Thurston Climate Mitigation 2022 Progress Report January 2023









THURSTON CLIMATE ACTION

Thurston County and the cities of Lacey, Olympia, and Tumwater are working together with Thurston Regional Planning Council to take action on climate change. In 2020, the four partners finalized the Thurston Climate Mitigation Plan, a framework for regional climate mitigation action.

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.ThurstonClimatePlan.com

Framework for Climate Mitigation Action

Shift Energy Sources

- Switch more appliances, heaters, and vehicles to electricity
- Make it easier to charge electric vehicles in homes and around town

Green Our Grid

- Support State-level action to generate electricity with 100% renewable sources
- Increase energy efficiency of homes and businesses
- Make it easier to install renewables on homes and businesses

EQUITABLE DISTRIBUTION OF COSTS & BENEFITS

Live Lighter

- Create denser urban neighborhoods where more people can opt to drive less
- Make it easier to telework, walk, bicycle, and ride transit
- Reduce food and other waste

Store Carbon

- Plant trees and preserve tree canopy
- Preserve farmland and increase regenerative agriculture practices
- Preserve and enhance prairies

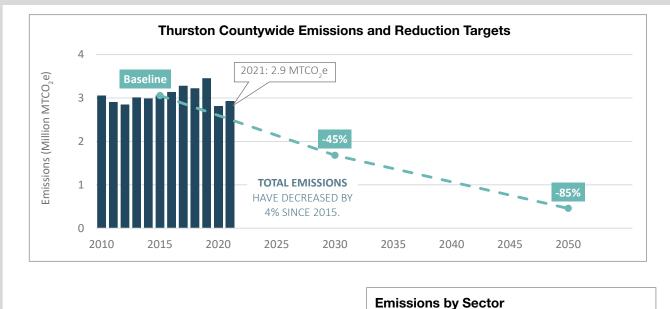
Build Local Capacity & Resilience

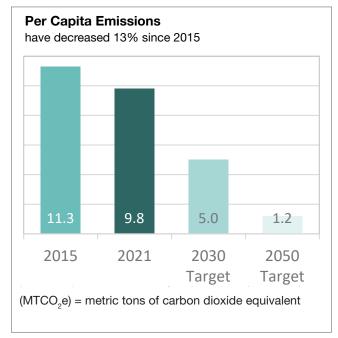
- Provide coordinated leadership on climate action
- Monitor greenhouse gases and assess progress
- Develop expertise in climateforward practices
- Factor climate impacts into funding and decisions
- Support the development of a green economy
- Further understand and address social equity issues related to climate change

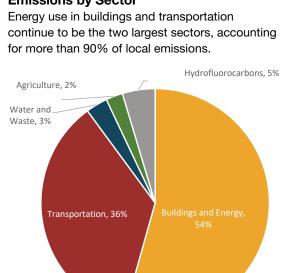
Communitywide Emissions

How Are We Doing?

In 2021, the region's estimated carbon footprint was 2.9 million metric tons of carbon dioxide equivalent $(MTCO_2e)$, approximately 9.8 $MTCO_2e$ per person. After a significant drop in 2020, emissions climbed back up by 4% as many activities rebounded from pandemic-related closures. Overall, the region has seen a 4% decrease in emissions since the baseline year, but more work needs to be done to meet the 2030 and 2050 targets.







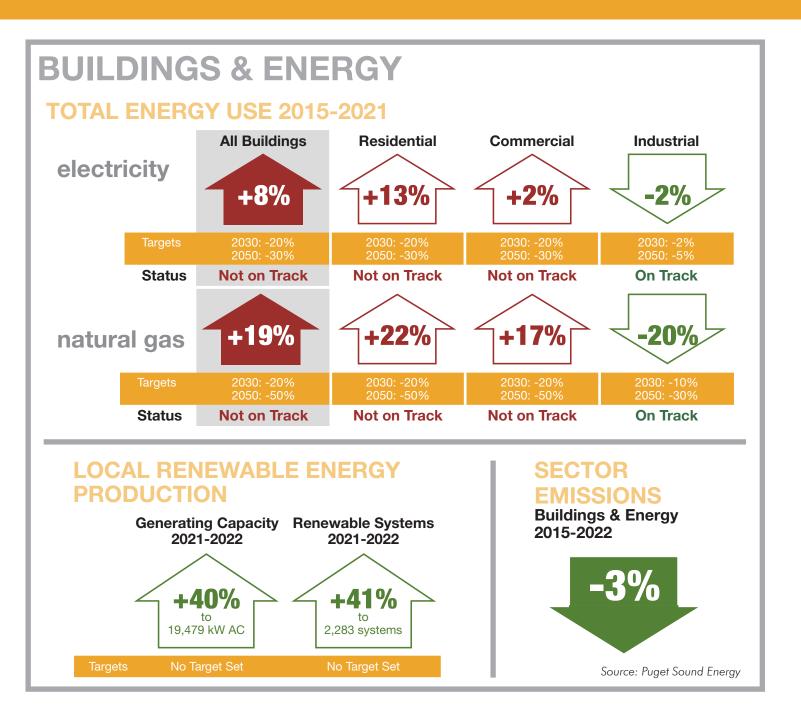
Source: 2021 Greenhouse Gas Emissions Inventory for Thurston County (October 2022)

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.

How are We Doing?

Energy use in the region has risen overall since 2015, and both electricity and natural gas use increased in 2021 compared to 2020. Despite this rise in energy use, emissions from the building sector have decreased 3% since 2015, as Puget Sound Energy has reduced the amount of fossil fuels it uses to generate electricity supplied to Thurston County. The amount of renewable energy produced across the region increased substantially in the past year, with most of the growth in 2022 among residential customers.



4

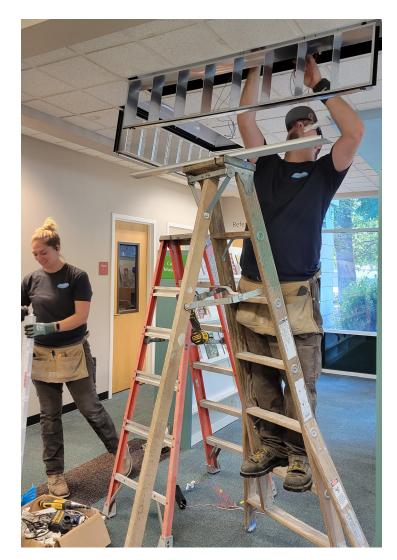
2022 Highlights

- Commercial Energy Financing. In July, Thurston County established its Commercial Property Assessed Clean Energy + Resilience (C-PACER) Program for all eligible commercial properties within incorporated and unincorporated Thurston County. The County is finalizing the administrative process and will pilot test the program in January 2023. The program makes it easier for commercial property owners to finance qualifying energy efficiency, renewable energy, water conservation, and resiliency improvements for their buildings. (Strategy B3)
- Solar Growth. The region continued to increase its renewable energy generating capacity through new solar projects. Olympia has received SolSmart Gold Designation, which recognizes communities that have taken aggressive action to become solar friendly. Tumwater, Thurston County, and Lacey also began the process of applying for SolSmart designation. Tumwater is working to install 11 panels on water infrastructure, and Olympia's Community Block Development Grant program awarded \$250k to Olympia Community Solar for 7 systems. (Actions B5.3, B5.5, B5.8)
- Municipal Energy Upgrades. Partners continued to replace existing lighting fixtures in public buildings and infrastructure with more efficient LED replacements. Olympia replaced approximately 300 fixtures at the old Family Support Center facility on State Street, Tumwater replaced roughly 900 fixtures at Timberland Regional Library, and Thurston County retrofitted two dorms at the Corrections Facility,

Building 5 of the Courthouse Campus, and 70 streetlights along Martin Way. Since 2015, emissions from streetlighting across the region have decreased by 46% thanks to investments by all the partners. (Action B2.3)

 Legislative Advocacy. The Steering Committee advocated for the passage of SB 5722 during the 2022 legislative session. The bill, now signed into law, directs the State Energy Office to create energy benchmarks for several categories of buildings, and expands the reach of the 2019 Clean Buildings Act to cover additional building types. The bill also includes an early incentive program where building owners who achieve compliance before the deadline can apply for incentive payments. (Action B2.8)

> Tumwater worked with the Tumwater Timberland Regional Library branch to upgrade around 900 light fixtures with more efficient technology. Credit: City of Tumwater





Community Spotlight Buildings & Energy

Quixote Village is a tiny house community that serves people experiencing homelessness. Quixote Communities, the nonprofit organization that manages the village, partnered with Olympia Community Solar to install solar panels on the 30 homes within the village, reducing long term energy costs of the site while reducing emissions and helping residents achieve their goals for sustainability. The solar system was designed and installed by South Sound Solar with funding from the City of Olympia, Squaxin Island Tribe, Puget Sound Energy, Collective Sun, and the Hammond Foundation.



Community Spotlight Transportation & Land Use

This year, Intercity Transit's Walk N Roll program supported Avanti High School's Physical Education teacher to create an interdisciplinary bike class that:

- taught riding skills
- facilitated discussions of mobility justice
- promoted awareness of road infrastructure impacts on people who bike, walk, and use transit

Students built skills in self-reliance and active, climate-resilient transportation using refurbished bicycles. Several students became regular cyclists after the class, trading in car commuting for bicycle rides. The school community's excitement about the program has laid the groundwork for expanding to run throughout the school year in 2023-24.

Credit: City of Olympia

Credit: Intercity Transit

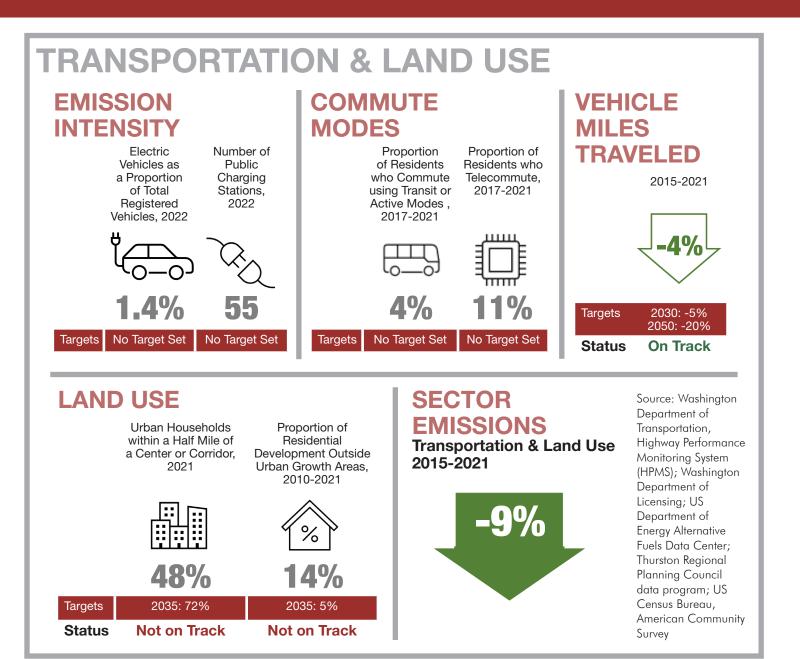
6

Transportation and Land Use

Transportation accounts for a third of emissions in our region. Passenger vehicles are the largest source, followed by heavy duty trucks and commercial vehicles. Strategies to shrink this sector 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.

How Are We Doing?

After a steep decline in 2020 due to the COVID-19 pandemic, total miles driven in Thurston County increased by 7% in 2021, but remained 9% lower than the amount driven in the baseline year. <u>Transit</u> <u>ridership</u> also increased, though boardings for Intercity Transit and ruralTRANSIT remain well below prepandemic ridership levels. The market for electric vehicles continues to increase, though they still make up a very small portion of total registered vehicles.



THURSTON

CLIMATE ACTION

2022 Highlights

- Dense Urban Areas. Lacey consolidated two lower density single family zones into one higher density zone that will allow for more housing options and help reduce sprawl, and is engaging the community on how to support hubs in their Neighborhood Commercial Districts. Olympia began work on a strategy to encourage more walkable, transit-supportive <u>Neighborhood Centers</u>, business clusters within residential neighborhoods that serve the day-to-day retail and service needs of local residents. Such land use changes will help reduce transportation emissions over time, by allowing more people to live close to their daily needs. (Actions T1.1, T1.2, T1.3, T1.4)
- **Teleworking**. A high proportion of workers in the region continued to work from home more than 63% of workers at larger employers and government offices enrolled in the <u>Commute Trip Reduction</u> program continue to telework, compared to just 6% in 2019. Thurston County updated its telework policy to support remote work options and reduce emissions from daily commuting. Teleworking policies that support remote work options for employees help reduce emissions from daily commuting. (Action T2.17)
- EV-readiness. Lacey adopted regulations that require electric vehicle charging stations and infrastructure for future expansion of electric vehicle charging in new multifamily buildings. Olympia began working with community stakeholders to develop electric vehicle charging standards in its parking standards. (Actions T3.1, T3.5)
- **Transportation Improvements.** All four jurisdictions continue to construct improvements that help support more efficient travel and car-free options that reduce emissions, like walking and bicycling. Thurston Regional Planning Council updated the competitive process it uses to distribute <u>federal</u> <u>transportation funding</u>, and now assigns higher scores to projects that reduce greenhouse gas emissions. (Actions T5.1, T5.2)



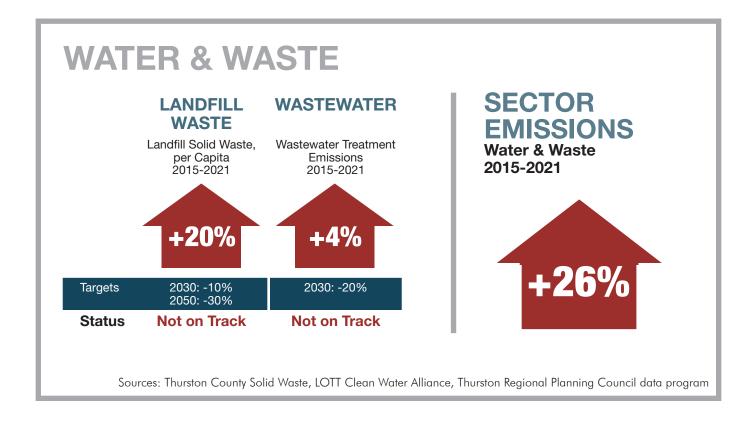
TOP: Olympia completed a multi-year effort to upgrade pedestrian connections along Franklin Street. The project includes new sidewalks, curb bulb outs at intersections, improved streetlighting, street trees, bike racks, and public art. *Credit: City of Olympia* BOTTOM: Lacey continued installation of several electric vehicle charging stations around the city, including at the Lacey Community Center and North Thurston School District Offices. *Credit: City of Lacey*

Water and Waste

Waste-related emissions contribute just three percent of Thurston County's total greenhouse gas emissions, though this measurement does not include emissions from products that are consumed in Thurston County, but manufactured elsewhere. Climate mitigation strategies include reducing the amount of solid waste we create and increasing the efficiency of water and wastewater infrastructure.

How Are We Doing?

The <u>amount of waste</u> Thurston County residents send to landfills is increasing even faster than the population is growing. The <u>amount of wastewater</u> we produce also is increasing, though this process has become more efficient, growing more slowly than population is growing in urban areas.



9

2022 Highlights

- Waste Audits. Partners can support local businesses by providing waste audits, or analyses of a business' waste stream with the goal of diverting and reducing the amount of solid waste generated. Olympia conducted 27 waste assessments in 2022. (Action W4.4)
- Municipal Facility Upgrades. Tumwater has signed a contract with the Department of Enterprise Services to examine water and energy efficiency of all city facilities including water and sewer infrastructure. (Action W1.1)
- Community Outreach. Thurston County continued to update their <u>Talkin' Trash</u> video series, which teaches residents best practices for disposing of a wide variety of household items. The video series now has 25 videos, with topics ranging from Plastic Clamshell Packaging to Window Envelopes. The series also includes tips and tricks to reduce waste. (Strategies W4, W6)



City of Olympia staff provide free assessments to local businesses to identify ways to manage food and other organic waste. Credit: City of Olympia



Community Spotlight Water & Waste

Thurston County's Master Recycler Composter Program trains volunteers on methods to reduce waste, recycle, and compost. These volunteers then become community ambassadors, helping to educate other people on waste reduction. The program is run through Washington State University Thurston County Extension Office, with support from Thurston County and the Master Gardener Foundation of Thurston County. In 2022, the program hosted 40 events and graduated 28 new master recycler composters.

> Volunteers with the Thurston County Master Recycler Composter Program learn to sift compost at a demonstration garden. Credit: Thurston County



Community Spotlight Agriculture, Forests, & Prairies

The Voluntary Stewardship Program (VSP) is a partnership between Thurston County and Thurston Conservation District that allows farmers to work with a technical advisor to develop voluntary, site-specific stewardship plans. Participants are eligible for State Conservation Commission-funded cost-share projects focused on conservation enhancement or climate-smart activities. As of 2022, there are a total of 4,522 acres enrolled in the VSP program, five cost-share projects are completed, and six more projects are underway.

Credit: Thurston Conservation District

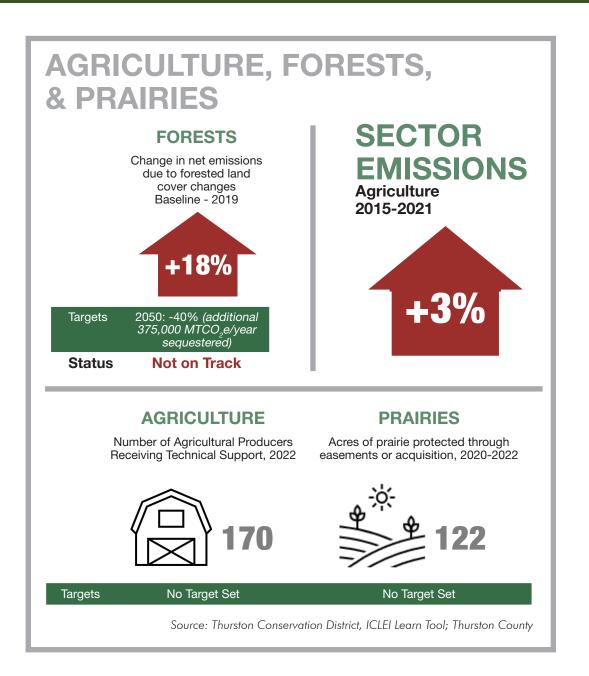


Agriculture, Forests, and Prairies

Agricultural practices like fertilizer use and manure management only contribute a small percent of emissions, but farmland, forests, and prairies can play a big role in offsetting the community's emissions by storing carbon in soil and vegetation.

How Are We Doing?

<u>Forested lands</u>, <u>agricultural lands</u>, and prairie lands in Thurston County have all declined from historic levels due to development pressure. The loss of these lands also means the loss of their ability to offset emissions from other sectors through carbon sequestration.



2022 Highlights

- Soil Smarts. Thurston Conservation District conducted 119 soil tests for Thurston residents the tests help reduce over-application of fertilizer. TCD also provided more than 50 community members with site-specific guidance on a range of regenerative agriculture practices that can increase carbon sequestration while providing other benefits. (A2.1)
- Forest Conservation. The Steering Committee sent a letter to Washington Department of Natural Resources (DNR) opposing planned timber harvest on legacy forests in Thurston County and requesting these areas be preserved for their carbon sequestration benefits. (A5.1)
- Urban Tree Standards. Both Lacey and Tumwater began working through recommendations from their Urban Forestry Management Plans. Lacey approved new standards reducing the number of trees that can be removed when new residential construction takes place. Olympia and Thurston County received a grant from the Washington Department of Natural Resources to conduct tree canopy estimates. (Actions A6.5, A6.9)
- Conservation and Restoration Programs. Olympia planted more than 1,800 trees during the 2021/2022 season across various projects and programs. Thurston County continued to preserve land for agriculture, forestry, wildlife habitat, and recreation through its conservation incentive programs, including 184 acres acquired or placed under a conservation easement in 2022 through the Conservation Futures Program. (A5.1, A6.5)
- **Prairie Progress**. Local governments made significant progress in their responses to the federal Endangered Species Act listing of several animals in the region these Habitat Conservation Plans (HCPs) will also preserve and restore carbon-storing prairie areas. After many years of work, Thurston County's HCP

was federally and locally approved in 2022. The County is developing a Conservation Land System, and is actively purchasing land and conservation easements, including 117 acres in 2022. Tumwater also made progress on its joint HCP with the Port of Olympia. (Action A7.3)



Prairie lands conserved and restored through Thurston County's federally approved Habitat Conservation Plan have the potential to sequester carbon in soil and vegetation. *Credit: Thurston County*





State and Federal Climate Action

2022 saw significant legislation passed at the state and federal levels that will lower greenhouse gas emissions and support regional climate mitigation activities.

The **Washington State Legislature** passed several bills in 2022 that support the Thurston Climate Mitigation Plan, including:

- SB 5722 expands on the 2019 Clean Buildings Act and directs the State Energy Office to create energy benchmarks and an early adopter incentive program for multifamily buildings and smaller commercial buildings. (Action B2.8)
- **HB 1280** requires that emissions reductions practices be considered in the design of major publicly owned or leased facilities. (Actions B4.4, B6.4)
- HB 1814 establishes a new Community Solar Expansion Program to support underserved communities' access to renewable energy systems. (Strategy B5)
- Move Ahead WA (SB 5974), a 16-year transportation package, prioritizes emissions reductions and active transportation options. (Strategies T2, T3, T4, T5)
- HB 1799 establishes statewide organic material management goals and sets new requirements for organic materials collection and management for businesses and local governments. (Action W4.10)

State Building Code updates adopted in April and November will support the transition to cleaner energy sources. Updates, which will go into effect in July 2023, include requiring new homes, apartments, and commercial buildings to use more efficient heat pumps rather than furnaces, and requiring improved kitchen ventilation systems for kitchens with gas stoves. The updates also included stricter requirements to support electric vehicle (EV) charging in residential and commercial buildings. (Actions B2.8, B6.2, B6.4, T3.1)

Federally, the **Inflation Reduction Act of 2022** allocates \$369 billion to energy security and climate change programs over the next decade. The bill includes clean energy tax credits, environmental justice initiatives, consumer programs, creation of a green bank, and more. Thurston County, Lacey, Olympia, and Tumwater, and neighboring tribes recognize the urgent threat and opportunity that climate change poses to our community's economy, public health, public safety, and environment. We will work together to identify and boldly implement the most effective, efficient, and equitable actions to reduce locally generated greenhouse gas emissions to protect current and future generations from the most severe impacts of climate change.

- Shared Vision

2022 Climate Action Steering Committee

The Climate Action Steering Committee guides regional coordination of climate mitigation activities. Members include a designated elected official and alternate from each of the four partner jurisdictions.

Carolyn Cox	Lacey City Council
Robin Vazquez	Lacey City Council, Alternate
Lisa Parshley	Olympia City Council, CASC Chair
Yên Huýnh	Olympia City Council, Alternate
Tye Menser	Thurston County Board of Commissioners, CASC Vice Chair
Carolina Mejia	Thurston County Board of Commissioners, Alternate
Eileen Swarthout	Tumwater City Council
Charlie Schneider	Tumwater City Council, Alternate

2022 Climate Advisory Workgroup

The Climate Advisory Workgroup acts as a community stakeholder committee to support implementation of the Thurston Climate Mitigation Plan.

Stephanie Bishop Leila Chavez Simone Ervin Rachel Hastings Kim Piper Amy Tousley Tierra Bonds Carly Colgan Linsey Fields Jasmin Miller Justin Schmal

Mike Burnham Tom Crawford Jessica Gould Candace Penn Hazel Stephens (alt)

2022 Multijurisdictional Staff Team

The staff team provides staff coordination and technical support for climate mitigation activities.

Grant Beck, Hans Shepherd	
Pamela Braff	
Jennica Machado, Rebecca Harvey	
Alyssa Jones Wood, Brad Medrud	

City of Lacey City of Olympia Thurston County City of Tumwater For more information on regional climate mitigation activities and to sign up for email updates, please visit our website: www.ThurstonClimatePlan.com

Questions and requests for information can be directed to: Thurston Regional Planning Council 2411 Chandler Court SW

Olympia, WA 98502 Ph: 360-956-7575 | <u>climate@trpc.org</u>



Title VI Notice

Thurston Regional Planning Council (TRPC) hereby gives public notice that it is the agency's policy to assure full compliance with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, and related statutes and regulations in all programs and activities. Title VI requires that no person shall, on the grounds of race, color, sex, or national origin, be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination under any Federal Highway Aid (FHWA) program or other activity for which TRPC receives federal financial assistance. Any person who believes they have been aggrieved by an unlawful discriminatory practice under Title VI has a right to file a formal complaint with TRPC. Any such complaint must be in writing and filed with the TRPC's Title VI Coordinator within one hundred and eighty (180) days following the date of the alleged discriminatory occurrence.

Americans with Disabilities Act (ADA) Information

Materials can be provided in alternate formats by contacting the Thurston Regional Planning Council at 360.956.7575 or email <u>info@trpc.org</u>.

2022 Detailed Action Reporting

Each quarter, the TCMP partners provide status updates on their climate mitigation activities. These, and other project updates, can be viewed at <u>www.ThurstonClimatePlan.com</u>. The actions below include references to strategies and actions in the TCMP. Each sector in the TCMP is denoted with a letter: Buildings & Energy (B), Transportation & Land Use (T), Water & Waste (W), Agriculture, Forests, and Prairies (A), and Cross-Cutting (G). Strategies are identified by one number after the sector letter, while actions are identified by a second number.

Activities not tied to a specific sector, strategy, or action in the TCMP

Staffing

- ✓ Olympia hired two Climate Program Interns (one intern is supported through a partnership with Evergreen State College) and applied for and was selected to host a CivicSpark Fellow for the 2022-23 program year. Olympia also opened recruitment for two new climate positions (Climate Program Specialist and Energy Program Manager) in December.
- ✓ Thurston County hired a Climate Mitigation Senior Program Manager in October.
- ✓ Tumwater hired a Sustainability Coordinator to lead climate work in May.
- ✓ Lacey's adopted 2023 budget includes two new full-time positions: a Climate Sustainability Coordinator and Housing Lead.

Regional Coordination

- ✓ In January, the four regional partners approved a 3-year Interlocal Agreement to continue coordinating climate mitigation activities.
- ✓ The Steering Committee formed and filled all slots on the new Climate Advisory Workgroup. The group will provide community input on climate actions and priorities.

Related Projects

- ✓ Olympia created and trained staff on new Climate and Equity Frameworks which will be used when bringing items to City Council. By January 2023, all items presented to City Council will require assessments of climate and equity considerations.
- ✓ Olympia was selected for the October 2022 Thriving Earth Exchange cohort. As a part of this cohort, the City will receive project and technical support to complete a community science project focused on evaluating the distribution of urban heat impacts in Olympia.

Awards and Recognition

✓ Tumwater applied for and won the municipality division of the Thurston Green Business Awards for sustainability efforts in 2021.

Buildings and Energy

✓ The Steering Committee advocated for passage of SB 5722, HB 1766, and HB 1770 as part of its legislative priorities. SB 5722 passed, and will set energy benchmarks for multifamily buildings and smaller commercial buildings. HB 1766 did not pass but would have set deadlines to limit new gas connections and transition toward electrification. HB 1770 also did not pass and would have allowed local jurisdictions to adopt a residential reach code in place of the state Energy Code. (B2.8, B4.6, B4.11, B6.4)

B1. Reduce energy use in residential buildings.

- ✓ Lacey began developing an Energy Efficiency Audit Program and gap analysis of existing programs/ community offerings. The project has included hosting PSE events/energy-saving pop-ups and collaborating with Puget Sound Energy, Community Action Council, Department of Commerce and other local and regional agencies to identify existing barriers for local households looking to increase their residential energy efficiency while lowering monthly costs. (B1.2)
- ✓ Olympia received first applications for the Rental Rehabilitation Revolving Loan Fund to rehabilitate rentalhousing units for low-income renters. This revolving loan fund provides access to zero-percent, deferredpayment loans to eligible applicants. Eligible projects include energy efficiency improvements such as replacing heating equipment and windows. Staff expect to write the first loan in first quarter of 2023. (B1.4)
- ✓ Olympia continued work to develop a rental housing registration program which will likely include a basic energy performance audit or inspection (B1.4).

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

- ✓ Tumwater looked at how Clean Building Performance Standards will impact City facilities and has started to compile data in EnergyStar Portfolio Manager. (B2.1)
- Olympia Public Works completed a LED conversion for the entire 108 State Street (old Family Support Center) facility. The building is 14,700 square feet, and approximately 300 light fixtures were updated. (B2.3)
- ✓ Lacey continues to convert lighting to LED in all facilities. Since 2007, all of Lacey's municipal buildings (including City Hall, the library, community center, museum, and public works operations center) as well as all City utility systems, parks and recreation facilities, and more than 4,300 streetlights are powered by "100 percent green" electricity from renewable energy credits. All traffic signals within Lacey have been converted to LED fixtures. (B2.3)
- ✓ Thurston County continues to replace lamps with LEDs as replacement is needed. Two dorms at Thurston County Corrections Facility, about 85% of the lamps in Building 5 of the Courthouse Campus, and a portion of the employee parking lot lighting at Family and Juvenile Court were retrofitted to LEDs. The new Administration Building on Pacific Avenue has all LEDs. All traffic signals (13) in the County have been updated to LEDs. The County retrofitted all 70 streetlights along Martin Way. In other locations, streetlights are retrofitted with LEDs on an ongoing basis when lights go out. (B2.3)
- ✓ Tumwater received a quote from PSE on the price to convert all PSE owned streetlights to LED, and is working internally to determine funding and timing for such an endeavor. (B2.3)
- ✓ Tumwater replaced ~900 light fixtures with LED fixtures at the Tumwater Timberland Library branch. (B2.3)

B3. Reduce energy use across building types.

- ✓ In 2020, the Washington State legislature passed legislation enabling counties to establish Commercial Property Assessed Clean Energy and Resilience (C-PACER) programs. C-PACER allows eligible property owners (commercial, agricultural, industrial, or multi-family) to obtain long-term financing for qualifying energy efficiency, renewable energy, water conservation, lead reduction, and resiliency improvements (including seismic). The financing is repaid to a private lender, while the County levies a voluntary assessment and records a lien on the property. County Ordinance No. 16184 (July 26, 2022) established the C-PACER Program for all eligible commercial properties within incorporated and unincorporated Thurston County. The County is finalizing its C-PACER administration process and will pilot test the program in the first quarter of 2023. (B3)
- ✓ Lacey has worked to connect residents with resources and access to help make energy efficient decisions (B3.1).

B4. Reduce energy use in new buildings or redevelopment.

- ✓ Tumwater held a public meeting about the forthcoming Operations & Facilities Building that should be built in the next three years. Information provided included a commitment to build the facility all-electric, the inclusion of EV chargers, and the incorporation of rooftop solar. (B4.4)
- ✓ Olympia's staff completed an inventory of natural gas equipment in city-owned facilities. Next steps include evaluating the feasibility of retrofitting existing buildings to become all-electric by 2030 and identifying priority projects for facility electrification. (B4.4)
- ✓ Thurston County upgrades its facilities to energy-efficient HVAC systems on a regular basis. Efficient heat pumps were installed in the Emergency Services Center building in 2021. (B4.4)
- ✓ Thurston County has streamlined its Land Use Permitting process through a Project Review Timeline, but has not yet developed incentives or streamlined permitting for green building. In prior years, the County conducted a stakeholder survey about barriers to green building as part of an initial effort to develop green building codes and standards. (B4.5)

B5. Increase the production of local renewable energy.

- ✓ Olympia City Council awarded \$250k of Community Development Block Grant (CDBG) funds to Olympia Community Solar to install solar on 7 single family and multi-family homes owned by Homes First in Olympia. The seven systems, cumulatively 95.5 kW of solar energy, will produce more than \$530,000 of energy savings over their 30-year warrantied lives. The 265-megawatt hours of solar electricity will also prevent 2.3 million pounds of CO₂ emissions, the equivalent of 4.2 million vehicle miles. (B5)
- ✓ Tumwater requested quotes from vendors to design additional solar on the roof of City Hall. Staff also did a preliminary assessment of water & wastewater facilities for their suitability for solar installations. (B5.3)
- ✓ Olympia staff evaluated the feasibility of rooftop solar on city buildings and identified priority sites for future rooftop solar projects. (B5.3)
- ✓ Thurston County has received direction from the Board of County Commissioners to incorporate solar into new buildings and major remodels where feasible; and will develop an RFP for solar energy procurement in Q1 of 2023. (B5.3)

✓ Lacey worked to identify public buildings with the capacity to support community solar programs. (B5.3)

- ✓ Tumwater began the installation of nine solar panels at one water fill station and two solar panels at one water valve location this year. As of December, two installations have been completed. (B5.3)
- ✓ Olympia received SolSmart gold designation in recognition for making it easier to install solar PV systems in Olympia. Olympia implemented several SolSmart recommendations in 2021-2022, including streamlining the solar permit process, supporting community solar, creating a solar resource webpage, and identifying local codes that intentionally or unintentionally prohibit solar PV development in Olympia. (B5.5)
- ✓ Thurston County met with SolSmart technical advisors in November and will be working on the scorecard in Q1 2023. (B5.5)
- Tumwater met with SolSmart Technical Assistance to begin the SolSmart process and have drafted the Solar Statement required to begin accreditation. The Solar Statement is on the agenda for the Public Works Committee to review in early January 2023. (B5.5)
- ✓ Lacey began conducting a SolSmart qualifications assessment. (B5.5)
- ✓ Olympia's Land Use and Environment Committee discussed solar-readiness policies during their 6/16 committee meeting, and directed staff to include single-family and multi-family residential solar-readiness as a part of the State Building Code update in July 2023. (B5.8)
- ✓ Lacey updated their website to promote solar resources and information and will be participating in Olympia Community Solar's 2023 campaign. (B5.8)
- ✓ Olympia shared an announcement for an Olympia Community Solar group purchase campaign on City social media and included information about the campaign in the Climate Newsletter and Five Things utility mailer. (B5.10)
- ✓ Lacey began working with local nonprofits to conduct a solar group purchase campaign. (B5.10)

B6. Convert to cleaner fuel sources.

- ✓ Olympia's CivicSpark Fellow has begun research on strategies to decarbonize existing buildings in Olympia through improving efficiency and electrifying. (B6)
- ✓ Olympia began work with Rocky Mountain Institute (RMI) and Habitat for Humanity to develop a heat pump group purchase campaign. The campaign launch is planned for the first quarter of 2023. (B6.1)
- ✓ In January, Olympia City Council passed a resolution stating the intent of the City to electrify city-owned facilities and Olympia's built environment. The resolution requires the city to electrify all newly constructed city-owned buildings and major renovations of existing buildings, and inventory existing buildings to evaluate the feasibility of retrofitting existing buildings to become all-electric. In March, Olympia City Council had a work session to discuss policy pathways to building electrification, and the Land Use Committee had a briefing and discussion on commercial building electrification policies. (B6.2, B6.4)
- ✓ Olympia provided written and oral testimony to the State Building Code Council in support of the heat pump space and water heating proposals for the 2021 Commercial Energy Code. (B6.2, B6.4)
- Tumwater has committed to building its next facility all-electric with no natural gas connections. Requiring new City Buildings to be all-electric is one of Tumwater City Council's Strategic Priorities for 2023-2024. (B6.4)

Transportation & Land Use

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

- All partners have continued ongoing implementation of Growth Management Act plans that are intended to direct future growth into urban areas, supporting the expansion of transit and walkable communities. (T1.1)
- ✓ Olympia began work to develop a subarea plan and environmental impact statement for the Capital Mall Triangle. The EIS scoping comment period closed in November and the 100+ comments are being used in the scoping for the EIS. Climate concerns were among the top three issues mentioned in the comments. Staff and the consultant team are currently working on developing the three alternatives for the EIS. Public engagement on these alternatives will begin in January 2023. They issued an RFQ for a consultant and hired a new Senior Planner to work on this project. (T1.1)
- ✓ Olympia City Council adopted Ordinance 7335, regarding downtown parking requirements for residential uses. Amendments make the entire area exempt from automobile parking for residential uses and clarify that bicycle parking requirements do apply. (T1.1)
- ✓ Olympia is working to update parking standards and conducted a survey around residential standards in November. Staff is working to incorporate proposed code amendments into other parking code revisions, and a public hearing is tentatively scheduled for March 2023. (T1.1)
- ✓ Lacey conducted a neighborhood multimodal commute and consumption preferences survey. (T1.1, T1.4)
- Lacey consolidated two lower density single family zones into one higher density zone that allows all housing types and styles. The primary goal is to promote infill development and additional density in existing neighborhoods. (T1.2)
- ✓ Olympia hired a consultant and began the initial phase of the Neighborhood Centers Plan project, including field visits to each neighborhood center. The consultant delivered a draft market analysis and neighborhood center profile. Staff engaged the community with a community survey and two pop-up events. An open house is tentatively scheduled for January 19, 2023, and an update will be provided to the Land Use and Environment Committee in February 2023. (T1.4)
- Lacey is working to engage the community on how to create more walkable, transit-supportive hubs in their Neighborhood Commercial Districts. The effort has included community surveys, open houses, and virtual events. (T1.4)
- ✓ Lacey is in development stages of an ADU program expansion. The development has included updating an ADU website and meeting with other communities on potential code implementation, a design guide, and suitability map. (T1.9)
- Accessory dwelling units are now permitted throughout Thurston County, with the rural County being the final area to have regulations adopted in 2020. The UGAs have ADU regulations specific to each area and will undergo an update to align with each respective City code and ensure compliance with state law. The updates will happen following the adoption of the updated joint plan. The County's Comprehensive Plan references ADUs as one housing type needed to diversify the housing options throughout the County. (T1.9)

✓ Olympia staff gave public presentations on proposed changes around reducing parking standards on urban corridors and used a questionnaire to solicit community feedback in October. (T1.11)

T2. Increase efficiency of the transportation system.

- ✓ Olympia continued design and right-of-way acquisition for Fones Road, a project that will mitigate some congestion and add safer active transportation facilities. (T2.2)
- ✓ Lacey updated and repaired multiple sidewalk locations and is currently working to update the Martin Way Park & Ride to direct access, provide a driver comfort station, and support transit stops off I-5. (T2.2)
- ✓ Tumwater submitted and received grant funding that will convert the X Street intersection at Capitol Blvd from a signalized intersection to a roundabout and for another project that will convert the northbound I-5 on/off ramps at Tumwater Boulevard from a partially stop controlled intersection to a roundabout. (T2.2)
- ✓ Tumwater applied for a Safe Routes to School grant which would install another roundabout. (T2.2)
- Thurston County completed a roundabout project at Yelm Hwy and Meridian Rd and is currently working on US 12 urban improvements phase 1. There are several other transportation projects currently in design and planning. (T2.2)
- ✓ Olympia worked on upgrading the signal controllers to add new Signal Performance Measures (SPM) software. This software will improve traffic activity monitoring, such as: traffic counting, vehicle arrival times, vehicle delay, and emergency vehicle activations in real time. This data will help us understand traffic flow along a corridor so that we can improve program signal timing adjustments for transit. (T2.2)
- Thurston County is working with a consultant to conduct a study evaluating the amount of congestion on rural intersections. The next step will be evaluating emission levels and identifying appropriate actions for reduction. Public Works hired an Associate Civil Engineer, this position will become the project manager for work on transportation efficiency. (T2.2)
- ✓ Thurston County Public Works hired a new Engineering and Training staff position to advance transportation efficiency. (T2.2)
- ✓ Olympia hired a project planner to review parking standards on Urban Corridors. (T2.8)
- ✓ Olympia staff attended the Capitol Campus Advisory Committee meeting which included a presentation on the WSDOT Telework Impact Study. (T2.17)
- ✓ Staff from all partners submitted Commute Trip Reduction reports outlining their jurisdiction's CTR programs. Olympia, Tumwater, and the County's reports included new telework policies implemented in 2022. (T2.17)

T3. Increase adoption of electric vehicles.

- ✓ Olympia, Tumwater, and Thurston County submitted an Electrification of Transportation Systems grant application for a regional project to prioritize and evaluate the readiness of publicly owned land and facilities to provide public EV-charging infrastructure. (T3)
- ✓ Olympia's Land Use and Environment Committee discussed EV-charging and EV-ready parking policies during their 6/16 committee meeting, and directed staff to begin work on developing an EV-readiness ordinance that exceeds the statewide minimum requirements. Staff held focus group sessions to learn more about community perspectives regarding the feasibility and need for increased EV charging and EV-ready parking in Olympia. (T3.1, T3.5)

- ✓ While T3.2 and T3.7 do not apply to the City of Tumwater as the city does not charge for parking nor exclude EV charging through zoning regulations, staff requested quotes from vendors for the installation of three Level 2 EV charging ports to be installed at City Hall. Six additional chargers were added behind City Hall (now a total of eight) to be used by City vehicles as Tumwater moves towards an electric fleet. (T3.2)
- ✓ Lacey identified locations to install EV charging stations and have worked on installations at four locations, two of which are completed. (T3.2)
- ✓ Lacey adopted regulations that require EV charging stations and infrastructure for future expansion of EV charging for all multi-family and long-term care facilities. (T3.1, T3.7)
- ✓ Olympia Public Works ordered 6 Ford Lightning EVs through Department of Enterprise Services. (T3.10)
- ✓ Tumwater kicked off a project to use the Electrification Coalition's DRVE tool to do a Fleet Electrification Assessment, which should be completed before the end of 2023. (T3.10)
- ✓ Tumwater passed an internal Anti-Idle Policy for the existing ICE fleet vehicles in coordination with the City's unions and Green Team. (T3.10)
- ✓ Thurston County has two F150 Lightnings and one Chevy Bolt on order, bringing the County fleet total to five BEVs and two PHEVs. Current focus is on assessing the suitability of the Lightnings and replacing the sedan fleet with BEVs as they come due. The County also plans to purchase a compact SUV in late 2023 to assess for suitability. The County has reduced its total fleet size by 8% and fuel volume by 10% over the past six years. (T3.10)
- ✓ Thurston County began development of a plan for EV charging infrastructure. (T3.10)
- ✓ Tumwater, Olympia, and Lacey ordered Ford F-150 Lightning electric trucks. Tumwater also ordered two plug-in hybrid small SUVs. (T3.10)
- ✓ Thurston County allocated \$150,000 for electric vehicle charging stations, project in progress. (T3.10)
- ✓ Tumwater installed 4 additional EV chargers to support current and future fleet electrification. (T3.10)
- ✓ Tumwater staff attended an EV Car Show with Thurston Climate Action Team (TCAT) at Harbor Days and showed the City's Nissan Leaf. (T3.11)
- ✓ Tumwater updated its Commute Trip Reduction Policy to include financial incentives for employees to purchase or lease new or used electric and plug-in hybrid vehicles. (T3.15)

T4. Increase the use of public transit.

- ✓ Olympia began construction of intersection improvements at State and East Bay streets, which includes replacing two pull-out bus stops with in-lane bus stops. This will improve transit's efficiency, making it more appealing. (T4.1)
- Tumwater's updated Commute Trip Reduction program explicitly included riding the bus as a method for getting a financial incentive, where previously only vanpooling, carpooling, and working remotely had incentives. (T4.15)
- ✓ Olympia published an article (Ways to Reduce the Impact of your Commute) in Climate Actions E-news, which encouraged use of fare-free transit and other alternatives to driving alone. (T4.15)

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

- ✓ Olympia moved ahead on a number of projects designed to make it safer and easier to walk and bicycle including:
 - Received an WSDOT City Safety grant for 4th and Plum project. (T5.1)
 - Finalized design and began construction of the State and East Bay project. (T5.1)
 - Finished the Franklin Street project. (T5.1)
 - Continued to move forward the Fones Road project. (T5.1)
 - Pursued permits for construction of one mile of shared use pathway through Grass Lake Park. (T5.1)
 - Applied for a Surface Transportation Block Grant (STBG) for the Elliott Avenue sidewalk and STBG grant for a scope and pre-design study for Martin Way. (T5.1)
 - Received several grants for the Downtown to Southeast Bike Corridor and the Westside Bike Corridor. (T5.1)
 - Continued to move the Boulevard Road Trail Crossing and Bike Corridor Ext. project forward. (T5.1).
- ✓ Thurston County moved ahead on a number of projects designed to make it safer and easier to walk and bicycle including:
 - The Martin Way ADA Improvements Project (completed in 2022) improved curb ramps, sidewalks, and push buttons at several intersections along Martin Way. (T5.1)
 - The Pacific Avenue Safety Project is currently in construction and includes the installation of three mid-block crossings for bikes and pedestrians. (T5.1)
 - Several additional bike and pedestrian projects moved through the planning stage. (T5.1)
 - The County continued to maintain 37.5 of the 57 miles of shared-use pathway in Thurston County. (T5.1)
- ✓ Tumwater moved ahead on a number of projects designed to make it safer and easier to walk and bicycle including:
 - As part of a painting and restriping project, the width of the non-motorized area on 79th was increased to improve the experience of bicyclists and pedestrians. (T5.1)
 - Added sidewalks and bike lanes to a redesign of Sapp Road where it crosses Percival Creek as part of the design phase of the Percival Creek Fish Passage Barrier Removal project. (T5.1)
 - Submitted a "Safe Routes to School" grant application to reduce lane width on 2nd Ave, increase sidewalk widths, and add a five-foot-wide bike lane in each direction. (T5.1)
- ✓ Olympia and Lacey participated in a stakeholder meeting hosted by TRPC to discuss maintenance of shared use trails, and provided information to TRPC for its trails plan update. (T5.1)
- ✓ Olympia completed a Street Safety Plan update (T5.1, T5.2)

23

- ✓ Olympia City Council celebrated Walk to School Month with special recognition and proclamation by Council on September 25. (T5.4)
- ✓ Olympia included a Back-to-School Safety Tips article in the Sep/Oct Five Things Utility Bill Insert. (T5.4)
- ✓ TRPC and the Olympia School District collaborated with partners to create Safe Route to School maps for elementary and middle schools to support students who walk/roll to school. (T5.4)
- ✓ Olympia staff attended Healthy Kids Safe Streets meetings. The purpose of this network is to bring together organizations and individuals in Thurston County working together to increase the number of students and youths who can safely walk and roll for transportation. Topics discussed included transportation safety messaging, walk to school month, bike map distribution, school walk route maps, and traffic safety yard signs. (T5.4)

Water and Waste

W1. Increase the efficiency of water and wastewater infrastructure.

✓ Tumwater signed a contract with the Department of Enterprise Services for an Energy Service Company to look at water and energy efficiency of all city facilities including water & sewer infrastructure. In Q4, the City received benchmarking results for their larger and lowest performing buildings. (W1.1, W1.2)

W2. Reduce water consumption.

✓ Thurston County reviews monthly water usage to prioritize capital improvements, although COVID-19 has made this assessment difficult since buildings have not been fully occupied. The County will test a prototype water-saving shower head at the Correctional Facility (TCCF). (W2.2)

W4. Divert more solid waste from landfills.

- ✓ Olympia added 178 residential composting customers for a total of 9,474 and added 4 new businesses for a total of 160 commercial participants. In 2023, the City will switch to reporting tonnage collected instead of the number of businesses and residents subscribing. (W4)
- ✓ Olympia drafted an ordinance to address City compost procurement requirements of HB 1799 and it is being reviewed by legal. It should be accepted in January 2023. (W4)
- ✓ Thurston County continued to update their Talkin' Trash video series, which teaches residents best practices for disposing of a wide variety of household items. The video series now has 25 videos, with topics ranging from Plastic Clamshell Packaging to Window Envelopes. The series also includes tips and tricks to reduce waste. (W4, W6)
- ✓ Thurston County Public Works is aiming to fill open positions in Solid Waste Education & Outreach. With the added staff capacity, the department will expand its Waste Audit program (which has stalled as a result of COVID-19 and lack of capacity). The program will target major businesses and work with the Chamber of Commerce on outreach. The program includes a focus on reducing food waste. The department also provides education and resources on its Business Waste Reduction web page. (W4.4)
- ✓ Olympia Waste ReSources completed 27 waste assessments with businesses. (W4.4)
- ✓ Tumwater piloted composting at City events at the Falls Fest event on October 1. (₩4.10)

✓ Thurston County Public Works maintains the Waste Less Food Program web page and will expand outreach and engagement (schools, community events, social media, etc) in 2023 once positions are filled. The department also sponsors the Thurston County Master Recycler Composter Program, in partnership with WSU Extension, which trains volunteers to promote the Waste Less Food Program, staff compost demonstration sites, and provide other assistance to the community. (W4.10)

Agriculture, Forests, and Prairies

✓ Thurston County Conservation Incentive Programs (A5, A6, A7)

- The Conservation Futures program has preserved up to 5,650 acres for agriculture, forestry, wildlife habitat, or recreation opportunities. The program allows landowners to sell property or future development rights to a land trust or other qualified organization, which uses funds provided by Thurston County government to support the purchases.
- Transfer of Development Rights allows eligible landowners in approved "Sending Areas" to transfer rights (or credits) to a developer while continuing to farm the land. Developers may buy the credits and use them to increase building density in designated "Receiving Areas." The County has certified 44 development rights resulting in 215 acres preserved through the program.
- The Open Space Tax Program allows landowners to apply for reduced property taxes if they keep land in a rural, undeveloped state. As of January 2021, the program has enrolled 127,207 acres as designated forest land, 32,592 acres as agricultural land, 2,206 acres as timberland, and 3,249 acres as open space.
- The Voluntary Stewardship Program allows farmers to work with a technical advisor (Thurston Conservation District) to develop voluntary, site-specific stewardship plans. Participants are eligible for State Conservation Commission-funded cost share projects focused on conservation enhancement or climate smart activities. To date, there are a total of 4,522 acres enrolled in the VSP program, five cost-share projects are completed and six more projects are underway.
- ✓ Tumwater's Tree Board has continually been advising City staff and Council on tree-related issues for 27 years. (A5, A6)

A2. Support agricultural practices that sequester carbon.

- ✓ Olympia staff met with Thurston Conservation District to discuss potential partnerships, opportunities to provide education to community gardeners in Olympia parks, and an Agripark Feasibility Study. (A2)
- ✓ Tumwater FRESH program has been practicing more regenerative agriculture and teaches low till/no till, tarping, deep compost mulching, and cover cropping. These practices are always discussed in the context of climate change and keeping carbon in the soil. (A2.1)

A5. Manage forests and other ecosystems to sequester carbon.

- ✓ Lacey acquired 537 acres of public open space and is now working on a master plan to support passive recreation and minimize the human footprint in forested areas, creeks, and wilderness. (A5)
- ✓ Olympia's Urban Forestry Policy Team has begun early discussions to plan for the development of an Urban Forest Management Plan. (A5.1)

- ✓ The Steering Committee sent a letter to Washington Department of Natural Resources (DNR) opposing planned timber harvest on legacy forests in Thurston County and requesting these areas be preserved for their carbon sequestration benefits. (A5.1)
- ✓ Olympia staff updated the habitat stewardship GIS systems to improve the prioritization, planning, and tracking of tree restoration and planting projects. During the 2021/2022 season, Olympia parks and public works staff planted more than 1,800 trees. (A5.1)
- ✓ In fall 2022, Olympia's Habitat Stewardship program completed tree plantings (A5.1)
- ✓ Olympia and Thurston County kicked off a project to develop a Thurston County land cover and City of Olympia tree canopy assessment. The city also applied for and successfully received a DNR Urban and Community Forestry Grant. (A5.1, A6.5)

A6. Reduce emissions from the urban landscape.

- ✓ Tumwater continues to implement its Urban Forestry Management Plan, and held a meeting with the Tree Board and internal staff in November to assess progress on the implementation of the plan and provided a workplan for 2023 and 2024. (A6.5)
- ✓ Thurston County's 2022-2023 development code update docket includes two potential forestry updates: amending the Forest Lands Conversion Ordinance and reviewing rural tree protection standards. As part of this larger project, Thurston County contracted with TRPC to conduct an analysis of where forest land conversions have occurred and the associated impacts to rural tree canopy, and produce a corresponding map product. The TRPC contract analysis was completed. (A6.5)
- ✓ Thurston County partnered with the City of Olympia and successfully secured grant funds to complete a Healthy Forests project by July 2023. The project will include work on municipal canopy and a joint code update (Development Code Docket A-25). After the tree canopy assessment, the next steps will be to update County tree planting standards and review forest conservation programs (2023); and update urban forest management provisions for the north county cities' urban growth areas as part of the Joint Code Update projects (2023-2024). (A6.9)
- ✓ Olympia's habitat stewardship work includes control of invasive/nuisance vegetation threatening tree health. (A6.9)
- Tumwater kicked off revising the city's Tree and Vegetation Protection ordinance, Street Tree Plan and ordinance, and Landscaping ordinance. The community engagement process for the Tree and Vegetation Protection Ordinance (TMC 16.08) has begun. (A6.9)
- ✓ Thurston County's Habitat Conservation Plan (HCP) is the county's response to the federal Endangered Species Act listing of several animals in Thurston County. The HCP provides a unique opportunity to keep farms in production while incentivizing sustainable farming practices. The HCP will save local building permit applicants the extra step of getting federal permits if their project impacts listed species. Federally approved in July 2022 and adopted by the Board of County Commissioners in November, permitting will begin in January 2023. The County is currently acquiring land and developing a Conservation Land System to create mitigation credits that can be purchased to offset development impacts to covered species. (A7.3)

✓ Tumwater held meetings with US Fish and Wildlife and Washington Department of Fish and Wildlife to review their comments on the administrative draft of the Habitat Conservation Plan prepared by the city and Port of Olympia. The city also prepared a grant funding request for Phase 3 federal funding to complete the development of the plan. The City and Port staff are currently reviewing the revised complete draft of the HCP to send back to the consultant in December. The intent is to have a complete public draft of the HCP issued in early 2023 with the NEPA/SEPA process to follow. (A7.3)

Cross-Cutting

The TCMP includes several strategies that touch multiple sectors, or cross-cutting strategies. Cross-cutting strategies involve education, outreach, legislative advocacy, and monitoring.

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

- ✓ TRPC completed the <u>2021 Thurston Region Greenhouse Gas Inventory</u>, and presented the information to the Steering Committee and Advisory Workgroup. The inventory did include several new emissions sources. (G4.1)
- ✓ Tumwater completed its 2021 City Operations Emission Inventory with the help of volunteer Dave Bradley. This information was included in our annual Green Team report and is published on our website. (G4.1)
- ✓ TRPC created the <u>Thurston Climate Action Dashboard</u>. The dashboard includes a homepage showing emissions broken into sectors, and sector webpages that show performance metrics, links to community resources, and information about TCMP actions and strategies. (G4.2)
- Tumwater staff re-worked internal goals and performance measures related to sustainability to include some new metrics and goals to better align with the full suite of Strategic Priorities from City Council. (G4.2)
- ✓ With the help of the Action Mapping Project out of the University of Washington Tacoma, the cities of Olympia, Tumwater, and Thurston County worked to create the Thurston County Equity Index, a geospatial tool to help identify areas of increased burden. Tumwater created Story maps aimed at presenting this information in a usable and understandable format for residents and internal staff. The tool is expected to be finished in 2023. (G4.4)

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

- ✓ Olympia City Council provided written comment to the State Building Code Council in support of the residential energy code proposals that would improve energy efficiency and indoor air quality, and accelerate the transition to clean energy in new residential construction. (G5.5)
- ✓ The Steering Committee approved a <u>set of legislative priorities</u> and advocated for them during the 2022 legislative session. (G5.5)

27