



CLIMATE ACTION PLAN

*Federal Transit Administration's
Sustainable Transit for a Healthy Planet Challenge*

APRIL 2022

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Executive summary

Climate change is one of the biggest social, economic, and environmental threats facing our planet. At Cherriots, we are aware how climate change has already begun to have a tangible effect for the residents of Salem-Keizer and surrounding regions. With the hotter and drier conditions anticipated, heat index rising, normal patterns of rain and snow being affected, increase in wildfire danger, and poorer air quality, climate change is not something we are anticipating, it is here.

Cherriots has been recognized by NW Natural to be the “Cleanest Public Transit Fleet in Oregon” because of our commitment to finding resources to contribute positively to our community. Building on regional action and the will to be a contributing entity toward positive progress, Cherriots is determined to meet goals around climate action for our riders, our community, our employees, and the world at large.

Cherriots commitment to reduce greenhouse gas (GHG) emissions has already begun in our efforts to create a much more environmentally friendly and sustainable

fleet. Cherriots use of Renewable Natural Gas (RNG) is one of the important steps we have already taken toward productive progress. More than half of the District’s buses now operate on RNG, which reduces harmful air pollution forming tailpipe emissions by more than 90 percent and greenhouse gas emissions by more than 40 percent compared to fossil fuels. RNG is a zero-carbon resource produced from local, organic materials like food, agricultural and forestry waste, wastewater, or landfills. As these materials decompose, they produce methane. This process closes the loop on waste and provides a renewable energy option for the natural gas system, in the same way that wind and solar are used to generate renewable electricity.



Cherriots has an opportunity to continue to substantially reduce GHG emissions in the Salem-Keizer region by providing our riders with an equitable, safe, friendly and reliable public transportation service. According to the City of Salem, 53 percent of Salem’s emissions come from transportation (2016). Another way Cherriots will be aiding in the reduction of GHG emissions is through the use of electric buses. Cherriots has secured 10 electric buses that are set to be delivered in December 2022. The electric buses are anticipated to be in revenue service beginning May of 2023. Planning for electrification has already begun at our facilities.

The goals set forth in this Climate Action Plan help to further augment environmental plans at the federal, state, county, and city levels. This Climate Action Plan is the first version of a more comprehensive plan after baseline data is collected. By achieving the goal of getting a GHG Emission Inventory, we will be able to better track our progress to make clear, achievable goals aligning with national, state, and local plans.

We at Cherriots are anchors to the commitment in continuing efforts in being a green, sustainable fleet and operation. We are thoughtful in our strategy to contribute to the improvement of the quality of life for the communities we serve. This plan begins to chart a course in continuing to build a safe, equitable, and environmentally beneficial network that is accelerating a zero emission future for Cherriots.



Introduction

Cherriots has signed on to the Federal Transit Administration’s (FTA) Sustainable Transit for a Healthy Planet Challenge. Using FTA’s template for a Climate Action Plan, resources provided through the initiative, and Cherriots determination to continue environmental progress, this plan was developed. The purpose of this initial version of a Cherriots Climate Action Plan is to help guide Cherriots through the development of a comprehensive Climate Action Plan to reduce greenhouse gas emissions. This is a guide for the initial stage of collecting data, setting goals for the district around climate action initiatives, and deciding upon reduction targets.

Because this is the initial version, the scope of this project will begin as soon as it is approved, and will be adjusted and enhanced once a greenhouse gas emission inventory is executed for the District. It is then we can use the data to set goals and emission targets.

When Cherriots signed on to participate in FTA’s Sustainable Transit for a Healthy Planet Challenge, we agreed to take bold actions and invest in reducing GHG emissions. Our first steps to achieve this goal are found in this document.

Federal Transit Administration’s Sustainable Transit for a Healthy Planet Challenge Overview: *“FTA’s Sustainable Transit for a Healthy Planet Challenge encourages transit agencies to take bold actions and investments to cut GHG emissions. The challenge calls on transit agencies to develop climate action strategies with measurable goals to achieve GHG emission targets. All transit agencies nationwide, regardless of size or service area, are encouraged to develop climate action or sustainability plans that detail GHG reduction strategies, such as converting fleets to electric buses and making facilities more energy efficient.”*



Agency overview

Salem Area Mass Transit District (SAMTD), known as Cherriots, is a public transportation system that provides local, regional, and paratransit services. Located in Oregon’s capital city of Salem, Cherriots is the third largest transit district in the state.

Established in 1979, Cherriots is a municipal corporation covering 76 square miles in the Mid-Willamette Valley between Portland and Eugene. Cherriots provides service to a population of more than 500,000 residents in Marion and Polk counties. The District maintains 64 active



buses for fixed route service, Cherriots Local; 43 buses for the paratransit service, Cherriots LIFT; and 13 buses for the Cherriots Regional service.

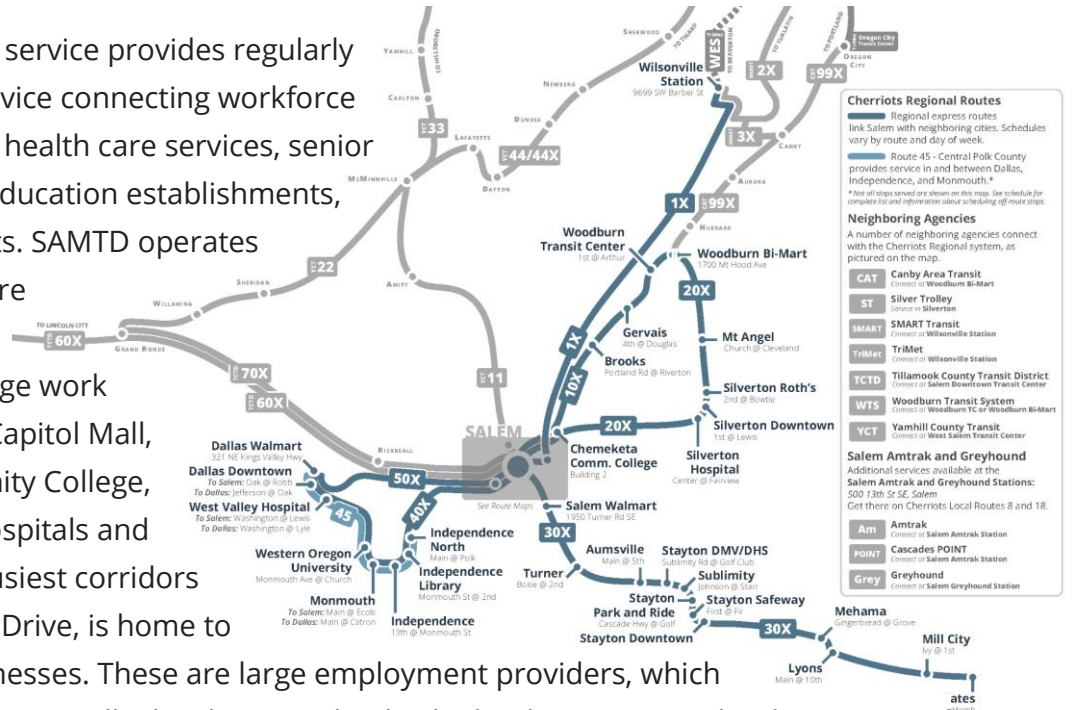
Cherriots Local and paratransit services operate Monday through Friday from 6 a.m. to 11 p.m., and Saturdays from 7 a.m. to 9 p.m. Beginning September, 2021, these services began operating on Sundays and holidays from 8 a.m.

to 8 p.m. Cherriots Local primarily provides service within the Salem-Keizer urban growth boundary, as defined by state statute.

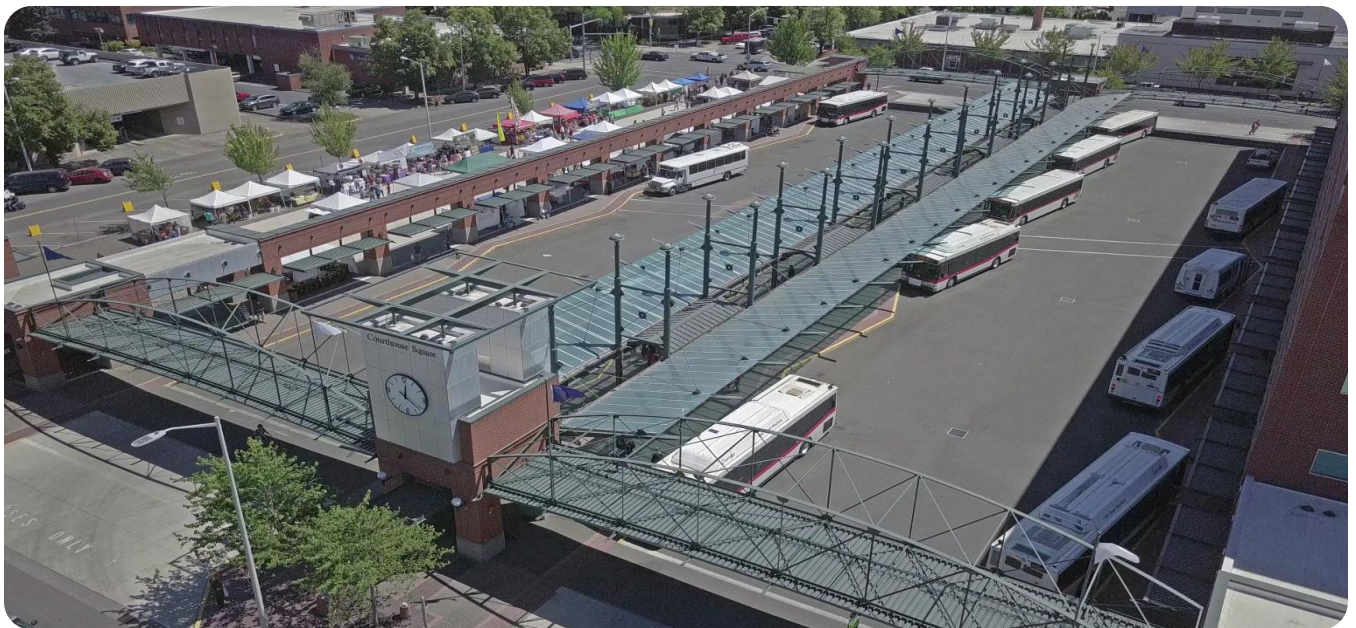
The Cherriots Regional service connects the Salem-Keizer area with the city of Wilsonville to the north, giving riders direct access to the Portland metropolitan area. Regional express services connect surrounding communities in Marion, Polk, Linn, Yamhill, and Clackamas counties from 6 a.m. to 9:30 p.m., Monday to Friday, and Saturdays from 7:30 a.m. to 7:40 p.m. Cherriots partners these outlying communities to bring people directly from rural areas to the critical services offered in the cities of Salem and Keizer.



Cherriots fixed route service provides regularly scheduled transit service connecting workforce centers, medical and health care services, senior centers, continuing education establishments, and shopping districts. SAMTD operates specific routes that are aimed at providing transportation to large work centers such as the Capitol Mall, Chemeketa Community College, and Salem Health Hospitals and Clinics. One of the busiest corridors in the city, Lancaster Drive, is home to malls and retail businesses. These are large employment providers, which generate jobs for economically disadvantaged individuals. The most popular destination of transit riders in east Salem is Chemeketa Community College, another large employer and the second largest community college in Oregon.



Cherriots has several facilities that help us serve the community. The downtown Transit Center (DTC), our Keizer Transit Center (KTC), Del Webb where our facilities and maintenance shop is located, and a South Salem Transit Center (SSTC) will be coming soon



The area served by Cherriots includes four Opportunity Zone Census tracts with unemployment rates peaking at 17.7 percent and poverty rates at 36.4 percent. Of the residents in Marion and Polk counties, 29.4 percent still live below 150 percent of the federal poverty line and are considered “low-income,” compared to 24.9 percent nationally.

The population in the Cherriots service area grew 14.2 percent from 2000 to 2010 and is anticipated to grow at the same rate in future years. According to Cherriots 2016 Onboard Survey, approximately 58 percent of SAMTD riders do not have access to a vehicle compared to 39 percent of neighboring TriMet riders and 29.4 percent of Lane Transit District’s riders, making efficient and reliable transit service a continued priority for the community. The Salem region is also a Clean Air Act maintenance area for carbon monoxide.

Local property taxes, as well as state and federal revenue, provide funding for our transit agency. With those funds, we provide local bus service in Salem and Keizer, as well as regional express service to towns in Marion and Polk counties.

Cherriots mission is to connect people with places through safe, friendly, and reliable public transportation services. Its vision is to make a positive difference by enhancing community livability through innovative and sustainable regional transportation options. Equally important, the Mid-Willamette Valley desires a strong and robust Cherriots that is a partner in economic growth, environmental impact, and accessibility for the region.



Emissions inventory

Cherriots does not have an emissions inventory at this time. It is outlined as one of the first goals in this plan, found on Page 12. Information included in this section outlines what Cherriots would be seeking in acquiring an emission inventory.

An emission inventory would provide an accounting of GHG emissions from Cherriots operations and facilities, including baseline data and trends. Having an accurate inventory and conducting annual updates will help the agency focus efforts on reducing the largest sources of GHG emissions while tracking progress.

Examples of emission sources to inventory include:

- Fleet operations, including revenue and non-revenue vehicles
- Facility operations, including stations, administrative buildings, maintenance facilities, and shops and yards
- Employee travel
- Solid waste and recycling
- Displaced emissions, i.e., GHG emissions avoided due to mode shift to transit

The emissions inventory should outline the data sources and data assumptions. In addition to reporting absolute emissions, Cherriots may choose to use different metrics to report emissions to provide context and assist the agency in describing progress toward meeting certain objectives. Options for alternative metrics to report transit GHG emissions include:

- Emissions per passenger miles traveled
- Emissions per produced seat miles
- Emissions per vehicle revenue hours
- Emissions per revenue vehicle length
- Emissions per vehicle miles
- Emissions per service area population
- Emissions per vehicle revenue miles
- Emissions per number of employees
- Emissions per unlinked passenger trips

A note about baseline data

Establishing a baseline year of GHG emissions is important because it will be how the agency measures future success in reducing emissions. Cherrits will consider the following when choosing a baseline:

- Availability of high-quality data
- Baseline year used in relevant state, regional, or local GHG emission reduction goals

Past and current initiatives

Cherriots is working to align our Climate Action Plan with the goals of:

- **The Federal Administration**

On April 22, 2021, President Joe Biden announced an ambitious goal: for the United States to achieve a 50-52 percent reduction from 2005 levels in economy-wide net greenhouse gas (GHG) pollution in 2030.

- **The State of Oregon**

In March 2020, Governor Kate Brown issued Executive Order 20-04: reduce greenhouse gas emissions in Oregon by at least 45 percent below 1990 levels by the year 2035, and by 80 percent by 2050.

- **Oregon Department of Transportation**

The Climate Action Plan is ODOT's five-year work plan to address the impacts of climate change and extreme weather on the transportation system. The plan includes actions ODOT is taking between 2021 and 2026 to reduce greenhouse gas emissions from transportation, address climate justice, and make the transportation system more resilient to extreme weather events.

- **The City of Salem**

In October 2020, the Salem City Council voted to adopt GHG emissions reduction goals. The goals are: By 2035, Salem's Greenhouse Gas emissions are reduced to 50 percent of the citywide greenhouse gas emissions from the baseline year of 2016. Also, by 2050 Salem is carbon neutral.

The City of Salem has developed a Climate Action Plan that comprehensively outlines strategies for Cherriots to look at in contributing our part to achieve this goal.

Cherriots previous and active climate/sustainability efforts

Sustainability committee (Green Team) - Active prior to COVID-19, and will be reinstated around Earth Day 2022.

Marion County Earthwise certified member since 2013 - EarthWISE Certification recognizes businesses in Marion County that have made a commitment to environmentally friendly practices. Businesses that immediately or over time meet pre-established criteria in the EarthWISE focus areas will earn the EarthWISE Certification.

Transition from compressed natural gas to renewable natural gas- Cherriots RNG Program established December 2019

Procurement of battery electric buses (BEB) - Procured 10 BEB's that are expected to arrive in December 2022. Will enter service on the new Electric Corridor (Route 11) in spring 2023.

100 percent transition to biodiesel (B20)

Currently, transitioning from B20 diesel to R99 - Have already acquired and used 10,000 gallons. Full transition expected in 2023.

Keizer Transit Center - The center features sustainable design elements, including a green roof, solar panels, bi-facial solar panels on bus stops, electric vehicle charging stations, geothermal heating and cooling, and rain gardens.

Transition from fluorescent lighting to LED lights in the maintenance shop, external lights at DTC, and outside at Del Webb.

Bus wash replacement - Reuses 80 percent of water and significantly fewer chemicals used.

Replacing in-ground lifts in the maintenance shop resulting in less leakage and usage of hydraulic fluid.

Emission reduction goals and targets

Goal: Acquire a Greenhouse Gas Emission Inventory in order to determine appropriate strategies and actions to achieve reduction goals based upon Cherriot's GHG emission data.

1. Form a Climate Action Board Subcommittee to lead efforts in climate initiatives.
 2. Seek out and acquire a GHG emission inventory for Cherriot's.
 3. Define reduction goals and targets based upon inventory data in alignment with federal, state, and local climate goals.
 4. Identify strategies and actions to complete in order to meet goals and targets based upon GHG emission data.
 5. Implementation of updated Climate Action Plan.
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FTA suggests that Agencies have two to five goals for reducing GHG emissions, including establishing specific GHG emission reduction targets. Cherriot's Reduction Goals and Targets are dependent upon a GHG inventory. Transit agencies should ensure the goals and targets outlined in the plan align with federal, state, regional, and local GHG emission reduction goals.

Sample goal statements for potential goals post-inventory:

- Vehicle acquisition policy
- Establishing board policy for being net zero by 2040
- Achieve a 50-52 percent reduction in GHG emissions from 2005 levels by 2030 (Biden-Harris Administration goal)
- Decrease total GHG emissions from transit fleet by 25 percent by 2030
- Use 100 percent renewable electricity for facility operations by 2030
- Plan all new maintenance facilities to accommodate zero-emission technologies
- Decrease total energy use by 10 percent for all facilities by 2030

Strategies and actions

Achieving Cherrriots first goal will determine the next steps for this plan.

For each goal, we will identify strategies and actions the agency will take to achieve the goal and target, including both short-term and longer-term strategies. For each action, we will identify the metrics that will be used to measure performance, the targeted timeframe for completing the action (i.e., month or season and year), and the staff/department(s) responsible for implementing the action.

Future emission reduction strategies may include:

- Expanding transit service and increasing ridership
- Clean and renewable energy and alternative fuel sources
- Energy efficiency and supply strategies
- Employee travel and trip reduction strategies
- Transportation and land use strategies
- System efficiency and capacity improvements
- Waste reduction strategies

Goal: Acquire a Greenhouse Gas Emission Inventory in order to determine appropriate strategies and actions to achieve reduction goals based upon Cherriots GHG emission data.

<i>Strategy</i>	<i>Actions</i>	<i>Metric to track progress</i>	<i>Timeframe</i>	<i>Responsible Office</i>
<i>Analysis and Goal Setting around Cherriots Greenhouse Gas Emission Impact on Environment</i>	<i>Form a Climate Action Subcommittee to lead efforts in climate initiatives.</i>			
	<i>Acquire GHG emission inventory</i>			
	<i>Define reduction goals and targets based upon inventory data in alignment with federal, state, and local climate goals.</i>			
	<i>Identify strategies and actions to complete in order to meet goals and targets</i>			

Implementation and monitoring

The Climate Action Subcommittee will collaborate in order to describe the process the agency will follow to track implementation of the strategies and actions. The subcommittee will also monitor progress toward meeting our GHG emission goals and reduction targets set forth by the Climate Action Plan.

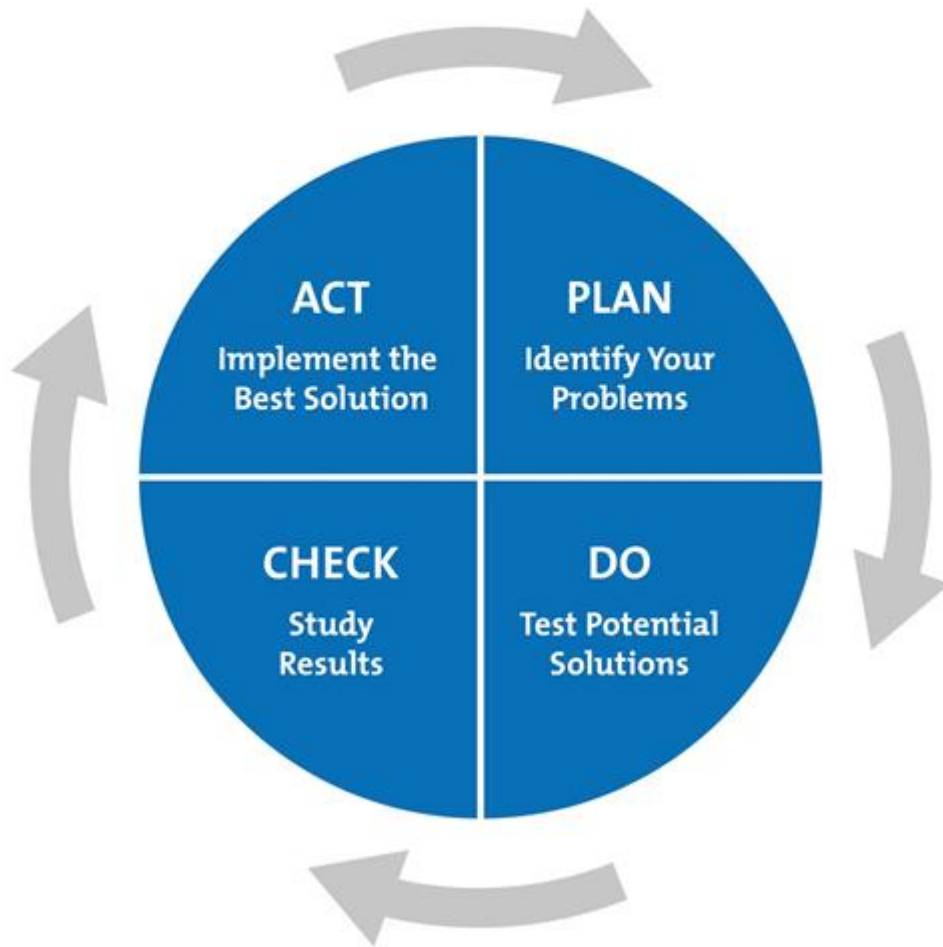
Implementation strategies may include information on the following topics:

- Ongoing efforts to keep the plan on track
- Funding
- Emerging challenges
- Implementation principles
- Partnerships
- Looking ahead

Cherriots will use a plan-do-check-act methodology to monitor and track the success of our efforts under these goals.

The Plan is a living document. It is to be reviewed regularly and, if needed, amended to reflect the agency's current plans, goals, budget, and available resources.

The Plan-Do-Check-Act cycle



Appendix: resources

Federal Transit Administration's Sustainable Transit for a Healthy Planet Challenge

<https://www.transit.dot.gov/climate-challenge>

National Climate Task Force

<https://www.whitehouse.gov/climate/#:~:text=From%20curbing%20emissions%2C%20strengthening%20resilience,across%20the%20United%20States%20government.>

State of Oregon

https://oeconline.org/wp-content/uploads/2020/04/OCAP-Fact-Sheet-FINAL_FINAL-FINAL.pdf

Oregon Department of Transportation's Climate Action Plan

<https://www.oregon.gov/odot/Programs/Pages/Climate-Action-Plan.aspx>

Climate Action Plan for City of Salem

<https://www.cityofsalem.net/Pages/climate-action-plan.aspx>

