

American Cities Climate Challenge

Part 1- General information and baseline data

(no more than 2 pages single-spaced, 11 point Arial font)

Name of municipality: Portland, Oregon

Mayor name: Ted Wheeler

Name of Staff contact: Amy Rathfelder

Title: Policy Advisor

E-mail: amy.rathfelder@portlandoregon.gov

Phone number: 503-823-4125

Address: 1221 SW Fourth Avenue, Suite 340

State: Portland, OR

Zip Code: 97204

American Cities Climate Challenge

Baseline Data

In the Phase 1 application, we asked cities to provide information on existing carbon emission reduction goals, which often vary between cities. For the American Cities Climate Challenge, we will ask cities to commit to carbon emissions reductions goals with consistent timelines across all cities that allow us to work collectively towards a shared future. To that end, we will work with applicants to modify existing goals to hit interim or new target dates of 2020 and 2025 using a 2005 baseline. Please complete the table below.

Sector	2005 Baseline in MMT CO ₂ <i>(if you do not have a 2005 baseline, please specify the year your baseline was conducted)</i>	Most recent year inventory emissions in MMT CO ₂	2020 target emissions (% reduction compared to 2005)	2025 target emissions (% reduction compared to 2005)
Municipal Operations	0.092932 MMT CO ₂ e (FY '06-'07)	0.050613 MMT CO ₂ e (FY 16-17)	0.0486 MMT CO ₂ e (-48%)	0.0462 MMT CO ₂ e (-50%)
Buildings	5.11 MMT CO ₂ e (2005)	3.94 MMT CO ₂ e (2016)	3.80 MMT CO ₂ e (-26%)	3.55 MMT CO ₂ e (-31%)
Transportation	3.14 MMT CO ₂ e (2005)	3.22 MMT CO ₂ e (2016)	2.40 MMT CO ₂ e (-24%)	2.09 MMT CO ₂ e (-33%)
Total	8.73 MMT CO ₂ e (2005)	7.29 MMT CO ₂ e (2016)	6.29 MMT CO ₂ e (-30%)	5.84 MMT CO ₂ e (-35%)

What is your city's current protocol for how often you will complete a GHG inventory? If you do not have a recent inventory, do you have plans to complete one?

Portland and Multnomah County use the U.S. Community Protocol for Accounting and Reporting Greenhouse Gas Emissions (version 1.1, July 2013). The inventory uses ICLEI's ClearPath software. Inventories are completed annually. Further information about the emissions inventory methodology, see page 152 of the 2015 Climate Action Plan: <https://www.portlandoregon.gov/bps/article/531984>.

Please note that the three categories above do not sum to the Total. Portland uses a different protocol for municipal operations and calculates those emissions by fiscal year, as opposed to calendar year like the communitywide emissions inventory.

American Cities Climate Challenge

Part 2 - Workplan Questions *(no more than 8 pages single-spaced, 11 point Arial font)*

1. What policies or programs are your biggest opportunities for acceleration of impact through the Challenge and why? Please refer to **Templates 1 and 2** and select 6-8 policies or programs of which between 2 to 4 are Ambitious or Moonshot actions. These programs will form the core of your work plan and will be prioritized to receive support resources through the Climate Challenge. Building off your responses to **Template 2**, please describe in specific, measurable terms, what you commit to accomplish by 2020 for each action selected.

Priority Actions – Buildings

1. Deep energy efficiency retrofits and retro-commissioning of municipal facilities (Foundational Building #1).

Portland has sought and achieved energy efficiency gains in City operations since the launch of the City Energy Challenge in the 1990s. Current energy efficiency and renewable energy goals for City operations are contained in the [2030 Environmental Performance Objectives](#) adopted by Portland City Council in 2015. These goals are consistent with the Local Government Operations chapter of the Climate Action Plan.

For over 20 years, the sustainability office has housed a Senior Energy Specialist who supports the infrastructure-owning bureaus in accessing energy efficiency information, technical support and financial incentives for projects. This has been a successful approach given Portland's unique form of government. Since 1993, the City has saved \$75 million dollars in energy bills. [City carbon emissions](#) are on a downward trajectory. While [City energy consumption](#) currently is holding steady, it is not declining quickly enough to continue to meet the stated annual goal of a two-percent reduction in energy use. Achieving annual reductions in energy use over the next twelve years is going to get more challenging and more expensive. City operations lacks the roadmap, and in several bureaus, the dedicated resources, to get there.

In light of recent commitments to own and operate net zero carbon assets by 2030 ([Net Zero Carbon Buildings Declaration](#)), it is more important than ever for Portland to serve as a model for the private buildings market. The Bureau of Planning and Sustainability and Portland Parks recently collaborated to develop and procure an Energy Savings Performance Contract (ESPC) to upgrade up to 49 Parks' facilities, including retro-commissioning two community centers. This ESPC is projected to result in a 20 percent reduction in energy consumption in Parks' facilities.

The ESPC model represents a new strategic approach to energy efficiency that we propose to expand out beyond Parks to other City bureaus. When negotiating the Parks ESPC, the City found it necessary to acquire the services of a technical consultant. **The Climate City Advisor or a technical consultant from one of the nonprofit partners in the ACCC could fill this role.** Support from the ACCC on this action essentially extends the work of BPS's Senior Energy Specialist and helps leverage the work Parks has done with its ESPC for the benefit of other city bureaus.

2. Community-based renewable energy infrastructure (Ambitious Building #5).

Portland's 100 Percent Renewables Resolution (No. 37289, 2017) prioritizes community-based development of renewable energy infrastructure and directs the City to "make investments in community facing organizations to build capacity to lead such development to meet two percent of community-wide energy needs via such infrastructure by 2035 and ten percent by 2050." Work has just begun among frontline communities to define what "community-based development" means to them. As part of this effort, the City and County

American Cities Climate Challenge

supported a coalition of environmental justice, social equity and community-based organizations in coordinating and launching the first Community Energy Justice Summit to address these questions this past July.

As part of our longstanding Climate Action Plan work around renewables, the City, along with many community stakeholders, has advocated for an equitable statewide community solar program since 2013. The program is expected to launch at the end of 2018. **Portland proposes to use ACCC resources to help facilitate the development of two community solar projects in Portland, representing up to 2.36 MW of installed capacity, as part of the first tranche of statewide program capacity (a total of 160 MW).** By 2020, these projects will be substantially under development (at 50 percent system design stage), though final system commissioning dates are likely to happen after 2020.

To help demonstrate a model of community ownership of renewable generation, at least one of the two systems will be sited in a Portland neighborhood, at a scale yet to be determined. The neighborhood-based project will be financed, constructed, owned and operated by community members, such that economic opportunities, job training and wealth-building accrue to low-income people and people of color. (The targeted neighborhood may choose to engage or not engage in any subset of these activities, according to community interests and capacities.) At a minimum, ten percent of the capacity of this project will be made available to low-income subscribers, per state law. However, community partners may decide to allocate a greater percentage of the project's capacity to low-income customers if they so choose.

The City owns a 20-acre parcel of land in Boring, Oregon that has potential to host a 2 MW solar facility. This system also plays a role in our overall strategy to provide more equitable access to affordable renewable energy options for Portlanders. It's possible that this site could be developed so that it meets community definitions of community-based renewable energy infrastructure and serves community needs, but that remains to be seen pending more work and conversation among stakeholders.

Priority Actions – Transportation

To effectively manage growth and equitably reduce climate pollution, Portland must move more people and goods on our already-at-capacity streets. To do so, we need to significantly reduce vehicle miles traveled by creating attractive alternatives to driving alone and reducing the need for auto ownership for significantly greater numbers of Portlanders. To achieve carbon-reduction goals for transportation, Portland is proposing to focus our ACCC resources on the following bundles of priority transportation strategies (see more details below): 1) High-Efficiency Infrastructure, 2) Commuter Incentives, and 3) Prioritization and Pricing.

To create the necessary public and political support to implement these bundles, we seek support from the ACCC to establish a Positive Feedback Loop of strong pre-/post-intervention data collection and performance measurement protocols, reinforced by impactful storytelling strategies and other strategic communication tools (see Question 5 for details).

2019 is an important year to get high-profile early wins in the Central City, and ACCC support will be essential in helping us build momentum for bigger wins in 2020 and beyond. Our near-term actions across the three bundles include transit priority projects near congested downtown bridgeheads with protected bike lanes, and multiple pedestrian crossings being designed and implemented across downtown. We will also be expanding our Transportation Wallet of commuter incentives to 15 other parking districts around the Central City. We will also look to be launching pilots for right-of-way and curb (or "flex") zone

American Cities Climate Challenge

prioritization for shared rides and dipping our toes into performance-based pricing with parking, while continuing to expand new mobility options such as e-bike share.

Biggest Moves	Ongoing performance management and storytelling	Network transit, bike, ped priority projects	Require parking cash-out for major employers subsidizing parking	Go Portland Zones (HOV and pricing in congested zones)
Bigger Moves	Tell stories + data from pilot projects	Corridor transit, bike, ped priority projects	Adopt Portland Commute Trip Reduction (CTR) Program	ROW/curb/flex zone HOV priority pilot projects
Early Wins (By 2020)	Collect baseline data and building performance monitoring system	Priority transit, bike, ped spot improvement projects (Central City in Motion, CCIM)	Expand Transportation Wallet to major employers	Performance-based parking pricing downtown
Strategy (ACCC Work Plan)	Positive Feedback Loop <ul style="list-style-type: none"> Collect data Tell story Try bigger tests 	Infrastructure FT1: Transit speed, reliability FT2: High priority bike/ped	Incentives FT5: Commuter incentives	Prioritization & Pricing AT1: Congestion pricing/Go Zones AT4: Parking management & pricing

We are initially focusing on the Central City because it is currently our most congested and highest demand location, while also having the highest density of large employers and existing transportation options. This is where CCIM is focusing its infrastructure efforts over the next couple of years. It is also where the Transportation Wallet is initially available, given its tie to parking meter districts, as well as where a Commute Trip Reduction program is likely to be started, given the concentration of large employers and Mixed Use, Campus and Institutional zones. This enables us to test high-impact strategies with a strong likelihood of success to build momentum prior to expanding them to other areas of the city. If we are successful in meeting our targets, we estimate shifting 16,000 SOV commute trips in 2020, eliminating ~50 million VMT and ~22,700 MT of GHG emissions through these strategies.

1. High-Efficiency Infrastructure (Foundational Transportation #1 and #2).

In 2017, Portland launched “Central City in Motion” (CCIM) to identify and build priority transit, bicycle, and pedestrian improvements to deliver safety, efficiency and reliability for all road users in the highest demand, most congested area of the city. Next generation investments will include dedicated transit lanes, separated bike routes, improved pedestrian connections, and clear demarcation of street space for freight, transit and bicycles. CCIM is slated to go to City Council at the end of October 2018, with engineering and design taking place during 2019 and construction occurring during 2020. We will need effective data and storytelling resources to build public support to successfully reallocate space, building from early wins in key spots. With success in showing how these changes helped more people and goods move more efficiently, we will be able to extend these approaches across broader corridors around other parts of the city and ultimately into connected networks of such treatments, which would significantly expand mode shift and reduce emissions.

2. Commuter Incentives (Foundational Transportation #5)

To support higher utilization rates of the improved and expanded high-efficiency infrastructure advanced through the first strategy, Portland also proposes to take our successful Transportation Demand Management (TDM) program to the next level. Building on expanded authority to require TDM plans with new development in Mixed Use and Campus/Institutional zones created with the 2035 Transportation System Plan, the city is doing a TDM Action Plan in 2019 to create implementation plans for the following strategies:

- A. Transportation Wallet: Portland currently offers a digital “wallet” of subsidized passes for transit, dockless, and shared ride services to residents in some parking meter districts, which has demonstrated success in supporting mode shift. Building on the initial residential-based pilot, we propose expanding the scope of user eligibility and included services to make it easier for employees to use active and shared travel options. We will also use access to the wallet to incent private transportation providers (e.g., TNC’s) to offer, promote, and reward shared rides, further reducing VMT and emissions.
- B. Commute Trip Reduction: In collaboration with major employers and employees, we will then develop and implement a Portland Commute Trip Reduction program that will further support use of the Transportation Wallet. The program could include establishing short-term mode share and VMT reduction targets, developing employer plans to achieve the targets, regular performance monitoring, and city staff and employee champions to monitor and achieve the targets;
- C. Parking cash-out: With a successful Wallet and CTR program in place, we will then work with new development and with major employers and employees to implement a parking cash-out requirement for major employers who subsidize parking.

Portland is seeking Challenge support in helping effectively communicate the mode shift benefits that have already been measured as part of the initial implementation of the Transportation Wallet to help build the case for coupling expanded incentives with increasingly stringent TDM requirements.

3. Prioritization & Pricing (Ambitious Transportation #1 and #4).

Prioritizing and pricing the curb (or “flex” zone) for higher-occupancy trips could significantly increase shared rides, cutting climate pollution and congestion. Right of way (ROW) prioritization and local street “precision pricing” could also increase transit and bicycling safety, speed and reliability, and therefore mode shift. The combination of commuter incentives in areas with multiple major employers, plus high efficiency infrastructure and prioritization and pricing could create conditions for a local Portland “Go Zone” in congested times and places, creating familiarity with, and support for, broader pricing and prioritization.

In August 2018, Portland adopted a dynamic parking management manual. Over the next two years, we will start implementing the tools in that manual. Portland has also adopted an Automated Vehicle Transportation Network Company (AV TNC) administrative rule that calls for a “congestion fee” and “efficiency fee.” To advance a coordinated local prioritization and pricing strategy, Portland proposes to conduct a ROW/flex zone allocation and valuation study to identify policies and actions that will significantly increase shared rides; significantly decrease deadheading (vehicles circling for parking or passengers); and improve the efficiency of freight and personal goods delivery. The allocation and valuation study is intended to lead to one or more pilot projects. Successful pilots build the “Positive Feedback Loop” creating public and political support for larger scale projects. Challenge support for study scoping and building political will to support its implementation would be valuable.

American Cities Climate Challenge

Portland has started a “Streets 2035” project to more clearly allocate right of way. The Streets 2035 project dovetails with our proposed ROW allocation and valuation study. The Challenge could help us identify other cities with similar ROW pricing and prioritization analysis needs, perhaps providing financial and logistical support so that we can coordinate and provide consistent incentives and regulations across multiple markets.

- For the policies and programs listed above, please fill out the table below clarifying who is the single lead point of contact, and their time dedicated to the project. Please also indicate other key staff who will support the lead point of contact.

Program/Policy	Person, Position	Time commitment (% FTE)	Other Key Staff
Deep EE in municipal operations	Danny Grady, Senior Energy Specialist	100%	Andria Jacob, Sr. Manager, Energy Programs and Policy
Community-based development of renewable energy infrastructure	Andria Jacob, Senior Manager, Energy Programs and Policy	25%	Bill Beamer, Climate Action Engagement Coordinator Vinh Mason, Green Building Policy Coordinator
Positive Feedback Loop of Data and Storytelling	Eric Hesse, Policy, Supervising Planner Shoshana Cohen, Resources and Legislative	25%	Mike Kerr (Strategy and Performance) John Brady (Communications)
Priority transit, bicycle, ped network	Gabe Graff, CCIM Project Manager	100%	Roger Geller Michelle Marx Bob Hillier (Modal Coordinators)
Commuter Incentives	Steve Hoyt-McBeth, Active Transportation Programs	25%	Liz Hormann, Sarah Goforth (Active Transportation Programs)
Prioritization & Pricing	Peter Hurley, Policy	50%	Chris Armes, Parking Manager

- Who is responsible for holding all parties above accountable for continual progress? Ideally there will be one single person monitoring and holding all parties accountable and an oversight body across departments that will regularly meet to help troubleshoot and push difficult actions forward. How often will your mayor be updated on progress so that each program or policy lead is individually held accountable based on evidence?

Amy Rathfelder, Policy Advisor to Mayor Wheeler, will be responsible for holding all parties above accountable for continual progress. Amy, along with a core team of lead staff from BPS and PBOT will meet regularly (at least every other month) to troubleshoot and elevate issues. That team will also provide quarterly updates to: 1) BPS and PBOT bureau directors, 2) the Mayor, and 3) the office of the commissioner in charge of PBOT.

American Cities Climate Challenge

4. What specific areas of work would you propose your Climate Challenge City Advisor will focus on and, given your city's context, what qualities will be necessary in a successful City Advisor?

PBOT is establishing a single Policy Team responsible for developing and implementing the performance-based Managing for Growth strategic initiative embedded within the Bureau's 3 Year Strategic Plan. We envision the City Advisor being positioned in the Director of Transportation's office to help build internal and external alignment (including with the Commissioner in Charge and the Mayor) around Managing for Growth. The Advisor would work closely with Bureau leadership and the policy team to ensure its effectiveness in establish performance management and strategic communication around the initiative. As such, Portland is seeking strong skills and experience in transportation data sourcing and analytics; story/narrative development, testing, and implementation; and change management to help facilitate organizational alignment and investment.

On the buildings side, expertise in energy services performance contracting for municipal facilities to leverage work in one bureau (Parks) to multiple bureaus would be valuable. To move forward on the community-based renewables action, technical feasibility and solar resource analysis to help site neighborhood-scale community solar projects will be helpful.

5. What additional resources would you need from Climate Challenge to be successful in achieving the prioritized policies and programs? Potentially available resources include, but are not limited to, campaign and communications support, polling information, technical consultants, data structuring and management, performance management, innovation (e.g., ideation, prototyping), behavioral insights, and citizen engagement.

We'd welcome direct financial investment from the ACCC nonprofit community in technical assistance and capacity-building for Portland's frontline communities, as they begin to build experience and expertise in local clean energy development, ownership and operations. The possibility of direct grants of financial assistance to community-based organizations is one of the most appealing reasons for Portland's interest in the Challenge.

Prioritizing lanes and zones for transit, other high occupancy vehicles (HOV's), and bicycles, and local "precision pricing" are big moves requiring big political lifts. To develop public and political support for these big moves, Portland proposes to ground the transportation elements of our Challenge on building internal and external capacity to develop and implement a "Positive Feedback Loop" combining data structuring and management with performance management, supplemented by behavioral insights and polling information to inform campaign and communications and effective citizen engagement:

- A. Develop or acquire data on vehicle, bicycle, and passenger movement in sufficient detail and tools to evaluate system, pilot, and project-level performance to better understand whether strategies are working to meet mode share, VMT and GHG targets;
- B. Cultivate leadership understanding of past success and support for implementing more ambitious strategies, increasing organizational alignment including program chartering protocols to establish clear roles and responsibilities within and across bureaus;
- C. Create narratives, messengers, and communication delivery tools that are meaningful to broad segments of the public and private sectors (e.g., Los Angeles' 100 Hours effort).

This Positive Feedback Loop provides the foundation to build public and political support for implementing more challenging initiatives in the three other priority action strategies.

American Cities Climate Challenge

6. What opportunities and challenges, both political and non-political, could affect your city's ability to successfully achieve the above policies or programs? If legislation (ordinances) or new policy is required, who are the key actors that will be required for success? Please be specific in your response and reflect on the Delivery Chain exercise employed during your site visit to provide additional insights.

The Mayor's help bolstering cross-bureau efforts to scale up efficiency and net-zero carbon projects in City operations could be useful. Historically, decision-making around energy efficiency has been diffuse, with different decision-makers overseeing infrastructure bureaus. Focused attention from the Challenge will catalyze quicker and more strategic actions.

On the transportation side, Portland could experience resistance from auto commuters, parking lot operators, developers, and the Portland Business Alliance to strategies that prioritize HOV and bicycle commuters and price the right of way. The Delivery Chain exercise made clear the need to use better data and storytelling to create understanding among elected officials and empower advocate voices such as the Bus Lane Project, Bike Loud!, Bus Riders Unite and The Street Trust to deliver a groundswell of support for making the big moves, bolstered with data-driven and personally meaningful stories of how those changes made people's lives better, even as they made it more natural to make the system-efficient, low-carbon choice. Without Challenge assistance in building and sustaining public and political support for the "big moves" we're proposing, Portland may not be able to be successful with our highest ambitions.

7. Pick one of your Ambitious or Moonshot policies above and describe your plan to engage local partners and key stakeholders for consensus-building, outreach, training, advocacy, funding, or other activities, including assessments of key proponents and potential hurdles to overcome. Please be specific in your response and include both supporters and detractors.

The City's 100% Renewables Resolution provides the policy direction for community-based development and ownership of renewable energy generation assets and specifically calls for investment in capacity-building among frontline communities. The City is an important supporting player in the just transition to a clean energy economy, but we are only one organization in a much broader constellation of partners, stakeholders and community leaders. Definitions, strategies and tactics related to community-based renewables must be originate within local communities themselves. The City has a unique role to play in supporting communities as we collectively move along the pathway to a just and equitable transition to 100 percent renewables. Though this dialogue has already begun, the City's role will ramp up in 2019, when we begin the stakeholder engagement process for the 2020 CAP update.

Key organizations include: Multnomah County, OPAL Environmental Justice, Asian-Pacific American Network of Oregon, Coalition of Communities of Color, Verde, Hacienda CDC, Native American Youth and Family Center, Portland African American Leadership Forum, Africa House and the Latino Network. Portland's two investor-owned electric utilities and natural gas company also are critical players in these efforts; community and utility interests are not always aligned when it comes to ownership of renewable energy generation assets. The City will have a role to play in fostering this discussion.

8. Please provide an example of another project or initiative where you've collaborated with internal and external stakeholders to achieve a goal, preferably the passage of a piece of legislation or policy. What were the steps taken and obstacles overcome?

American Cities Climate Challenge

Portland's Climate Action Plan (CAP) adopted in 2015 is an example of a significant undertaking that required extensive internal and external stakeholder collaboration. One challenging component involved figuring out how to fully integrate equity and racial justice. A workgroup made up of representatives from community-based organizations serving low-income communities and communities of color met every two weeks to help identify the potential benefits, burdens and unintended consequences of all the proposed CAP goals and actions. A challenge of the project was bridging the differing perspectives on how to proceed between the equity-focused working group, program staff, the CAP Steering Committee (external advisors), the public and elected officials. These obstacles were overcome through a year of iterative technical analysis, facilitated group discussions, one-on-one conversations and relationship building.

9. What is the timeline of good news that you want to announce over time? Look back at Templates 1 and 2 to identify communication opportunities associated with public-facing milestones, quick wins and progress on the project. Please list them by quarter below for the first year.

- Q1 2019: Announce expansion plan for Transportation Wallet to new parking districts
- Q2 2019: Community solar projects are granted pre-certification status by OR PUC
- Q3 2019: Bus/BAT/HOV lanes leading to Hawthorne Br and across Burnside Br
- Q4 2019: Implement ROW/flex zone shared-ride priority and pricing pilot project

Pick one of the moments listed above and describe in more detail what your media strategy would be and how you would utilize the mayor to accomplish that strategy? What support would you want from the Climate Challenge?

As right-of-way (ROW) reallocations for dedicated bus lanes leading to and on downtown bridges occur, we will need the Mayor and City Council members to be vocal champions for the need for and the benefits of these big moves. By supporting the Positive Feedback Loop described in Question 5, the expertise and support of the Challenge will be essential in helping us measure the impacts of these changes in ROW allocation through better data collection and analysis, as well as more powerful storytelling, empowering and amplifying supportive community-based advocacy. When we can tell the story that we're moving more people more quickly as a result of those changes and at lower personal cost (especially for our most vulnerable communities and road users), we can build public and political support for more ambitious efforts, such as curb zone prioritization and localized pricing, eventually enabling cordon and congestion pricing, which can generate revenue to further improve the system.

10. Why should your city be selected as a winner of the American Cities Climate Challenge?

Portland has a long track record of implementing aggressive actions to combat climate change -- with the carbon emissions reductions to prove it. In addition, Portland has a deep bench of technical competency to develop and advance meaningful action in both the building and transportation sectors, and the political will and public support to get challenging actions to the finish line. We believe it's critical to include leading cities in the cohort; as became clear in the onsite meeting, even leading cities have significant information, data and other resource gaps that makes our participation meaningful. We have a lot of things figured out but certainly not everything!