

THURSTON CLIMATE MITIGATION COLLABORATIVE



0)223 Progress Report



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Introduction

Thurston County and the cities of Lacey, Olympia, and Tumwater have been working together since 2018 to take action on climate change. In 2020, the four jurisdictions finalized the Thurston Climate Mitigation Plan (TCMP), a framework for regional climate mitigation action, and in 2021 each jurisdiction's governing body adopted or accepted the Plan. By 2023 each of the four jurisdictions hired full-time staff to implement the TCMP, and the jurisdictions established the Thurston Climate Mitigation Collaborative (TCMC) to support ongoing coordination and implementation of the TCMP.

Where are we headed?

The four jurisdictions have adopted shared targets to reduce locally generated greenhouse gas emissions 45% below 2015 levels by 2030 and 85% below 2015 levels by 2050. The Thurston Climate Mitigation Plan includes 22 strategies and 72 actions targeted to reduce local contributions to climate change. Read on for highlights from the past year's work. Additional information can be found at www.thurstonclimatecollaborative.org

Live Lighter Framework for Climate Create denser urban neighborhoods **Mitigation Action** where more people can opt to drive less Make it easier to telework, walk, bicycle, and ride transit Reduce food and other waste **Shift Energy Sources** Store Carbon Switch more appliances, Plant trees and heaters, and vehicles preserve tree canopy to electricity Preserve farmland and Make it easier to charge increase regenerative electric vehicles in homes agriculture practices and around town Preserve and enhance prairies **Build Local Capacity Green Our Grid** & Resilience Support State-level action Provide coordinated to generate electricity with leadership on climate action 100% renewable sources Monitor greenhouse gases Increase energy efficiency and assess progress of homes and businesses Develop expertise in climate-Make it easier to install forward practices renewables on homes Factor climate impacts into and businesses funding and decisions Support the development **EQUITABLE** of a green economy Further understand and **DISTRIBUTION OF** address social equity issues **COSTS & BENEFITS** related to climate change

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Community-Wide Emissions

In 2022, the region's greenhouse gas emissions were estimated at 3.2 million metric tons of CO2e (MTCO2e) - about 10.7 MTCO2e per person. Emissions from 2022 are approximately 6.2% higher than the 2015 baseline, but 7.4% lower than the peak in 2019. Much like the rest of the world, emissions are not on track to meet the 2030 and 2050 targets. However, per capita emissions have decreased 5.3% since 2015.

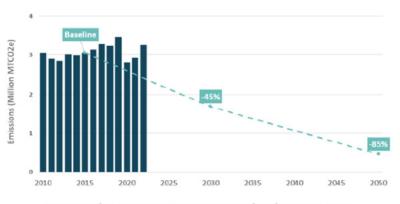


Figure 1: Thurston County Emissions and Reduction Targets

Emissions at a Glance

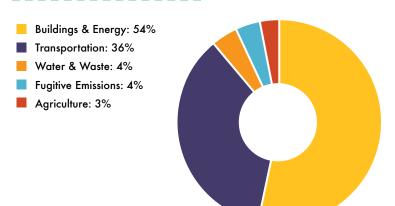


Figure 2: Community-Wide Emissions by Sector



Regional Coordination

The TCMP is primarily implemented by individual jurisdictions, but the four jurisdictions will work together to coordinate on regional climate mitigation action when it is feasible and mutually beneficial. Those regionally coordinated actions include the administration of the Thurston Climate Mitigation Collaborative (TCMC), annual reporting and monitoring of regional actions, and regional initiatives selected each year at the TCMC Annual Retreat. This section of the Annual Report highlights progress toward regionally coordinated implementation of the TCMP in 2023.

2023 Regional Coordination Highlights

Updated and Optimized TCMP

Implementation Strategy. With all four jurisdictions now having full-time dedicated staff, the original implementation strategy of the TCMP needed updates and revisions. From October 2022 to October 2023, the Staff Team worked to develop a new implementation strategy that clarified roles and responsibilities and optimized procedures for TCMP implementation at the regional and jurisdictional levels. This structure was formalized through a new Interlocal Agreement¹, executed on December 6, 2023, and the development of a Regional Implementation <u>Guidance Document</u>.²

Formed the Thurston Climate Mitigation

Collaborative. The new Interlocal Agreement defined the Thurston Climate Mitigation Collaborative (TCMC) as the framework for implementing the TCMP that is led by individual jurisdictions and supported by an Executive Committee of elected officials, a multijurisdictional Staff Team, and a Community Advisory Workgroup. This allows the community to better understand and interact with the people and groups who are leading implementation of the TCMP. The TCMC is working on a new logo and collaborative website has created a new logo and website which has launched.



¹https://www.thurstoncountywa.gov/media/20321

 $\label{eq:linear} ^2 https://s3.us-west-2.amazonaws.com/thurstoncountywa.gov.if-us-west-2/s3fs-public/2023-12/TCMC_Final%20Guidance%20Document_0.pdf$

Held the First Annual Retreat. In June 2023, the TCMC convened its first Annual Retreat. The retreat included all three groups under the TCMC: the Executive Committee, Community Advisory Workgroup, and Staff Team. This retreat was focused on celebrating successes and selecting regional initiatives that all jurisdictions would endeavor to work on together in 2024.

Selected Regional Initiatives. At the 2023 Annual Retreat, the TCMC reached a consensus to select two regional initiatives for 2024, which both address greenhouse gas reduction in existing residential buildings: Developing a Home Energy Score Model Ordinance and Designing an Energy Efficiency and Electrification Campaign. The Executive Committee also decided to jointly advocate for Rural Tree Canopy Targets and State Forest Lands Management.

Recruited and Appointed the Community

Advisory Workgroup. The one-year term of the first seated Community Advisory Workgroup ended in August 2023. In the fall, the Staff Team recruited and appointed a new Community Advisory Workgroup (CAW) of 15 community members representing diverse experiences and perspectives on climate mitigation. The new CAW meets monthly, and members will serve three-year terms.

Transitioned Administrative Tasks to a New

Consultant. In the summer of 2023, the Thurston Regional Planning Council (TRPC) decided to step back from work related to the TCMP. The City of Lacey, on behalf of the TCMC, issued a Request for Qualifications for a new consultant to carry out the administrative tasks previously done by TRPC. The Institute for Sustainable Communities was selected and now serves as a consultant to the TCMC for administrative tasks.



Contracted with ICLEI for County-wide Greenhouse Gas Inventory. With the departure of TRPC, the TCMC also needed to secure a consultant to carry out the regular greenhouse gas emission inventories. Thurston County, on behalf of the TCMC, became an ICLEI member and entered into a contract with the nonprofit ICLEI for the 2022 Greenhouse Gas Emission Inventory. ICLEI is an international leader in greenhouse gas emission inventories.

Created Jurisdiction Work Programs. To better inform the community about actions being taken to implement the TCMP, the Staff Team created a standard Jurisdiction Work Program for the County and three cities to each report their current and planned climate mitigation activities for a one-or two-year timeframe. The four jurisdictions published their individual Jurisdiction Work Programs in August 2023, and a similar format is used to document progress in Appendix A.

Timeline: Formation of the Thurston Climate Mitigation Collaborative

2018

Regional Emission Reduction Targets

The four jurisdictions contracted with TRPC to establish regional Greenhouse Gas Emission reduction targets and create a timeline for the development of a regional climate action plan.

2019

Development of the Plan

The four jurisdictions contracted with TRPC to establish regional Greenhouse Gas Emission reduction targets and create a timeline for the development of a regional climate action plan.

2020

The Draft Plan Is Completed

The draft Thurston Climate Mitigation Plan (TCMP) was completed in 2020.

2021

The Plan is Adopted/Accepted and Olympia Hires Staff

Early in 2021 the TCMP is accepted/adopted by each of the four jurisdictions. The City of Olympia hired the first dedicated full-time climate staff person.

2022

Tumwater And Thurston County Hire Staff

The City of Tumwater hired a full-time staff person to which \sim 50% of their duties are to implement the TCMP. Thurston County hired a full-time staff person dedicated fully to the TCMP.

2022

Clarity Is Needed

The original implementation strategy of the TCMP assumed there wouldn't be dedicated climate staff. The Staff Team began revisions to the implementation strategy to better reflect existing capacity.



Lacey Hires Staff

All four jurisdictions have now hired staff to work on TCMP implementation. The Staff Team work on revising the implementation strategy of the TCMP.



Jurisdiction Highlights

The new implementation structure of the TCMC clarifies that the implementation of all actions included in the TCMP are led by individual jurisdiction parties. Each jurisdiction has the authority to act on any actions in the TCMP, and decides individually what strategies and actions to implement, including actions in the TCMP and/ or other climate-related actions. Jurisdictions may develop annual Jurisdiction Work Programs to communicate regionally on planned climate mitigation activities.

This section of the 2023 Annual Report highlights implementation progress completed at the Jurisdiction level. For exhaustive lists of 2023 implementation progress by jurisdiction, please see Appendices A - D.

Buildings and Energy

Energy use in buildings is our region's largest source of greenhouse gas emissions. Strategies to address this sector include reducing energy use in existing and new buildings, increasing the production of local renewable energy, and converting to cleaner fuel sources.

2023 Highlights

• Converting to Cleaner Fuel Sources and Reducing Energy Use in Residential Buildings. The City of Olympia launched a heat pump group purchase program and outreach campaign called Energize Olympia to accelerate the adoption of electric heat pumps. In 2023 the Energize Olympia program oversaw 67 total heat pump installations, 22 of which were fully subsidized for low-to moderate income residents. The City of Lacey launched a matching rebate program in partnership with Puget Sound Energy that provides a 100% match for PSE residential energy efficiency rebates. In 2023 Lacey matched 84 rebates for a total of \$31,985 and budgeted \$150,000 to continue the program into 2024. The City of Olympia also awarded Homes First with funding to convert approximately 40 rental households from natural gas to electric heat pump heating.

• **SolSmart.** In 2023 both Thurston County and the City of Tumwater achieved SolSmart Silver designation. SolSmart is a national program of the U.S. Department of Energy that helps cities, towns, counties, and regional organizations become solar energy leaders. It is intended to reduce barriers and the soft costs of solar.

• Public Facility Solar Planning. Thurston County completed solar plus storage feasibility assessments of six County-owned buildings: Thurston County Emergency Coordination Center, Public Works Tilley Road Campus, Emergency Services Center, Thurston County Public Health & Social Services Building, and Thurston County Fairgrounds & Event Center (Heritage Hall and Expo Center). Thurston County also made progress developing an "option to lease agreement" with Puget Sound Energy to develop and install a solar energy system on the closed landfill at the Thurston County Waste and Recovery Center (WARC).



• **Municipal Buildings.** The City of Olympia completed an initial inventory of City Facilities currently using natural gas. The City of Tumwater completed an Investment Grade Audit of City Facilities, identifying potential improvements for decarbonization and increased efficiency.

Transportation and Land Use

Transportation accounts for 36% of regional greenhouse gas emissions. Passenger vehicles are the largest source, followed by heavy duty trucks and commercial vehicles. Strategies to reduction transportation emissions include improving options to walk, bike, take the bus, telework, or drive an electric or more efficient vehicle. Land use planning is a critical component – creating denser urban neighborhoods where people can easily access their daily needs will enable more people to opt out of driving.

2023 Highlights

• Increase Adoption of Electric Vehicles

(EV). The City of Tumwater installed three Level 2 charging stations at City Hall for public and workplace charging and was awarded grant funding to install two more Level 2 public charging ports. The City of Olympia adopted new standards for EV parking for new development and significant renovations in the City. These new Olympia standards require most new development to provide a minimum number of parking spaces that support the future installation of EV charging stations. Thurston County adopted a policy to provide publicly available EV charging stations on Countyowned property.

- Zero Emission Fleet Purchases. In 2023 the City of Lacey purchased 16 new EVs and installed three EV charging stations to support those vehicles. Thurston County received its first F-150 Lightning Truck, increasing the County's EV fleet to five vehicles. The City of Olympia EV fleet increased to 24 vehicles in service. The City of Tumwater electric fleet grew from one to 13 in 2023. Each jurisdiction continues to order more electric vehicles to continue to electrify their fleets.
- Fleet Electrification Policies and Plans. The City of Olympia approved an internal City Fleet Vehicle Acquisition Policy which supports the electrification of new city vehicles to the greatest extent feasible. The City of Tumwater completed a Fleet Electrification Assessment using the Electrification Coalition's DRVE tool which found Tumwater can replace up to 66 vehicles with EVs and identifies future EV charging needs across years and facilities.
- Renewable Diesel. Both the City of Tumwater and Olympia piloted renewable diesel in mediumduty vehicles. The City of Olympia has transitioned its diesel tanks over to renewable diesel 100%.
- Transportation Improvements. The City of Olympia completed safety improvements along State Avenue & Easy Bay Drive. The City of Lacey completed multiple transportation infrastructure projects, including pedestrian beacons on Ruddell Road. Thurston County constructed a singlelane roundabout at the intersection of US12 and Sargent Road SW and made progress on several trail extension and pedestrian improvement projects. The City of Tumwater secured funding for pedestrian and bicycle improvements on 2nd Avenue and Israel Road and Linderson Way.

Water and Waste

Waste-related emissions contribute just 3% of Thurston County's total greenhouse gas emissions. However, according to the 2022 Thurston County Greenhouse Gas Inventory (GHGI), waste related emissions increased by 97% since 2015. Emissions reduction strategies include reducing the amount of solid waste we create and increasing the efficiency of water and wastewater infrastructure.

2023 Highlights

- **Compost Procurement.** Each TCMC jurisdiction adopted a Compost Procurement Ordinance that requires certain public projects to procure, use, and track the use of compost.
- Waste Outreach. Thurston County completed a multifamily recycling contamination study at select apartment complexes, conducted business outreach

regarding the state's new Organics Management Law, and conducted mailings to residential curbside waste customers about proper recycling and composting. The City of Tumwater continues to organize "Recycling and Compost Attendant" volunteers to help event-goers sort their waste at select City sponsored events. Lacey, Olympia, and Thurston County all host "borrow a bin" programs in which residents can borrow trash, compost, and recycling bins to host zero waste events.

- **Diverting Waste.** The City of Tumwater launched compost diversion at all its City buildings.
- Reducing Water Consumption. The City of Lacey's mandatory watering schedule remains ongoing during the summer months. Thurston County achieved their Demand Side Goal of maintaining average day residential water usage at or below 200 gallons per day per connection.





Agriculture, Forests, and Prairies

Agricultural practices like fertilizer use and manure management only contribute a small percent of emissions, but this sector is growing quickly. According to the 2022 Thurston County GHGI, agricultural emissions increased by 65.41% since 2015. Additionally, farmland, forests, and prairies can play a big role in offsetting the community's emissions by storing carbon in soil and vegetation.

2023 Highlights

- Urban Tree Assessments. The City of Olympia completed a Tree Canopy Assessment and the City of Tumwater completed an inventory of trees on City owned properties.
- **Tree Planting.** City of Olympia Public Works and Parks staff planted 2,304 trees on city owned properties and logged 7,693 volunteer hours from community members for this effort.
- Healthy Forests Project. The Forest Lands Conversion Ordinance update was completed in 2023 and expected to be adopted in early 2024. Tree protection standards were reviewed and updated to incentivize retention of trees 24"

and larger, to limit moratorium releases, and to streamline the permitting processes. Countywide tree canopy data were received from UVM with a plan to publish in Summer 2024. The aim of the canopy assessment is to better understand the extent and composition of the county's forest resources.

- **Tree Policy.** Thurston County completed an update of its Forest Land Conversion Ordinance, which includes tree protection standards that incentivize retention of trees 24 inches in diameter at breast height and larger. The City of Tumwater continued work on updating three sections of its municipal code related to trees and understory vegetation.
- State-level Advocacy for Existing Trees and Forests. Thurston County and the TCMC Executive Committee advocated for the protection of structurally complex, carbon dense forests. Additionally, the City of Tumwater joined forces with the Association of Washington Cities to improve the state Wildland Urban Interface Code.
- **Urban Agriculture.** The City of Olympia completed a draft feasibility study for an Urban Farm Park.

Other Actions

2023 Highlights

- **Hired Staff.** In May 2023 Lacey hired its first Climate and Sustainability Coordinator. All four TCMC jurisdictions now have dedicated staff to implement the TCMP.
- Improved Outreach and Education. Olympia, Tumwater, and Thurston County all updated their existing webpages for their Climate or Sustainability programs/departments. Additionally, the City of Olympia, in partnership with the Timberland Regional Library and Evergreen Center for Climate Action and Sustainability, the City of Olympia curated a list of "<u>Climate Reads</u>³" and

"<u>Climate Films</u>⁴" for community members who'd like to learn more about climate change and climate solutions. The complete list of recommended <u>Climate Reads and Films</u>⁵ is available at the Timberland Regional Library.

• Climate and Equity Lens. As of January 2, 2023, all projects, plans, and policies considered by the Olympia City Council, include a climate and equity analysis. To support staff in conducting this assessment, Olympia developed climate and equity frameworks, which provide guidance on how to evaluate climate and equity considerations for City projects and initiatives.



³ https://timberland.overdrive.com/collection/1471850

⁴ https://www.olympiawa.gov/blog_detail_T40_R19.php

⁵ https://timberland.bibliocommons.com/list/share/2341613679_betsymay_trl/2462490379_climate_reads_and_films?_gl=1%2A13k3kx-0%2A_ga%2AMTYxNDQ2NTAwNi4xNzA4MDI1NDAy%2A_ga_G99DMMNG39%2AMTcwODAyNTQwMS4xLjEuMTcwODAyNTY5Ny4wLjAu-MA..%2A_ga_H6970RKGCQ%2AMTcwODAyNTM4OS4xLjEuMTcwODAyNTY5Ny4wLjAuAA..&page=2

Acknowledgements

2023 Executive Committee

The Executive Committee champions implementation of climate mitigation actions by the Staff Team, Jurisdiction Parties, and other community partners.

Robin Vazquez	Lacey City Council,
Carolyn Cox	Lacey City Council , Alternate
Lisa Parshley	Olympia City Council, EC Chair
Yen Huynh	Olympia City Council, Alternate
Emily Clouse	Thurston County Board of Commissioners
Tye Menser	Thurston County Board of Commissioners, Alternate
Eileen Swarthout	Tumwater City Council, EC Vice Chair
Charlie Schneider	Tumwater City Council, Alternate

2023 Community Advisory Workgroup

The Community Advisory Workgroup provides community perspectives and input on climate mitigation progress and priorities.

January - August 2023

- Kelsey Hulse (Puget Sound Energy)
- Stephanie Bishop (Thurston Conservation District)
- Jessica Gould (Intercity Transit)
- Justin Schmal
- Carly Colgan
- Leila Chavez
- Simone Ervin
- Hazel Stephens
- Mike Burnham
- Linsey Fields
- Jasmin Miller
- Tom Crawford
- Candance Penn
- Tierra Bonds
- Kim Piper
- Rachel Hastings

2023 Staff Team

The Staff Team meets on a regular basis to share information on the climate mitigation activities of individual jurisdictions and actively facilitate cross-jurisdictional coordination on TCMP implementation.

Pamela Braff	City of Olympia
Linsey Fields	City of Lacey
Rebecca Harvey	Thurston County
Alyssa Jones Wood	City of Tumwater

November 2023 - Present

- Wendy Moudy
- Lauren Tamboer
- Matthew Landers
- Amita Devarajan
- Shannon Sipher
- Courtney Cecale
- Stephan Bernath
- Mackenzie McCall
- Tom Crawford
- Candance Penn
- Tierra Bonds
- Kim Piper
- Rachel Hastings
- Juan Hackerman-Godoy
- Jolie Song
- Elsie Sabel

Appendix A – City of Lacey

2023 Implementation Progress

Buildings & Energy Sector

Strategy B1. Reduce energy use in existing residential buildings.

1. Project Name: Residential Energy Efficiency and Electrification Campaign (2024 Regional Initiative)

The TCMC Staff Team completed a Phase I Project Plan for Design and Planning of the Residential Energy Efficiency and Electrification Campaign that will consist of three components: a web-based information hub, an advisory support service, and a local incentive and outreach campaign. Thurston County also engaged with King and Pierce counties, and the cities of Seattle, Tacoma, and Olympia to launch a tri-county "Switch Is On" Pilot to serve as the foundational web platform for the local campaign.

2. Project Name: Home Energy Score Model Ordinance (2024 Regional Initiative)

The TCMC Staff Team completed a Project Plan for developing a regionally consistent policy for assessment and disclosure of residential energy performance ratings. It will provide homebuyers and occupants with an assessment of home energy performance, expected energy costs, and recommendations for cost-effective improvements to reduce energy use and costs.

3. Project Name: Lacey Matching Rebate Program

Lacey has supplied almost \$80,000 in matching rebate funds to residential home owners for energy efficiency upgrades through Puget Sound Energy rebate program. This program is slated to use \$150,000 of matching funds this year. Lacey will be reviewing funding and program metric at the end of 2024 for continuation of the program in 2025.

Strategy B2. Reduce energy use in existing commercial/industrial buildings.

4. LED Street Lighting

Lacey will be receiving EECBG funding to replace the remaining non-LED street lights to LED's in 2024.

Strategy B3. Reduce energy use across building types. No current projects.

Strategy B4. Reduce energy use in new construction or redevelopment.

5. Project Name: State Building Code Updates None; code adoption deadline extended into 2024.

Strategy B5. Increase the production of local renewable energy.

6. Solsmart Designation

Lacey will be designated by the end of the summer 2024; additional code updates are in the works and will be included in other building code updates for adoption later this year (2024). Staff is currently working with a Solsmart Technical Assistance provider on designations requirements.

Strategy B6. Convert to cleaner fuel sources.

See Project #1: Residential Energy Efficiency and Electrification Campaign (2024 Regional Initiative)

Transportation & Land Use

Strategy T1. Set land use policies that support increased urban density and efficient transportation networks and reduce urban sprawl.

7. Comprehensive Plan Update

Lacey has officially kicked off its Comprehensive Plan update and it set to adopt two new climate sub-elements for GHG emissions and climate resiliency. This will include conducting a vulnerability and risk assessment for climate related hazards and a full review of the comp plan through a climate lens; this includes development codes, regulations and ordinances.

8. Neighborhood/Commercial District

This project started in 2022, during 2023 a series of online and in person outreach events took place; as well as surveys for the residential and business communities. Draft code language was created, edited, and will go to our council for adoption in mid-2024. In March Lacey Planning Commission held a public hearing, staff will update codes and move to council for adoption. These codes updated include 15-minute walkable communities and larger neighborhood commercial district.

Strategy T2. Increase efficiency of the transportation system.

9. College ST NE Extension Completed.

10. College and 16th Phase 3 Completed.

11. College and 29th Phase 4 Completed.

12. Ruddell Road Pedestrian Beacons Completed.

13. 7th Ave/College Roundabout

Completed. Strategy T3. Increase adoption of electric vehicles.

14. Fleet Electrification

Lacey has purchased 16 new EV's to replace and electrify our fleet.

15. EV Charging Stations

New charging stations have been installed at the Shop for fleet vehicles. EV chargers will be installed at the new RAC parking extension and Police Station being constructed in 2024/2025. The EV charging station project that will install new and fast charging at 4 locations around Lacey is currently on hold.

Strategy T4. Increase the use of public transit.

16. Martin Way Park & Ride Improvements Completed.

Strategy T5. Increase use of active forms of travel and more efficient commute modes. No current projects.

Water & Waste Sector

Strategy W1/W2/W3. Increase the efficiency of water and wastewater infrastructure/ Reduce water consumption/Reduce emissions from wastewater treatment operations.

17. Golf Club RD Water and Waste Water Improvements

Complete.

18. Update SCADA Operating System Complete.

19. Mandatory Watering Schedule

Ongoing and still active during the summer months.

Strategy W4. Divert more solid waste from landfills.

No current projects.

Agriculture, Forests, and Prairies Sector

Strategy A1/A2. Reduce emissions from agricultural practices/Support agricultural practices that sequester carbon. No current projects.

Strategy A5/A6/A7. Preserve tree canopy and manage forests and prairies to sequester carbon.

20. Greg Cuoio Park and Greenways Phase 1A

Phase 1A was on hold during 2023 due to a backup with permitting and SEPA. Phase 1A has been schedule to start 2024.

21. Parks Comprehensive Plan Update

Plan was updated and adopted by council.

22. Woodland Creek Oil Water Separator Completed.

Cross-Cutting Sector

Strategy G1. Conduct education and outreach across climate mitigation areas. No current projects.

Strategy G4. Enhance monitoring and evaluation of climate mitigation measures and outcomes. No current projects.

Strategy G5. Advocate for climate-mitigating state and federal policy. No current projects.

Jurisdiction climate action progress not tied to a strategy in the TCMP No additional projects.

Appendix B – City of Olympia

2023 Jurisdiction Work Program Progress Report

Buildings & Energy Sector

Strategy B1. Reduce energy use in existing residential buildings.

23. Project Name: Residential Energy Efficiency and Electrification Campaign (2024 Regional Initiative)

The TCMC Staff Team completed a Phase I Project Plan for Design and Planning of the Residential Energy Efficiency and Electrification Campaign that will consist of three components: a web-based information hub, an advisory support service, and a local incentive and outreach campaign. The City also engaged with King, Pierce, and Thurston counties, and the cities of Seattle and Tacoma to launch a tri-county "Switch Is On" Pilot to serve as the foundational web platform for the local campaign.

24. Project Name: Home Energy Score Model Ordinance (Regional Initiative)

The TCMC Staff Team completed a Project Plan for developing a regionally consistent policy for assessment and disclosure of residential energy performance ratings. It will provide homebuyers and occupants with an assessment of home energy performance, expected energy costs, and recommendations for cost-effective improvements to reduce energy use and costs.

Strategy B2. Reduce energy use in existing commercial/industrial buildings.

25. Project Name: Armory Building Renovations

The City contracted with Ameresco to conduct a full-scale Investment Grade Audit (IGA) at the Armory, which will include specific energy performance measures. A full IGA report will be delivered to the City of Olympia in August of 2024 with the intention of entering into construction that fall.

Strategy B3. Reduce energy use across building types.

26. Project Name: All-Electric Buildings Webpage

This project has been superseded by the regional effort to launch the "Switch Is On Washington". Educational resources are now available at wa.switchison.org.

Strategy B4. Reduce energy use in new construction or redevelopment.

27. Project Name: State Building Code Updates

The 2021 State Building Code updates were adopted by the Olympia City Council on March 5, 2024, effective March 15, 2024.

28. Project Name: Commercial Electrification Reach Code

Staff conducted community outreach and drafted proposed code amendments to advance the Commercial Electrification Reach Code. However, City Council action was delayed due to anticipated changes to the WA State Building Code. Staff will resume this project following the adoption of the 2021 WA State Building Code in March 2024.

Strategy B5. Increase the production of local renewable energy.

29. Project Name: Residential Solar Readiness Code Update

The 2021 State Building Code updates, including residential solar readiness provisions, were adopted by the Olympia City Council on March 5, 2024, effective March 15, 2024.

Strategy B6. Convert to cleaner fuel sources.

See Project #1: Residential Energy Efficiency and Electrification Campaign (Regional Initiative) See Project #6: Commercial Electrification Reach Code

30. Project Name: Energize Olympia Heat Pump Group Purchase Pilot Program

The Energize Olympia Pilot Program was successfully implemented in 2023. The program exceeded all goals and expectations, laying a strong foundation for expanded iterations of the program in the future. Highlights include:

- 231 contacts with Olympia residents during outreach events, and thousands reached through advertisements and the program's webpage
- 253 individuals engaged through the program's educational workshop series
- 67 total heat pump installations
- 22 fully subsidized (zero cost) heat pump installations for lowto moderate-income households, 100% of which did not have access to cooling before the program
- At least 42 households converted to electricity as their energy source for heating
- Nearly \$100,000 in savings on ductless heat pump purchases and installations for self-funded installations (i.e., participants who were not eligible for subsidized installations)

31. Project Name: Building Electrification Retrofit Strategy Research

This project is still ongoing and will be completed by the City's 2024 CivicSpark fellow.

32. Project Name: City Facility Electrification Feasibility Inventory

Public Works/Facilities completed an initial inventory of City Facilities currently using natural gas in 2024. The electrification feasibility assessment will be included as a part of the City Facility Condition Assessment, which is scheduled to begin in Fall 2024.

33. Project Name: CDBG Program Year 2023 Electrification Projects

Approximately 90% of this project has been completed. The remaining homes receiving CDBG funds for electric heat pumps will be completed by the end of Program Year 2023 (August 31, 2024).

Transportation & Land Use

Strategy T1. Set land use policies that support increased urban density and efficient transportation networks and reduce urban sprawl.

34. Project Name: Olympia 2045: Comprehensive Plan Periodic Update

Work is well underway to update the Comprehensive Plan. The Land Use and Urban Design Chapter is running slightly behind the Transportation Chapter, but both are expected to be complete by June 2025 and will continue to support and strengthen the City's ability to accommodate population and employment growth within the existing urban growth boundary. The intention is to continue the policy direction of the Future Land Use Map of directing most new growth within three High-Density Neighborhood Overlay areas and the urban corridors that connect them, while encouraging residential infill in other parts of the city. Emphasis will include multimodal transportation options and the ability to live in parts of the City without needing a car to meet all or most of one's mobility needs. Language about accommodating growth within the UGA as a form of protecting resource lands and rural areas – by preventing sprawl – will also be strengthened.

Additionally, House Bill 1181, passed and signed into law in July 2023, added a climate goal to the Growth Management Act (GMA) and required local comprehensive plans to have a Climate Element with resilience and greenhouse gas emissions mitigation sub-elements. Before it became a requirement, the City had already planned to develop a new Climate Element as part of the Olympia 2045 scope of work. In late 2023 the City applied for and was awarded a grant of \$150,000 from Department of Commerce to develop the Climate Element and integrate resilience and GHG reduction policies across the other chapters of the Plan. Staff hired ICLEI – Local Governments for Sustainability to provide technical support for the Climate Element and launched the Climate Element update in early 2024.

35. Project Name: Climate Mall Triangle Subarea Plan and Planned Action Environmental Impact Statement

The Final Environmental Impact Statement and the Preliminary Final Draft Subarea Plan was released for the public on February 8, 2024. Additional community meetings and briefings for City Advisory Committees will be held throughout March and April, with public hearing by the Olympia Planning Commission scheduled for April 1, 2024. City Council review will begin in May with approval of the subarea plan and implementing regulations expected in summer 2024.

36. Project Name: Neighborhood Centers Strategy Report

The contract for consultant services has been extended to allow for re-writes of several sections. The draft report is currently under review with City staff. Staff expect to introduce the report to the public in April/May, with a briefing to the Land Use & Environment Committee in April 2024. The report will be submitted to City Council by the end of May. Dates are tentative pending any additional revisions, especially regarding the forthcoming consultant recommendations.

Strategy T2. Increase efficiency of the transportation system.

37. Project Name: Transit signal priority pilot project

This pilot project has been completed. The TSP (transportation signal prioritization) is operational and Public Works will collect data over the next 6 months to assess any trends. If successful, future expansions may be considered.

38. Project Name: Eastside & Westside Chip Seals

Public Works completed the eastside chipseal project in 2023. The westside chipseal project started in 2023 and we anticipate completion in 2024.

Strategy T3. Increase adoption of electric vehicles.

39. Project Name: City Fleet Electrification and Infrastructure Plan

DKS Associates was selected as the consultant to conduct the fleet electrification assessment and develop a Phased Master Plan. The anticipated start date for this work with DKS Associates is April 2024.

40. Project Name: City Fleet Vehicle Acquisition Policy

The City Manager approved a City Fleet Vehicle Acquisition Policy in June 2023, which supports the electrification of new city vehicles to the greatest extent feasible.

41. Project Name: Fleet Electrification and Renewable Diesel Pilot

The City's Electric Vehicles (EV) fleet has increased from 7 to 24 in service within the last two years. We are looking into the potential

to include a medium-duty electric vehicle in 2024. The Pilot for Renewable Diesel showed promising results and the city has transitioned to 100% Renewable diesel starting January 2024, reducing our GHG emissions of Diesel-powered engines by approximately 75%.

42. Project Name: C2C Peer-Learning Cohort: Planning and Funding for Electric Vehicle Charging Infrastructure Deployment

Cohort is complete. Staff will apply learnings to future work on electric vehicle readiness planning.

43. Project Name: Electric Vehicle (EV) Ready Parking Code

On August 22, 2023, Olympia City Council adopted new standards for electric-vehicle (EV) parking for new development and significant renovations in the City (Ordinance No. 7367). These new standards require most new development to provide a minimum number of parking spaces that have the necessary infrastructure for the future installation of EV charging stations wherever parking is provided, as of October 29, 2023. Eligible multifamily and commercial buildings will also be required to provide a minimum number of EV charging stations.

Strategy T4. Increase the use of public transit.

See Project #15: Transit signal priority pilot project.

Strategy T5. Increase use of active forms of travel and more efficient commute modes.

44. Project Name: State Avenue & East Bay Drive Safety Improvements

This project completed in 2023.

45. Project Name: Boulevard Road Trail Crossing and Bike Corridor

Council approved bid award on 3/5/2023. Construction is anticipated to start in March 2024 and be completed in August 2024.

Water & Waste Sector

Strategy W1/W2/W3. Increase the efficiency of water and wastewater infrastructure/ Reduce water consumption/Reduce emissions from wastewater treatment operations.

Water and wastewater efficiency projects are not included in Olympia's 2023 Climate Work Program and will be described in future work programs.

Strategy W4. Divert more solid waste from landfills.

Waste diversion projects are not included in Olympia's 2023 Climate Work Program and will be described in future work programs.

Agriculture, Forests, and Prairies Sector

Strategy A1/A2. Reduce emissions from agricultural practices/Support agricultural practices that sequester carbon.

46. Project Name: Urban Farm Park Feasibility Study

The draft feasibility study has been completed. Briefings are scheduled for the Olympia Parks and Recreation Advisory

Committee (PRAC; 3/21) and City Council (3/26) to receive input and finalize the study by May.

Strategy A5/A6/A7. Preserve tree canopy and manage forests and prairies to sequester carbon.

47. Project Name: Tree Canopy Assessment

The Tree Canopy Assessment was completed in December of 2023. The final report and online storymap will be published in Spring 2024 with updates to include information and engagement opportunities related to the Urban Forest Management Planning process kicking off in the Fall of 2024.

48. Project Name: Habitat Restoration and Tree Plantings

Public Works Vegetation Operations and Parks Stewardship and Maintenance planted 2,304 trees on Parks and other City properties in 2023. Parks Stewardship volunteers logged 7,693 volunteer hours in 2023.

Cross-Cutting Sector

Strategy G1. Conduct education and outreach across climate mitigation areas.

See Project #8: Energize Olympia Heat Pump Group Purchase Pilot Program

49. Project Name: Olympia Climate Action Webpage Update

Basic updates to the City's Climate Change website were completed in early 2024, to make it easier for community members to find relevant projects and resources.

50. Project Name: Olympia Climate and Equity Frameworks

The climate and equity frameworks were launched in January 2023, and implementation is ongoing. All City projects, plans, and policies now include a climate and equity analysis.

Strategy G4. Enhance monitoring and evaluation of climate mitigation measures and outcomes.

51. Project Name: Greenhouse Gas Emissions Inventory

Analysis and final report was completed, including a <u>community-</u> wide <u>emissions inventory</u> and <u>analysis of emissions reduction</u> <u>strategies</u>.

52. Project Name: Climate Funding Analysis

This project has been paused due to staff capacity limitations.

Strategy G5. Advocate for climate-mitigating state and federal policy.

53. Project Name: Legislative Agenda

Several climate initiatives were included in the City's 2024 State Legislative Agenda, including:

- The use of Climate Commitment Act (CCA) funding for statewide and community based programs that substantially reduce greenhouse gas emissions, with an emphasis on hardto-decarbonize sectors, as well as low- and moderate-income residents, multifamily housing, and small businesses.
- Actions by the State Legislature to prohibit the extension of new natural gas service and require gas companies to plan for decarbonization and electrification.
- Establish a statewide Navigator program (HB 1391) to provide information and resources to help businesses and residents access clean energy incentives and find qualified contractors for energy upgrades and retrofits.
- Establish a statewide home energy assessment and disclosure program that provides a common framework and licensing program for residential energy assessments and disclosures.
- Actions by the State Legislature to reduce waste and develop a circular economy. Thurston County included in its 2023 Legislative Priorities:
- The City also worked with its lobbyist and TCMC partner jurisdictions to advocate for other bills that would help reduce local emissions.

54. Project Name: Climate Risk and Vulnerability Assessment

The Climate Risk and Vulnerability assessment was initiated in early 2023, including the formation of a Community Project Team, research on local climate conditions and hazards, and community outreach to identify potential impacts. More than 250 community members provided feedback on local climate impacts and concerns throughout the project. Additional work is still needed to evaluate several vulnerabilities identified throughout the assessment. Completion of the final report was delayed to allow more time for additional research and analysis. The final report will be completed by end of 2024.

55. Project Name: Heat Vulnerability Assessment

Data monitoring and analysis is complete. The final report has been delayed and will be completed by mid-2024.

56. Project Name: Olympia Hazard Mitigation Plan Annex

Olympia City Council adopted the Hazards Mitigation Plan for the Thurston Region and Olympia Annex on February 13, 2024.

57. Project Name: Olympia Sea Level Rise Response Collaborative

Tide gauge installation was completed in 2023. All other projects (groundwater monitoring, funding and governance evaluation, and subsidence survey) are currently underway.

Appendix C – Thurston County

2023 Jurisdiction Work Program Progress Report

Buildings & Energy Sector

Strategy B1. Reduce energy use in existing residential buildings.

58. Project Name: Residential Energy Efficiency and Electrification Campaign (2024 Regional Initiative)

The TCMC Staff Team completed a Phase I Project Plan for Design and Planning of the Residential Energy Efficiency and Electrification Campaign that will consist of three components: a web-based information hub, an advisory support service, and a local incentive and outreach campaign. Thurston County also engaged with King and Pierce counties, and the cities of Seattle, Tacoma, and Olympia to launch a tri-county "Switch Is On" Pilot to serve as the foundational web platform for the local campaign.

59. Project Name: Home Energy Score Model Ordinance (2024 Regional Initiative)

The TCMC Staff Team completed a Project Plan for developing a regionally consistent policy for assessment and disclosure of residential energy performance ratings. It will provide homebuyers and occupants with an assessment of home energy performance, expected energy costs, and recommendations for cost-effective improvements to reduce energy use and costs.

Strategy B2. Reduce energy use in existing commercial/industrial buildings.

60. Project Name: Energy Management Software

The Central Services department tested the free version of EnergyCAP software (available through Puget Sound Energy) to analyze energy use in buildings and facilities. The County has not yet determined if it would benefit from an investment in a more robust energy management software service.

61. Project Name: LED Lighting

Central Services replaces light bulbs in their facilities with LEDs on an as-needed basis. Public Works staff are working to finalize an inventory of the County's streetlights and develop a plan for upgrading the rest of them to LEDs.

Strategy B3. Reduce energy use across building types.

62. Project Name: Commercial Property Assessed

Clean Energy & Resiliency (C-PACER) Program Progress in 2023: Thurston County launched the C-PACER financing program in February 2023 and developed an internal administration process, but did not yet received its first applicant. Stakeholder engagement has included a press release, email newsletter, fact sheet, presentation to Olympia Master Builders, and tabling at the 15th Annual South Sound Real Estate Forum. The Program Manager also convened a C-PACER working group of six Washington counties that meet regularly to compare notes on program administration.

Strategy B4. Reduce energy use in new construction or redevelopment.

63. Project Name: State Building Code Updates

None; code adoption deadline extended into 2024.

64. Project Name: Climate Mitigation Code Package

None yet

Strategy B5. Increase the production of local renewable energy.

65. Project Name: SolSmart Designation

In September 2023, Thurston County received SolSmart Silver designation for encouraging the growth of clean, affordable solar energy at the local level. The County was awarded all 190 points applied for across the categories of permitting & inspection, planning & zoning, government operations, community engagement, and market development. Thurston County has a unique approach to incentivizing solar by not requiring countylevel permits for residential rooftop solar projects. The County also received points for reviewing their zoning code for solar best practices and potential barriers, training permitting staff, having solar panels on its Public Works building, creating a dedicated solar web page, and more. The County is one of approximately 90 counties nationwide with a SolSmart designation, and was featured in two national articles about the program.

66. Project Name: WARC Landfill Solar Installation

In early 2023, the Board of County Commissioners was briefed on a project concept for a solar energy system to be installed on the closed landfill at the Thurston County Waste and Recovery Center (WARC). EDF Renewables (EDFR), a national solar developer, submitted a proposal to Puget Sound Energy's (PSE's) 2023 Distributed Solar and Storage RFP. In April Thurston County published a Notice of Intent to Negotiate Lease of up to 25 acres of the WARC property, and received a proposal from EDFR. In August PSE awarded the project to EDFR and began to work on negotiating a power purchase agreement. The BoCC was updated in October and more than 20 favorable public comments were received. The County and EDFR began working on a shortterm "Option to Lease" Agreement to demonstrate site control for PSE and ensure protection for the County both legally and operationally.

67. Project Name: Solar Plus Storage Feasibility Assessment

The County was accepted into the Department of Commerce's "Solar Plus Storage for Resilient Communities" Technical Assistance Program for a no-cost feasibility assessment of six County-owned buildings: Thurston County Emergency Coordination Center, Public Works Tilley Road Campus, Emergency Services Center, Thurston County Public Health & Social Services Building, and Thurston County Fairgrounds & Event Center (Heritage Hall and Expo Center). The Department's contractor, Cascadia Renewables, completed and delivered the six feasibility studies to the County in November 2023. The reports aim to convey a clear, detailed, and accurate impression of the benefits and challenges of leveraging a solar plus storage system to enhance community resilience at each facility. This included assessing community needs; analyzing trends in energy usage and conditions of the site; determining the optimal system size and architecture; assessing the benefits, challenges, and risks of proceeding with the proposed system; and identifying next steps. In early 2024, staff will review the results and discuss potential grant applications to deploy the recommended projects.

Strategy B6. Convert to cleaner fuel sources.

See Project #1: Residential Energy Efficiency and Electrification Campaign

Transportation & Land Use

Strategy T1. Set land use policies that support increased urban density and efficient transportation networks and reduce urban sprawl.

68. Project Name: Thurston 2045: Comprehensive Plan Periodic Update

House Bill 1181, passed and signed into law in July 2023, added a climate goal to the Growth Management Act (GMA) and required local comprehensive plans to have a Climate Element with resilience and greenhouse gas emissions mitigation sub-elements. Before it became a requirement, the BoCC had already approved the development of a new Climate Element as part of the Thurston 2045 scope of work. Thurston County Community Planning has collected public input about the Plan Update since 2022, including surveys of almost 1,500 Thurston County residents in addition to individual public comment. In late 2023 the County applied for and was awarded a grant of \$300,000 from Department of Commerce to develop the Climate Element and integrate resilience and GHG reduction policies across the other chapters of the Plan. Staff issued an RFP to hire a consultant team for the overall Comprehensive Plan Update including the Climate Element, and reviewed Commerce's planning guidance to prepare for a project kick-off in early 2024.

69. Project Name: Nisqually Subarea Plan Update (Comprehensive Plan Docket CPA-6)

Staff reviewed the Nisqually Subarea Plan to assess informational needs for the plan update, which will address land use and

transportation for general alignment with the TCMP. This included a review of existing goals and policies to determine what has been completed since the plan was adopted. Staff also produced a communications plan that was brought before the Nisqually River Council and edited according to feedback. Based on this feedback, staff organized an open house meeting scheduled for early 2024 to be co-hosted by the Nisqually Indian Tribe.

70. Project Name: UGA Code Updates (Development Code Docket JP-2, JP-3, JP-4)

None. Work on these updates will follow adoption of the Joint Plans. The updates will bring County code in alignment with City codes for the urban growth areas (not explicitly focused on climate mitigation but may address changes in density, mixed use requirements, and other land use policies).

Strategy T2. Increase efficiency of the transportation system.

71. Project Name: US 12 Urban Improvements Phase 1 (Sargent Rd Intersection)

A single lane roundabout was constructed at the intersection of US 12 and Sargent Rd SW during the summer of 2023. The project is now complete. Travelers can now access Sargent Rd from US 12 creating resiliency in the transportation system in the fast-growing Grand Mound area. It was designed with the ability to expand in the future to two lanes on the east and west approaches.

72. Project Name: Johnson Point Rd & Hawks Prairie Rd. Intersection Improvements

The design and right-of-way phases were progressed to 90% in 2023 to meet the 2024 construction date target. The project will include construction of a roundabout at the intersection of Johnson Point Rd NE, Hawks Prairie Rd NE and South Bay Rd.

73. Project Name: Marvin Rd Upgrade Phase 2 (Mullen Rd Intersection)

The design phase is at 90% for this project, which will construct a roundabout at the intersection of Marvin Rd SE and Mullen Rd SE.

74. Project Name: Old Hwy 99 at Intersections of Sargent Rd and 201st Ave

The design phase was progressed through 60% and the rightof-way phase was started in 2023. This project will construct a roundabout at the intersection of Old Highway 99 SW and 201st Ave SW and a right[in right[out intersection treatment at the intersection of Old Hwy 99 SW and Sargent Rd SW.

Strategy T3. Increase adoption of electric vehicles.

75. Project Name: County Wide Vehicle Charging Stations

The County applied for grants from the Washington Departments of Ecology and Commerce to support the installation of Level 2 EV charging stations for County vehicles at Public Health and Social Services (PHSS), The Atrium, and the Waste and Recovery Center (WARC); as well as public chargers at PHSS and The Atrium. (In early 2024 we received award notifications from Dept of Commerce for the fleet chargers at The Atrium and the WARC. The Ecology grant applications were not successful.)

76. Project Name: Fleet Electrification

The Fleet Services Division received its first electric F150 Lightning pickup truck, with a second one on order. The County currently has five plug-in electric vehicles and aims to purchase more when grantfunded charging infrastructure is deployed on County property.

77. Project Name: Policy for Publicly Available Electric Vehicle Charging Stations

On November 7, 2023, the Board of County Commissioners adopted a new policy to provide publicly available electric vehicle (EV) charging on County property. The policy's intent is to support the use and adoption of EVs in Thurston County through the provision of free "Level 2" charging. Direct Current Fast Charging (DCFC) stations may also be provided for a fee in the future based on identified needs and available funding. The policy provides guidance on ownership, funding, site identification, planning, and use of EV chargers on County property.

78. Project Name: Electric Vehicle Readiness Assessment of County Properties

None.

Project Name: EVSE at SW WA Agricultural Business & Innovation Park in Tenino

The County applied for a WA Dept. of Commerce Electrification of Transportation Systems (ETS) 2022 Round Two Grant to install 2 DC Fast Chargers and 2 dual-port Level 2 EV charging stations at the new Southwest Washington Agricultural Business & Innovation Park in Tenino. The grant objective is the procurement, installation, and integration of EV chargers that fill deployment gaps in rural communities. The \$350,000 grant was conditionally awarded at the beginning of 2024. The County will execute an Interlocal Agreement with the City of Tenino who will use the grant funds to carry out the project.

Strategy T4. Increase the use of public transit. No current projects

Strategy T5. Increase use of active forms of travel and more efficient commute modes.

79. Project Name: Yelm-Rainier-Tenino Trail Extension

The Yelm-Rainier-Tenino Trail Extension project completed design and environmental permit November of 2023. The project went out to bid immediately and was award to Miles Resources at the end of the year. Construction is expected to be completed early 2024, resulting in extension of the 14.5-mile Yelm-Rainier-Tenino trail from the Tenino Train Depot south along West Park Avenue to Crowder Road Southeast. This project is part of the County's Trail Connectivity Program, whose focus is to improve connectivity by linking trail systems and corridors throughout the County to be enjoyed regionally by all residents. Trails are intended to form a non-motorized network throughout the County and beyond, linking neighborhoods, parks, schools, open spaces, civic facilities, and commercial centers.

80. Project Name: Gate-Belmore Trail Extension

Design staff worked with Parks staff on developing a preferred layout to the new trail head near Glacial Heritage. Preliminary engineering and environmental permitting began in late 2023. Construction is planned for the end of 2024 to will develop the first 1.6-mile leg of the Gate-Belmore Trail near Glacial Heritage Preserve (south of Mima Mounds Natural Area Preserve, between Littlerock and Mima roads). The Gate-Belmore Trail will eventually extend 12.5 miles along a rail corridor linking southwestern Thurston County to Kenneydell Park. This project is part of the County's overarching Trail Connectivity Program.

81. Project Name: Complete Streets ADA Program 1 Pedestrian Crossing Improvements

The design phase was progressed through 90% in 2023 to meet the 2024 construction date target. The project will construct ADA accessible crossings through the installation of pedestrian refuge islands, by improving curb ramps and improving sidewalks along Yelm Highway SE and Martin Way E.

82. Project Name: Pleasant Glade Elementary Pedestrian Improvements (SRTS)

The design phase was progressed through 60% and the right-ofway phase was started in 2023 to meet the 2024 construction date target. The project will construct new sidewalk, ADA ramps, and other features that will improve safety concerns for children who walk to school.

83. Project Name: Marvin Rd Upgrade Phase 1 (22nd Ave to Union Mills Rd)

The design phase was progressed through 90% in 2023 to meet the 2024 construction date target. The project will reconstruct roadway to provide 2 to 3 lanes, bike lanes, pedestrian refuge islands, planter strips, medians, sidewalks, lighting, and drainage; as well as intersection improvements including a roundabout at 19th Ave SE and access control at Union Mills RD SE.

Water & Waste Sector

Strategy W1/W2/W3. Increase the efficiency of water and wastewater infrastructure/ Reduce water consumption/Reduce emissions from wastewater treatment operations.

84. Project Name: Water System Efficiency Goals & Measures

Public Works achieved their Demand Side Goal of maintaining average day residential water usage at or below 200 gallons per day (gpd) per connection over the next 10 years. They did so in part by implementing a system to alert customers of unusually high water usage in cases of potential water leaks, and by showing customers their historical water usage on their bills. In 2023, the average residential connection water usage was 178.64 gpd for the Boston Harbor water system, 178.85 gpd for the Tamoshan water system, 198.76 gpd for the Grand Mound water system, and 188.26 gpd for all County-owned water systems as a whole. Public Works also calculated and reported 2022 Distribution System Leakage (DSL) to the Washington State Department of Health in June of 2023, and all three water systems were under 5% of production. This exceeded the Supply Side Goal to maintain or reduce DSL below 10% of production over the next 10 years

85. Project Name: Wastewater System Energy Audit

A preliminary energy efficiency audit was conducted at the Grand Mound wastewater treatment plant (WWTP). This audit identified ten energy conservation measures (ECMs) to reduce or offset energy use at the facility. Some of these measures have been included in the Grand Mound General Sewer and Wastewater Facility Plan and will be incorporated into the design of the next WWTP upgrade.

86. Project Name: Nutrient Optimization Plan

Thurston County Public Works (TCPW) worked with a consultant to complete a Nitrogen Optimization Plan (NOP) for the Boston Harbor and Tamoshan wastewater treatment facilities. The NOP identified a number of improvements to improve nitrogen removal at these facilities. In 2023, TCPW began implementation of the process monitoring and control improvements identified in the NOP. As these improvements allow our operations team to have better control over the treatment process, it is likely that energy efficiency improvements will be realized as a byproduct of the nutrient treatment optimization.

Strategy W4. Divert more solid waste from landfills.

87. Project Name: Waste Characterization Study

Project Description: Thurston County Public Works conducted a waste composition study to provide data that track progress toward waste reduction and diversion program performance, refine existing programs and identify new program opportunities. The study analyzed municipal solid waste (MSW) arriving for disposal at the Waste and Recovery Center (WARC) as well as an analysis of contaminants in the commingled recycling stream and organics. The final waste sampling event was May 8-3, 2023. Using this data and data from 2022 sampling events, the County's contractor, HDR, conducted an analysis and created a written report. The study was made available to the public online and is being used to guide solid waste public engagement programs.

88. Project Name: Compost Procurement

Project Description: On January 31, 2023 Thurston County adopted a compost procurement ordinance, as mandated by Washington State. The ordinance states Thurston County will strive to purchase an amount of finished compost products equal or greater to fifty percent of the tonnage of organics transported to the local composting facility. The purchased compost will be used projects like landscaping, construction, soil erosion prevention, low-impact development, etc. Public Works began creating a procedure to capture data regarding the volume and origin of local compost used for County-owned projects. This procedure will be used to capture compost data for all County departments and report to the Department of Ecology at the end of 2024 per RCW 43.19A.150.

89. Project Name: Multifamily Recycling Contamination Study

Project Description: Public Works recycling specialists partnered with local waste hauler LeMay, Inc. to study contamination levels in commingled recycling carts at select apartment complexes over the course of six months. Beginning in January 2023, outreach staff and Master Recycler Composter volunteers visited five properties once per month to examine the amount of contamination in each cart. They also documented the top types of contamination found in each cart. After baseline data were collected, LeMay replaced the labels on commingled recycling carts at four locations with new labels containing more information about accepted materials and available resources. The fifth site kept its existing labels and served as a control. Six months of data from the five sites show that the updated commingled recycling cart stickers helped curb a rise in contamination. The top contaminants identified in the study were recyclables enclosed in plastic or paper bags, guiding our 2024 program to focus on helping residents keep all recyclables loose in carts. In 2023 we designed a follow-up study for 2024 that will evaluate the impact of reusable in-unit tote bags intended to assist with collection and transport of loose recyclables.

90. Project Name: Business Organic Waste Outreach

To help businesses that may be impacted by the state's new Organics Management Law, Thurston County Public Works (TCPW) developed education and outreach materials including a webpage, FAQ Sheet, Focus Sheet, Postcard, and Presentation. Businesses identified as most likely to have at least eight cubic yards of organic waste a week were sent a postcard advising them of the new law and to contact TCPW for help. Approximately 20% of those businesses reached out and received information about the law. 2024 education and outreach efforts will include updating educational materials, business identification, and sending updated postcards to those businesses.

91. Project Name: Business Recycling and Waste Reduction

While providing technical assistance for organics management, TCPW also provides recommendations regarding recycling and waste reduction opportunities. Educational materials have been developed for the upcoming Polystyrene (Styrofoam) ban. An additional long-term campaign has been identified to address construction and demolition materials coming into the Waste and Recovery Center, which is the largest commercial waste stream according to the Waste Characterization Study. The early stages of that campaign involve research and identifying major contributors to the stream (items and businesses).

92. Project Name: Residential Outreach Expansion

Five billing inserts were mailed directly to residential curbside waste customers, sharing information about events, proper recycling practices, and news regarding available services. Residents who opt out of paper invoices received the newsletter electronically. Newly translated publications available in 2023 include the curbside food and yard waste guide and the guide for self-hauling yard waste to the Waste and Recovery Center. In May 2023, drop-off recycling bins at the Waste and Recovery Center began accepting paper, cans, and plastic bottles commingled together rather than requiring separation of each commodity. To support this new system, we created new signs for each bin in both English and Spanish.

Agriculture, Forests, and Prairies Sector

Strategy A1/A2. Reduce emissions from agricultural practices/Support agricultural practices that sequester carbon.

93. Project Name: Community Agriculture Program (Comprehensive Plan Docket CPA-16)

The Agriculture Land Use Code Update was completed in 2023, including the addition of new agricultural uses such as biochar facilities to the development code. In addition, agriculture with regenerative practices was provided an exemption from forest conversion permitting in the Forest Lands Conversion Ordinance (see project #38). Thurston County Community Planning received a grant to update the Farmland Conservation Incentive Programs and are currently working to select a consultant. Updates were made to the Open Space Tax Program to broaden eligibility. Washington State University completed a "Hedgerows Toolkit for Rural & Working Lands" that the County will use to educate landowners about the science and values of hedgerows.

Strategy A5/A6/A7. Preserve tree canopy and manage forests and prairies to sequester carbon.

94. Project Name: Healthy Forests Project (Development Code Docket A-25)

The Forest Lands Conversion Ordinance update was completed in 2023 and expected to be adopted in early 2024. Tree protection standards were reviewed and updated to incentivize retention of trees 24" and larger, to limit moratorium releases, and to streamline the permitting processes. Countywide tree canopy data were received from UVM with a plan to publish in Summer 2024. The aim of the canopy assessment is to better understand the extent and composition of the county's forest resources.

95. Project Name: Rural Tree Canopy Targets (2024 Regional Initiative)

None other than the tree canopy assessment data noted above in #38: Healthy Forests Project. In 2024, data will be analyzed and

established targets and policies will be integrated into Thurston County's Comprehensive Plan (see Project #11). There has not yet been direct engagement by TCMC partner cities on this project.

96. Project Name: Natural Landmark Program (Development Code Docket CR-1)

Project Description: This project is centered around protecting trees on smaller properties. It needs to be scoped a bit more but would apply to some of the same strategies under forest conversions project. Scoping discussions with BoCC will happen over the next few months, will determine completion date.

Progress in 2023: None. The project faces legal hurdles and the BoCC is considering whether to keep it on the 2024-2025 Work Plan.

97. Project Name: Habitat Conservation Program (HCP)

The County's HCP is a mitigation plan to replace the habitat lost to the building and development it permits. The HCP will coordinate a large-scale reserve system to replace the current piecemeal mitigation process. Implementation of the HCP is ongoing. In 2023, the County acquired 25 acres of conservation land for Oregon Spotted Frog Habitat. This is in addition to the approximately 91 acres already acquired for the Mazama Pocket Gopher in November 2022.

Cross-Cutting Sector

Strategy G1. Conduct education and outreach across climate mitigation areas.

98. Project Name: Thurston County Climate Change website

A new Climate Change page was published in March 2023 under the "Living in Thurston County" section of the County's updated website. The site's goal is to be a hub for information about Thurston County climate initiatives that are implemented across multiple County departments. In late 2023 a page was added to catalog TCMC meeting materials for the Executive Committee, Community Advisory Workgroup, and Staff Team. These meeting materials had previously been posted by TRPC, and will temporarily be on the County's website until the TCMC's new collaborative website is launched in 2024.

Strategy G4. Enhance monitoring and evaluation of climate mitigation measures and outcomes.

99. Project Name: Greenhouse Gas Emissions Inventory

In Fall 2023, Thurston County executed a contract with the international nonprofit ICLEI to complete a 2022 Thurston County Greenhouse Gas Inventory and QA/QC of past inventory data from 2015-2021. The aim of the countywide inventory is to quantify emissions and track progress toward meeting TCMP emission reduction targets. Data will be finalized in Spring 2024.

100. Project Name: Climate Mitigation Dashboard and Performance Measures None

Strategy G5. Advocate for climate-mitigating state and federal policy.

101. Project Name: Legislative Agenda

Thurston County included in its 2023 Legislative Priorities: • CCA Implementation: Support use of Climate Commitment Act (CCA) funding for programs that substantially cut climate pollution and reduce cost burden, including medium/heavy duty vehicle electrification, charging infrastructure, and incentives to retrofit and electrify existing homes and buildings. At the end of the year, the County released its 2024 Legislative Priorities which included:

Protection for Structurally Complex, Carbon Dense Forests: Thurston County is home to many structurally complex and carbon dense forests. The county supports additional authorization to the Department of Natural Resources to transfer these lands out of trust status and be replaced with other lands. The Capitol State Forest is home to approximately 2,100 acres of unprotected, mature, structurally-complex, and carbon-dense state forestland. A program allowing 2,000 acres of transfer and replacement of these lands statewide needs to be significantly expanded. Most of Thurston County's 'old-growth like' forests left in Capitol State Forest are scheduled for cut by 2026.

The County also worked with its lobbyist and TCMC partner jurisdictions to advocate for other bills that would help reduce local emissions.

No additional projects.

Appendix D – City of

Tumwater

2023 Jurisdiction Work Program Progress Report

Buildings & Energy Sector

Strategy B1. Reduce energy use in existing residential buildings.

102. Home Energy Score Audit and Electrification Campaign Pilot (2024 Regional Initiatives)

The City of Tumwater submitted a grant proposal for competitive Energy Efficiency and Conservation Block Grant program (EECBG) funding since Tumwater's population was too small to receive EECBG formula funding like the other TCMC jurisdictions. Unfortunately, our proposal was not awarded. Regardless, the work on this regional initiative continues.

The TCMC Staff Team completed a Phase I Project Plan for Design and Planning of the Residential Energy Efficiency and Electrification Campaign that will consist of three components: a web-based information hub, an advisory support service, and a local incentive and outreach campaign. Thurston County also engaged with King and Pierce counties, and the cities of Seattle, Tacoma, and Olympia to launch a tri-county "Switch Is On" Pilot to serve as the foundational web platform for the local campaign.

The TCMC Staff Team also completed a Project Plan for developing a regionally consistent policy for assessment and disclosure of residential energy performance ratings. It will provide homebuyers and occupants with an assessment of home energy performance, expected energy costs, and recommendations for cost-effective improvements to reduce energy use and costs.

Strategy B2. Reduce energy use in existing commercial/industrial buildings.

103. LED lighting

City Facilities staff replace light bulbs in facilities with LEDs on an as-needed basis. Additionally, Facilities staff completed some comprehensive LED lighting retrofits throughout the City, including the golf cart barn at the Tumwater Valley Golf Course.

Strategy B3. Reduce energy use across building types.

104. All-Electric Buildings Webpage

This website was launched at https://www.ci.tumwater.wa.us/ departments/water-resources-sustainability-department/sustainability/ all-electric-buildings and incentives and rebates are included at https://www.ci.tumwater.wa.us/ www.ci.tumwater.wa.us/departments/water-resources-sustainabilitydepartment/sustainability/all-electric-buildings/electrifying-rebatesincentives. Additional educational resources are now available at wa.switchison.org.

Strategy B4. Reduce energy use in new construction or redevelopment.

105. State Building Code Updates

None; code adoption deadline extended into 2024.

Strategy B5. Increase the production of local renewable energy.

106. SolSmart Designation

The City of Tumwater achieved SolSmart Silver Designation in 2023. The City was awarded all 210 points applied for across the categories of permitting & inspection, planning & zoning, government operations, community engagement, and market development. Achieving more than 200 points means the City is ready to achieve Gold accreditation once the Community Development Department is ready to declare a 3-business day turn-around time for solar permits. See the City Solar Landing Page at www.ci.Tumwater.wa.us/Solar and the Solar Dashboard (updated monthly) at www.ci.Tumwater.wa.us/ SolarDashboard.

107. Solar + Storage Feasibility Assessment

The City of Tumwater was awarded \$29,800 to complete site assessments, community engagement, feasibility assessments, and preliminary design of combined solar and battery storage at the Tumwater Timberland Library and Tumwater City Hall. This project will be completed by Summer 2024.

Strategy B6. Convert to cleaner fuel sources.

See Project #1: Home Energy Score Audit and Electrification Campaign Pilot (2024 Regional Initiatives)

Transportation & Land Use

Strategy T1. Set land use policies that support increased urban density and efficient transportation networks and reduce urban sprawl.

108. Comprehensive Plan Periodic Update

In 2023 the City of Tumwater applied to several Washington Department of Commerce grant programs to secure funding to support the periodic update of our Comprehensive Plan, including Development Code amendments. Much of that funding was awarded, including \$420,000 for the development of the Climate Change Element and related Bicycle and Pedestrian Plan in the Transportation Element. In 2023, City Staff also worked on establishing a timeline and community engagement plan for the effort's launch in 2024.

109. TCMP Related Development Code Amendments

Progress in 2023 on this item is reflected in the above entry for the Comprehensive Plan Periodic Update.

Strategy T2. Increase efficiency of the transportation system.

110. Traffic Signal Controller & Detection Upgrade

The preliminary engineering for this project was authorized by the Washington Department of Transportation.

111. I-5/Trosper Road/Capitol Blvd Reconfiguration

Construction of one of the three roundabouts was completed.

112. X Street Roundabout

The right-of-way extents were determined, and right-of-way acquisition is planned for 2024.

Strategy T3. Increase adoption of electric vehicles.

113. Fleet Electrification Plan

City Staff completed a Fleet Electrification Assessment using the Electrification Coalition's DRVE tool. This assessment was accompanied by an internal memo suggesting a process of Fleet purchase reviews annually by the internal Green Team. According to the estimated vehicle replacements, the City will replace up to 66 vehicles with EVs, install 50 charging stations for fleet use, and displace 70% of its gasoline use by 2030.

114. Public EV Charging

Progress made in 2023: In April 2023, the City completed the installation of three (3) Level 2 EV charging stations at City Hall. These charging stations are intended for both public and workplace charging and are available at no cost. Additionally, the City was awarded funding from the Washington Department of Commerce to purchase a solar-powered EV charger to deploy at Pioneer Park. As of February 2024, the City is awaiting the grant agreement from Commerce and will commence work on this project once that agreement is fully executed.

115. Energy Code Adoption

The deadline to adopt the State Building Code updates, including the Energy Code, was extended to March 2024. As such, we're waiting for those changes to be finalized by the State Building Code Council and then will adopt those updates.

Strategy T4. Increase the use of public transit.

No current projects.

Strategy T5. Increase use of active forms of travel and more efficient commute modes.

116. Linwood Avenue Sidewalk, Sustina Lane to 2nd Ave

The design for this project is in progress.

117. Tumwater Hill Neighborhood Park Trail Improvements

This project is currently on hold due to capacity constraints for in-house design.

118. Deschutes Valley Trail – E Street

This project is currently on hold due to capacity constraints for in-house design.

119. Palermo Wellfield Trail

This project is currently on hold due to capacity constraints for in-house design.

120. 2nd Avenue Pedestrian and Bicycle Improvements

Safe Routes to School grant funding was secured (\$2,115,000). A Request for Qualifications for the project was posted.

121. Israel Road and Linderson Way Pedestrian and Bicycle Improvements

The design for this project was completed to 80%. The design is planned for completion and construction in 2024.

122. 2024 Pavement Maintenance Project

This project was canceled for 2024.

123. Multimodal Improvements and Traffic Calming Program

Multimodal improvements are incorporated into each project where possible.

Water & Waste Sector

Strategy W1/W2/W3. Increase the efficiency of water and wastewater infrastructure/ Reduce water consumption/Reduce emissions from wastewater treatment operations.

124. Water Audit

The Investment Grade Audit of City Facilities, which includes a water audit, continued into 2023. The results of the audit were completed in 2024, and thus will be reported on in the 2024 Annual Report. Strategy W4. Divert more solid waste from landfills.

125. Recycling and Composting at City Events

In 2023 the City had "Recycling and Compost Attendants" at the following special events: Tumwater Artesian Brewfest, Dog Days, and Falls Fest. This program will continue.

126. Composting at City Facilities

In April 2023, the City launched compost diversion at all its buildings. The program is going well.

127. Compost Procurement Ordinance Implementation

Implementation of this Ordinance continues.

Agriculture, Forests, and Prairies

Strategy A1/A2. Reduce emissions from agricultural practices/Support agricultural practices that sequester carbon. No current projects.

Strategy A5/A6/A7. Preserve tree canopy and manage forests and prairies to sequester carbon.

128. Tree and Vegetation Protection Ordinance Update

The City held multiple public meetings about the update to Tumwater Municipal Code (TMC) 16.08. In the Summer, a new Washington Wildland Urban Interface (WWUI) Code arose as a potential concern related to the code updates in progress. The project to update TMC 16.08 was put on hold until the WWUI Code issues were resolved. The City campaigned with the Association of Washington Cities to champion requested changes to the WWUI at both the Washington Building Code Council and State Legislature. Those changes were adopted by the State Legislature in 2024. The work on this project will restart in Spring 2024.

129. Street Tree Standards Update

The City held multiple public meetings about the update to Tumwater Municipal Code (TMC) 12.24. In the Summer, a new WWUI Code arose as a potential concern related to the code updates in progress. The project to update TMC 12.24 was put on hold until the WWUI Code issues were resolved. The City campaigned with the Association of Washington Cities to champion requested changes to the WWUI at both the Washington Building Code Council and State Legislature. Those changes were adopted by the State Legislature in 2024. The work on this project will restart in Spring 2024.

130. Landscaping and Buffering Requirements

The City held multiple public meetings about the update to Tumwater Municipal Code (TMC) 18.47. In the Summer, a new WWUI Code arose as a potential concern related to the code updates in progress. The project to update TMC 18.47 was put on hold until the WWUI Code issues were resolved. The City campaigned with the Association of Washington Cities to champion requested changes to the WWUI at both the Washington Building Code Council and State Legislature. Those changes were adopted by the State Legislature in 2024. The work on this project will restart in Spring 2024.

131. Tumwater Public Urban Forest Inventory

The City was awarded \$40,000 from the Washington Department of Natural Resources to complete this project. By December 31, 2023, the City Inventory had been completed. The project continued into 2024 related to the Maintenance Plan as part of the project scope. Funds for this project were provided by the USDA Forest Service Urban and Community Forestry Program, administered through the State of Washington Department of Natural Resources Urban and Community Forestry Program. The USDA is an equal opportunity provider and employer.

132. Habitat Conservation Program

The City is in the process of finishing work with our consultants on a couple of studies in preparation for expected meetings with U.S. Fish and Wildlife in March 2024 to address their latest round of comments. The City remains committed to getting an HCP that protects endangered species while allowing Tumwater to meet our planning obligations under the Growth Management Act.

Cross-Cutting Sector

Strategy G1. Conduct education and outreach across climate mitigation areas.

133. Tumwater Sustainability Webpage

The City Sustainability webpage was updated in 2023 to be more up to date: www.ci.Tumwater.wa.us/Sustainability.

134. Student Internships and Guest Lectures

The City hosted a total of six interns from the Evergreen State College's Center for Climate Action and Sustainability in 2023.

135. Legislative Agenda

The City remains committed to pushing for state action on climate and other environmental issues. Most notably the City of Tumwater was very active in both WA State Building Code Council and the State Legislature in 2023 regarding proposed changes to the WWUI Code and worked closely with the Association of Washington Cities to pass legislation making necessary improvements to the Code.

The City also worked with its lobbyist and TCMC partner jurisdictions to advocate for bills that would help reduce local emissions.

Strategy G4. Enhance monitoring and evaluation of climate mitigation measures and outcomes.

No current projects.

Strategy G5. Advocate for climate-mitigating

state and federal policy.

No current projects.

136. Tumwater Tree Board

The Tumwater Tree Board continues to meet monthly to advise the City Council on Tree-related issues. The Tumwater Tree Board has been in place for 28 years.

137. Rechargeable Battery Recycling at "Clean Up Drop Off" Event

The City Green Team added rechargeable battery recycling to the annual "Clean Up Drop Off" event. More than 30 pounds of rechargeable batteries and devices were collected for recycling at no cost to the City.

138. CDP "B" Score

The City's CDP score improved from a "C" in 2022 to a "B" in 2023.

139. Arbor Day Native Plant Giveaway

The Tumwater Tree Board provided 100 native plants and 50 packets of native wildflower seeds to members of the community to celebrate Arbor Day in 2023.

140. Environmental Purchasing Requirements

The Tumwater Green Team passed Environmental Purchasing Requirements for City Operations.



