

June 2023: Climate Change

<https://cityoflakewood.us/climatechange/>



What is Climate Change?

Climate change is the long-term change in worldwide temperatures and weather patterns observed and measured since the 1800s. Though there are many contributing factors to climate change, greenhouse gas (GHG) emissions from the burning of fossil fuels are a major driving factor. We burn fossil fuels such as coal, oil, and gasoline to generate energy and heat for a range of applications. Certain industrial and agricultural processes also produce large amounts of GHGs, contributing to climate change. Due to these and other factors, the average global temperature has been steadily rising over the past century. (Figure 1)

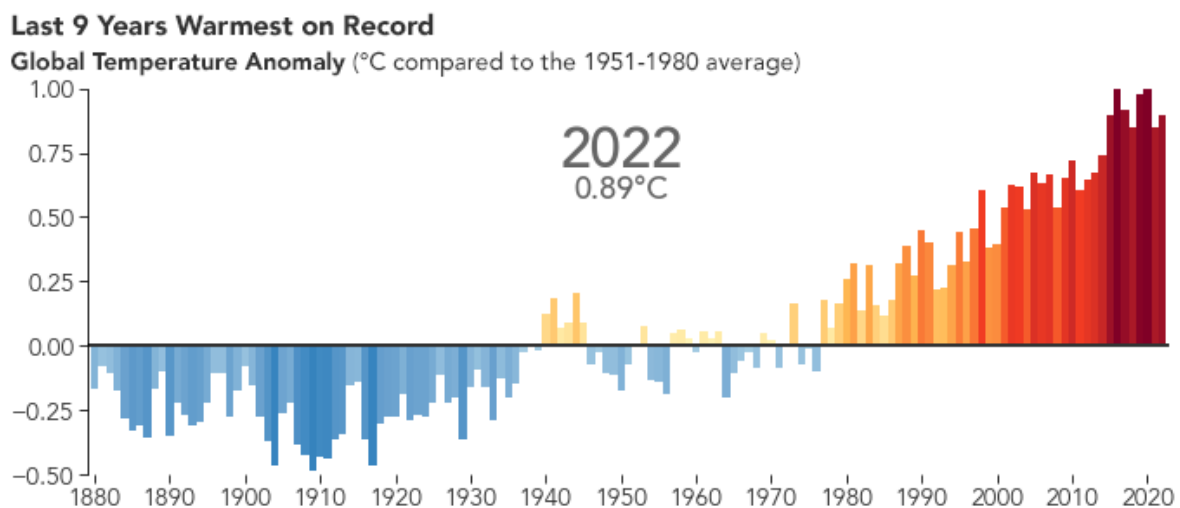


Figure 1: Graph of Global Temperature Anomaly

Lakewood Quality of Life

Climate change is one of the greatest challenges we face as a community today. The effects of climate change are not always obvious to us, as changes often occur over many years. In order to minimize the effects of climate change on our daily lives we must reduce greenhouse gas emissions, reduce the adverse effects of climate change, and ensure that we share the burdens, costs, and benefits equitably with a concentration on environmental justice.

Communities near major roadways and industrial areas typically experience disproportionate environmental impacts due to the emissions of GHGs. These areas should receive careful consideration when determining the best strategies for mitigating the effects of climate change. The following map of Lakewood from the Washington State Department of Health Environmental Disparities Map shows areas of the City disproportionately impacted by environmental factors. (Figure 2)

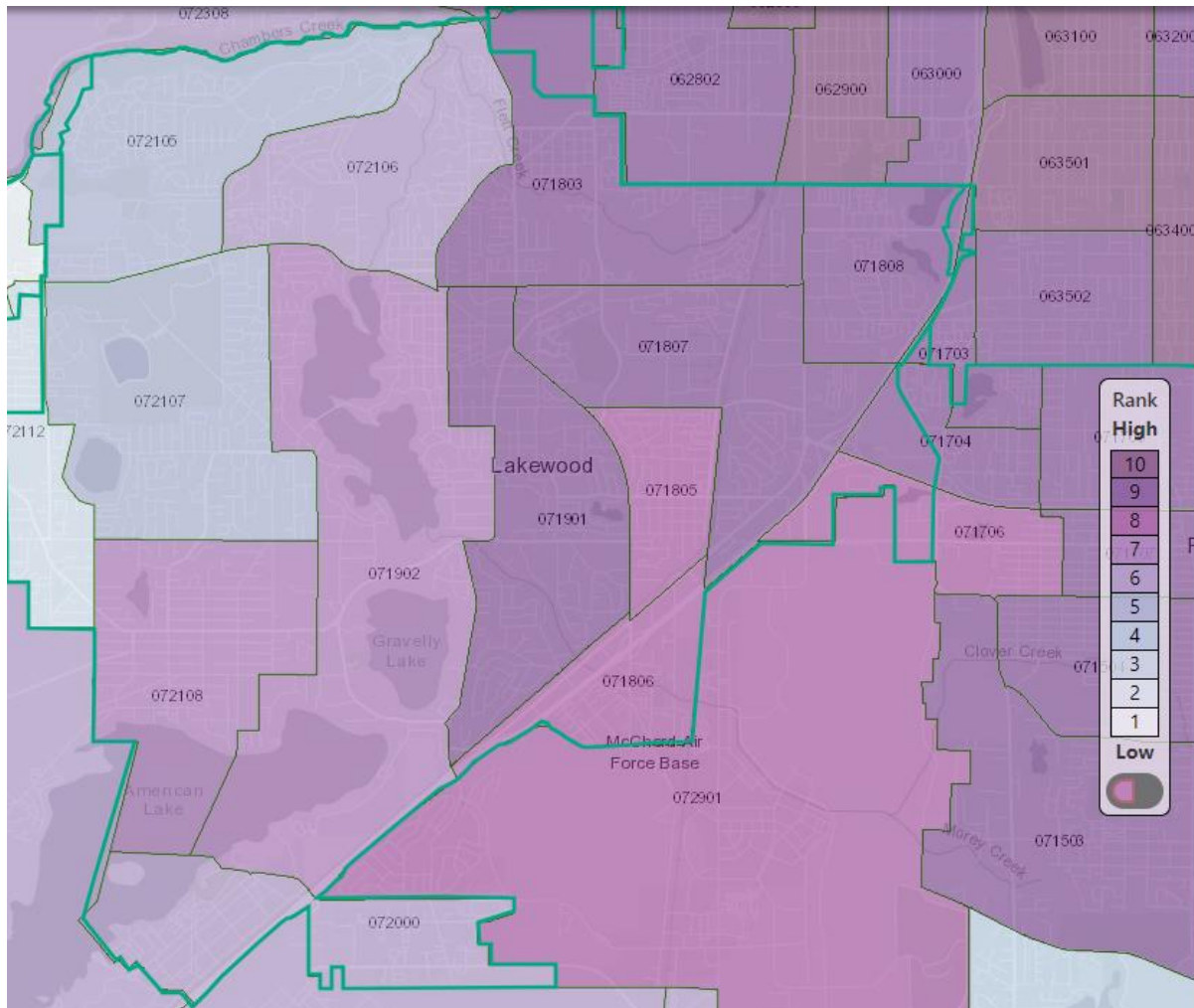


Figure 2: Environmental Disparities Map of Lakewood, WA: <https://fortress.wa.gov/doh/wtnibl/WTNIBL/>

(1 = low impacts, 10 = high impacts) These rankings help to compare health and social factors that may contribute to disparities in a community. You should not interpret rankings as absolute values. Do not use them to diagnose a community health issue or to label a community.

Response Strategies

The Washington State Department of Ecology (WADOE) recognizes the dangers of climate change if left unattended. We know that we must respond to climate change in some way, though mitigation efforts often place burdens and costs on citizens and businesses. The State designs strategies with these issues in mind. The strategies respond to the effects of climate change while retaining quality of life for citizens and a healthy economic environment for businesses. WADOE provides the following strategies for mitigating the effects of climate change:

- Use best-available science.
- Build on principles of sustainability.
- Increase our resilience and protect the most vulnerable populations.
- Ensure integrated approaches that avoid unintended consequences.
- Emphasize collaboration and strengthen partnerships.
- Recognize the impacts of decisions made by other regions and countries.

Mitigation Efforts

The lakes, trees and green spaces in Lakewood are great natural resources. In order to continue to enjoy the beauty of Lakewood now and into the future, we must take care to protect and maintain these resources. Mitigating the effects of climate change come in many shapes and sizes. The City focuses on three main areas: trees & green spaces, renewable energy, and transportation.

Trees, Tree Code, and the Urban Forestry Program

The City has recently made great strides towards protecting trees, especially important local trees such as Garry Oaks. Lakewood worked with local partners, community organizations, the UW Evans School of Public Policy, and experts to produce a City Tree Code that protects trees from arbitrary removal. Lakewood also invested \$340,000 to kick off the City's Urban Forestry Program. See the April, 2023 newsletter, Trees and Tree Code, for more detail on Lakewood's efforts toward protecting trees at: <https://cityoflakewood.us/economic-development/#editorialcolumn>

Parks and Green Spaces

Lakewood is investing in parks and green spaces. The Downtown Subarea Plan calls for a Green Street Loop that connects from city hall to the Motor Avenue festival street. The city is also considering a new central civic park that connects with the green street loop. City planners intend to increase the usefulness of current and future public transportation by creating walkable green spaces that connect with regional transportation options.

Transportation Upgrades

The Washington State Growth Management Act addresses both future growth and climate change by focusing on reducing vehicle miles traveled (VMT). We accomplish this goal through Transit Oriented Development (TOD). TOD aims to concentrate housing, services, and jobs near public transportation nodes to maximize the benefits of transportation networks. This also includes expanding non-motorized transportation options and strengthening the connections between public transportation nodes and non-motorized transportation networks. The City is currently updating both its non-motorized transportation plan and its comprehensive plan. These updates focus on TOD centered on transportation nodes within Lakewood. The major nodes in the City are the Sounder commuter rail service at Lakewood Station and the Lakewood Transit Center bus terminal in Lakewood Towne Center.

Several areas of Lakewood stand out as transportation islands when considering transportation options for the entire City. These same areas are also among the areas most disproportionately impacted by environmental factors as seen in Figure 2. Though the Tillicum and Woodbrook neighborhoods are part of Lakewood on a map, Interstate 5 and Joint Base Lewis-McChord sit between those neighborhoods and the rest of the City. For some residents of Lakewood, City Hall is only accessible by car via I-5. Lakewood is strengthening the connections between these neighborhoods and the main body of the City. The I-5 - Gravelly - Thorne connector will give pedestrians and bicyclists access to Tillicum and Woodbrook from Gravelly Lake Drive.

Renewable Energy

Energy links tightly to climate change. Much of our energy comes from the burning of fossil fuels. This is true for both our motorized modes of transportation and the energy we use at home and work. A City can reduce its energy usage and its effect on climate change in several ways. Two avenues to reducing fossil fuel emissions are reducing energy usage in City facilities and ensuring utilities are providing energy in an efficient and sustainable manner. The State of Washington sets goals for reduced energy usage and reduced emissions and the City expects future goals to push these targets further.

City Hall Energy Audit

Lakewood City Hall is now more than 20 years old. The current HVAC systems are original equipment and are nearing the end of their useful life cycle. The City recently performed an energy audit to assess the Lakewood City Hall building's energy usage and to provide options for replacement and energy savings. Replacement of these systems will provide energy and expenditure savings.

Utilities

While Lakewood does not run its own utilities, the City works closely in partnership with its utility providers. There are three electrical provider utilities in Lakewood. To explore energy savings and other energy efficiency programs, consult the map (Figure 3) to find your electricity provider and visit their website for more information:

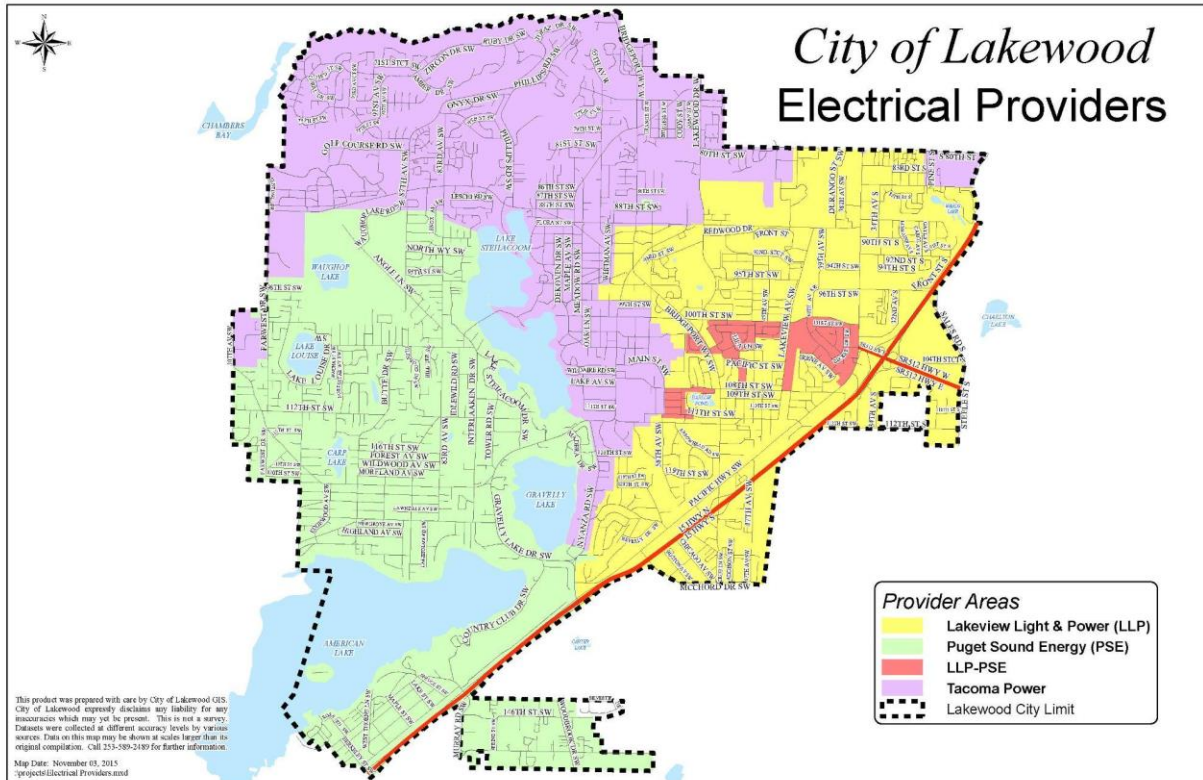


Figure 3: Map of Electrical Providers in Lakewood. Click for a larger view.

Lakeview Light & Power (LLP)

<https://www.lakeviewlight.com/>

Lakeview Light & Power offers several energy efficiency programs for businesses including rebates and grants.

[Click here for more information about LLP's energy savings programs](#)

[Click here for more information about LLP's Commercial Lighting Rebate Program](#)

Puget Sound Energy (PSE)

<https://www.pse.com/>

Puget Sound Energy offers several programs, grants, and savings to businesses looking to become more energy efficient.

[Click here for more information about PSE's energy efficiency programs](#)

Tacoma Public Utilities (TPU)

<https://www.mytpu.org/>

Tacoma Public Utilities works to provide rebates for business customers to become more energy efficient and to save water. They offer rebates for upgrades to lighting, HVAC, commercial kitchen equipment, irrigation systems, and more.

[Click here for more information about Tacoma Power's Business Rebates](#)

TPU also offers a free walk-through energy assessment service that helps businesses understand how they consume electricity, and provides them with recommendations for reducing electricity use along with cost estimates for energy saving equipment upgrades.

To schedule a free assessment contact TPU by:

Phone: (253) 502-8619

Email: bizrebates@cityoftacoma.org