Tacoma Environmental Action Plan: 2020 Progress Report



Amidst the many challenges faced in 2020, this past year also brought forth a renewed understanding of the positive impact that collective action can have on ensuring healthy communities.

Five years ago, the City of Tacoma adopted the Environmental Action Plan (EAP) with the goal of identifying meaningful, high-priority actions that the City of Tacoma and our community would take between 2016 and 2020 to meet the environmental goals outlined in the Tacoma 2025 Strategic Plan.

While significant progress was made on many of the targets and actions detailed in the EAP, we also know that more equitable, ambitious, and urgent actions will be required to help mitigate the impacts of a changing climate that affect our community health, economy, and well-being.

I am pleased to present this Year 5 progress report, which helps set the stage for new priorities and investments focused on equitable action for climate change and environmental justice in the years to come.

To learn more about our climate action planning efforts, visit www.cityoftacoma.org/climate.

Yours in Service.





Victoria R. Woodards

Victoria R. Woodards Mayor

What is the Environmental Action Plan and Its Intent?

The Environmental Action Plan (EAP) is a list of meaningful, high-priority actions that the City of Tacoma, Tacoma Public Utilities (TPU), and our community will take between 2016 and 2020 to meet the environmental goals outlined in the Tacoma 2025 Strategic Plan.

The EAP was developed in 2015 over nine months in a collaborative process with staff from multiple City of Tacoma departments, representatives of partner organizations, and residents of Tacoma.

It replaces the 2008 Climate Action Plan and builds on the 2016 Climate Change Risk Assessment to present near-term sustainability targets and actions in six different categories.

Each year the City releases a progress report detailing progress made on each target and action.

Six Categories of Sustainability

Natural Systems

Acquiring and managing natural areas contributes to climate change resilience. Green spaces also offer Tacomans access to nature and can positively influence mental and physical health.

Air and Local Food

Clean air and safe, nutritious food are important to sustaining our local community.

Buildings and Energy

Building energy represents about 40% of emissions for Tacoma's homes and businesses mostly due to natural gas used for heating.





Transportation

Transportation accounts for 73% of GHG emissions in Tacoma. Single-occupancy passenger vehicles contribute significantly to overall transportation emissions.

Materials Management

In the waste hierarchy we must prioritize reducing, then reusing, then recycling. Sharing, leasing, borrowing, refurbishing and buying used and durable goods should be the first choices.

Climate Resiliency

Climate change is having and will continue to have negative financial and social impacts to our built infrastructure and natural and social systems.



Reading the 2020 Progress Report



This report contains near-term **targets** for each of the six categories of sustainability. In most cases, the baseline was set using 2015 data, and 2020 is the target year. For each target, a graphic shows the baseline, goal, and progress so far:





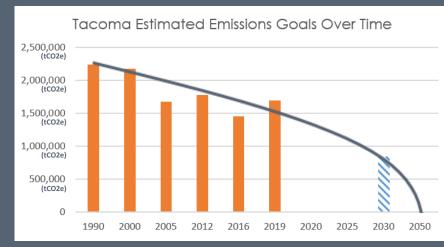
When the 2020 value exceeds the goal, data and icon is shown in green.

When the 2020 value is **behind the baseline**, data and icon is shown in **red**.

This report also contains **actions** that the City and community will take to reach the targets. Each action is given a **progress rating** and a **status update**:



Look for **stories of success** throughout the report to see some of the impactful accomplishments made this year (or over the past five years) in each EAP category.



The EAP recognizes that climate change poses serious threats for life in Tacoma and demands a strong and thorough response.

The targets and actions in the EAP are intended to improve the health and resilience of Tacoma by helping to reduce our greenhouse gas (GHG) emissions. Tacoma's historic GHG emissions are shown in the graph to the left.

The 2030 goal represents 50% reduced GHG emissions from 2019 levels, and the 2050 goal represents the pledge to reach (net)-zero emissions, in line with global efforts to limit warming to 1.5° Celsius.



TARGETS



Increase volunteers engaged in stewardship activities and programs by 20%.

2020 Goal: 4,105 volunteers

2020: 1.795 volunteers

2019: 3,735 volunteers **2018:** 2,076 volunteers **2017:** 3,888 volunteers **2016:** 3,781 volunteers

2015 Baseline: 3.421 volunteers

Increase blocks of new permeable residential streets.

2020 Goal: 53 blocks

2020: 62.5 blocks

2019: 62.5 blocks **2018:** 60.5 blocks **2017:** 37.5 blocks **2016:** 30 blocks

2015 Baseline: 28 blocks

Increase acres of actively managed open space ecosystem habitat by 52%.

2020 Goal: 87.5 acres

2020: 76.35 acres

2019: 72.2 acres **2018:** 67.8 acres

2017: 62.5 acres

2016: 60.4 acres

2014 Baseline: 57.5 acres

Increase acres managed by Green Stormwater Infrastructure.

2020 Goal: 870 acres

2020: 990 acres

2019: 960 acres **2018:** 925 acres **2017:** 866 acres **2016:** 860 acres

2014 Baseline: 290 acres

Increase tree canopy, focusing on low income neighborhoods and communities of color most susceptible to heat island effect.

2020 Goal: 212,500 trees

2020: 216,581 trees

2019: 215,633 trees **2018:** 213,013 trees **2017:** 212,371 trees **2016:** 212,115 trees

2009 Baseline: 212,000 trees







	Action	Progress Rating (1-5)	2020 Status
N1	Reduce stormwater quantity and/or increase quality in each of the city's watersheds by developing Management Plans that use best practices appropriate to each watershed's natural and built conditions.	3	The City received \$0.5M in grant funding to complete Phase 2 of the area's Watershed Management Plan, a GIS-based tool to prioritize stormwater management actions that improve water quality and are fiscally responsible. Phase 2 will be complete in 2022.
N2	Implement code that discourages development on lands where such development would endanger life, property or infrastructure, or where important ecological functions or environmental quality would be adversely affected.	4	In 2020 the City Council initiated a regulatory amendment process to consider code updates for the Port of Tacoma Manufacturing and Industrial Center and South Tacoma Manufacturing and Industrial Center, to replace the Tideflats Interim Regulations. The regulatory updates are scheduled to be considered by the City Council in April and May of 2021.
N3	Develop Urban Forestry Implementation Strategy for strategic and equitable planting locations, incentives, public engagement, retention strategies and maintenance. Create stable funding for implementation.	5	The City's Urban Forest Management Plan was developed in 2019, and officially adopted by City Council (Resolution 40492). This UFMP strengthens themes such as Resource Management, Equity and Accessibility, Canopy Health & Growth, Long-Term Funding, Climate Resiliency, Enhanced Ecosystem Services & Benefits, and Community Engagement & Stewardship.
N4	Plan, create incentives for, and support green stormwater retrofit projects such as rain gardens and other low-impact designs.	4	The City continues to complete new and retrofit green stormwater infrastructure projects. In 2020, the City was awarded a grant through the Puget Sound Partnership Action Agenda to investigate alternative methods for infiltration testing for GSI. The City also provides technical assistance for private citizens and developers on GSI.
N5	Develop and manage an Open Space program based on watershed planning that seeks to own most valuable properties and effectively manages and restores habitat, using volunteers as appropriate.	4	The City has an established Open Space Program that stewards approximately 500 acres in various capacities. All properties are managed for tree canopy and stormwater benefit. The City continues to educate, recruit and engage the public in open space property stewardship.



	Action	Progress Rating (1-5)	2020 Status
N6	Improve regulations to encourage tree preservation and protection on private property and in the City right-of-way.	3	As part of the Urban Forest Management Plan, a package of code amendment policy was prepared and recommended for adoption by IPS. Staff is currently working on the code amendment package which will include a Heritage Tree program as well as clarification on tree protection in the right-of-way. This package of code updates will be proposed in 2021.
N7	Create a public education campaign, targeted outreach effort or incentives to inform residents and/or plant sellers about the benefits of native and pollinator-friendly species and the hazards of invasive species.	3	The City's Open Space program uses social media, public stewardship events, and individual interactions to communicate about the importance of native species and hazards of invasive species. Green Tacoma Day 2020 was a virtual celebration of community green spaces, engaging community members on the importance of our native forests. Open Space continues to plant and salvage native plants in our community.
N8	Adopt and implement Landscaping Manual and Integrated Pest Management Policy and Plan for all City facilities and train staff.	1	No progress made.
N9	Retrofit one public facility with Green Stormwater Infrastructure.	5	In 2019, the City completed the Solid Waste Management building Green Stormwater Infrastructure project. This project added 10,694 sq. ft. (0.24 acres) of water quality control, treating 71,895 sq. ft. (1.65 acres) of runoff.

Tacoma's Tree Coupon Program

In 2016, the Environmental Action Plan set a goal to plant 500 trees - focusing on low-income neighborhoods and communities of color most susceptible to heat island effect. As a result, the Tree Coupon Program was expanded to reduce the financial barrier to tree planting for Pierce County residents. A partnership between Tacoma Urban Forestry, Tacoma Power, and the Puyallup Watershed Initiative, the program continued to grow over the past five years, helping to easily exceed the goal of 500 trees planted. Since 2018, the program has reinvested \$14,340 into Tacoma's low-income neighborhoods (increasing from \$15/tree in 2018 to \$30/tree since 2019). The program has grown its partnership from five to eight local nurseries, helping to support small local businesses. Increased surveying of program participants as well as expanded equity investigations continue to help improve and ensure equitable outcomes for the program.





TARGETS

Increase number of low income neighborhoods and communities of color with community gardens by 14%.

2020: 18 gardens
2019: 20 gardens
2018: 12 gardens
2017: 12 gardens
2016: 14 gardens

Meet healthy fine particle pollution levels 365 days a year (in 2015, 9 days were above healthy particle levels).



2015 Baseline: 356 days

Support for Food Equity and Security

2015 Baseline: 14 gardens

Food equity and security became an increasingly urgent issue during the COVID-19 emergency. Despite funding and operational challenges affecting many City programs and partner organizations, the City maintained a strong partnership with the Puyallup Watershed Initiative to support three community-led food equity projects, helping to deliver 1,320 pounds of food to 555 individuals and skills training to 139 individuals. Ensuring equitable access to local food was also supported through increasing the number of community gardens in low-income neighborhoods and communities of color from 14 to 18 over the past five years. The City continues to support programs and partners with the goal of expanding access to healthy local food.





Air and Local Food

	Action	Progress Rating (1-5)	2020 Status
A1	Continue to collaboratively seek federal and state funding for reducing wood smoke pollution.	4	The City continues to promote the woodstove change out program administered by the Puget Sound Clean Air Agency. 39 stoves were scrapped or removed in 2020.
A2	Sustain and grow community garden program through enhanced garden support and education.	4	City support continues for gardens for residents in low-income and low-English language proficiency neighborhoods. From 2016-2020, the number of gardens with low-English proficiency community members increased from 14 to 18.
A3	Create and fund a reporting system and feedback forum for the city to hear from those suffering from food insecurity.	4	City staff continues to engage with community members and organizations about food equity issues. The City contracted with the Puyallup Watershed initiative to provide \$19,590 for three community-led food equity projects delivering 1,320 pounds of food to 555 individuals and skills training to 139 individuals.
A 4	Support gleaning (harvesting produce left over in fields and home and community gardens for donation) in Tacoma through funding and outreach.	4	The Harvest Pierce County gleaning program adjusted its model in 2018. The amount of food harvested and distributed increased from 17,495 pounds in 2018 to 46,290 pounds in 2019 and 57,251 pounds in 2020. To accomplish this, 239 gleaning events were held that engaged 293 volunteers in 2020.
A5	Support urban agriculture and clear legal hurdles so citizens can sell produce grown in the city.	3	City staff reviewed the Urban Farm Pilot Project conditional use permit application and issued a permit. Through the process, staff identified potential changes to Code. Staff will use lessons from the multi-year Urban Farm Pilot Project to improve Code, policies, and programming to support urban agriculture.
A6	Support innovative projects to encourage more disadvantaged citizens to shop at farmer's markets.	4	The City contracted with Proctor Farmers' Market and Tacoma Farmers Market to provide \$9,830 for their SNAP Market Match program delivering healthy food to 430 low-income market shoppers. These local farmers markets provided \$103,475 to low-income shoppers in 2020, up from \$81,113 in 2019.
A7	Pilot 1 - 2 small-scale urban agriculture programs on public land.	2	To pilot a small-scale urban farm, Harvest Pierce County has partnered with a farmer who completed their Farm Foundations training program. A conditional use permit has been issued for a City-owned site. Rollout is anticipated for spring 2021.
A8	Implement community supported agriculture (CSA) pick-up at 4 city facilities for employees.	3	A program scope for a CSA program at four City worksites was developed, but was delayed due to the COVID-19 pandemic. The program will continue in spring 2022.

TARGETS

Reduce energy use in City & TPU buildings by 10%.

2013-15 Baseline: 213 mil kBTU 2016: 199 mil kBTU 2017: 216 mil kBTU 2018: 210 mil kBTU **2019:** 212 mil kBTU **2020:** 173 mil kBTU 2020 Goal: 192 mil kBTU

Reduce electricity use in City & TPU operations by 10%.*

2013-15 Baseline: 80.3 mil kWh 2016: 75.6 mil kWh 2017: 77.7 mil kWh **2018:** 78.4 mil kWh 2019: 62.3 mil kWh **2020:** 56.9 mil kWh

2020 Goal: 72.4 mil kWh

Decrease peak water use by 1,419 gallons per account.*

2017 Baseline: 64,576 gal/acct.

2018: 66,334 gal/acct. **2019:** 62,521 gal/acct.

2020: 59,310 gal/acct

2020 Goal: 63,157 gal/acct.

*This target was updated and added in 2017

Reduce water use at City & TPU facilities by 10%.

2013-15 Baseline: 105,759 CCF

2016: 98.573 CCF **2017:** 104,393 CCF **2018:** 100,662 CCF **2019:** 98.322 CCF

2020: 96,057 CCF

2020 Goal: 95.183 CCF

Increase solar power by 26%.

2020 Goal: 1.012 kW

2020: 4.127 kW 2019: 3.084 kW

2018: 2.881 kW **2017:** 1.767 kW

2016: 1,600 kW

2015 Baseline: 784 kW

Certify 100% more buildings as Energy Star.

2020 Goal: 28 buildings certified

2020: 23 buildings **2019:** 23 buildings

2018: 18 buildings **2017:** 18 buildings **2016:** 14 buildings

2015 Baseline: 14 buildings certified

Certify 20% more buildings as LEED

2020 Goal: 49 buildings certified,

2020: 44 buildings

2019: 44 buildings

2017: 44 buildings

2016: 44 buildings

2015 Baseline: 41 buildings certified



^{*}This target was reworded in 2020 to clarify accurate tracking and measurement of electricity use in City operations.



	Action	Progress Rating (1-5)	2020 Status	
B1	Meet I-937, the Washington State Energy Independence Act, energy conservation targets which require utilities to achieve all cost-effective energy conservation measures.		Tacoma Power exceeded I-937 targets for 2020 of 23.37 million kWh by acquiring 41.762 million kWh of energy conservation savings across the whole service territory. 23.38 million kWh of these savings occurred within Tacoma - saving enough electricity to heat and light 1,949 homes.	
B2	Develop a pilot commercial program focused on reducing utility costs through improving building ops. & maintenance.	5	Through workshops, coaching, and assessments, Tacoma Power supported participants in pilot CSEM project toward achieving 5% in electricity savings during their first two years. The first cohort saved an average of 6% in their first year, and achieved 4% savings. A second cohort also launched.	
В3	Continue to develop water conservation incentives, rebates and education for residential, commercial and industrial customers.	4	Tacoma Water issued 70 smart irrigation controller rebates. Water savings kits reached almost 200 households in 2020, largely by a new mail-fulfillment program. Tacoma Water also finalized two new brochures (one for children, one for adults) that emphasize the source of our water and complexity of our system.	
B4	Hire a green building advocate for the City's Permit Office to identify incentives, remove barriers, and encourage green building practices.	5	The City's Resilient & Green Building Specialist position funding was renewed for the 2021-2022 budget.	
B5	Retain funding for low income energy efficiency programs.	5	Due to the effectiveness of past TPU programs, better building codes and the availability of more efficient products, fewer conservation opportunities exist today. Funding has been retained in the budget and adjusted to align with current conservation potential. Tacoma Power continues to seek new opportunities to serve low-income customers.	
В6	Support efforts at the state and local level to incentivize conservation in rental properties.	4	Tacoma Power continues active participation in the development of the Clean Buildings Law. This law will require commercial building owners for buildings larger than 50,000 square feet to invest in the energy performance of their buildings to meet building performance targets.	



	Action	Progress Rating (1-5)	2020 Status
B7	Work with regional partners to increase cost effective energy efficiency standards in the State Energy Code. Participate actively to revise the State Building Code to incorporate performance that targets net-zero energy by 2030.	5	Tacoma Power participated in both the residential and commercial code Technical Advisory Groups in 2018-2019, and this action is complete. The City had 48 registered voters for 2021 ICC code voting. City staff are active in the Regional Code Collaboration led by King County and Shift Zero work groups that focus on improving Washington energy code.
В8	Develop community-owned solar projects and support distributed generation.	5	Four, 75 kW Community Solar projects were completed in 2016, and TPU continues to explore options for new projects. Tacoma Power submitted a grant application for the State Clean Energy Fund to support solar projects that benefit low-income residents through service providers.
В9	Promote transparency, investment and competition of energy and water performance by requiring commercial benchmarking and disclosure through EPA's Energy Star utility tracking system. Increase awareness of the system and provide technical assistance to customers to better track and monitor building energy use.	5	TPU customers can now track multiple accounts attached to one building using new software available online. Advanced meter upgrades are in progress, which will allow for customer access to more specific data related to building energy use. A how-to guide has been created and is live on the TPU website.
B10	Upgrade all streetlights to LED where cost effective and use best practices when possible to reduce light pollution.	5	TPU's LED street light project replaced approximately 18,000 streetlights, reducing costs, increasing safety, and saving energy. The project finished three months ahead of schedule and \$2 million under budget. These LED street lights will save the City \$620,000 per year in electricity costs, and even more in maintenance costs.
B11	Track and report city buildings' utility performance and Energy Star scores. Develop a Resource Conservation Management (RCM) Plan.	4	74 City facilities were tracked in EPA's Energy Star Portfolio. Facilities that will need to meet WA State's new Clean Building Standards were identified. Energy savings projects were identified for key properties, and lighting and other upgrades were made on a case-by-case basis.

ACTIONS

	Action	Progress Rating (1-5)	2020 Status
B12	Meet federal Better Building Challenge goal (5 year, 10% reduction) by implementing energy efficiency in city buildings where cost effective.	4	TPU and General Government continued to focus on reducing energy use through operational improvements and low-cost equipment upgrades in five facilities with significant annual consumption: Convention Center, Police-Fleet Campus, TPU Campus, Tacoma Dome, and Central Treatment Plant.
B13	Ensure all existing occupied LEED New Construction buildings comply with LEED Existing Building Operations and Maintenance guidelines.	3	The Center for Urban Waters continues to monitor and report as part of its existing LEED gold certification. Police Headquarters and Fleet Administration buildings continue to work toward achieving LEED EBOM prerequisites.
B14*	Launch four new energy conservation initiatives to assist low-income and hard to reach customers	5	This goal was met in 2018 with a manufactured home pilot, higher rental rebate incentives, targeted energy audits, and a custom projects program. In 2020, Tacoma Power continued to launch new initiatives including a window promotion for rental properties, energy audits for low income customers and a low-income agency partnership program.

^{*}This action was added in 2018, as a more measurable replacement for the previous target: "Achieve all cost-effective electricity community conservation savings"

City Facility Energy Reductions

After hiring a City Resource Conservation Manager and TPU Facilities Conservation and Planning Administrator, the City of Tacoma has made significant progress in reducing energy and electricity use in City facilities in the past five years. The establishment of a Commercial Strategic Energy Management team helped identify numerous areas for improvement and establishment of long-term energy management solutions. Improvements include low-cost equipment upgrades, improved tracking and measurement strategies, and ongoing efforts to achieve LEED Existing Building Operations and Maintenance guidelines. Although unexpected, the COVID-19 state of emergency also allowed City facility management staff additional time to identify and install a number of system equipment and software upgrades which will help achieve long-term goals.



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Transportation

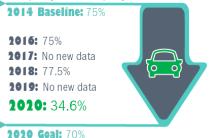
TARGETS



Decrease community single occupancy vehicle trips by 7% of 2014 levels.



Decrease City & TPU employee single occupancy vehicle trips by 5% of 2014 levels.



Register 2,000 electric vehicles by 2020.

2020 Goal: 2,000 registered

2020: 1,410 registered

1019: 1,164 registered1018: 878 registered2017: 583 registered



2015 Baseline: 383 registered

Increase pedestrian counts by 15% of 2015 counts (as measured during annual Bicycle/Pedestrian Count Week).

2020 Goal: 1,550 pedestrians

2020: 830 **2019:** No new data

2018: No new data **2017:** 1,581 pedestrians **2016:** 1,348 pedestrians

2015: 1,414 pedestrians

*This target and baseline data was updated for accuracy in 2020 due to previous inconsistencies in site counts.

Increase miles of bicycle infrastructure by 35% of 2015 miles.



*Reduce bicycle and pedestrian collisions in low income neighborhoods and communities of color by 50% of 2015 collisions.

2015 Baseline: 111 collisions
2016: 128 collisions
2017: 99 collisions
2018: 126 collisions
2019: 113 collisions
2020: 78 collisions

2020 Goal: 56 collisions

*This target and baseline data was updated for accuracy in 2019.

Decrease City & TPU fossil fuel use by 15% of 2014 levels.*

2014 Baseline: 19,328 MTCDe

2016: 19,065 MTCDe **2017:** 19,435 MTCDe **2018:** 19,011 MTCDe **2019:** 18,936 MTCDe **2020:** 16,877 MTCDe



*This target was updated for accuracy in 2018, and was updated in 2019 for greenhouse gas pollution, as measured by metric ton carbon dioxide equivalents (MTCDe).

Support for Electric Vehicles and Commute Trip Reductions

In 2020, the City of Tacoma was awarded a nearly \$600,000 grant from the WA State Department of Commerce to support electric vehicle (EV) charging infrastructure in communities disproportionately impacted by climate change and pollution from transportation systems. This funding will help add EV charging plugs in the downtown area, including both Level 2 and DC fast charging plugs at sites serving local workplaces and assembly centers.

As a result of the COVID-19 state of emergency, many City of Tacoma employees began teleworking in spring 2020. This drastically reduced both employee commute and city vehicle trips. The initial success of telework adoption helped jumpstart an update to the City's telework policy, which began development in late 2020. The updated policy will support continued commute trip reduction goals, and is expected to be finalized in mid-2021.





₹ Transportation



	Action	Progress Rating (1-5)	2020 Status
T1	Develop education programs and materials for the public on benefits and practicalities of electric vehicles (EVs).	5	TPU maintains an EV webpage (mytpu.org/EVs) and hosted virtual EV workshops through much of 2020. Other educational resources continue to be updated.
T2	Establish dedicated and stable funding for active transportation education, encouragement, safety programs, and infrastructure improvements.	2	In 2020, the Tacoma Streets Initiative maintained dedicated funding of \$2.5 million/year for active transportation.
Т3	Synchronize and recalibrate the timing of traffic signals on all Tacoma arterials. Repair, improve, or upgrade infrastructure as needed to maximize signal efficiency.	3	The City made changes to 9 signals to improve vehicle time spent at a signal, which includes installing flashing yellow arrows. The City also installed new 12" signal heads with back plates in approximately 20 locations.
T4	Become a Bicycle Friendly Silver Community by implementing the next 5 prioritized Mobility Master Plan roadway projects and next 3 trail projects.	3	1.9 miles of new bike facilities were constructed in 2020 - including bike lanes on Mildred St. and Phase III of the Pipeline Trail. Barriers to achieving silver Bike Friendly Community status are the number of dedicated active transportation staff and total miles of bike infrastructure.
T5	Support 4 multi-year Safe Routes to School (SRTS) Programs and infrastructure improvements.	3	Worked with two schools to identify infrastructure projects funded by City Real Estate Excise Tax (REET). Staff installed two traffic gardens in coordination with Metro Parks and taught pedestrian education to 60 children. Four pedestrian and bike safety videos were created and used in outreach materials.
T6	Create a grant program that supports walking, biking, and transit projects in business districts and designated centers.	1	No grant program has been developed.
Т7	Develop sidewalk, curb ramp and crosswalk inventories to prioritize future investments, as part of a Pedestrian Mobility Strategy.	3	168 new curb ramps were installed. Approximately 18,000 curb ramps (70-80% of total curb ramps) have been assessed to date.
Т8	Advocate at the state and national levels for policies and programs that provide incentives for Tacoma residents to use more fuel-efficient and alternative-fuel vehicles.	4	TPU advocated for HB 1512 (which passed the Washington State Legislature in 2020) clarifying utilities' authority to promote and incentivize transportation electrification. The City continues to advocate for passage of a state-wide Clean



	Action	Progress Rating (1-5)	2020 Status
Т9	Advocate for strong Sound Transit and Pierce Transit policies and funding, incl. South corridor ST3 projects & Pierce Transit bus rapid transit on Rt. 1.	4	The City continues to support the Hilltop Tacoma Link Extension, which is scheduled for completion in spring 2022, and the Pierce Transit BRT along Pacific Avenue.
T10	Equip operationally appropriate city vehicles with petroleum fuel saving and/or anti-idling technology.	4	The City continues to invest in hybrid and plug-in electric vehicles that reduce idling, and is continuing to install automatic vehicle locator equipment as appropriate to identify opportunities to reduce idling.
T11	Convert solid waste trucks from diesel to renewable natural gas made from methane captured at the wastewater treatment plant.	3	33 of the overall fleet of 82 solid waste trucks are now fueled by CNG. 6 diesel vehicles were removed from the fleet in 2020. Expansion of on-site pumping station capacity is in-progress. Renewable CNG from the wastewater treatment plant is under construction.
T12	Develop, implement, and monitor a Fuel Reduction Policy and associated education and awareness campaigns for both employee commuting and city trips.	3	A Fleet Decarbonization and Fuel Reduction Personnel Management Policy was drafted by the Sustainable Fleet and Fuel Team, with the involvement of legal and advisory committees. The adoption process is now underway.
T13	Update City's Telecommuting Policy and flexible work schedule to foster increased use when it meets City business needs.	3	Significant progress was made in 2020, as remote work was mandated for many employees. Most employees see benefits to continuing some level of telecommuting in the future, and new policy and guidance will be adopted in
T14	Join West Coast Electric Fleets at the Highway Lane Level in 2016.	5	The City joined West Coast Electric Fleets in 2018. City fleet management continues to work with departments to purchase electric passenger vehicles.
T15	Develop and incorporate contractor fuel emissions reduction standards into bids and contracts.	3	Emission reductions and sustainable construction practices were incorporated into City-wide Sustainable Procurement resources. These include updates for evaluating the sustainability of proposal and bid requests.



Materials Management

TARGETS

Decrease waste generation by 11% per capita per day.

2014 Baseline: 4.4 lbs.

2016: 4.8 lbs.
2017: 4.9 lbs.
2018: 5.1 lbs.
2019: 4.9 lbs.
2020: 4.8 lbs.

Double commercial composting accounts.

2020 Goal: 220 accounts

2020: 387 accounts

2019: 372 accounts **2018:** 344 accounts

2016. 344 accounts

2017: 277 accounts

2016: 270 accounts

Increase multi-family recycling accounts.

2020 Goal: 1,160 accounts

2020: 1,292 accounts

2019: 1,370 accounts **2018:** 1,111 accounts **2017:** 1.143 accounts

2016: 1,026 accounts

2015 Baseline: 1.105 accounts

2015 Baseline: 110 accounts

"Recycle Reset" Expands Knowledge of Proper Recycling Practices

In 2019, the Tacoma City Council approved Ordinance 28623 which brought changes to Tacoma's residential recycling program. A monthly surcharge was added, which helped fund new resources for improving recycling education. Additional staff was hired to help expand public education activities, and new print and digital resources were developed. With a renewed focus on historically underserved communities, transcreation focus groups were conducted for non-native English speaking community members, and a multilingual Recycling Community Ambassador Program was developed. Sustainable waste prevention and diversion strategies continue to be a priority for the Solid Waste Utility.





Materials Management

	Action	Progress Rating (1-5)	2020 Status
M1	Develop Construction and Demolition Diversion (C&D) program that includes education, reporting, regulation and enforcement.	3	The City's Green Building Specialist expanded C&D information on the City webpage. Resources include C&D recycling resources and C&D information being added to Planning and Development Services demolition permits.
M2	Support and advocate for strong product stewardship policies at the state and national levels, minimizing environmental impacts of product and packaging throughout all lifecycle stages, especially manufacturing.	4	Staff represented the City on the NW Product Stewardship Council Steering Committee and assisted in the development of comprehensive Extended Producer Responsibility legislation that will be introduced in the 2021 Legislative Session.
М3	Provide financial incentives to increase diversion of materials at the Tacoma Recovery and Transfer Center.	3	SWM is currently using an on-site wood grinder to make wood chips for TAGRO product. The wood diversion program was suspended for much of 2020, but is expected to continue in the future.
M4	Conduct and support education and outreach on waste prevention (including food) and toxic reduction, with focused outreach to communities of color.	4	While waste prevention remains the most effective strategy to divert materials from the landfill, 2020 focused on informing community members about changes to the recycling program, known as the "Recycle Reset". Transcreation focus groups were conducted for non-native English-speaking multifamily customers to improve recycling resources. A multilingual Recycling Community Ambassador Program was also developed.
M5	Incentivize the use of sink food grinders as a strategy for beneficial use of food scraps. Food sent to the wastewater treatment plant is used as TAGRO and can be turned into renewable natural gas.	2	Meetings were hosted for City staff to discuss challenges and opportunities around using and promoting the use of food grinders, and planning began to develop incentive programs for new multifamily construction projects.
М6	Provide recycling and composting education and outreach targeted at multifamily property managers and tenants.	4	SWM received a \$200K grant to increase recycling education among multifamily residents. In 2020, staff tested outreach materials in focus groups with property managers, staff, and residents, and transcreated these materials for field testing 2,500 multifamily households.



Materials Management

	Action	Progress Rating (1-5)	2020 Status
M7	Require new buildings to provide adequate space and receptacles for recycling and organics storage and collection.	3	Planning and Development Services and Environmental Services staff met to draft municipal building code language for commercial and multifamily buildings. New code proposals are anticipated in 2021.
M8	Enhance opportunities to sort and drop-off reusable and recyclable materials at the Tacoma Recovery and Transfer Center through better signage, enhanced floor sorts, and drop-off area.	1	Little progress was made on wood diversion strategies in 2020 due to staffing shortages and operational impacts from COVID-19.
M9	Reduce disposable bag use by shoppers.	5	The Bring Your Own Bag ordinance went into effect in July 2017, but was temporarily suspended in 2020 due to COVID-19 health and safety considerations. A state-wide plastic bag ban is expected to be implemented in 2021, which will take the place of Tacoma's ordinance.
M10	Ensure compliance with existing Sustainable Purchasing Policy, including increasing staff training.	3	A Sustainable Purchasing website with support resources for City staff was established as a result of work by an inter-departmental team, and policy and training documents continue to be updated.
M11	Conduct waste characterization audits at 4 City facilities in order to develop better strategies for waste minimization and diversion.	4	Waste characterization audits were completed by 4 target facilities. City departments continue to implement strategies for waste minimization and diversion, some of which were identified through audits.
M12	Increase materials surplus recovery and sale of City-owned goods and building demolitions.	1	No progress made, as a result of very few City-owned goods and buildings surplused.
M13	Use low-carbon concrete or asphalt made with a percentage of recycled asphalt and/or recycled asphalt shingles in City projects, including streets, where feasible and applicable.	3	The City is currently manufacturing Hot Mix Asphalt (HMA) with 10% recycled content. In 2020, 2,389 tons of HMA was produced with 10% recycled content. The City also continues to manufacture our own recycled content material using grindings from arterial street projects.



TARGETS

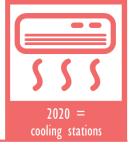
Complete sea level and flooding studies.



Incorporate climate risks into formal asset management, Capital Improvement Plans and implementation, and emergency management plans.



Have adequate and accessible cooling stations to address heat waves.



Use information from completed studies to modify development codes, ensuring safety and resiliency.



Educate the public on risks of climate change and opportunities for climate resilience and adaptation.



Identify which public infrastructures and facilities are at unacceptable risk from climate change; prioritize adaptations for these elements.



Climate Action Planning

As we plan for our collective climate future, the City of Tacoma is working to gather community input and hear more voices to develop the City's new Climate Action Plan. This plan will serve as the next phase of the current Environmental Action Plan, and will focus on climate action and environmental justice.

In September 2020, two community-led groups were formed to coordinate and gather meaningful input from the community. Over 30 Climate Justice Ambassadors were recruited to help gather community priorities, ideas, needs, and opinions to share with the City's Office of Environmental Policy and Sustainability and Citizens for a Healthy Bay—a local non-profit that has partnered with the City to support this engagement effort. A group of 10 Environmental Justice Leaders was formed to help steer the planning process and Climate Action Plan outcomes. The Climate Action Planning process will continue through mid-2021, and the new Climate Action Plan is expected to be adopted before the end of 2021.

To learn more about the City of Tacoma's Climate Action Plan, visit cityoftacoma.org/climate.





	Action	Progress Rating (1-5)	2020 Status
C1	Incorporate climate resilience actions into equity initiatives and programs, and consider future climate risk in emergency planning and hazard mitigation plan updates.	3	A Climate Adaptation Strategy contract was started in August 2020 and will continue into 2021.
C2	Preserve and expand urban forest canopies with climate resilient species based on heat island data analysis.	4	Open space continues to use native and climate adapted species to diversify our tree canopy over time. Heat island data is not used, as open space properties are focused in habitat corridors throughout the City.
C3	Prioritize the most vulnerable neighborhoods for capital improvement, development, and planning activities to ensure that these communities receive the services they need to build resilience to climate change and other stressors.	3	In 2020 the City Council approved the 2021-2026 Capital Facilities Program. The Capital Facilities Program identifies and describes projects that are proposed for funding, and projects with a climate nexus are flagged.
C4	Begin a conversation with the business community around climate impacts and resilience.	2	Building upon the 2016 Climate Risk Assessment, a Climate Adaptation Strategy began development, and will be completed mid-2021.
C5	Engage with and support community organizations that enhance community resilience.	3	Building upon the 2016 Climate Risk Assessment, a Climate Adaptation Strategy began development, and will be completed mid-2021.
C6	Ensure that near-term capital improvement projects consider climate change risks.	e 3	Building upon the 2016 Climate Risk Assessment, a Climate Adaptation Strategy began development, and will be completed mid-2021.



	Action	Progress Rating (1-5)	2018 Status
C7	Conduct additional studies (including data gathering, research, and mapping) to identify infrastructure that will be impacted by sea level rise (SLR) and flooding.	3	Building upon the 2016 Climate Risk Assessment, a Climate Adaptation Strategy began development, and will be completed mid-2021.
C8	Inspect, maintain, and upgrade critical infrastructure.	3	The City continues to inspect all facilities after any rainfall event that is greater than a 10 year event (3 inches in 24 hours); however, regular inspections or upgrades of roadway infrastructure is less frequent. Critical infrastructure upgrades are being evaluated in the Climate Adaptation Strategy, which is currently under development.
C9	Preserve remaining natural areas, and provide more guidance and specifications on incorporating climate science in habitat restoration plans.	4	Open Space looks for opportunities to acquire property in a cost effective manner. The City permitting department allows climate adapted species on a case by case basis. PDS has updated code to increase the protection of biodiversity corridors. OS staff follows pertinent science and local forums tracking research and trends on climate change and restoration.
C10	Evaluate the development code related to landslide and flooding hazards.	3	Building upon the 2016 Climate Risk Assessment, a Climate Adaptation Strategy began development, and will be completed mid-2021.
C11	Integrate climate change considerations (e.g., increased sediment, increased flow, increased sea level) into current and near-term work for Puyallup River flood planning.	3	Building upon the 2016 Climate Risk Assessment, a Climate Adaptation Strategy began development, and will be completed mid-2021.