

Village of Oak Park Climate Plan

Cost Average Estimates: Methodology

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This document is intended to provide an overview of the methodology and assumptions used to inform the cost opinions for the Village of Oak Park's Sustainability, Climate Action, and Resiliency Plan. Broad cost estimates were derived for the plan's 40 overarching goal areas and 192 implementation actions as described further below. This method of providing cost average estimates is supported by the U.S. Sustainability Directors' 2019 Report on Funding & Financing Climate Action Plans "in order to have confidence in expected project costs and ROI, CAP initiatives need concrete project scopes and usually the engagement of engineers and other technical professionals through a feasibility study. Without such detail, capital and ongoing cost estimates and ROI projections should be considered ballpark ranges," ([Source](#)). Cost estimates are generally grouped to the nearest \$50,000.

Cost estimates were provided based on the costs to reach overarching goal areas for the following Impact Areas: Extreme Weather & Climate Resilience, Healthy & Sustainable Food, Waste & Sustainable Materials, Sustainable Economic Development, Community Health, and Parks, Plants, & Biodiversity. This method of estimated costs is also supported by the U.S. Sustainability Directors' 2019 Report: "Financial innovation often originates from combining multiple mechanisms, or actions, into a single project. By combining multiple funding pathways into a blended mechanism for a single project, and by creating or utilizing project structures that align the interests of private and public actors, cities can often overcome split-incentive problems and leverage external funding. Additionally, grouping several different climate action projects together under the same funding mechanism can create a multiplier effect for both project benefits and available funding. Bonds and grants are both funding mechanisms that can fund multiple projects, and even several climate action themes, in a single financial transaction."

Cost estimates were provided for specific implementation actions for the high-impact areas of Energy Use in Buildings & Housing and Transportation, to provide a more granular level of understanding behind the investments needed to achieve significant reductions in greenhouse gas emissions and meet the community's goals of a 60% reduction by 2030 and carbon neutrality by 2050.

The planning team recognizes the cost estimates for implementation of the Climate Plan **do not** include specific references to savings and benefits that are difficult to quantify but no doubt exist and would provide a significant reduction in the total estimated cost if the recommended actions are successful. "Additionally, the high number of unknowns related to the impacts of climate change on cities' economic, social, and environmental wellbeing, made it difficult to estimate the cost of doing business as usual."

These savings and co-benefits include but are not limited to: improved human health and wellbeing and an associated reduction in health care costs, avoided damage to infrastructure from extreme weather, avoided loss of biodiversity, reduced energy burden, reduced productivity from lost work days due to illness or displacement, a stronger local economy, increased productivity of local agriculture, and more. According to October 2019

data from the World Bank, the world will need to make significant investment in climate action over the next 15 years – around US\$90 trillion by 2030. “But it can recoup those investments. Transitioning to a green economy, it found, can unlock new economic opportunities and jobs. An investment of US\$1, on average, yields US\$4 in benefits,” ([Source](#)).

Another disclaimer is that the cost estimates provided are not intended as expenditures from the Village alone; the community as a whole can and should share in the investments. However, the planning team recognizes the limitations in authority the Village has over individual investments, especially in regard to the stated goal of maintaining affordability for residents and businesses. Therefore, costs that are intended to be shared among public, private, and non-profit entities are included so as to showcase a conservative estimate for climate action across goal areas.

For example, an overall cost estimate is included for the replacement of internal combustion engine (ICE) vehicles across the Village with zero-emission vehicles (ZEVs), but this cost will be spread among many residents and organizations that choose to purchase ZEVs. If this total cost was not included, the interpretation may be that the investments needed to reach the emissions reduction goals may be understated and not well understood by the community as a whole. The U.S. Sustainability Directors Network describes: “Choosing to focus on capital intensive projects gets cities to focus on the hardest to fund big-ticket items. This helps expose funding gaps in earlier in the CAP development process, giving cities adequate time to leverage private funds and explore alternative mechanisms.”

Cost opinions were determined after incorporating a range of potential pricing for the following items that may help guide successful implementation:

- Costs for professional services including consultant fees, studies, technical analyses, plan updates, and other outside services
- Salary estimates for individual department staff and cross-departmental staff based on an anticipated level of effort spent per year on a specific action (percentage of overall time spent) based on overall costs over a 5 year period except where otherwise noted, as the intention is for this work to become more efficient over time
 - This includes call-outs for updating ordinances, redesigning inspection processes, training, public meetings, presentations, etc.
 - This also includes time and effort creating, launching, and managing new or existing programs
- Education, outreach, and communication items, based on time spent by Village staff and community organizations including coordination time, meetings, creation of materials, engagement, etc.
- Cost estimates for special events to promote or engage the community
- Material costs including flyers, giveaways, etc. (reusable bags, efficient power strips, sharable gardening equipment, etc.)
- IT costs including database creation, system upgrades
- Capital costs including for infrastructure upgrades, purchases of new equipment, ongoing or expanded maintenance

- Sample amounts of new grant programs to help residents and businesses offset the cost of new or retrofitted equipment

Some costs can be considered absorbed by ongoing staff salaries already budgeted by the Village. Cost estimates do not include references to whether new staff will need to be hired by departments or outside organizations.

A selection of assumptions is included below in the staff-facing plan implementation spreadsheet, to be finalized pending final approval of the Climate Plan by the Village Board.

The community-wide cost between the Village and community members for the Climate Plan is estimated at approximately \$1.0 billion.