mayor Anderson
Catherine (Kay) Hudson	Mayor Anderson



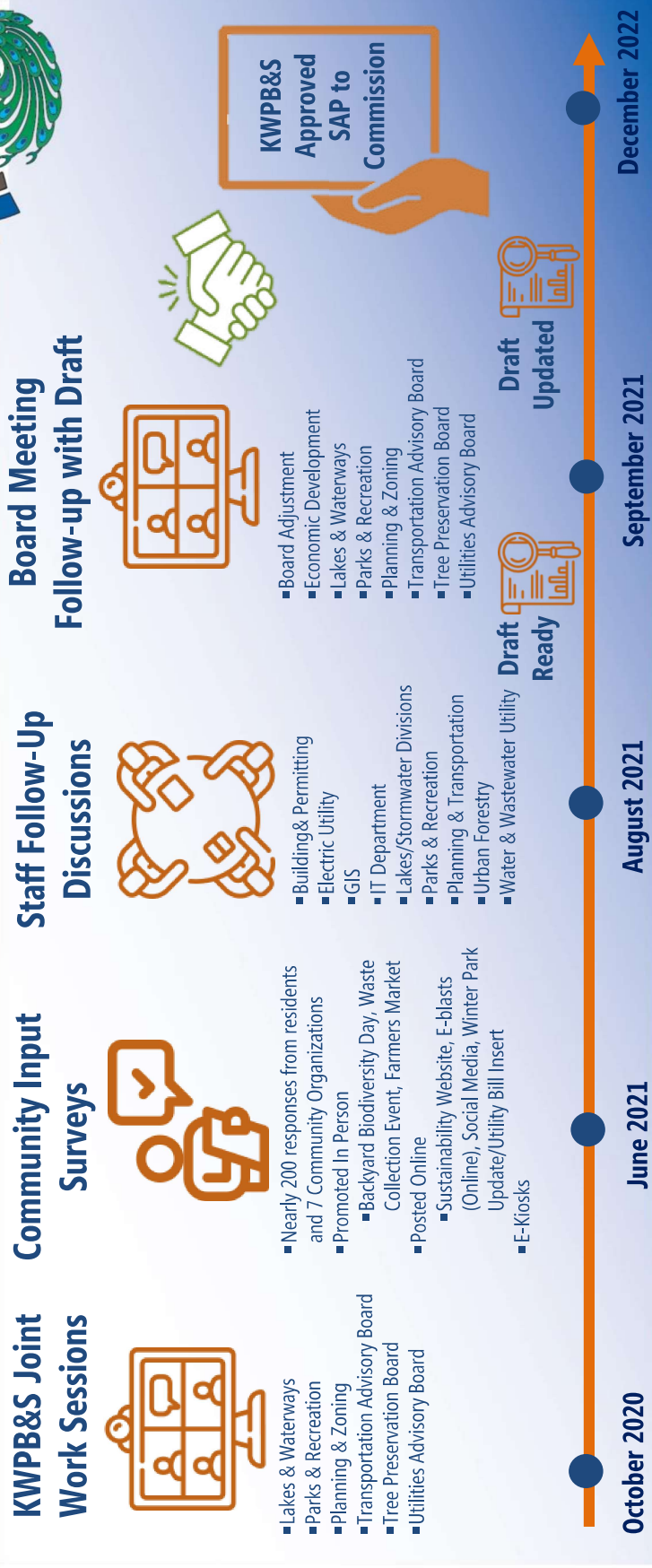
People. Planet. Prosperity.

In 2015, the City adopted a definition of sustainability that promotes...

responsible and proactive decision-making that minimizes negative impacts and maintains balance between social, environmental, and economic growth to ensure a desirable planet for all species now and in the future

2022 Sustainability Action Plan

Roadmap to Adoption





2022 Sustainability Action Plan

Climate Resiliency Chapter



<https://www.inquirer.com/weather/hurricane-dorian-bahamas-category-5-180-mph-winds-20190901.html>

Climate Resiliency

Basics of Climate Change

The Greenhouse Effect



Observations across the US and world provide multiple, independent lines of evidence that climate change is happening now.

- Changing temperature and precipitation patterns
- Increases in ocean temperatures, sea level, and acidity
- Melting of glaciers and sea ice
- Changes in the frequency, intensity, and duration of extreme weather events
- Shifts in ecosystem characteristics, like the length of the growing season, timing of flower blooms, and migration of birds

These changes are due to a buildup of greenhouse gases in our atmosphere and the warming of the planet due to the greenhouse effect.

Source: EPA, [Basics of Climate Change](#)

Source: U.S. Global Change Research Program, 2018: *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II*

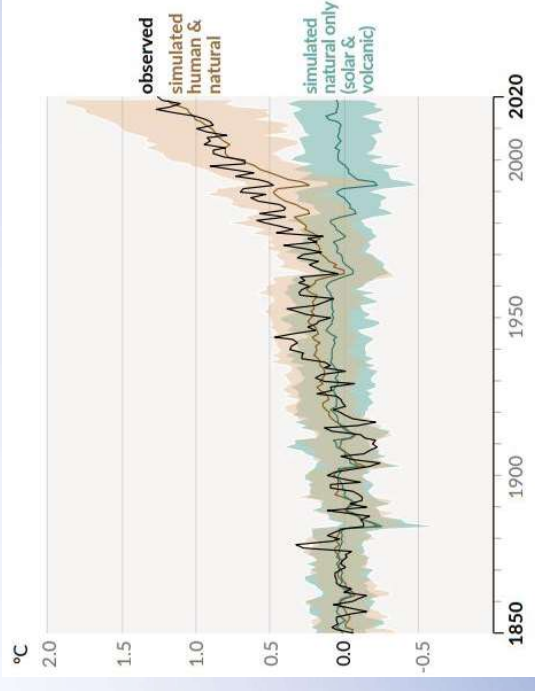
Climate Resiliency IPCC Assessment

According to Intergovernmental Panel on Climate Change (IPCC)

- Global warming of 1.5°C and 2°C will be exceeded during the 21st century unless deep reductions in carbon dioxide (CO₂) and other greenhouse gas emissions occur in the coming decades
- Climate-related risks to health, livelihoods, food security, water supply, human security, and economic growth are projected to increase with this anticipated global warming
- Many changes in the climate system become larger in direct relation to increasing global warming. They include increases in the frequency and intensity of hot extremes, marine heatwaves, and heavy precipitation, agricultural and ecological droughts in some regions, and proportion of intense tropical cyclones, as well as reductions in Arctic sea ice, snow cover and permafrost

Source: IPCC, 2021: [Headline Statements from the Summary for Policymakers](#)
IPCC, 2019: [Summary for Policymakers](#)

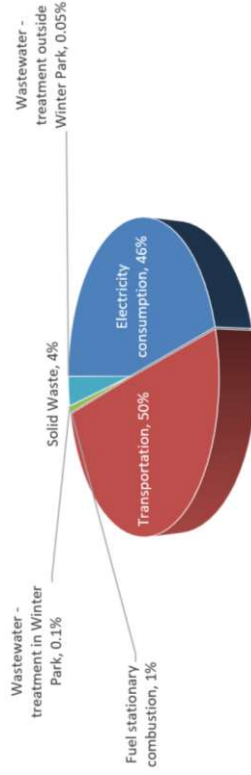
Change in global surface temperature (annual average) as observed and simulated using human & natural and only natural factors (both 1850-2020)



Source: Figure SPM.1 (b), IPCC, 2021: [Headline Statements from the Summary for Policymakers](#)

Climate Resiliency Greenhouse Gas Inventory

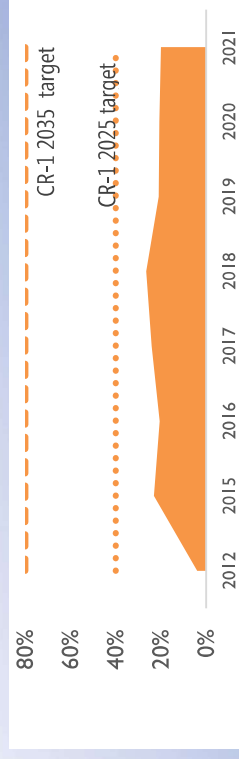
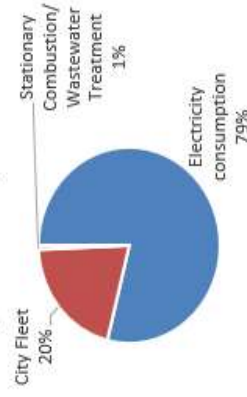
Community Wide GHG Inventory 2021



Community-wide Greenhouse Gas Inventory estimates

46% of GHG emissions came from electricity consumption
 50% of GHG emissions came from transportation
 4% of GHG emissions came from other sources
 (solid waste, wastewater treatment, stationary combustion)

Local Government Operations Greenhouse Gas Emissions [tons of CO2e] - 2021





2022 Sustainability Action Plan

Climate Resiliency



Improving the city's capacity to cope with climate change impacts, respond or reorganize in ways that allow the city to maintain its essential functions while also maintaining the capacity for adaptation, learning and transformation

Changes:

- **2021 City Data Benchmarked**
- Adjusted renewable energy targets to more realistic goals based on data
- Initiated 100% Renewable Feasibility Study with Quanta & Energy Efficiency Study with 15 Lightyears to better calibrate targets
- Granted \$100K to perform Vulnerability Assessment which will allow us to perform more accurate assessments regarding extreme events such as heat, rainfall, and flooding
- CR-4 population to be updated

	Indicator Description	Baseline	2021	2025 Target	2035 Target
CR-1	Proportion of renewable energy in Winter Park Electric Utility's Energy portfolio* – Baseline Year: 2012	4%	22%	2021 Benchmark	
CR-2	Community wide greenhouse gas emissions [Tons of carbon dioxide equivalent] – Baseline Year: 2018	398,919	405,394	10% less than baseline year	35% less than baseline year
CR-3	WP Electric Utility Customers with Solar – Baseline Year: 2012	7	139	200	250
CR-4	Proportion of Residents within 1/2 mile of affordable, healthy food options – Baseline Year: 2012	-	46%	50%	75%



New Action Items

- Food Security Policy- Community based grant program selected by committee
- Establish Grants for Food
- Collaboration with Community Partners and Leaders for Equality and Resilience
- Develop Climate Risk and Vulnerability Assessment and Plan

Climate Resiliency Food Security

Community Gardens → Adopt A Lot

- Aid our current community gardens
- Look into Adopt A Lot Program
 - City of Baltimore
- Microgrants to further help local Urban Farmer's





2022 Sustainability Action Plan

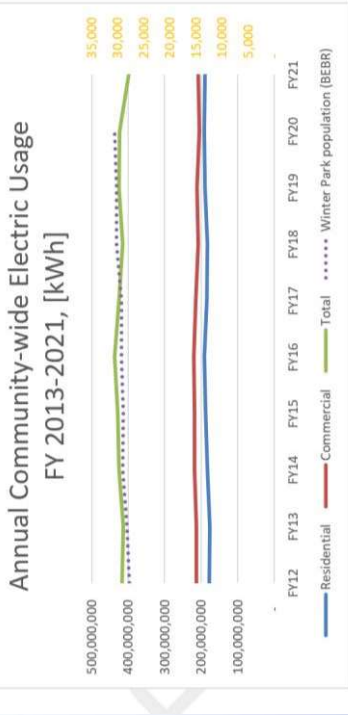
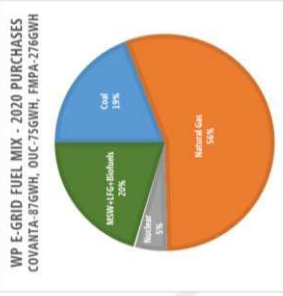
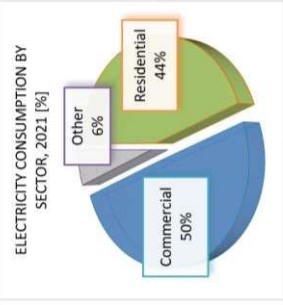
Energy Chapter



<https://www.nrel.gov/news/program/2020/nuclear-renewable-synergies-for-clean-energy-solutions.html>

2022 Sustainability Action Plan

Energy



Reducing the environmental consequences of the construction, reconstruction and operation of buildings and infrastructure with a focus on energy efficiency and energy conservation.

Changes

- Targets adjusted and determined based on average energy use of residential and commercial customers
- We decided not to use Energy Use Intensity but stick to Energy Use.
- Removed indicator tracking # of Commercial buildings to tracking# of Residential Rebates provided annually

	Indicator Description	Baseline	2021	2025 Target	2035 Target
E-1	Energy usage in residential buildings [kWh/customer/year] ¹ – Baseline Year: 2012	15,263	14,739	12,000	10,000
E-2	Energy usage in commercial buildings [kWh/customer/year] ¹ – Baseline Year: 2012	91,850	86,704	80,000	75,000
E-3	Residential building audits performed annually – Baseline: Average # of audits/yr between 2017-2020	63	91	125	200
E-4	Residential Rebates provided annually – Baseline: Average # of audits/yr and between 2017-2020	0	26	75	100

New Action Items

- Internal employee energy conservation training – reduction in energy and water use that provides incentives to help motivate conservation
- Conduct Energy Efficiency Study benchmarking city buildings utilizing 70% of city electricity portfolio and identify technology to improve energy efficiency
- Implement Energy Efficient Technologies based on Energy Efficiency Study i.e motion detection lighting and programmable thermostats
- Maintain competitive rates for WP Utility Customers
- Continue to pursue clean transportation options: Expanding City Fleet and EV Charging Stations for commuters



2022 Sustainability Action Plan

Water Chapter



<https://www.independent.ie/opinion/letters/our-national-attitude-to-precious-clean-water-is-very-immature-35945405.html>

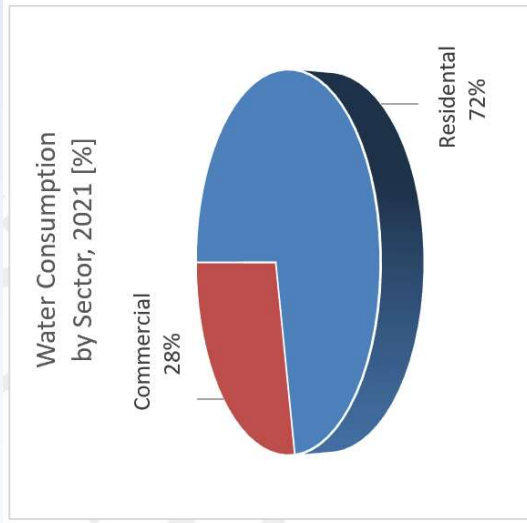
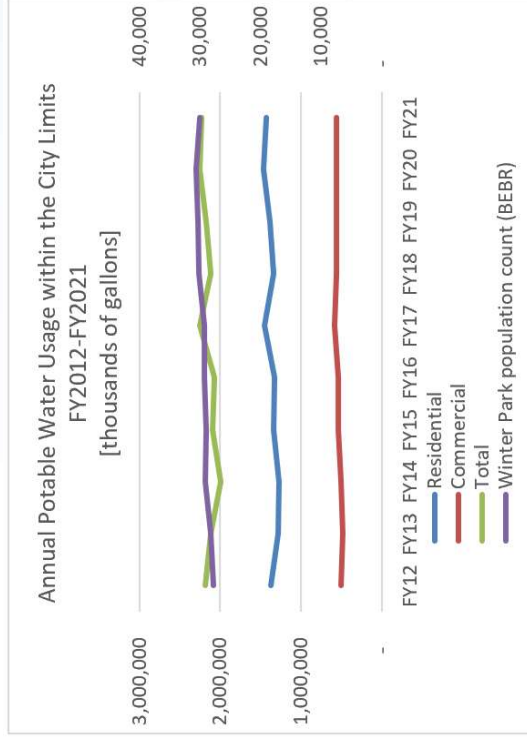


<https://www.irese.com/how-water-utilities-can-reassure-their-customers/>



2022 Sustainability Action Plan

Water



2022 Sustainability Action Plan

Water



Increasing water efficiency and water conservation in residential and commercial sectors

Changes

- Per capita correction
- Adjusted W-3 targets based on more attainable goals
- W-4 added rebates; untracked in prior years

	Indicator Description	2012 Baseline	2021	2025 Target	2035 Target
W-1	Water usage in residential buildings [gallons/customer/year] ¹	127,777	130,849	TBD	TBD
W-2	Water usage in commercial buildings [gallons/customer/year] ¹	294,098	303,788	TBD	TBD
W-3	Reclaimed water usage [million gallons/year]	145	92	10% increase	30% increase
W-4	Residential Rebates provided annually	-	34	75	150

¹Targets will be determined upon the renewal of St. Johns River Water Management District Consumptive Use Permit in 2025



New Action Items

- Explore a code requirement for commercial customers that encourages water conservation
- Create water conservation education program for schools, residents, business
- Create waterwise checklist for residents (similar to lakeside living checklist)



2022 Sustainability Action Plan Community Engagement & Green Economy Chapter





2022 Sustainability Action Plan

Community Engagement & Green Economy



Encouraging residents, business owners, schools and other organizations in the city of Winter Park to begin incorporating more sustainable solutions in their daily activities

Changes

- Indicator CEGE-1 adjusted from tracking number of community engagement events per year to total number of volunteer hours per year

	Indicator Description	Baseline	2021	2025 Target	2035 Target
CEGE-1	Volunteer hours for community engagement events	240	1304	No less than 1,500	No less than 2,000
CEGE-2	Green Businesses Recognized per year – Baseline Year: 2012	0	26	No less than 10	No less than 10
CEGE-3	Green School Grant Funding – Baseline: Average amount of funding between 2018-2021	\$3,300	\$2,890	Equal or more than \$3,500/year	Equal or more than \$3,500/year



- Start-up & Recalibration of GB Recognition Program
- Green Event Guide

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2022 Sustainability Action Plan Local Government Operations Chapter



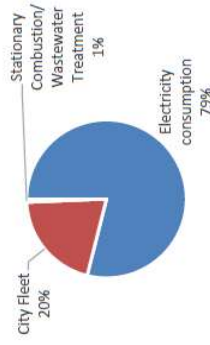
<https://the32789.com/2020/08/07/winter-park-residents-may-see-first-tax-increase-since-the-great-recession/>

2022 Sustainability Action Plan

Local Government Operations



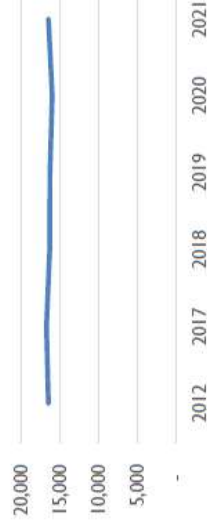
Local Government Operations
Greenhouse Gas Emissions
[tons of CO₂e] - 2021



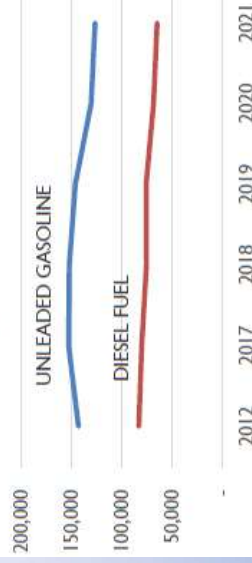
Annual Potable Water Usage for
Local Government Operations
[thousands of gallons]

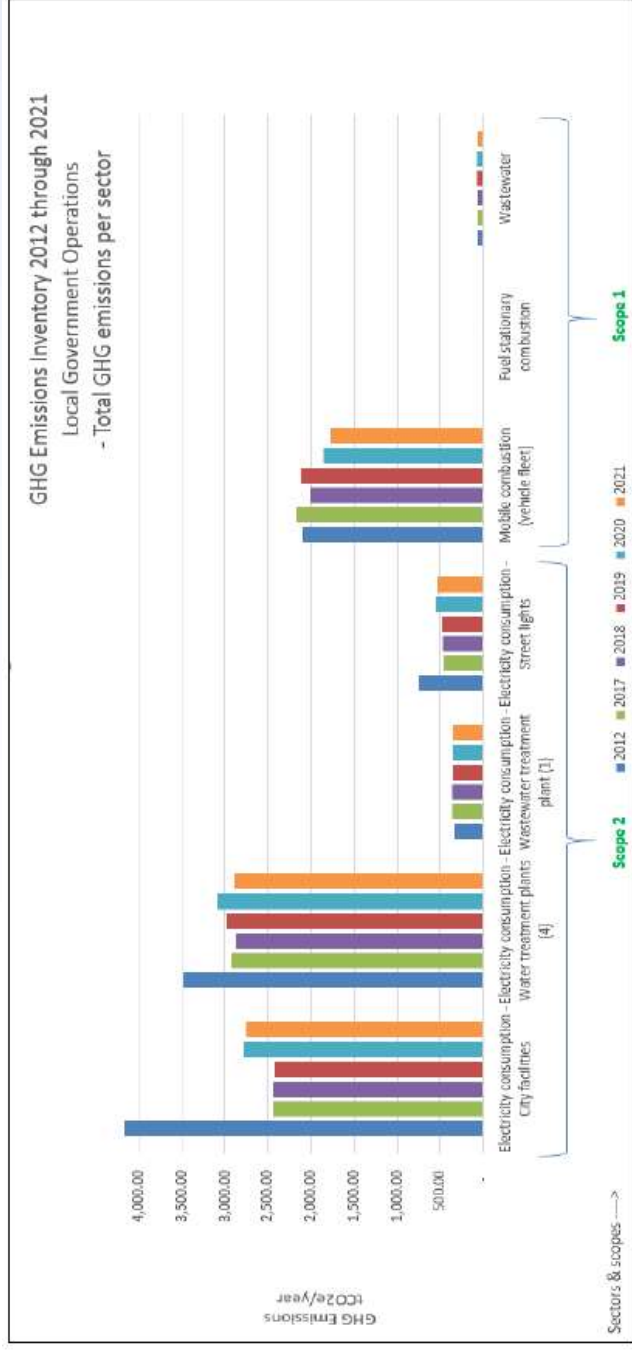


Annual Energy Usage for
Local Government Operations
(MWh)



Annual City Fleet Fuel Usage
[gallons]







2022 Sustainability Action Plan

Local Government Operations



Reducing GHG emissions of municipal operations, increasing municipal facilities' resiliency to the impacts of climate change, and encouraging resource protection and conservation.

Changes

- Removed previous LGO-3 indicator "installed renewable energy capacity" This was a metric not tracked in 2012 and felt that current staff did not have the ability to track
- Current LGO-3 target was adjusted from TBD to 100% of buildings audited by 2035 as Energy Efficiency project has initiated
- LGO-4 TBD based on consumptive use permit
- LGO-5-6 projects show TBD due to us starting to really tackle water consumption as well as fleet electrification here within the city.

2021 Sustainability Action Plan

Local Government Operations



	Indicator Description	2012 Baseline	2021	2025 Target	2035 Target
LGO-1	Local Government Operations greenhouse gas emissions [Tons of CO ₂ equivalent]	11,315	8,734.51	40% less than baseline year	80% less than baseline year
LGO-2	Energy usage for Local Government Operations [MWh/yr]	16,471	16,442.87	5% less	15% less
LGO-3	City-owned and city-operated facilities audited	3	3	50%	100%
LGO-4	Potable water usage [thousands of gallons] ¹	-	70,172	50% less	TBD
LGO-5	City Fleet fuel usage [gallons of unleaded gasoline]	143,268	126,747	Downward trend	TBD
LGO-6	City Fleet fuel usage [gallons of diesel fuel]	83,142	64,929	Downward trend	TBD
LGO-7	Number of city-owned Electric Vehicles ²	0	8	Increase	Increase
LGO-8	Number of Electric Vehicle charging Stations available for city business use [ports] ²	1	8	Increase	Increase

¹ Target based on data received from utility reporting based on all city facilities meters.

² By the end of 2020, the city had 6 electric vehicles (2% of total fleet) and 7 EV Charging Ports for Fleet Use

Fleet Electrification

FY 23 Replacement



FY 23 Replacement

Unit	Yr., Make, Model	Replacing with	EV/ Hybrid Option	Department
1075	2006 Ford F-150	Ford F-150 Electric	EV	Police
1307	2009 Chevy Tahoe	Ford Hybrid Explorer	possible EV	Police
1535	2011 Chevy Traverse	Ford Hybrid Explorer	Hybrid	Police
1536	2011 Chevy Traverse	Ford Hybrid Explorer	Hybrid	Police
1553	2012 Chevy Traverse	Ford Hybrid Explorer	Hybrid	Police
1554	2012 Chevy Caprice	Ford F-150 Electric (Tony Fairbanks)	EV	Police
2279	2011 Chevy 3500	Ford F-250	Gas Powered- no EV option	Fire
2294	KME Tiller	Pierce Tiller ladder fire truck	Diesel Powered- no EV option	Fire
3220	2007 Chevy 1500	Ford F-150, Ranger, or Maverick	possible EV or Hybrid	Code
4249	2003 Ford F-250	Ford F-150, Ranger, or Maverick	possible EV or Hybrid	Water Treatment
4348	2008 Chevy 1500	Ford F-150	Possible EV	Parks
4415	2003 Ford F-550	Ford F-550 utility body	Gas powered- no EV option	Water
7291	2002 Ford F-250	Ford F250 4x4	Gas Powered- no EV option	Lakes
8155	2008 Chevy Van	Ford Transit	Possible EV	Parks
8836	2012 Ford F-150	Ford F-150	Possible EV	Park Ranger Truck
9007	2005 International Line Truck	Altec Derrick Digger Truck	Diesel Powered- no EV option	Electric Utilities
9033	2013 Vermeer Bore Machine	Bore Machine	Diesel Powered- no EV option	Construction



- ARPA Funds-providing new EV vehicle for Sustainability Program
- EVs will be considered for all replacement vehicles where applicable- Not all vehicles applicable
- **11 out of 17** planned replacements are electric/sustainable
- **6 of the 17** replacements are construction or specialty related; no EV option available
- In 2021, city had only **8** EV's. FY23 Replacement Plan is **137.5%** increase in EV vehicles
- Challenge with market: 2 years out and with unexpected price increases (even gas powered)
- Need to increase Charging Stations as part of Electrification plan



Ford CEO on F-150 Lightning: 'We are sold out for at least a year or so'



Brian Sozzi · Anchor, Editor-at-Large

April 26, 2022 · 2 min read

In this article:

TSLA -0.34%	RIDE -2.11%	NKLA -1.24%	NIO +6.60%	F +0.15%	GM +0.63%
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If you want to get behind the wheel of Ford's first-ever all-electric truck dubbed the [F-150 Lightning](#), you will have to wait at least until 2023.

"Even if you know Jim Farley it probably wouldn't matter, we are sold out for at least a year or so," Farley told Yahoo Finance. "And we stopped taking orders unfortunately — in theory, a customer can make an order and then wait for two years, that doesn't make sense."

Farley says Ford has 200,000 reservations for the Lightning.



New Action Items

- (Solicit proposals for solar feasibility study for all city facilities updated to)
- Conduct Renewable Energy Feasibility Study — 5.25.22 commission approved to move forward
- Develop educational programs for city employees for water and energy conservation, sustainable transportation mode and waste management to include incentives (Sustainability Olympics/Wellness Challenges)
- City adoption of a flexible work plan to a four-day work week would decrease carbon emission
- Explore ways to quantify waste generated from city offices
- REESTABLISH: sustainability procurement policy that is fiscally responsible and aligns with sustainability goal that will include in the cities current comprehensive procurement policy
 - Create Green Event Checklist
 - Approved sustainable products list
- Upon renewal of SJRWMD Consumptive Use Permit, assess and identify opportunities for water conservation measures for all city facilities
- Utilize racial equity lens to assess city policies, initiatives, programs, and budget issues



2022 Sustainability Action Plan

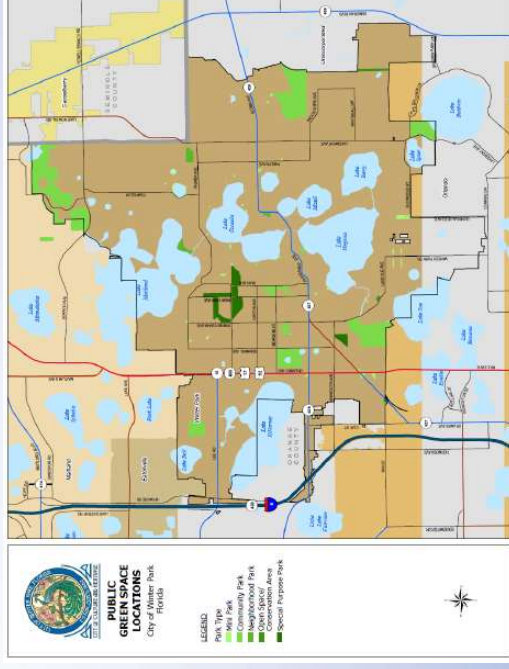
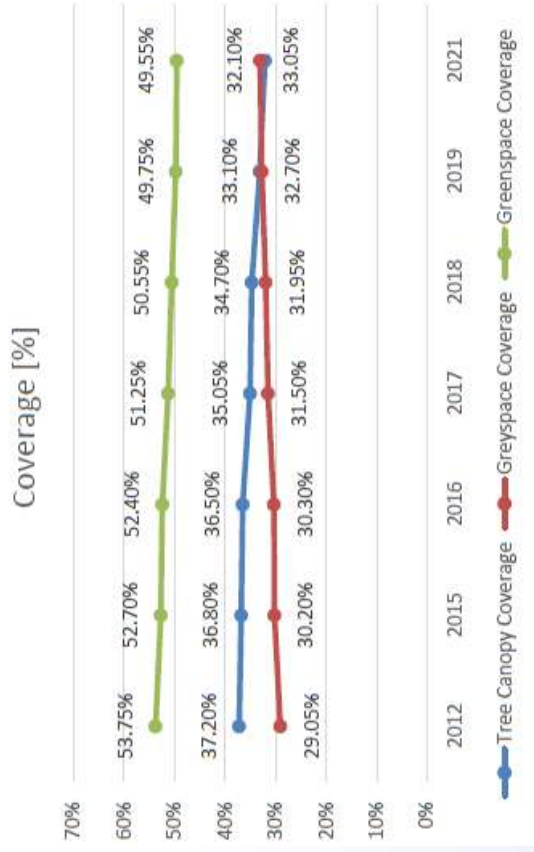
Natural Resources Chapter



<https://www.thestar.com/life/travel/2019/04/23/winter-park-chain-of-lakes-paddling-with-history-scenery.html>

2022 Sustainability Action Plan

Natural Resources





Preserving and enhancing the City of Winter Park's valuable natural features that help make the city such a great place to live

Changes to Objectives

1. Maintain and expand an equitable urban tree canopy
2. Increase overall greenspace
3. Increase parks and conservation space
4. Increase street trees within the city's rights of way
5. Maintain number of lakes meeting good water quality standard
6. Increase residents' and businesses' knowledge of best practices for urban tree canopy maintenance
7. Increase residential awareness on pollution prevention of natural water resources, including impacts of stormwater runoff and over-fertilizing for Winter Park lakes
8. Designate "no-smoking zones" for city parks and events
9. Creating a Mead Botanical Garden Comprehensive Plan documents



2022 Sustainability Action Plan

Natural Resources



Preserving and enhancing the City of Winter Park's valuable natural features that help make the city such a great place to live

Changes

- Previous Indicator NR-4 "Residents living with ½ mile from park space was removed due to the Parks & Recreation Advisory Board not coming to conclusion on the specific metric.
- New NR-4 & NR-5 to continue the cities canopy growth. Target is dependent upon the development code.
- We hope to continue to plant trees throughout our city!

	Indicator Description	Baseline	2021	2025 Target	2035 Target
NR-1	Tree Canopy Coverage - Baseline Year: 2019	33.10%	32.10%	Maintain	5% more
NR-2	Greenspace Coverage - Baseline Year: 2019	49.75%	49.55%	Maintain	5% more
NR-3	Greyspace Coverage - Baseline Year: 2019	32.70%	33.05%	Maintain	5% less
NR-4	# of Trees Removed	-	120	Maintain	TBD
NR-5	# of Trees Planted	-	150	Increase trend	TBD
NR-6	Percentage of City of Winter Park's Main Lakes ¹ meeting Good Water Quality Standard—Baseline Year: 2012	100%	100%	Maintain	Maintain

¹ Lakes Baldwin, Berry, Killarney, Maitland, Mizell, Osceola, Sue and Virginia



New Action Items

- Howell Branch Preserve
- Mead Botanical Garden Comprehensive Plan
- Develop a checklist of trees for residents to reference
- Adopt Artificial Turf Ordinance
- Periodic Review for Natural Resources Protection. Increase policy to save more trees within building code — land development code
- Water quality data readily accessible for all WP citizens to utilize
- GIS Modeling to predict tree canopy
- Establish Lakes Newsletter to inform citizens on the importance of lake side living
- Establish a lakeside living checklist for use when hiring lawn care/maintenance to prevent excess fertilizers and grass clippings from entering our waterways
- Implement lake vegetation bioassessment to benchmark and track the health of WP's Shorelines
- Add pollinator gardens to the initial landscape plan throughout the city
- Increase beneficial native aquatic plant shorelines for all Winter Park Lakes



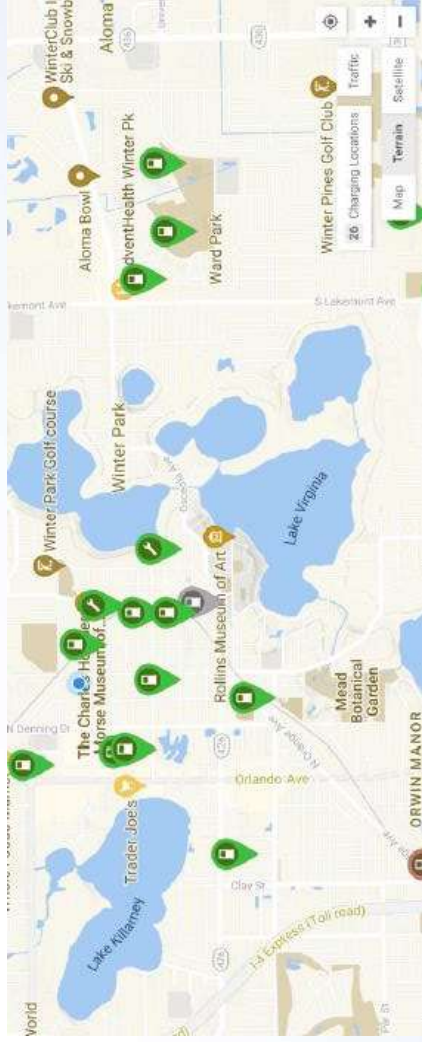
2022 Sustainability Action Plan Transportation and Urban Form Chapter



<https://westendmagazine.com/best-sustainable-trans-port/>

2022 Sustainability Action Plan

Transportation & Urban Form



2022 Sustainability Action Plan

Transportation & Urban Form

Encouraging healthier, more active forms of transportation such as walking, bicycling and using mass transit such as LYNX bus and SunRail commuter rail and increased connectivity

Changes

- TUF – 2 we removed improvements such as benches, water bottle filling stations, and sitting shelters as that is not part of Planning & Transportation's Mobility Plan
 - Enhanced Crossings for ADA compliance will be looked at mostly. i.e. voice activated cross walks
- TUF-3 we removed infrastructure improvements such as bike storage and bike repair stations as that is not part of Planning & Transportation's Mobility Plan
- Mobility Planning will start in 2022
- TUF-5 removed ports and adjusted to Public & Private EV charging Stations. Metric is tracked using PlugShare



	Indicator Description	2012 Baseline	2021	2025 Target	2035 Target
TUF-1	Sidewalk/Street improvements allowing for pedestrian and bicyclist use [Linear feet] ^{1,2} - Starting year 2022	-	930 LF	1 mile (cumulative)	3.5 miles (cumulative)
TUF-2	Pedestrian infrastructure improvements (enhanced crossings) [improved site/year] ² - Starting year 2022	-	5	10	25
TUF-3	Bicyclist infrastructure improvements (enhanced crossings, bike racks) [improved site/year] ² - Starting year 2022	-	22	15	30
TUF-4	Improved transit stops (benches, transit shelters, waste receptacles, etc.) [improved transit stop/year] ² - Starting year 2022	-	0	2	4
TUF-5	Public & Private EV Charging Stations ³	7	156	30 additional	25 additional

¹ e.g., converting a sidewalk to a mixed use trail or adding a bike lane to an existing road

² Targets for TUF-1, TUF-2, TUF-3 and TUF-4 will be determined and baseline adjusted upon completion of Mobility Plan

³ As of 2020, the city has 14 EV Charging Ports for Public Use (info pulled from PlugShare)



New Action Items

- Access to workforce community
- Implement public and private rideshare partnership opportunities that will promote the use of the cities SunRail System
 - Smart Bus (Free Bee or similar) model app for City-wide rideshare program which provides free rides, on-demand, door-to-door, in 100% electric vehicles



2022 Sustainability Action Plan Waste Management Chapter



<https://www.orlandosentinel.com/news/orange-county/os-hurricane-dorian-orange-county-garbage-collection-20190905-75fhusvhwlbjpkb3mua-ue-story.html>

2022 Sustainability Action Plan

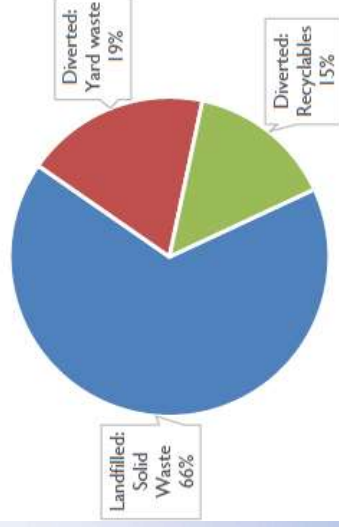
Waste Management



Residential Waste Generated 2012-2019 [tons/year]



Residential Waste Generated 2021 [%]



2022 Sustainability Action Plan

Waste Management

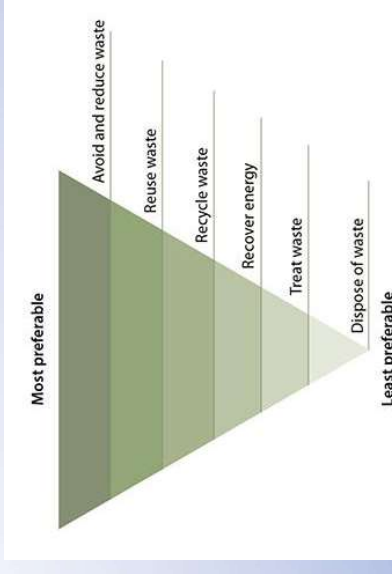


Reducing the amount of waste generated, encouraging the reuse and repair of products, and diverting waste from the landfill

Changes

- WM-3 target adjusted from 5% less to 10% more
- WM-3 2035 Target adjusted from 10% less to 20% more
- We want to continue to reduce our waste and divert as much as possible for residents, city, and commercial businesses

	Indicator Description	2012 Baseline	2021	2025 Target	2035 Target
WM-1	Residential Waste Generated [tons] ¹	14,714	15,018	5% less	10% less
WM-2	Residential Solid Waste Landfilled [tons]	9,890	10,004	10% less	20% less
WM-3	Residential Waste Diverted from Landfill [tons] ²	4,824	5,014	10% more	20% more



¹Includes tonnage collected from residential households (solid waste, yard waste and recycling)
²Includes tonnage of waste diverted for other purposes (i.e., recyclables recycled and yard waste used for landfill cover)



New Action Items

- New focus on zero waste: REDUCE-REUSE-RECYCLE
- Analyze implementation of a Food Waste Diversion Program for Center Street and Farmer's Market
- Implement a Green Event Guide
- Establishing an ordinance to ban all Styrofoam products city-wide
- Consider a mandate for commercial ordinance for recycling and composting



Action Item Tracker List



Category	Action Item
Climate Resiliency	Update Land Development Code, to allow food processing and handling in accordance with F.S. 500.80 (Cottage Food Operations) as a home occupation to encourage local food production
Climate Resiliency	Adopt Backyard Chicken Program (exp. September 2022) to evaluate program outcomes and possibility of expanding and extending the program
Climate Resiliency	Build a community based sustainable food system which includes education and outreach that promotes seed access, growing edible gardens at home, and encourages community supported agriculture and local food consumption.
Climate Resiliency	Establish community grants for food security and sustainability initiatives
Climate Resiliency	Implement a food security policy. Must have community garden/ farm near most vulnerable areas.
Climate Resiliency	Research and design policies to increase green building standard requirements in residential & commercial developments
Climate Resiliency	Internal employee energy conservation training – reduction energy and water. Incentives used to help motivate.
Energy	Conduct benchmark of all city buildings utilizing 70% of city electricity and identify technology for energy efficiency.
Energy	Explore incentive programs for commercial customers that encourage energy conservation
Energy	Explore a code requirement for commercial customers that encourages water conservation
Water	Using AMI system to identify customers in non-compliance with SJRWMD irrigation policies and provide non-compliant customers with water conservation best practices
Water	
Community Engagement and Green Economy	Create Green Event Guide and Volunteer Program for city events

Lakes Engagement 2023



"Dock Party"



- January 28th – [Lake Sue / Lake Chelton](#)
- February 16th – Chain of Lakes ([Virginia/Mizell/Osceola/Maitland](#))
[Meet and Greet at the Event Center](#)
- February 25th – [Lake Berry](#)
- March 25th – [Lake Virginia / Lake Midget](#) at Dinky Dock
- April 29th - [Lake Killarney](#)
- May 20th – [Lake Sylvan](#) at Harris Park
- June 24th – [Lake Bell](#) at Commissioner Weaver
- July 29th – [Lake Knowles](#) and [Lake Wilbur](#)
- August 26th – [Lake Osceola](#)
- September 30th – [Lake Temple](#) and [Lake Tuscany](#)
- October 28th – [Lake Mizell](#) street
- November 18th – [Lakes Baldwin, Spear, Compton, Forrest and Grace](#) at Lake Baldwin Dock
- December 30th – [Lake Maitland](#) at Azalea Kraft Garden Dock

Sustainability Team



Gloria Eby
Natural Resources &
Sustainability Director
Master of Science – BS, Biology
Bachelor of Science – BS, Biology



Sara Miller
Sustainability Manager
B.A. Environmental Studies

Mia Brady
Sustainability Specialist
Environmental Studies

▪ Discussion? ▪ Adoption Plan??



Winter Park Sustainability Action Plan

2022 Update

Presented by:

Gloria Eby, Natural Resources and Sustainability Director

Sara Miller, Sustainability Manager

Mia Brady, Sustainability Specialist

Keep Winter Park Beautiful & Sustainable Advisory Board

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Background

Vision and Purpose

The 2022 Sustainability Action Plan (SAP) updates and expands upon the City of Winter Park's 2015 SAP. The purpose of the SAP remains the same, to create a roadmap depicting where the city is today and where it would like to be in the future, in regard to sustainability.

The city defines sustainability as responsible and proactive decision-making that minimizes negative impact and maintains balance between social, environmental, and economic growth to ensure a desirable environment for all species now and into the future.

By integrating elements of this plan, Winter Park will:

- Increase quality of life while improving individual and community health
- Become more independent from energy derived from fossil fuels
- Protect and enhance air quality, water quality, and natural systems
- Save money
- Increase economic value

It is the intention of this document to provide high level objectives that are conceptually approved by the City Commission and leadership. The actions listed under each category are put forth as possible avenues for achievement of the approved goals, and do not represent required or prescriptive measures. The plan is a living document intended to evolve over time as the city experiences both progress and challenges.

A progress report will be presented to the City Commission on an annual basis. This annual report will include:

- Summary of progress made toward the previous year's indicators and actions
- Proposed project/action list
- Estimated project costs
- City staff and budget allocations
- Outside funding opportunities

History

On January 14, 2008, the Winter Park City Commission passed a resolution stating the City would pursue measures to become a certified Green Local Government through the [Florida Green Building Coalition](#) (FGBC). In 2009, Public Works Director Troy Attaway hired Tim Maslow to coordinate the city's sustainability efforts and to develop a plan for achieving the certification. In 2011, after working with each department on a multitude of new projects, policies and programs, the city was officially certified as a Green Local Government at the Gold level, also earning the highest score for a local government that year. The SAP was originally drafted based upon the structure provided by the Green Local Government certification.

In 2012, the city's Environmental Review and Keep Winter Park Beautiful (Keep America Beautiful affiliate since 1993) boards merged with a shared focus of improving community sustainability and achieving the Green Local Government Platinum certification. The new Keep Winter Park Beautiful and Sustainable (KWPB&S) Advisory Board held monthly workshops in addition to their regularly scheduled monthly board meetings in an effort to develop and refine the SAP with community involvement. The 2015 SAP, presented by Kris Stenger, Assistant Director of Building, Permitting and Sustainability and Abby Gulden, Sustainability and Permitting Coordinator, was accepted by unanimous vote of the City Commission on February 9, 2015.

2012-2013 KWPB&S Board Members		2014-2015 KWPB&S Board Members	
Mary Dipboye, Chair	James (Bob) Robinson	Michael Poole, Chair	Mark Roush
Stephen Pategas, V. Chair	Pat Schoknecht	Stephen Pategas, V. Chair	Bruce Thomas
Michele Hipp	Julia Tensfeldt	Michele Hipp	Steven DiClemente
Michael Poole	Kent Tse	Raymond Randall	Mary Dipboye
Raymond Randall	Laura Walda	Pat Schoknecht	John Tapp
John Rife	Carol Kostick	Julia Tensfeldt	Fred Kosiewski
Lucy Roberts	Mark Roush	Laura Walda	Cathy Blanton
Joseph Robillard		Carol Shenck (Kostick)	

About the 2022 SAP Update

Overview

The year 2020 was the first target year for many of the 2015 SAP metrics. Due to the COVID-19 pandemic, data from 2020 is not comparable to previous years. For this reason, trend data for the 2021 document were only expressed through the year 2019 (pre-COVID-19 pandemic). The city's progress toward the 2015 SAP Objectives, Indicators, and Actions through 2020 is provided in the 2020 Annual Report available at cityofwinterpark.org/sap.

The 2021 SAP revises baselines, where necessary, for more complete and accurate data collection and analysis. It also includes a new category, Climate Resiliency, to help the City better understand and withstand weather and climate-related risks and vulnerabilities. The update also includes actions to apply a [racial equity lens](#) to ensure a future where race can no longer be used to predict life outcomes and where outcomes for all groups are improved.

During 2021, many programs and goals were suspended due to prior sustainability staff no longer employed at the city. In 2022, the Sustainability Program was moved to the newly created Natural Resources and Sustainability Department. The 2022 SAP revision contains edits made to the 2021 SAP being implemented by the Sustainability Division consisting of the Sustainability Specialist, Sustainability Manager, and Natural Resources and Sustainability Director.

In addition, as a result of the above-mentioned delays, the Department of Natural Resources and Sustainability conducted a comprehensive inventory of all SAP metric indicators to benchmark city status in effort to give the new Department a starting point on data trend and analysis moving forward. This information is presented in subsequent tables labeled as “**2021 Status**”.

2021 SAP Update Community Engagement Process

The 2021 SAP integrates discussion and feedback from joint virtual KWPB&S Advisory Board work sessions, which allowed for public comments, with the following city advisory boards and respective staff liaisons: Economic Development, Lakes and Waterways, Parks and Recreation, Tree Preservation, Planning and Zoning, and Transportation and Utilities. Additional community input on SAP priorities were gathered using an online survey that had over 200 respondents (over two-thirds were identified as residents). Community input was also gathered from community organizations via an online survey from Hannibal Square Heritage Center, Ideas for Us Orlando, League of Women Voters Orange County, The Nature Conservancy, Winter Park Garden Club, Winter Park History Museum, and Winter Park Public Library.

Keep Winter Park Beautiful & Sustainable Advisory Board

The mission of Keep Winter Park Beautiful and Sustainable (KWPB&S) Advisory Board is to make recommendations to the city commission concerning matters to improve the quality, health, sustainability and aesthetics of our environment in order to create a healthier, more beautiful place to live, work, and play.

2022 KWPB&S Board Members	Appointed By	End of Term
Ben Ellis, Vice Chair	Mayor Anderson	2024
Carey Bond	Commissioner DeCiccio	2023
Mark J Yonker	Commissioner Cruzada	2025
Kay Hudson, Chair	Mayor Anderson	2024
Stephen Pategas	Commissioner Weaver	2025
Rishona S Teres	Commissioner Sullivan	2023
Laura Gustafson-Hullinger	Mayor Anderson	2024

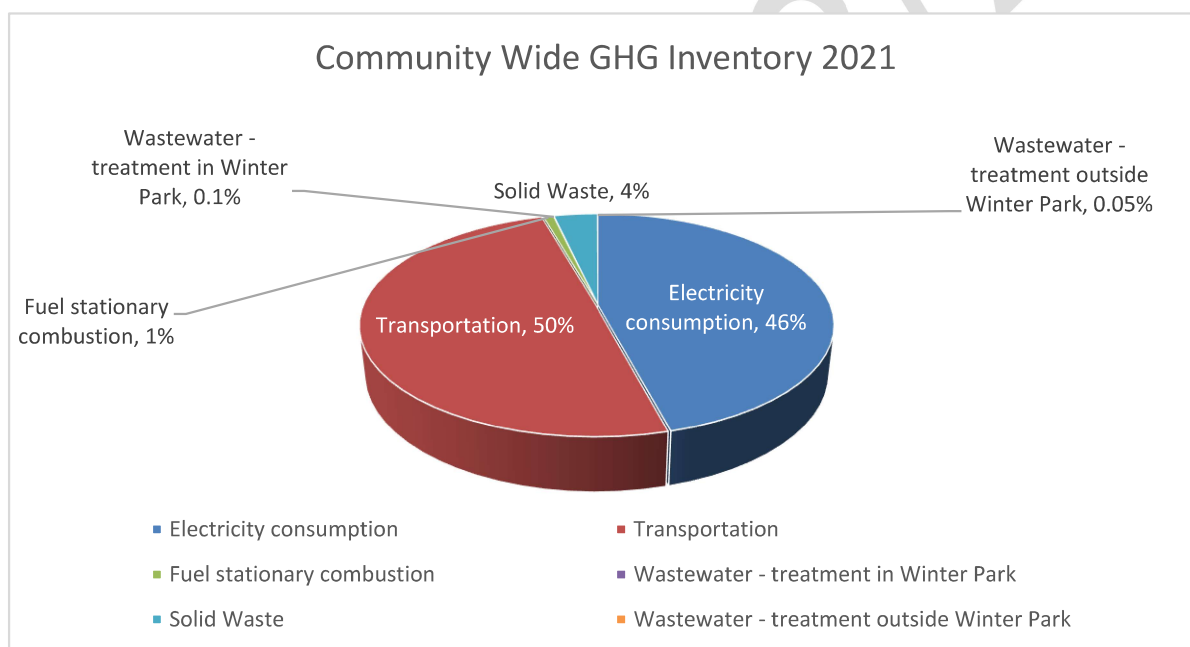
Highlights and Accomplishments

- [East Central Florida Regional Resilience Collaborative](#) Partner and Regional Greenhouse Gas Reduction Advisory Committee Member
- [Solar United Neighbors](#) Partner
- [America In Bloom's](#) 2020 Outstanding Achievement Award for Environmental Efforts
- [SolSmart](#) Gold Designee
- EV Charging Infrastructure Readiness Ordinances ([3203-21](#), [3204-21](#))
- Backyard Chicken Permit Pilot Program Ordinance ([3182-20](#))
- Single-use Products Policy for City Facilities Pilot Program Resolution ([2238-20](#))
- Electrified the Building & Permitting Department's entire fleet
- Purchased 20MW of utility-scale solar, expanding the city's renewable portfolio
- Launched [Green Business Recognition Program](#)
- Collaborations with UCF and Rollins College students on energy benchmarking and Green Business recruitment
- [Rollins College Bonner Leaders Program](#) Partner

- Awarded over \$100,000 in Florida Department of Transportation Keep America Beautiful Florida Affiliates Grants
- Single-stream Residential Recycling Program including [Schedule Reminding and Waste Lookup Tool Digital Service](#)
- Electric Vehicle Charging Stations available to the public throughout the city at no cost
- Residential audit and rebate programs encouraging [energy](#) and [water conservation](#)
- Sustainability Program moved to the Natural Resources and Sustainability Department where the Program now is addressed as a Division to work collaboratively with Lakes and other Departments
- Sustainability Specialist position was increased from part-time to full-time in order to help the Sustainability Manager and Natural Resources and Sustainability Director fulfill the goals of the SAP
- Awarded \$100,000 from the Department of Environmental Protection to go towards the City's Climate Risk Vulnerability Assessment

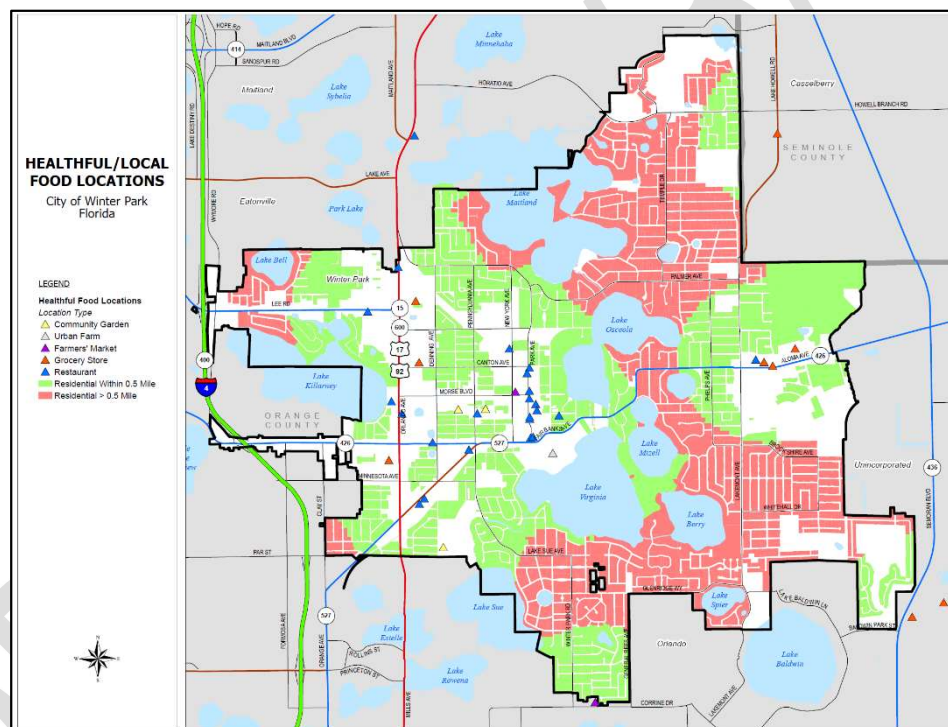
Climate Resiliency

The [Climate Resiliency](#) category outlines long-term objectives and short-term actions focused on improving the city's capacity to cope with [climate change](#) impacts and to respond in ways that allow the city to maintain its essential functions while also maintaining the capacity for adaptation, learning, and transformation. In 2021, the Intergovernmental Panel on Climate Change (IPCC) *Sixth Assessment Report* asserts that human activities are estimated to have caused approximately 1°C of global warming to date and further warming of 1.5°C and 2.0°C will be exceeded during the 21st century unless deep reductions in CO₂ and other [greenhouse gas](#) emissions occur in the coming decades. Warming at this level is projected to increase the mean temperature of most land and ocean regions, increase hot extremes in most inhabited regions, and increase climate-related risks to health, livelihoods, food security, water supply, human security, and economic growth.



The city's Community-wide Greenhouse Gas (GHG) Emissions Inventory consists of all major direct and indirect GHG emissions generated and occurring within the City of Winter Park's organizational boundary. Transportation-related (50%) and electricity consumption-related (46%) activities contribute the largest proportion of greenhouse gases emissions in the city. As a municipally owned-utility, the Electric Utility is uniquely situated to increase the percentage of its energy portfolio coming from renewable and clean alternative sources. Transitioning to 80% [renewable energy](#), for all electricity and transportation may be more feasible and accessible for the City of Winter Park than many of its neighbors given that it has purchasing power over its electricity and is implementing policies that will ready future developments for a transition to electric vehicles.

In May of 2022, the City of Winter Park was awarded \$100,000 in grant funding from the Florida Department of Environmental Protection to conduct a [Climate Risk Vulnerability Assessment](#) which will identify ways in which the city is susceptible to harm from climate threats and vulnerabilities. This uses science-driven data about climate threats and works with private/public organizations, the City's [Emergency Management](#) Team, and [FEMA](#). The scientific data is combined with information about the City of Winter Park's residents, assets, and businesses to better understand current and future challenges with long-term operability and recovery. Creating a Food Security policy, one that allows front yard structures (such as arbors, trellises), for growing edibles is one of many desired outcomes in strengthening the city's vulnerability. A key component would be delivering access to affordable, healthy food options (community gardens, or farmers markets) through a selection process involving community partners (such as Center for Health and Well Being and Winter Park Library's Seed Library Program) and investors. Below is a map illustrating healthy food locations within the Community Restoration area (CRA).



OBJECTIVES

1. Increase the city's resiliency to the impacts of climate change, ensuring a healthy, livable and sustainable community for present and future generations
2. Ensure a robust and resilient technology infrastructure with high-speed communications available for all
3. Increase proportion of renewable energy in Winter Park Electric Utility's Energy portfolio
4. Reduce community wide greenhouse gas emissions

5. Encourage on-site renewable energy generation for residential and commercial buildings
6. Ensure access to affordable, healthy food options for food security (community gardens, grocery stores or farmers markets)
7. Increase residential and commercial customers knowledge of city's renewable energy portfolio and opportunities for reducing their [carbon footprint](#)
8. Benchmark all indicators to current state of the city given pandemic and operational delays

The Department of Natural Resources and Sustainability conducted a comprehensive inventory of all SAP metric indicators to benchmark city status in effort to give the new Department a starting point on data trend and analysis moving forward. This information is presented in all subsequent tables labeled as “**2021 Status**”.

INDICATORS

	Indicator Description	2012 Baseline	2021 Status	2025 Target	2035 Target
CR-1	Proportion of renewable energy in Winter Park Electric Utility's Energy portfolio – Baseline Year: 2012 includes Covanta	4%	22%	40%	80%
CR-2	Community wide greenhouse gas emissions [Tons of carbon dioxide equivalent] ¹ – Baseline Year: 2018	398,919	405,394	10% less than baseline year	35% less than baseline year
CR-3	WP Electric Utility customers with Solar – Baseline Year: 2012	7	139	200	250
CR-4	Proportion of Residents within 1/2 mile of affordable, healthy food options – Baseline Year: 2012	-	46%	50%	75%

¹2018 is the earliest year of available transportation emissions data using [Google EIE tool](#)

²The baseline for this updated indicator will be calculated in 2023, previous indicator did not include “affordable” identifier

ACTIONS

Projected Implementation Year	Action	Accomplished	Status	Responsible Department/ Division
2022	Conduct Renewable Energy Feasibility Study	5.25.22 commission approved to move forward	Initiated	Sustainability Division, Quanta, & WP Electric Utility, Public Works
2023	Establish community grants for food security and sustainability initiatives	No	None	Sustainability Division

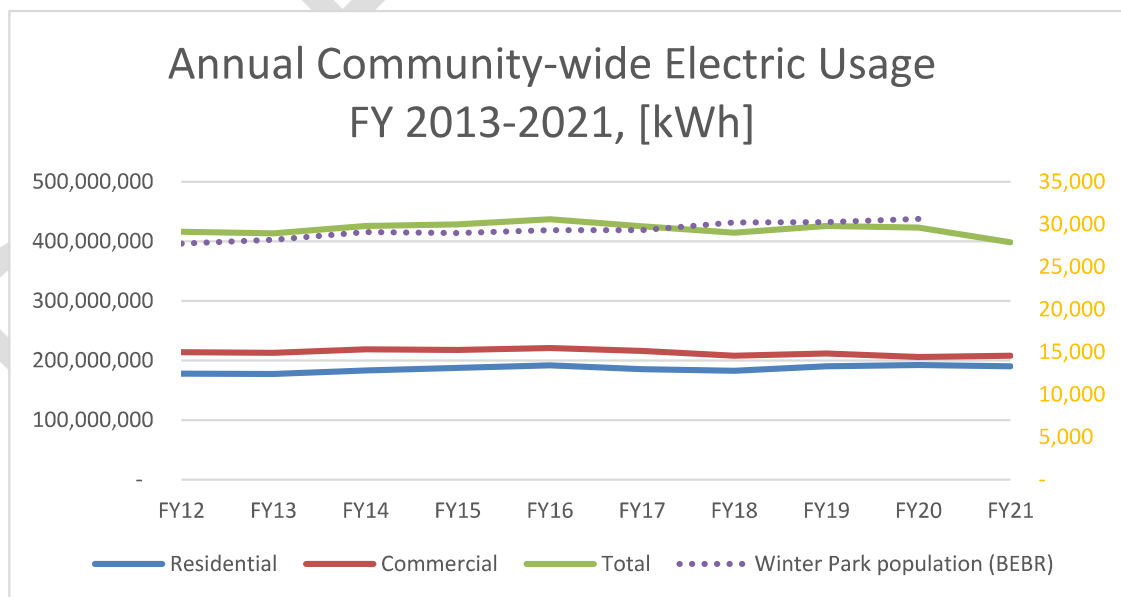
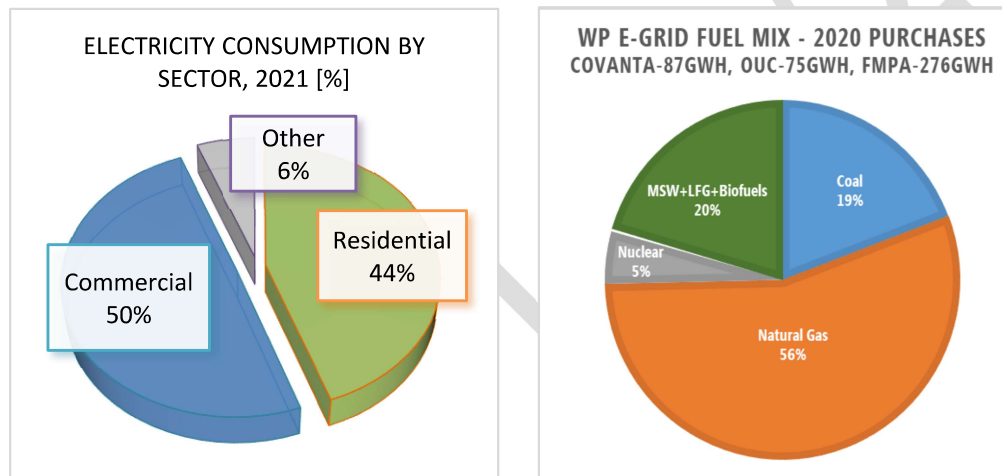
Projected Implementation Year	Action	Accomplished	Status	Responsible Department/ Division
2022	Implement an Artificial Turf Ordinance which will help mitigate the number of houses that have artificial turf by addressing stormwater and sustainability concerns	No	None	Sustainability Division, Public Works
2022	Adopt Backyard Chicken Program (exp. September 2022) to evaluate program outcomes and possibility of expanding and extending the program	No	Initiated	Sustainability Division, Planning & Transportation
2023	Upon feasibility study results, pass resolution committing the City to at least 80% of all electricity consumed in the City to come from renewable energy resources by feasible target date	No	Initiated	Sustainability Division, WP Electric Utility
2023	Conduct a Climate Risk and Vulnerability Assessment via FDEP Resilient Florida Program \$100K grant. Upon completion, create Climate Mitigation and Adaptation Plan (CMAP) to include creating resilience hubs within the city reducing impacts of climate change on human health, esp. for most vulnerable communities	No	Initiated	Natural Resources & Sustainability Dept., Emergency Management Team, Pubic Works, IT
2023	Build a community based sustainable food system which includes education and outreach that promotes seed access, growing edible gardens at home, encourages community supported agriculture, and local food consumption	No	None	Sustainability Division, Communications
2023	Implement a food security policy. Must have community garden/ farm near most vulnerable areas and educate on reducing consumption of carbon-intensive foods	No	None	Sustainability Division, GIS

Projected Implementation Year	Action	Accomplished	Status	Responsible Department/ Division
2024	Research and design policies to increase green building standard requirements in residential & commercial developments	No	None	Sustainability Division, Planning & Transportation, Building & Permitting, Economic Development
2024	Update Land Development Code, to allow food processing and handling in accordance with F.S. 500.80 (Cottage Food Operations) as a home occupation to encourage local food production	No	None	Planning & Transportation, Economic Development, Sustainability Division
Continue Annually	Develop a policy to replace gas-powered leaf blowers with electric alternatives	Yes	Completed	Sustainability Division, Economic Development
Continue Annually	Evaluate potential for increasing Winter Park Electric Utility's Energy Portfolio coming from renewable resources	Yes	Ongoing	Sustainability Division, WP Electric Utility
Continue Annually	Conduct Community-wide Greenhouse Gas Emissions Inventory and track proportion of renewables in the WP Electric Utility's portfolio. Continue to report to CWP	Yes	Ongoing	Sustainability Division
Continue Annually	Participate in Regional Sustainability and Resilience Professional Networks (Urban/Southeast/Florida Sustainability Directors Networks, East Central Florida Regional Resilience Collaborative, Good Food Central Florida Regional Policy Council, etc.)	Yes	Ongoing	Department of Natural Resources & Sustainability Dept.
Continue Annually	Provide green building best practices (e.g., energy/water efficiency, tree conservation, waste management) education to building professionals and residents	Yes	Ongoing	Building & Permitting, Sustainability Division, Urban Forestry

Projected Implementation Year	Action	Accomplished	Status	Responsible Department/ Division
Continue Annually	Energy Conservation Rebate Program	Yes	Ongoing	Sustainability Division
Continue Annually	Develop recommendations to City Commission that would allow for broadband availability, expanding public WiFi, and enhanced public safety and security	Yes	Ongoing	IT, Sustainability Division, Planning & Transportation, Police Dept., Public Works
Continue Annually	Explore opportunities for smart street lights able to gather local environmental data, optimize light energy consumption, and improve public safety	Yes	Ongoing	IT, WP Electric Utility, Planning & Transportation, Police Dept., Sustainability Division
Continue Annually	Work with Planning & Transportation Department to ensure Comprehensive Plan Update incorporates sustainability and resilience related goals, objectives and policies	Yes	Ongoing	Planning & Transportation, Sustainability Division

Energy

The Energy category focuses on measures that can reduce the environmental consequences of the construction, reconstruction and operation of buildings and infrastructure with a focus on energy efficiency, energy conservation, and clean energy sources. With buildings' energy usage contributing to nearly half of all of the community-wide greenhouse gas (GHG) emissions in 2021, implementing the prescribed actions is critical to achieving a more sustainable city. Electricity is primarily being used to power buildings for commercial (50%) and residential (44%) activities, while a smaller fraction (%) is being used to power city scale infrastructure such as streetlights and transporting water and [wastewater](#). Between 2012 and 2021, electric usage remained generally stable.



All utility data is sourced from the city's Comprehensive Annual Financial Reports, which can be reviewed on the city's website.

OBJECTIVES

1. Increase energy efficiency of residential and commercial buildings
2. Increase energy conservation in residential and commercial sectors
3. Increase solar energy in residential and commercial sectors
4. Increase educational awareness for energy efficiency and conservation best practices
5. Maintain utility rates that are competitively low for consumers

INDICATORS

	Indicator Description	Baseline	2021 Status	2025 Target	2035 Target
E-1	Energy usage in residential buildings [kWh/customer/year] – Baseline Year: 2012	15,263	14,739	12,000	10,000
E-2	Energy usage in commercial buildings [kWh/customer/year] ¹ – Baseline Year: 2012	91,850	86,704	80,000	75,000
E-3	Residential building audits performed annually – Baseline: Average # of audits/yr and between 2017-2020	63	91	125	200
E-4	Residential Rebates provided annually – Baseline: Average # of audits/ yr and between 2017-2020	-	26	75	100

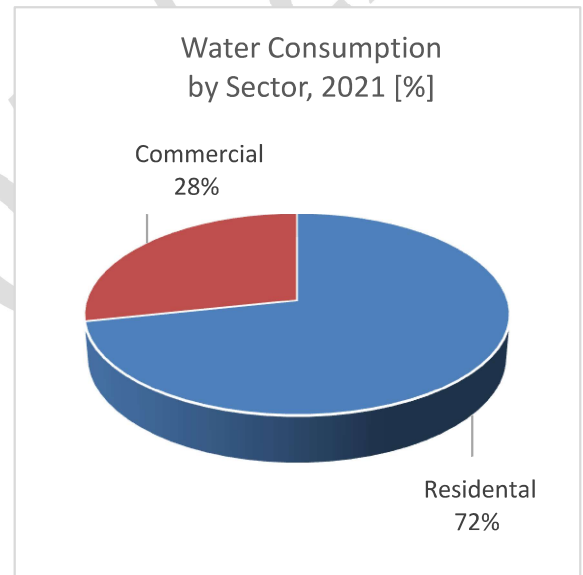
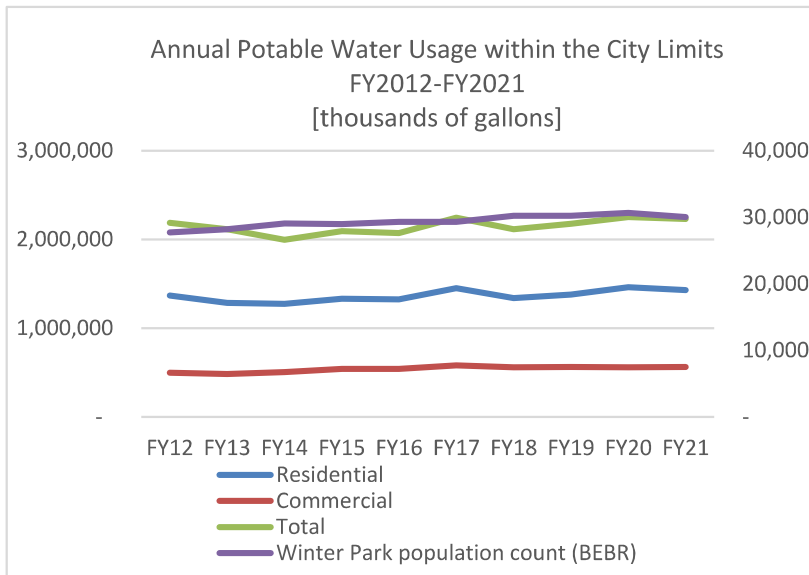
ACTIONS

Projected Implementation Year	Action	Accomplished	Status	Responsible Department/ Division
2023	Internal employee energy conservation training – reduction in energy and water use that provides incentives to help motivate conservation	No	None	Sustainability Division; Human Resources
2023	Conduct Energy Efficiency Study benchmarking city buildings utilizing 70% of city electricity portfolio and identify technology to improve energy efficiency	No	Initiated	Sustainability Division, WP Electric Utility, WP Water Utility
2023	Implement Energy Efficient Technologies based on Energy Efficiency Study i.e motion detection lighting and programmable thermostats	No	Initiated	Sustainability Division, WP Electric Utility, Public Works

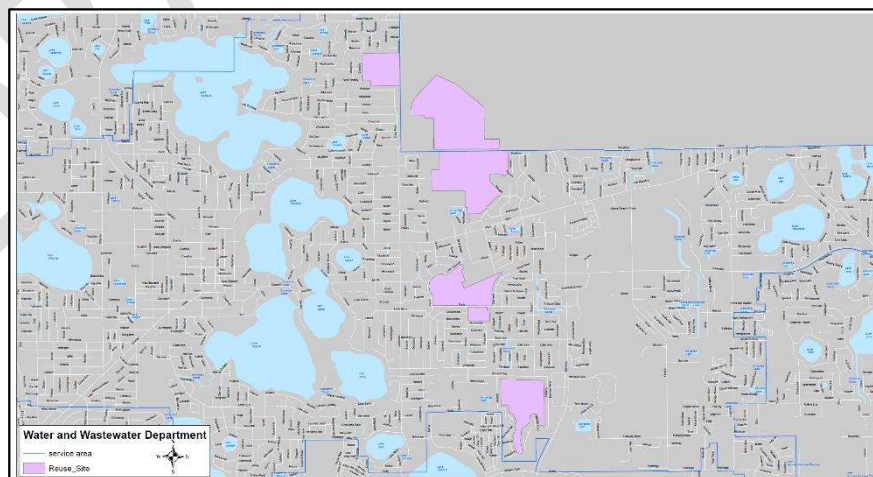
Projected Implementation Year	Action	Accomplished	Status	Responsible Department/ Division
2023	Explore incentive programs for commercial customers that encourage energy conservation	No	None	Sustainability Division, WP Electric Utility, Economic Development
2024	Identify methodology for expressing energy use intensity in kWh per square foot for residential and commercial customers via Smart Works Technology and Energy Star	No	None	GIS, IT, WP Electric Utility, Sustainability Division
Continued Annually	Maintain competitive rates for WP Utility Customers	Yes	Ongoing	Sustainability Division, WP Electric Utility, WP Water Utility
Continue Annually	Promote Energy Conservation opportunities such as audits and rebates, providing energy conservation kits, and solar feasibility reports for customers that undergo energy audits including local schools	Yes	Ongoing	Sustainability Division, WP Electric Utility, Communications
Continue Annually	Provide technical assistance and education to commercial property owners and tenants on Energy Star Portfolio Manager	Yes	Ongoing	Sustainability Division
Continue Annually	Continue to pursue clean transportation options. Expanding City Fleet and EV Charging Stations for commuters	Yes	Ongoing	Sustainability Division, WP Fleet Services, WP Utility

Water

The Water category focuses on measures that can increase water efficiency and water conservation in residential and commercial sectors. In the City of Winter Park, residential and commercial customers use potable water for indoor and outdoor (irrigation) purposes. Over the last decade, potable water has remained generally stable, reflecting the minimal change in population growth over that time. The majority of potable water consumed in the city is used by residential customers (71%), with nearly half of residential water usage being spent on irrigation. Implementation of technological tools, such as Advanced Metering Infrastructure (AMI), will allow for effective monitoring of water usage, efficiency, and recognizing irregularities. The city hopes to continue promoting irrigation rebate incentives in addition to providing water conservation education for residential, commercial, and Winter Park schools.



All utility data is sourced from the city's Comprehensive Annual Financial Reports, which can be reviewed on the city's website.



Water and Wastewater Service area in Winter Park including reuse areas.

OBJECTIVES

1. Increase water efficiency of residential and commercial buildings
2. Increase water conservation in residential and commercial sectors
3. Increase residential and commercial customers knowledge of water efficiency and conservation best practices and benchmarking tools
4. Implementing smart technologies to aid in water conservation efforts

INDICATORS

	Indicator Description	2012 Baseline	2021 Status	2025 Target	2035 Target
W-1	Water usage in residential buildings [gallons/customer/year] ¹	127,777	130,849	TBD	TBD
W-2	Water usage in commercial buildings [gallons/customer/year] ¹	294,098	303,788	TBD	TBD
W-3	<u>Reclaimed water</u> usage [million gallons/year] ²	144.5	91.612	10% increase	30% increase
W-4	Residential Rebates provided annually	-	34	75	150

¹Targets will be determined upon the renewal of St. Johns River Water Management District Consumptive Use Permit in 2025

ACTIONS

Projected Implementation Year	Action	Accomplished	Status	Responsible Department/ Division
2022	Create water conservation education to residential and commercial customers through on-line, print campaigns, and social media including water wise check list	No	Initiated	WP Water & Wastewater Utility, Sustainability Division, Communications, Economic Development
2022	Increase public awareness of Florida-friendly landscaping and irrigation regulations for city (internal), residential, and commercial customers; i.e. raingardens	No	Initiated	Natural Resources & Sustainability Dept., Communications
2023	Implement Sewer Impact Fee Deferral Program throughout the city to reduce both residential and commercial customer upfront costs for connecting to the sewer system	No	None	WP Water & Wastewater Utility

Projected Implementation Year	Action	Accomplished	Status	Responsible Department/ Division
2023	Explore a code requirement for commercial customers that encourages water conservation	No	None	Sustainability Division, WP Water & Wastewater Utility, Economic Development
2023	Amend ordinance for grease trap collection for above ground unit collection & maintenance	No	None	Sustainability Division, WP Water & Wastewater Utility, Stormwater Div, Economic Development
2024	Identify methodology for expressing water use intensity in gallons per capita upon renewal of SJRWMD Consumptive Use Permit	No	None	WP Water & Wastewater Utility, Sustainability Division
2025	Upon renewal of SJRWMD Consumptive Use Permit, review inverted water utility rate structure to increase water conservation efforts	No	None	WP Water & Wastewater Utility
2025	Upon renewal of SJRWMD Consumptive Use Permit, expand reclaimed water system	No	None	WP Water & Wastewater Utility
Continue Annually	Explore grant opportunities for septic to sewer conversion projects	No	Initiated	WP Water & Wastewater Utility; PW; Sustainability Division
Continue Annually	Using AMI system to identify customers in non-compliance with SJRWMD irrigation policies and provide non-compliant customers with water conservation best practices	Yes	Initiated	WP Water & Wastewater Utility, Sustainability Division
Continue Annually	Promote existing water conservation educational opportunities such as audits and rebates including Schools	Yes	Initiated	WP Water & Wastewater Utility, Sustainability Division, Communications
Continue Annually	Replace Advanced Metering Infrastructure (AMIs) to allow for new, more effective monitoring of water usage, system efficiency, detecting malfunctions and recognizing irregularities	Yes	Initiated	WP Water & Wastewater Utility

Community Engagement & Green Economy

The Community Engagement and [Green Economy](#) category outlines long term objectives and actions focused on encouraging residents, business owners, schools and other organizations in the city of Winter Park to begin incorporating more sustainable solutions in their daily activities. To foster and build upon a culture that values health, environmental stewardship, and financial wellbeing, the city will support public engagement campaigns to educate, inspire and offer some of the most cost effective, healthy and easy solutions. The campaign will seek to engage diverse partners and sectors of the community; create a shared community vision, goals and progress indicators of a low-carbon future; connect individuals and organizations to education, tools and resources; and celebrate positive changes and successes. A fully engaged community is the key to successfully making the city a more sustainable community.

OBJECTIVES

1. Communicate, educate and motivate residents to begin incorporating more sustainable solutions in their daily actions to change their behaviors in ways that support the objectives of the Sustainability Action Plan
2. Engage businesses, offer sustainable solutions and recognition for greening their daily operations that support the objectives of the Sustainability Action Plan
3. Provide opportunities for schools to implement sustainable practices in their daily operations that support the objectives of the Sustainability Action Plan
4. Work collaboratively with community organizations to identify and implement sustainable solutions that support the objectives of the Sustainability Action Plan

INDICATORS

	Indicator Description	Baseline	2021 Status	2025 Target	2035 Target
CEGE-1	Volunteer hours for Community engagement events – Baseline Year: 2012	240	1,304	No less than 1,500	No less than 2,000
CEGE-2	Green Businesses Recognized per year – Baseline Year: 2012	0	26	No less than 10	No less than 10
CEGE-3	Green School Grant Funding – Baseline: Average amount of funding between 2017-2020	\$3,300	\$2,890.00	Equal or more than \$3,500/year	Equal or more than \$3,500/year

ACTIONS

Projected Implementation Year	Action	Accomplished	Status	Responsible Department/ Division
2022	Re-participate in America In Bloom's annual nationwide competition in addition to researching grant opportunities to help aid KVPBS&S	No	Yes	Sustainability Division, KWPBS Board, Communications

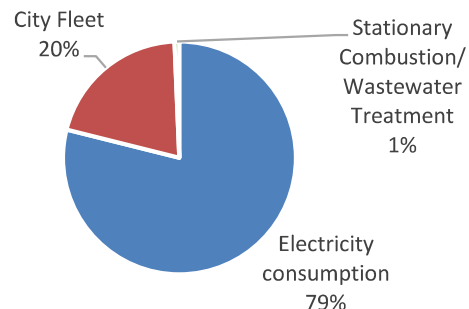
Projected Implementation Year	Action	Accomplished	Status	Responsible Department/ Division
2023	Create Green Event Guide and Volunteer Program for city events	No	None	Sustainability Division, Parks & Recreation, Communications
Continue Annually	Promote sustainability program initiatives through various social media platforms and traditional print media, at in-person events, and maintain and update Program's website	Yes	Yes	Sustainability Division, Communications
Continue Annually	Administer Green Business Recognition Program and promote Green Business initiatives: Facilitate Green Business networking events	Yes	Yes	Sustainability Division, Communications, Economic Development
Continue Annually	Administer Green School Grant Program and Green Education opportunities for educators	Yes	Yes	Sustainability Division
Continue Annually	Partner with local universities (e.g., University of Central Florida, Rollins College) to provide educational trainings on sustainability-related subjects	Yes	Yes	Sustainability Division
Continue Annually	Ensure all requirements are met for remaining a Keep America Beautiful affiliate	Yes	Yes	Sustainability Division
Continue Annually	Provide volunteer opportunities for litter cleanups of city's lakes and rights-of-way and opportunities for beautification of city parks and greenspaces	Yes	Yes	Sustainability Division, Lakes Division, Parks and Recreation
Continue Annually	Provide education on Sustainability Division at Neighboring Community Events	Yes	Yes	Sustainability Division
Continually Annually	Create and implement environmental education opportunities at parks and city buildings (e.g., Mead Gardens, Howell Branch Creek, Dinky Dock and Fort Maitland)	No	Yes	Sustainability Division, Parks & Recreation, Communications

Local Government Operations

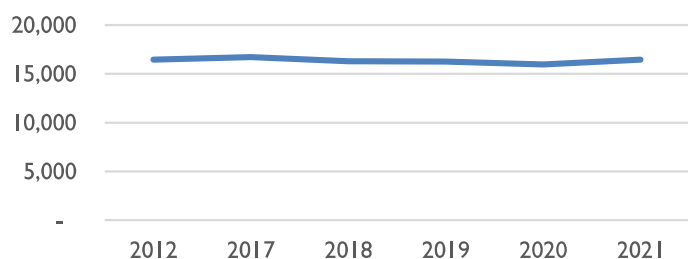
The Local Government Operations category outlines long term objectives and actions focused on reducing GHG emissions of municipal operations, increasing municipal facilities' resiliency to the impacts of climate change, and encouraging resource protection and conservation. Creating healthier and more comfortable environment for employees and building occupants are also anticipated benefits from the city renovating existing buildings and building new city facilities to meet high performance, green building standards.

The city's Local Government Operations GHG Emissions Inventory consists of all major direct emissions from the burning of fossil fuels by the City's fleet and indirect GHG emissions associated with the electricity consumption for local government operations. City Fleet-related (20%) and electricity consumption-related (79%) activities contribute the largest proportion of greenhouse gases emissions in government operations. Energy usage has remained generally stable since the baseline year of 2012.

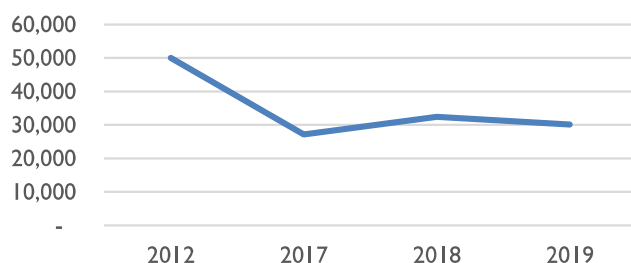
Local Government Operations
Greenhouse Gas Emissions
[tons of CO₂e] - 2021



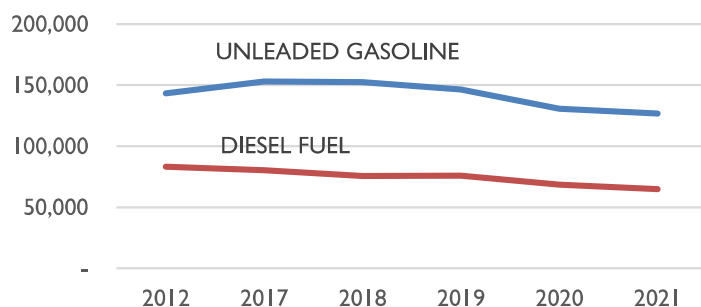
Annual Energy Usage for
Local Government Operations
(MWh)

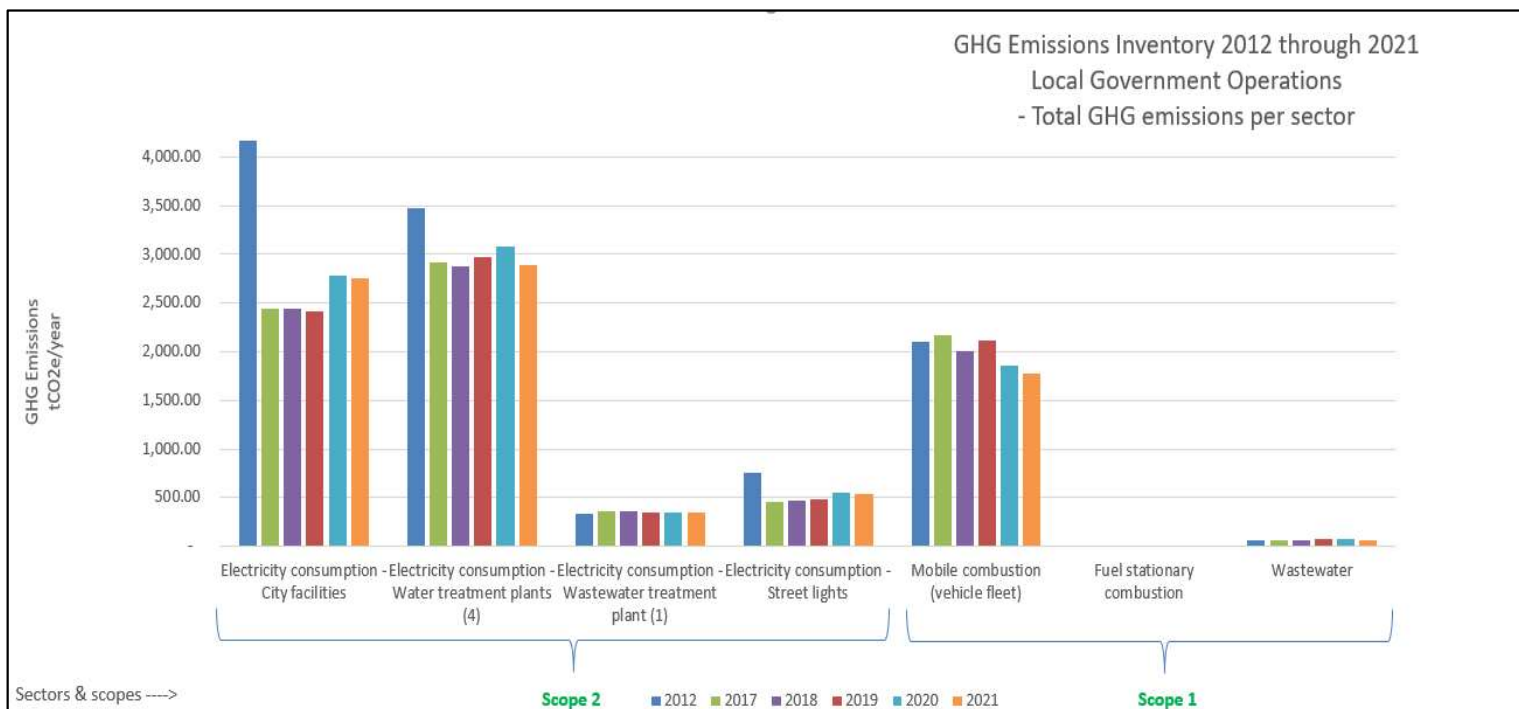


Annual Potable Water Usage for
Local Government Operations
[thousands of gallons]



Annual City Fleet Fuel Usage
[gallons]





Workforce commute also contributes to GHG emissions. City adoption of a flexible work plan to a four-day work week would decrease carbon emission. This provides both climate and employee well-being benefits.

Energy audits of city facilities would allow for projects to be selected that will provide the greatest energy reduction at the best return on investment. Several city parks use reclaimed water, lake or well water, reducing the amount of high-quality potable water being used by the city to irrigate. Efforts to expand the use of reuse water for park irrigation is planned.

City fleet gasoline and diesel consumption has remained generally stable since the baseline year of 2012. In 2020, there was a decrease in both unleaded gasoline and diesel due to the pandemic. We expect 2022 to jump back to average consumption with a goal to steadily decrease over the next decade with the establishment of a fleet electrification policy. By 2023, the City of Winter Park is committed to establishing a policy that creates a vehicle replacement and purchase tiered structure that prioritizes zero tail pipe emissions, high fuel efficiency vehicles would help further fleet electrification and fuel usage reduction. The city plans to expand EV charging stations that would be used for both city employees and for public use.

Sustainability education and incentivization for city employees also plays a vital role. By providing a green procurement guideline, the guesswork of selecting sustainable and compostable products is taken out while the city implements greener purchasing choices. City sponsored events, and hired vendors such as catering services, should be required to follow green event policies. While

green choices are made at the workplace, employees learning about these choices could help make greener choices at home.

OBJECTIVES

1. Increase the city's municipal facilities resiliency and energy use efficiency to the impacts of climate change
2. Improve city services and broaden public access to information about city performance
3. Reduce Local Government Operations (LGO) greenhouse gas emissions
4. Increase energy and water efficiency of existing and new city-owned and city-operated facilities
5. Encourage on-site renewable energy generation at city-owned and city-operated facilities
6. Reduce fossil fuel consumption by city fleet vehicles
7. Communicate, educate and motivate city employees to incorporate more sustainable solutions in their daily actions to change their behaviors in ways that support the objectives of the Sustainability Action Plan
8. Reduce the amount of waste generated from local government operations
9. Encourage reuse and other means of disposal that divert generated waste away from the landfill
10. Consider reducing carbon emission by implementing four-day work week where applicable

INDICATORS

	Indicator Description	Baseline	2021 Status	2025 Target	2035 Target
LGO-1	Local Government Operations greenhouse gas emissions [Tons of carbon dioxide equivalent]	11,315	8,735	40% less than baseline year	80% less than baseline year
LGO-2	Energy usage for Local Government Operations [MWh/yr]	16,471	16,443	5% less	15% less
LGO-3	City-owned and city-operated facilities audited	3	3	50%	100%
LGO-4	Potable water usage [thousands of gallons] ²	-	70,172	50% less	TBD
LGO-5	City Fleet fuel usage [gallons of unleaded gasoline] ³	143,268	126,747	Downward trend	TBD
LGO-6	City Fleet fuel usage [gallons of diesel fuel] ³	83,142	64,929	Downward trend	TBD

LGO-7	Number of city-owned Electric Vehicles ⁴	0	8	Increase	Increase
LGO-8	Number of Electric Vehicle charging Stations available for city business use [ports] ⁴	1	13	Increase	Increase

¹By the end of 2020, the city had 266kW of installed solar capacity (City Fleet Building, Aloma Water Treatment Plant)

²Target based on data received from utility reporting based on all city facilities meters

³By the end of 2020, the city had 6 electric vehicles (2% of total fleet) and 7 EV Charging Ports for Fleet Use

ACTIONS

Projected Implementation Year	Action	Accomplished	Status	Responsible Department/ Division
2022	Solicit proposals for energy conservation audits for all city facilities	No	Initiated	Public Works, Procurement, Sustainability Division, WP Electric Utility
2022	Conduct Renewable Energy Feasibility Study – 5.25.22 commission approved to move forward	No	Initiated	Public Works, Sustainability Division, Procurement, WP Electric Utility
2023	Pilot food waste collection program at a city facility (City Hall and or Center Street)	No	No	Sustainability Division
2023	Create & establish sustainable fleet policy that creates vehicle replacement EV hybridization	No	No	Fleet, Sustainability Division
2024	Develop educational programs for city employees on best practices for workplace energy & water conservation, sustainable transportation modes and waste management; include incentives like Sustainability Olympics/Challenges	No	No	Sustainability Division, Human Resources
2023	Reestablish Single Use Product Policy	No	No	Sustainability Division, City Administration, Parks & Recreation
2024	Research energy and water management software capable of identifying low-efficiency city facilities and early detection of usage anomalies	No	No	Sustainability Division, Public Works

Projected Implementation Year	Action	Accomplished	Status	Responsible Department/ Division
2023	Install high efficiency dishwashing machines and water bottle filling stations at city facilities to facilitate the reuse of dishware for city-business meetings and gatherings	No	No	Public Works, Sustainability Division
2023	City adoption of a flexible work plan to a four-day work week would decrease carbon emission	No	No	City Management, All City Departments
2024	Explore ways to quantify waste generated from city offices	No	No	Sustainability Division
2024	Design/implement a sustainability procurement policy that is fiscally responsible and aligns with sustainability goal that will include in the cities current comprehensive procurement policy	No	No	Procurement, Sustainability Division
2025	Upon renewal of SJRWMD Consumptive Use Permit, assess and identify opportunities for water conservation measures for all city facilities	No	No	WP Water & Wastewater Utility
2025	Ensure that all new, significantly renovated, occupied, city-owned buildings will be designed to incorporate measures that would allow them to be FGBC or minimum of LEED "Silver Certification" level	No	No	Public Works, Sustainability Division
Continue Annually	Use data and analytics to improve city services and broaden public access on information about city performance	Yes	Ongoing	IT, All City Departments
Continue Annually	Utilize racial equity lens to assess city policies, initiatives, programs, and budget issues	Yes	Ongoing	All City Departments
Continue Annually	Work with OMB annually to identify sustainability-related project needs and budget with city departments on Capital Improvement Plan	Yes	Ongoing	Office of Management & Budget, Sustainability Division, All City Departments
Continue Annually	Monitor city buildings' energy and water usage through ENERGY STAR Portfolio Manager	Yes	Ongoing	Sustainability Division
Continue Annually	Conduct Local Government Operations Greenhouse Gas Emissions Inventory	Yes	Ongoing	Sustainability Division
Continue Annually	Shift from fossil-fuel to electric powered landscaping equipment upon replacement; exception to leaf blowers with due date of 2024	Yes	Ongoing	Parks & Recreation

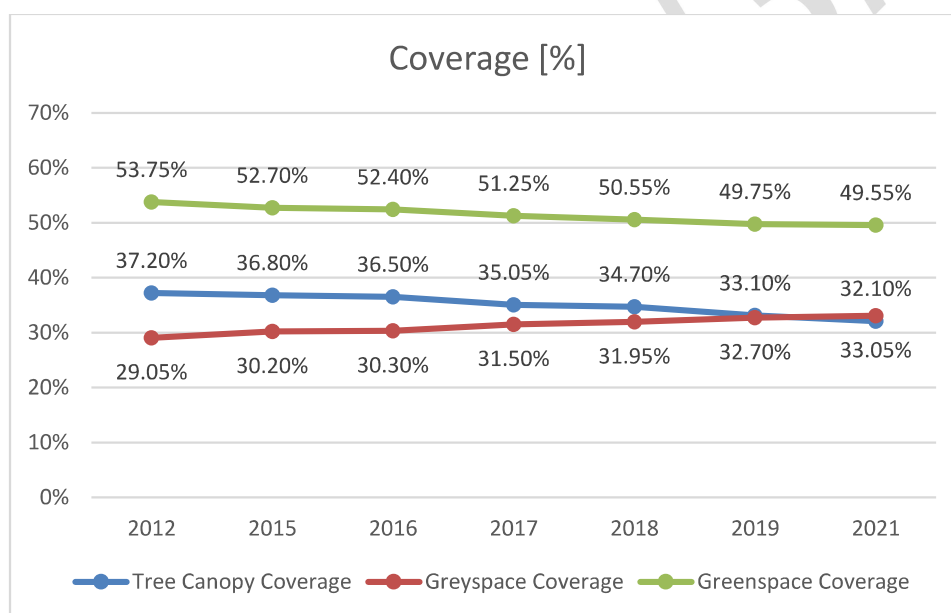
Projected Implementation Year	Action	Accomplished	Status	Responsible Department/ Division
Continue Annually	Continue to partner with FDOT's reThink Your Commute program to encourage employees' use of SunRail, Lynx, vanpools, bikes, and walking to work	Yes	Ongoing	Human Resources, Sustainability Division

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Natural Resources

The Natural Resources category is focused on preserving and enhancing the City of Winter Park's valuable natural features that help make the city such a great place to live. The city is known for its lush tree canopy and pristine lakes. Both of these features provide a multitude of benefits including improved air quality, wildlife habitat, cooler temperatures through reduced [urban heat island](#) effect, beautification and increased property values. In recognition of a downward trend from 2012 to 2019, the target goals for tree canopy coverage and greenspace coverage reflect a commitment to reversing the trend.

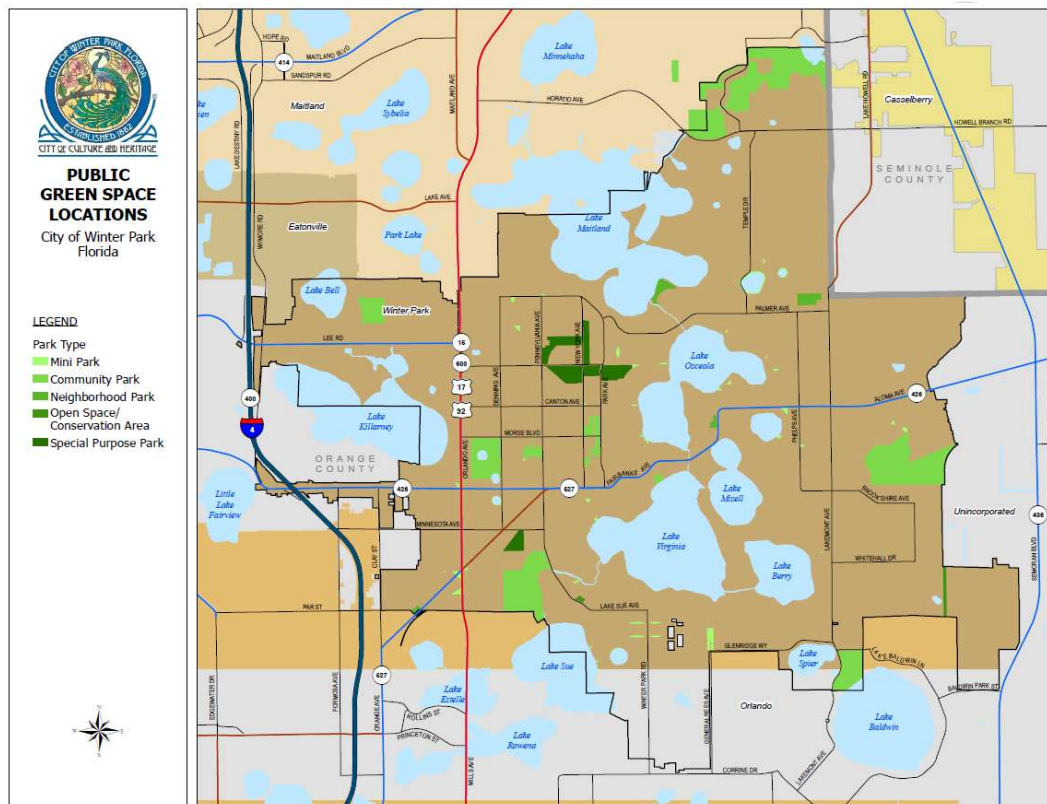
In 2020, the city's Urban Forestry Division began using [i-Tree Canopy](#). The online tool randomly lays points onto Google Earth imagery and then the user manually classifies what cover class (e.g., tree) each point falls upon. While 500-1,000 points are suggested, the Urban Forestry Division classified 2,000 points, increasing the accuracy of the estimates. Since the aerial imagery from Google Earth is normally about 2 years old, the assessment presented goes only through 2021.



Using i-Tree Canopy, Urban Forestry was able to determine the city's tree canopy coverage (includes trees and shrubs), greenspace coverage (includes trees, shrubs, grass and herbaceous cover) and greyspace coverage (includes impervious surfaces and buildings). A trend of gradual decline in tree canopy and greenspace coverage and gradual incline of greyspace coverage is evident during the reporting years. Tree canopy loss is most likely attributable to changes in land development use. Land development regulations and city programs that protect and expand the existing canopy are critical to ensure tree canopy coverage does not continue to decline.

City parks play a crucial role in residents and visitors mental and physical well-being and stimulate social cohesion. The city's Parks and Recreation Division has consistently exceeded its goal of

more than 10 park acres per 1,000 people. Maintaining the percentage of residents living within a half mile from park space will not only ensure that residents are within walking distance of places that are good for their mind and body, but these green areas also help mitigate localized air pollution and provide habitat for numerous animal and plant species. In addition, adding designated “no-smoking zones” to city parks and events reinforces clean air initiatives.



In 2021, the city’s Lakes Division will begin tracking the city’s Main Lakes meeting the “Good” Water Quality Standard [average annual trophic state index (TSI) below 60]. The city’s Main Lakes include Lakes Baldwin, Berry, Killarney, Maitland, Mizell, Osceola, Sue and Virginia. TSI is a classification system designed to “rate” individual lakes, ponds and reservoirs based on the amount of biological productivity occurring in the water. Using the index, one can gain a quick idea about how productive a lake is.

In 2022, the Natural Resources and Sustainability Department implemented discussions with Mead Botanical Garden in efforts to create a Comprehensive Plan. The Comprehensive Plan is intended to become a guiding document between Mead Garden, City of Winter Park, and Stakeholder groups (such as Winter Park Land Trust and Native Plant Societies). The plan would address projects, management plans (both removal and revegetation), and Howell Creek water

quality stabilization. This further illustrates the City of Winter Park’s partnership with Mead Botanical Garden in allowing for the further success of our current and future projects. Mead Botanical Garden not only brings tourism to our city, but provides environmental conservation and educational opportunities for our city to experience and enjoy.

The restoration and preservation of Howell Branch Preserve is equally vital to environmental conservation efforts. Continuing with invasive species management and restoring with native species, to include a robust reforestation plan, is key to the long term protection of this unique park/preserve system.

OBJECTIVES

1. Maintain and expand an equitable urban tree canopy
2. Increase overall greenspace
3. Increase parks and conservation space
4. Increase street trees within the city’s rights of way
5. Maintain number of lakes meeting good water quality standard
6. Increase residents’ and businesses’ knowledge of best practices for urban tree canopy maintenance
7. Increase residential awareness on pollution prevention of natural water resources, including impacts of stormwater runoff and over-fertilizing for Winter Park lakes
8. Designate “no-smoking zones” for city parks and events
9. Creating a Mead Botanical Garden Comprehensive Plan document

INDICATORS

	Indicator Description	Baseline	2021 Status	2025 Target	2035 Target
NR-1	Tree Canopy Coverage – Baseline Year: 2019	33.10%	32.10%	Maintain	5% more
NR-2	Greenspace Coverage – Baseline Year: 2019	49.75%	49.55%	Maintain	5% more
NR-3	Greyspace Coverage – Baseline Year: 2019	32.70%	33.05%	Maintain	5% less
NR-4	# of Trees Removed	-	120	Maintain	TBD
NR-5	# of Trees Planted	-	150	Increase trend	TBD
NR-6	Percentage of City of Winter Park’s Main Lakes ¹ meeting Good Water Quality Standard [Average Annual Trophic State Index (TSI) below 60] – Baseline Year: 2012	100%	100%	Maintain	Maintain

¹Lakes Baldwin, Berry, Killarney, Maitland, Mizell, Osceola, Sue and Virginia

ACTIONS

Projected Implementation Year	Action	Accomplished	Status	Responsible Department/ Division
2022	Provide education on pollution prevention of natural water resources (e.g., impacts of stormwater runoff and over-fertilizing) to residents and businesses through on-line, print campaigns, and social media	No	Initiated	Lakes Division, Sustainability Division, Communications
2023	Research establishing an Energy-Savings Tree Giveaway Program that delivers a diverse variety of canopy and understory trees to residents	No	No	Urban Forestry, Sustainability Division
2023	Explore opportunities to preserve existing trees on private property such as increase front set backs on septic for property owners and developers	No	No	Building & Permitting, Urban Forestry, Sustainability Division
2023	Conduct <i>tree equity score</i> study to determine if tree canopy cover is distributed in a way that all residents can experience the climate, health and other benefits that trees provide	No	No	Urban Forestry
2023	Develop a checklist of trees for residents to reference	No	No	Urban Forestry, Communications
2023	Incorporate opportunities to build a green infrastructure (bio-swales, rain gardens, green roofs, etc.) demonstration project within the city limits	No	No	Sustainability Division, Stormwater Division
2022	Adopt Artificial Turf Ordinance	No	Initiated	Natural Resources & Sustainability Dept., Public Works

Projected Implementation Year	Action	Accomplished	Status	Responsible Department/ Division
2023	Periodic Review for Natural Resources Protection. Increase policy to save more trees within building code – land development code	No	No	Urban Forestry, Natural Resources and Sustainability Dept., Building & Permitting
2023	Explore implementation of Tree Equity Score indexing	No	No	Urban Forestry & Sustainability Division
2023	Water quality data readily accessible for all WP citizens to utilize	No	Initiated	Communications , WP Electric Utility
2023	GIS Modeling to predict tree canopy	No	No	GIS & Urban Forestry
2023	Establish Lakes Newsletter to inform citizens on the importance of lake side living	No	No	Lakes Division, Communications
2023	Establish a lakeside living checklist for use when hiring lawn care/maintenance to prevent excess fertilizers and grass clippings from entering our waterways	No	No	Lakes Division, Communications
2023	Implement lake vegetation bioassessment to benchmark and track the health of WP's Shorelines	No	No	Lakes Division
2023	Add pollinator gardens to the initial landscape plan throughout the city	No	No	Parks & Recreation, Landscaping, Natural Resources & Sustainability
2024	Enhance tree canopy coverage via the urban forest management plan and update every 5 years	No	No	Urban Forestry, Natural Resources & Sustainability Dept.

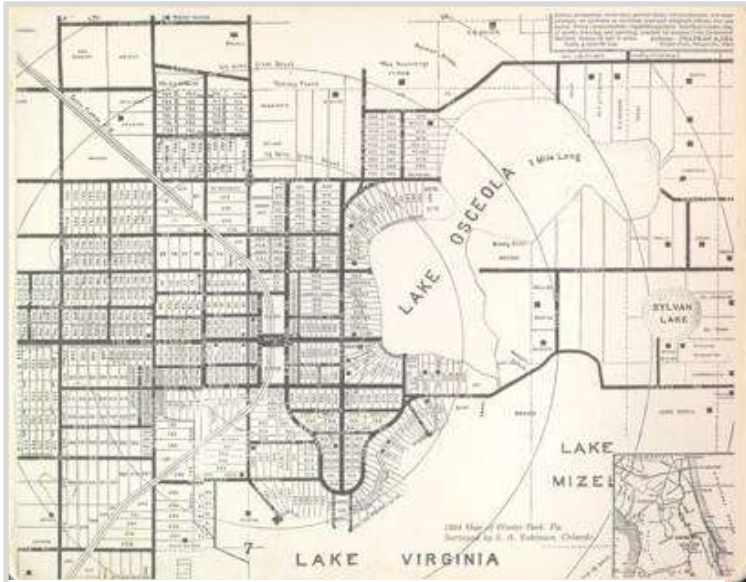
Projected Implementation Year	Action	Accomplished	Status	Responsible Department/ Division
Continue Annually	Increase beneficial native aquatic plant shorelines for all Winter Park Lakes	Yes	Ongoing	Natural Resources & Sustainability Dept.
Continue Annually	Explore funding to support green infrastructure and tree canopy development	Yes	Ongoing	Urban Forestry, Natural Resources & Sustainability Dept.
Continue Annually	Administer city's tree management program	Yes	Ongoing	Urban Forestry
Continue Annually	Consider the usefulness and availability of state and federal grant programs for the acquisition of lands for conservation areas or passive recreation	Yes	Ongoing	City Administration, Parks & Recreation, Planning & Transportation
Continue Annually	Administer integrated aquatic plant management program	Yes	Ongoing	Lakes Division
Continue Annually	Provide Tree Canopy Conservation education (e.g., environmental/health benefits, cost savings, aesthetics) to residents, building professionals, realtors and businesses through on-line, social media, print campaigns and in-person workshops	Yes	Ongoing	Urban Forestry, Sustainability Division, Building & Permitting, Communications
Continue Annually	Increase Watershed Clean Ups, Tree Plantings, and Shore Restoration Events	Yes	Ongoing	Natural Resources & Sustainability Dept., Urban Forestry

Transportation and Urban Form

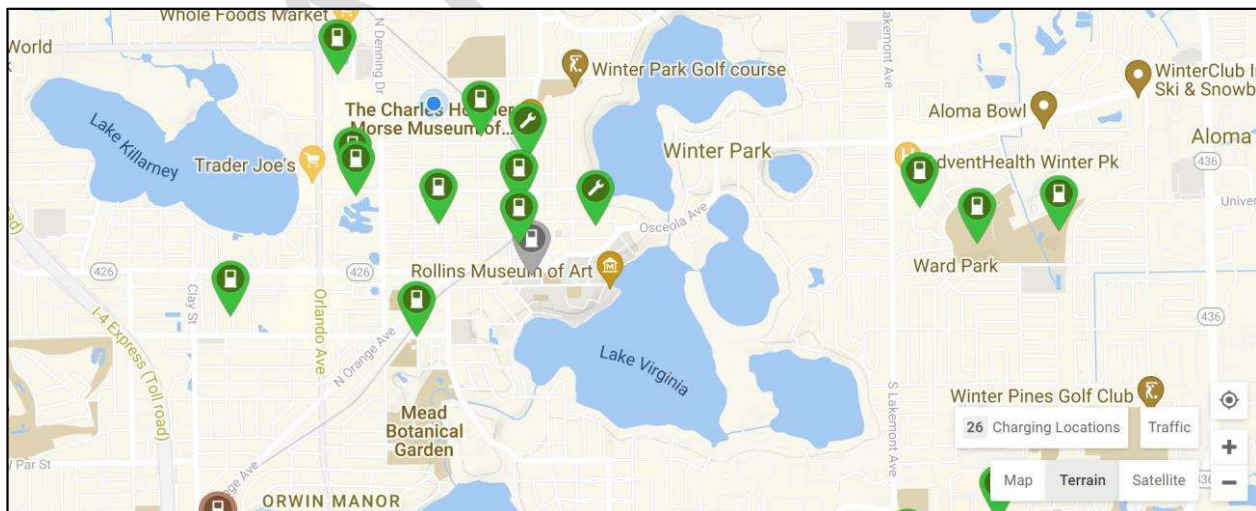
The Transportation and Urban Form category is focused on encouraging healthier, more active forms of transportation such as walking, bicycling and using mass transit such as LYNX bus and SunRail commuter rail and increased [connectivity](#). As the first planned community in Florida, the city was founded around the concept of walkability and human scaled urbanism. Since owning a car was a rarity in the 1880s, the city's founders designed the original plan around the Train Station which was the town's first constructed building. Future development was patterned off quarter mile walks around the station.

As discussed in the Climate Resiliency category, transportation is a significant (50%) contributor to the city's community-wide GHG emissions. Climate Resiliency emphasizes the need for people to choose more sustainable transportation options.

Common design elements of [complete streets](#) includes continuous sidewalks, bike lanes, landscaping, and shade trees. These design characteristics, combined with green infrastructure such as bio-swales and rain gardens, also help reduce stormwater runoff, enhance lakes water quality, and reduce the urban heat island effect.



The original Town Plan for Winter Park, FL placing the train station in the center with development planned around it. The circles represent quarter mile distances.



Map from PlugShare showing City of Winter Park's public charging stations in green.

OBJECTIVES

1. Improve pedestrian and bicyclist environments with sustainable and safe transportation infrastructure such as sidewalks, multimodal paths, and transit shelters
2. Encourage more complete streets in planning and development
3. Create an environment that encourages residents, businesses, and visitors to transition to electric and less carbon-intensive modes of transportation to achieve a level of air quality that is healthy for all residents and the natural environment (e.g., meeting and exceeding regional indoor and outdoor [air quality standards](#))
4. Increase residents' and businesses' knowledge of benefits and importance of sustainable transportation choices

INDICATORS

	Indicator Description	2012 Baseline	2021 Status	2025 Target	2035 Target
TUF-1	Sidewalk/Street improvements allowing for pedestrian and bicyclist use [Linear feet] ^{1,2} - Starting year 2022	-	930 LF	1 mile (cumulative)	3.5 miles (cumulative)
TUF-2	Pedestrian infrastructure improvements (enhanced crossings) [improved site/year] ² - Starting year 2022	-	5	10	25
TUF-3	Bicyclist infrastructure improvements (enhanced crossings, & bike racks) [improved site/year] ² - Starting year 2022	-	22	15	30
TUF-4	Improved transit stops (benches, transit shelters, waste receptacles, etc.) [improved transit stop/year] ² - Starting year 2022	-	0	2	4
TUF-5	Public and Private EV Charging Stations	7	156 current	30 additional	75 additional

¹e.g., converting a sidewalk to a mixed use trail or adding a bike lane to an existing road

²Targets for TUF-1, TUF-2, TUF-3 and TUF-4 will be determined and baseline adjusted upon completion of Mobility Plan

³As of 2020, the city has 14 EV Charging Ports for Public Use (info pulled from PlugShare)

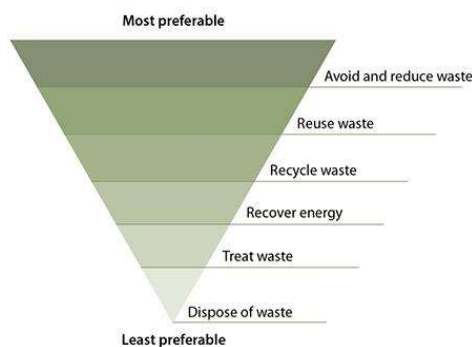
ACTIONS

Projected Implementation Year	Action	Accomplished	Status	Responsible Department/ Division
2023	Develop Mobility Plan, considering SunRail, Lynx, safe routes to schools, Complete Streets, and linkages of the City's trails with adjacent counties and municipalities	No	None	Planning & Transportation, Sustainability Division
2023	Explore feasibility of an incentive program for EV Charging Station installation in multifamily and commercial properties	No	None	Sustainability Division, Building & Permitting, WP Electric Utility

Projected Implementation Year	Action	Accomplished	Status	Responsible Department/ Division
2023	Develop EV infrastructure needs assessment and master plan	Yes	Ongoing	Sustainability Division, WP Electric Utility, Planning & Transportation
2023	Explore opportunities to pilot electric shuttle (Smart Bus)	No	No	City Administration, Economic Development, Planning & Transportation, Sustainability Division
2024	Implement public and private rideshare partnership opportunities that will promote the use of the cities SunRail System	No	No	Economic Development, Planning, Transportation, SunRail, Uber, & Lyft
Continue Annually	Maintain Electric Vehicle Charging Stations available to the public	Yes	Ongoing	Sustainability Division
Continue Annually	Encourage private developments to increase safety and ease of walking and cycling through site plan review process	Yes	Ongoing	Planning & Transportation
Continue Annually	Implement affordable & workforce housing within a quarter mile from major employers	No	Ongoing	Economic Development, Planning & Transportation
Continue Annually	Provide education on pedestrian and bicyclist safety, routes, and proximity to amenities to residents and businesses through on-line, social media, interactive map, and print campaigns	Yes	Ongoing	Planning & Transportation, Police Department, Communications
Continue Annually	Evaluate bus stop infrastructure for accessibility and amenities	Yes	Ongoing	Planning & Transportation
Continue Annually	Provide education on benefits and importance of sustainable transportation choices to residents and businesses through on-line, print campaigns, social media, and in-person events	Yes	Ongoing	Planning & Transportation, Sustainability Division, Communications
Continue Annually	Work with Sustainability Division to ensure Comprehensive Plan Update incorporates sustainability and resilience related goals, objectives and policies as it relates to transportation	Yes	Ongoing	Planning & Transportation, Sustainability Division

Waste Management

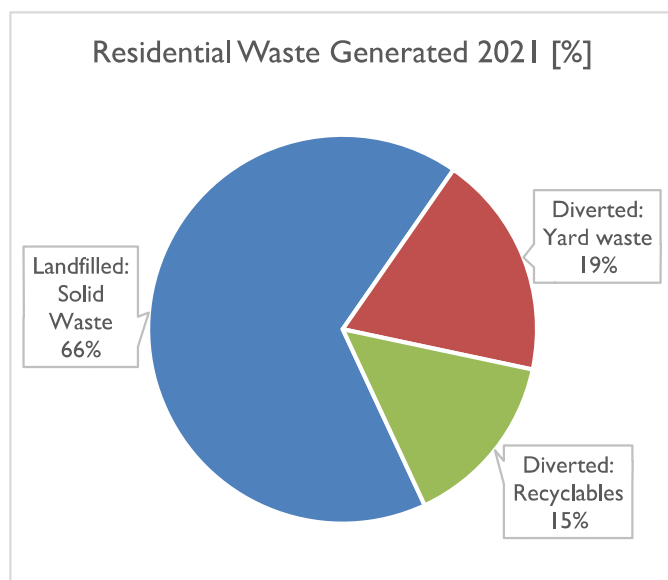
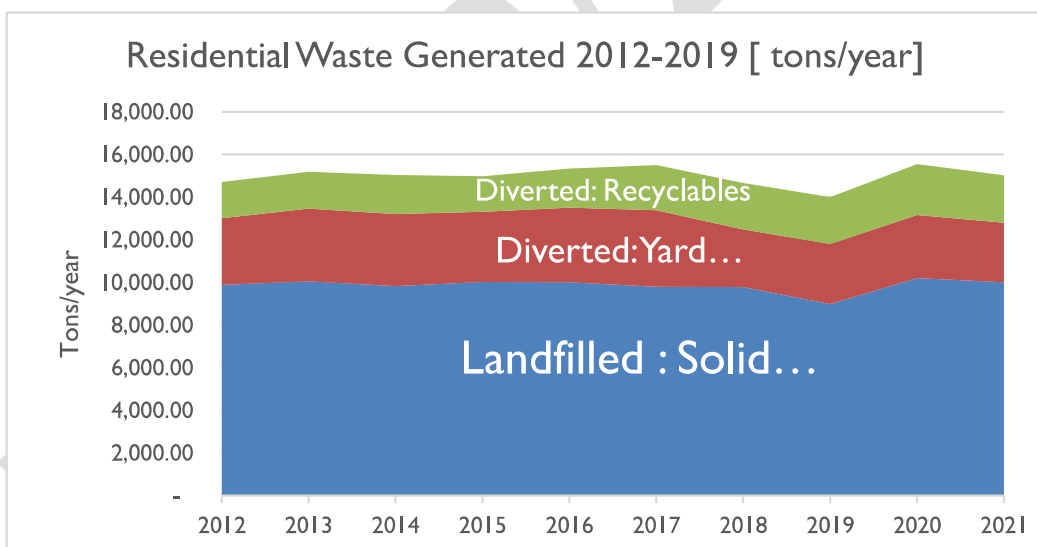
The Waste Management category is focused on reducing the amount of waste generated, encouraging the reuse and repair of products, and diverting waste from the landfill. The EPA developed the non-hazardous materials and [waste management hierarchy](#) in recognition that no single waste management approach is suitable for managing all materials and waste streams in all circumstances. The hierarchy ranks the various management strategies from most to least environmentally preferred.



The City of Winter Park has a franchise agreement with WastePro for hauling of solid waste, yard waste and recyclables from residential properties. Under this contract, WastePro hauls solid waste and yard waste to the Seminole County Transfer Station. Solid waste is landfilled and yard waste is used primarily as road cover at the landfill, allowing yard waste to be counted as diverted waste. WastePro hauls recyclables to the Orange County Transfer Station.

There, recyclables are graded by Waste Management as being “acceptable” or “rejectable” based on the level of contamination. Acceptable loads are transported to Waste Management’s sorting facility in Cocoa for sorting, baling and compaction and then prepared for market. Unacceptable loads are landfilled. Consistency in updating residents to what is acceptable and not acceptable in the recycling bin is key to keeping rejections low.

It is important to recognize that at the top of the waste management hierarchy is avoidance and reduction of waste. The city is leading by example with



its Single Use Product Policy Pilot program that prohibits plastic bags, plastic straws and styrofoam products at city facilities. The Green Business Recognition Program provides a way for businesses to receive recognition for switching from single-use to reusable and compostable alternatives. It is critical to reinforce the message that most environmentally preferable choice an individual can make in regards to waste is to not create it in the first place.

OBJECTIVES

1. Reduce the amount of waste generated
2. Increase repair, reuse and donation of materials
3. Divert waste generated away from the landfill
4. Increase residents and businesses' knowledge of the benefits and importance of waste prevention and reduction

INDICATORS

	Indicator Description	2012 Baseline	2021 Status	2025 Target	2035 Target
WM-1	Residential Waste Generated [tons] ¹	14,714	15,018	5% less	10% less from prior target
WM-2	Residential Solid Waste Landfilled [tons]	9,890	10,004	10% less	20% less
WM-3	Residential Waste Diverted from Landfill [tons] ²	4,824	5,014	10% more	20% more

¹Includes tonnage collected from residential households (solid waste, yard waste and recycling)

²Includes tonnage of waste diverted for other purposes (i.e., recyclables recycled and yard waste used for landfill cover)

ACTIONS

Projected Implementation Year	Action	Accomplished	Status	Responsible Department(s)
2022	Provide composting education and backyard composters to residents	Yes	Initiated	Sustainability Division
2022	Analyze implementation of a Food Waste Diversion Program for Center Street and Farmer's Market	No	Initiated	Sustainability Division

Projected Implementation Year	Action	Accomplished	Status	Responsible Department(s)
2023	Maintain the list of the city's Registered Haulers	No	Initiated	Sustainability Division
2023	Assist multi-family and commercial buildings with creating recycling education and outreach plans	No	No	Sustainability Division, Economic Development
2023	Increase recycling opportunities at city-owned public facilities and parks	No	No	Parks and Recreation, Sustainability Division
2023	Consider food scrap collection and Pay As You Throw options in Scope of Work description for Solid Waste Services Solicitation	No	No	City Administration, Sustainability Division
2023	Establishing an ordinance to ban all Styrofoam products city-wide	No	No	City Administration, Sustainability Division
2023	Consider a mandate for commercial ordinance for recycling and composting	No	No	City Administration, Sustainability Division
Continue Annually	Host "Fix It, Don't Pitch It" regional community repair event	Yes	Ongoing	Sustainability Division
Continue Annually	Provide residents with online waste management tool that provides collection schedules, reminders and look-up tool to determine how items should be disposed of	Yes	Ongoing	Sustainability Division
Continue Annually	Provide in-person, online and print education on waste management hierarchy (reduce, reuse, recycle)	Yes	Ongoing	Sustainability Division
Continue Annually	Participate in Florida Food Waste Prevention Week	Yes	Ongoing	Sustainability Division
Continue Annually	Hold Annual Household Hazardous Waste (HHW) and Electronics Waste Collection Event	Yes	Ongoing	Sustainability Division
Continue Annually	Increase availability of water bottle filling stations at city-owned public facilities and parks	Yes	Ongoing	Parks and Recreation, Sustainability Division

2022 Action Item Tracker List:

Climate Resiliency	Conduct Renewable Energy Feasibility Study
Climate Resiliency	Implement an Artificial Turf Ordinance which will help mitigate the number of houses that have artificial turf by addressing stormwater and sustainability concerns
Climate Resiliency	Adopt Backyard Chicken Program (exp. September 2022) to evaluate program outcomes and possibility of expanding and extending the program
Water	Create water conservation education to residential and commercial customers through on-line, print campaigns, and social media including water wise check list
Water	Increase public awareness of Florida-friendly landscaping and irrigation regulations for city (internal), residential, and commercial customers; i.e. raingardens
Community Engagement and Green Economy	Re-participate in America In Bloom's annual nationwide competition in addition to researching grant opportunities to help aid KWPB&S
Local Government Operations	Solicit proposals for energy conservation audits for all city facilities
Local Government Operations	Conduct Renewable Energy Feasibility Study – 5.25.22 commission approved to move forward
Natural Resources	Provide education on pollution prevention of natural water resources (e.g., impacts of stormwater runoff and over-fertilizing) to residents and businesses through on-line, print campaigns, and social media
Natural Resources	Adopt Artificial Turf Ordinance
Waste Management	Provide composting education and backyard composters to residents
Waste Management	Analyze implementation of a Food Waste Diversion Program for Center Street and Farmer's Market

Glossary

Air quality standards. The [Orange County Air Quality Management \(AQM\) section](#) ensures that the air quality of Orange County meets standards set forth in the Federal Clean Air Act and in the Florida Statutes. The goal of the [Florida Department of Health Indoor Air Program](#) is to improve the health of Floridians by reducing exposure to indoor air contaminants.

[Best Workplaces for Commuters](#) is an innovative membership program that provides qualified employers with national recognition and an elite designation for offering outstanding commuter benefits such as offering at least \$30 per month towards a transit pass to employees, employee shuttle to transit stations, etc.

[Carbon Footprint](#) The total amount of greenhouse gases that are emitted into the atmosphere each year by a person, family, building, organization, or company. A person's carbon footprint includes greenhouse gas emissions from fuel that an individual burns directly, such as by heating a home or riding in a car. It also includes greenhouse gases that come from producing the goods or services that the individual uses, including emissions from power plants that make electricity, factories that make products, and landfills where trash gets sent.

[Carbon-intensive foods](#) include beef (6.6l lbs. of CO₂e per serving), cheese (2.45 lbs. of CO₂e per serving), and other animal-based products.

[Climate change](#) refers to a change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcings such as modulations of the solar cycles, volcanic eruptions and persistent anthropogenic changes in the composition of the atmosphere or in land use.

[Climate Resilience](#) The capacity of social, economic and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity and structure while also maintaining the capacity for adaptation, learning and transformation.

[Complete Streets](#) are streets for everyone. They are designed and operated to prioritize safety, comfort, and access to destinations for all people who use the street, especially people who have experienced systemic underinvestment or whose needs have not been met through a traditional transportation approach, including older adults, people living with disabilities, people who cannot afford or do not have access to a car, and Black, Native, and Hispanic or Latino/a/x communities. Complete Streets make it easy to cross the street, walk to shops, jobs, and schools, bicycle to work, and move actively with assistive devices. They allow buses to run on time and make it safe for people to walk or move actively to and from train stations.

[Connectivity](#) reduces the distances traveled to reach destinations, increases the options for routes of travel, and can facilitate walking and bicycling. Well-connected, multimodal networks are characterized by seamless bicycle and pedestrian infrastructure, direct routing, accessibility, few dead-ends, and few physical barriers. Increased levels of connectivity are associated with higher levels of physical activity from transportation. Connectivity via transportation networks can also improve health by increasing access to health care, goods and services, etc.

[Florida Food Waste Prevention Week](#) raises awareness and inspires action to prevent food waste, save money, reduce hunger and protect the environment.

[Florida Green Building Coalition](#) has developed green certification programs that apply to construction projects and local government operations. Seeking FGBC certification demonstrates a commitment to providing your customers with products or services that are green and sustainable.

[Food Recovery](#) is the practice of collecting wholesome food that would otherwise go to waste and donating it to local food distribution agencies to help feed those in need.

[Google EIE](#) uses exclusive data sources and modeling capabilities in a freely available platform to help cities measure emission sources, run analyses, and identify strategies to reduce emissions — creating a foundation for effective action. Starting in 2021, the city's Greenhouse Gas emissions inventory uses Google EIE estimates for transportation emissions (baseline year 2018).

[Green Economy](#) is defined as an economy that is low carbon, resource efficient and socially inclusive. In a green economy, growth in employment and income are driven by public and private investment into such economic activities, infrastructure and assets that allow reduced carbon emissions and pollution, enhanced energy and resource efficiency, and prevention of the loss of biodiversity and ecosystem services.

[Green Infrastructure](#) includes a range of measures that use plant or soil systems, permeable pavement or other permeable surfaces or substrates, stormwater harvest and reuse, or landscaping to store, infiltrate, or evapotranspire stormwater and reduce flows to sewer systems or to surface waters.

[Greenhouse gases](#) are those gaseous constituents of the *atmosphere*, both natural and *anthropogenic*, that absorb and emit radiation at specific wavelengths within the spectrum of terrestrial radiation emitted by the Earth's surface, the atmosphere itself and by clouds. This property causes the greenhouse effect. Water vapour (H₂O), carbon dioxide (CO₂), nitrous oxide (N₂O), methane (CH₄) and ozone (O₃) are the primary GHGs in the Earth's atmosphere.

[Integrated Aquatic Plant Management Program](#), established by the City of Winter Park, attempts to meet the challenges of maintaining beneficial plants while minimizing undesirable ones. The program includes chemical, biological and mechanical control methods.

[LEED](#) (Leadership in Energy and Environmental Design) is the most widely used green building rating system in the world. Available for virtually all building types, LEED provides a framework for healthy, highly efficient, and cost-saving green buildings. LEED certification is a globally recognized symbol of sustainability achievement and leadership.

[Pay As You Throw](#) is a system in which residents pay for municipal solid waste (MSW) services per unit of waste discarded rather than solely through a fixed fee or property tax.

[Racial Equity](#) occurs when race can no longer be used to predict life outcomes and outcomes for all groups are improved. For more detailed information review the GARE [Advancing Racial Equity and Transforming Government](#) Resource Guide.

[Racial Equity Lens](#) is the set of questions we ask ourselves throughout the decision-making process. The lens interrupts the impact of unintended consequences by taking into consideration the lived experiences and perspectives of the racially diverse communities we intend to serve.

[Reclaimed water](#) is wastewater that has been thoroughly treated to remove harmful organisms and substances, such as bacteria, viruses and heavy metals, so it can be reused.

[Renewable energy](#) is energy from sources that are naturally replenishing but flow-limited; renewable resources are virtually inexhaustible in duration but limited in the amount of energy that is available per unit of time. The major types of renewable energy sources are: Biomass, Hydropower, Geothermal, Wind and Solar.

[Resilience Hubs](#) are community-serving facilities augmented to support residents, coordinate communication, distribute resources, and reduce carbon pollution while enhancing quality of life. Hubs provide an opportunity to effectively work at the nexus of community resilience, emergency management, climate change mitigation, and social equity while providing opportunities for communities to become more self-determining, socially connected, and successful before, during, and after disruptions.

[Urban Heat Islands](#) occur when cities replace natural land cover with dense concentrations of pavement, buildings, and other surfaces that absorb and retain heat. This effect increases energy costs (e.g., for air conditioning), air pollution levels, and heat-related illness and mortality.

[Tree Equity Score](#) is an indicator of whether an area has a sufficient amount of tree canopy cover distributed in a way that all residents can experience the climate, health and other benefits that trees provide.

[Tree Management Program](#), established by the City of Winter Park, maintains existing vigorous trees, removes dead/diseased/dying trees, and replants with a diverse species. The Urban Forestry division is also responsible for maintaining trees in parks and around facilities, trees coexisting with electrical facilities, rights of way trees, and community outreach and education.

[Trophic State Index \(TSI\)](#) is a classification system designed to “rate” individual lakes, ponds and reservoirs based on the amount of biological productivity occurring in the water. Using the index, one can gain a quick idea about how productive a lake is.

Trophic State Index	Trophic State Classification	Water Quality
0-59	Oligotrophic through Mid-Eutrophic	Good
60-69	Mid-Eutrophic through Eutrophic	Fair
70-100	Hypereutrophic	Poor

Climate Risk & Vulnerability Assessment: a structured process that identifies ways in which a community is susceptible to harm from climate threats and identify corrective actions that can reduce or mitigate the risk of serious consequences due to climate change. This assessment will look at the City's critical facilities, water infrastructure, economic factors, our natural resources, people and socioeconomic statistics, property, transportation, and mobility. As a city that is mostly in land but surrounded by wetlands, Winter Park is still no stranger to climate events such as hurricanes, flooding, and extreme heat. As rapid growth in development continues, we continue to find ways to be adaptable to these climate changes. Within this assessment we will have key indicators which will allow us to keep track of this data for continued planning and prevention. These indicators include: GHG Emissions, Heat (Rising Temperatures and Extreme Heat), and Precipitation.

Waste Management Hierarchy: EPA developed the non-hazardous materials and waste management hierarchy in recognition that no single waste management approach is suitable for managing all materials and waste streams in all circumstances. The hierarchy ranks the various management strategies from most to least environmentally preferred. The hierarchy places emphasis on reducing, reusing, and recycling as key to sustainable materials management.

Wastewater is used water. It includes substances such as human waste, food scraps, oils, soaps and chemicals. In homes, this includes water from sinks, showers, bathtubs, toilets, washing machines and dishwashers.