



**Agenda**  
**Planning Commission Regular Meeting**  
**July 13, 2026 | 6:30 PM**

Stanwood Fire Station  
8117 267<sup>th</sup> Place NW  
Stanwood, WA 98292

Members of the public may attend Stanwood City Council meetings in-person or via  
Zoom.

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

- 1. Call to Order**
  - 2. Roll Call**
  - 3. Public Requests and Comments**
  - 4. Approval of Minutes**
    - a. June 8, 2026 Planning Commission Meeting Minutes
  - 5. Unfinished Business**
    - a. Climate Change Assessment Workshop
  - 6. New Business**
  - 7. Miscellaneous Business**
  - 8. Recent Council Action on Commission Items**
    - a. Permitted Use Matrix
  - 9. Upcoming Items**
  - 10. Adjourn**
- 

**Zoom Meeting Information**

Please click the link below to join the webinar:

<https://us02web.zoom.us/j/82891360016>

Passcode: 502157

Telephone: 253-215-8782

Webinar ID: 830 9911 3579



## City of Stanwood Planning Commission Staff Report

**Item Number:** 4.a.  
**Date:** July 13, 2026  
**Subject:** June 8, 2026 Planning Commission Meeting Minutes  
**Contact Person:** Patricia Love, Community Development Director  
**Attachments:** 1. PC Meeting Minutes 06.08.2026

---

Minutes



# Planning Commission Meeting Minutes Monday, June 8, 2026, 6:30 pm

**Call to Order:** 6:30 p.m.

## **Roll Call**

### **Commissioners Present:**

Richard Craig, Commissioner, Vice Chair  
Patrick Hosterman, Commission Chair  
Doug Standish, Commissioner  
Rachell Pedersen, Commissioner

### **Staff Present:**

Patricia Love, Community Development Director  
Audrey Rotrock, Associate Planner

**Absent:** Eric Warnat, Gabrielle Braley

**Also known to be present:** Josh Knabe, Kai Cardon

**Public Requests and Comments:** None

## **Approval of Minutes:**

The minutes of the April 13, 2026 Planning Commission meeting were approved with a change to Roll Call and members present.

## **Unfinished Business:**

### **Climate Change Assessment**

The Planning Commission has been introduced to the state mandate requiring local jurisdictions to update their Comprehensive Plans to include a new Climate Change and Resiliency Element. This new Climate Element must incorporate goals and policies intended to reduce greenhouse gas (GHG) emissions, improve community resilience to climate impacts, and address localized climate risks and vulnerabilities.

As part of this effort, one of the first steps toward developing climate policies specific to Stanwood is completing a climate hazards analysis. The City's consultant, Maul Foster & Alongi, put together a memorandum that summarizes the assessment methodology and associated maps.

From this work, policy direction can be developed to ensure that Stanwood's Comprehensive Plan responds proactively to climate-related risks while ensuring public safety. It is important to identify both the physical areas that may be affected and the populations that may experience disproportionate impacts. In accordance with state guidance documents, the memorandum outlined the process used to identify Stanwood's vulnerable populations, community assets, and potential natural hazards.

This assessment utilized mapping tools, climate hazard datasets, and future climate projections to better understand how climate-related events may affect the community over time. It provides baseline information regarding Stanwood's community characteristics, built environment, and natural systems. This information will assist the City in developing future climate-related goals and policies that are informed by local conditions consistent with state requirements.



## Planning Commission Meeting Minutes Monday, June 8, 2026, 6:30 pm

### Commissioner Questions & Comments (to be answered at the July meeting)

- Since the majority of the city is already developed, how will climate change policies and regulations affect existing homes and businesses?
- We cannot require existing structures to be retrofitted after the fact. Given that limitation, should the City's primary role be to serve as a resource for information and education?
- What agencies, such as the PUD, offer rebate or incentive programs that could help residents and businesses reduce energy consumption and improve energy efficiency?
- What options are available to help residents and businesses adopt a greener lifestyle?
- What are the City's largest sources of greenhouse gas emissions?
- As a community that is nearing buildout, what are the most significant climate change challenges facing Stanwood?
- What actions can the City take that would produce meaningful climate-related results given our size and level of development?

The Commission would also like to receive the results of the public survey prior to their July meeting.

### **New Business:**

#### **Multimodal Level of Service Ordinance and Comprehensive Plan Amendment**

As part of the City's 2025 Workplan, staff began working on the development of a Multimodal Level of Service (MMLOS) standard. This initiative responds to the State mandate and community goal to create a more inclusive and comprehensive approach to transportation planning. Rather than focusing solely on vehicular traffic, the MMLOS framework is designed to evaluate and plan for all modes of travel—including motor vehicles, pedestrians, bicyclists, and transit users. The ultimate goal is to ensure that the transportation network supports safe, efficient, and comfortable mobility for individuals of all ages and abilities.

A multimodal concurrency and LOS program(s) must meet the requirements of the Growth Management Act and Puget Sound Regional Council (PSRC) VISION 2050. Below are typical MMLOS units of measurements used by agencies in Washington.

### Commissioner Questions & Comments

The Planning Commission looks forward to getting more information on the Comprehensive Plan amendments and concurrency procedures for the Multimodal Level of Service Ordinance.

**Miscellaneous Business:** None

**Recent Council Action on Commission Items:** Grading and Stormwater Code Amendment & Permitted Use Matrix and Development Standards Code Amendment.

**Upcoming Items:** Development Design Standards

**Adjourn:** 7:43 p.m.



**CITY OF STANWOOD  
PLANNING COMMISSION  
AGENDA STAFF REPORT**

**DATE:** July 13, 2026

**SUBJECT:** Climate Assessment and Public Survey

**CONTACT PERSON:** Patricia Love, Community Development Director

**ATTACHMENTS:**

1. GHG Emissions Inventory Memo
2. Public survey summary

---

**PURPOSE**

The purpose of this agenda item is to provide the Planning Commission with an overview of the technical analysis and community outreach efforts to be discussed at the July 13 meeting.

Planning Commission should also be aware of two items for future meetings:

1. The Department of Commerce recommends that a jurisdiction's Climate Policy Advisory Team draft a vision statement to guide development of the Climate Element. One option for meeting this recommendation is to adapt Stanwood's existing vision statement from the Comprehensive Plan for use in the Climate Element. Stanwood's 2044 Vision and Mission Statements from the Comprehensive Plan are included for reference below.

**2044 Vision Statement:** *Promote historic downtown Stanwood as the commercial and cultural heart of the Greater Stanwood/Camano region while strategically planning for future growth and economic development opportunities of the entire City.*

**Mission Statement:** *The Mission of the City of Stanwood is to create and maintain a community where people can live, work, and play in an environment that is safe, vibrant, and aesthetically pleasing. Stanwood is inclusive of everyone, includes the community in its decision-making process, ensures a thriving local economy, provides transparent government, and is responsive to the needs of the community.*

2. The Department of Commerce recommends that jurisdictions set an overall emissions reduction target that leads to achieving net-zero emissions by 2050, consistent with state-level efforts.

## **BACKGROUND**

Over the last several months, the Planning Commission has been reviewing the state mandated climate change requirements and initial mapping assessments. To fully understand the potential impacts of climate change on Stanwood, it is important to identify both the physical areas that may be affected and the populations that may experience disproportionate impacts. These include:

- Vulnerable Populations:
  - Children aged 4 or younger
  - Adults 65 and older
  - People of Color (BIPOC Populations)
  - Those with disability
  - Non or limited English populations
  - Those living below the poverty line
  
- Community Assets:
  - Facilities and infrastructure
  - Parks and open space
  
- Climate-Induced Hazards:
  - Flooding
  - Sea level rise
  - Excessive heat
  - Drought
  - Wildfire smoke

## **ANALYSIS**

The process for identifying pertinent goals and policies for inclusion in the Climate Element involves combining technical analysis and community engagement. The City's consultants, Maul Foster and Alongi (MFA), have completed a greenhouse gas emissions inventory that identifies the largest emission categories in Stanwood. The largest sources of GHG emissions within Stanwood city limits are natural gas (45% of total emissions), transportation (19%), refrigerants (12%), and electricity (10%).

The City does not have direct control over all emissions produced within City limits but the inventory points to potential areas of greatest policy influence. This inventory also provides a baseline against which the City can conduct future GHG inventories to measure progress.

MFA has also completed an analysis of the results of the public survey that was open June 8 to June 21. The survey received 37 responses. The survey asked for community members' experiences with climate hazards and their priorities for what the City should focus on as it develops the Climate Element. High-level themes from the results include:

- Top community concerns:
  - Infrastructure and planning to support current and future population and traffic growth
  - Maintaining and improving flood resilience

- Opportunities:
- Supporting energy efficiency
  - Increasing tree canopy and protecting/enhancing natural spaces

MFA will be leading a workshop-style discussion covering the following findings:

- Highest climate risks (review the Climate Impacts Analysis)
- Sources of emissions (review GHG Emissions Inventory Report)
- Community priorities (review public survey results)
- Gaps and opportunities in current policies (review Plan Audit)

This review will answer some of the Planning Commission's recent questions:

- Since the majority of the city is already developed, how will climate change policies and regulations affect existing homes and businesses?
- What options are available to help residents and businesses adopt a greener lifestyle?
- What actions can the City take that would produce meaningful climate-related results given our size and level of development?
- We cannot require existing structures to be retrofitted after the fact. Given that limitation, should the City's primary role be to serve as a resource for information and education?
- What agencies, such as the PUD, offer rebate or incentive programs that could help residents and businesses reduce energy consumption and improve energy efficiency?
- As a community that is nearing buildout, what are the most significant climate change challenges facing Stanwood?

MFA and BHC will propose several topic areas for focus in developing preliminary Climate Element goals and policies.

### **PROPOSED COMMITTEE ACTION**

This is a discussion item to provide the consultant team with direction for developing preliminary goals and policies for the Climate Element.

Discussion questions:

- Are there guiding principles or context the consultant team should keep in mind as they compile an initial draft of goals and policies?
- Do the proposed topic areas reflect the most important issues facing Stanwood? Where are there gaps? Which are most important?

- For the highest-priority topics, what outcomes or changes would you like to see over time?

# City of Stanwood 2023 Greenhouse Gas Emissions Inventory

---

CLIENT REVIEW DRAFT

*Prepared for:*

**City of Stanwood**

June 29, 2026

Project No. M1030.10.004

*Prepared by:*

Maul Foster & Alongi, Inc.

114 W Magnolia Street, Suite 500, Bellingham, WA 98225

© 2026 Maul Foster & Alongi, Inc.



MAUL  
FOSTER  
ALONGI

# City of Stanwood 2023 Greenhouse Gas Emissions Inventory

*The material and data in this report were prepared  
under the supervision and direction of the undersigned.*

*Maul Foster & Alongi, Inc.*

---

*Kat Klass  
Project Environmental Scientist*

# Contents

---

Abbreviations.....v

1 Background .....1

    1.1 Methods.....1

        1.1.1 GHG Emissions Inventory Protocols.....1

        1.1.2 Inventory Boundary and Emissions Sources .....2

2 GHG Emissions Inventory Findings .....2

    2.1 Summary of Findings .....2

    2.2 Findings by Category .....4

        2.2.1 Built Environment.....4

        2.2.2 Refrigerants .....5

        2.2.3 Land Use .....5

        2.2.4 Transportation .....5

        2.2.5 Wastewater.....6

        2.2.6 Solid Waste.....6

3 Conclusion .....6

## Limitations

## Figures

### In the Text

- 2-1 Breakdown of Stanwood’s 2023 GHG Emissions by Source
- 2-2 Built Environment GHG Emissions by Category and Source

## Tables

### In the Text

- 1-1 Emissions Sources for the 2023 GHG Emissions Inventory
- 2-1 Total and Per-capita GHG Emissions, by Category

## Appendixes

### Appendix A

Greenhouse Gas Emissions Inventory Methods



# Abbreviations

---

|                   |                                                           |
|-------------------|-----------------------------------------------------------|
| City              | City of Stanwood                                          |
| CH <sub>4</sub>   | methane                                                   |
| CNG               | Cascade Natural Gas                                       |
| CO <sub>2</sub>   | carbon dioxide                                            |
| CO <sub>2</sub> e | carbon dioxide equivalent                                 |
| EPA               | U.S. Environmental Protection Agency                      |
| GHG               | greenhouse gas                                            |
| ICLEI             | International Council for Local Environmental Initiatives |
| MFA               | Maul Foster & Alongi, Inc.                                |
| MT                | metric ton                                                |
| N <sub>2</sub> O  | nitrous oxide                                             |
| SnoPUD            | Snohomish County Public Utility District No. 1            |
| VMT               | vehicle miles traveled                                    |

# 1 Background

---

The City of Stanwood (the City) is advancing climate planning to inform the development of a new Climate Element as part of the 2029 Comprehensive Plan periodic update cycle. State law now requires Washington cities and counties to include a Climate Element in their comprehensive plans that addresses climate resilience and greenhouse gas (GHG) emissions. For eleven counties (including Snohomish County) and the cities within, the next update must include a GHG emissions reduction subelement.

To support this effort, the City engaged Maul Foster & Alongi, Inc. (MFA) to prepare a community-wide GHG emissions inventory (the inventory). The inventory identifies emission sources, estimates the magnitude of current emissions, and summarizes 2023 emissions. This information provides a baseline for understanding where emissions are coming from and helps inform opportunities for reducing emissions over time.

## 1.1 Methods

To guide the development of Stanwood's inventory methods, MFA applied three principles:

- Replicability and transparency, to support updates over time and allow comparison with the baseline provided by this inventory.
- Consistency with the Snohomish County 2022 Greenhouse Gas Emissions Analysis, to enable comparison across jurisdictions and datasets.
- Accuracy, by including relevant emission sources and using locally specific data where available.

### 1.1.1 GHG Emissions Inventory Protocols

This inventory follows the International Council for Local Environmental Initiatives' U.S. Community Protocol for Accounting and Reporting of GHG Emissions, a standardized method for quantifying community-scale GHG emissions.<sup>1</sup>

The protocol addresses six internationally recognized GHGs: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

Emissions are reported as carbon dioxide equivalents (CO<sub>2</sub>e), which standardizes GHGs into a common unit based on their relative warming impact, or global warming potential. This accounts for differences in how strongly each GHG contributes to climate change over a 100-year period compared to carbon dioxide.

---

<sup>1</sup> ICLEI. 2010. U.S. Local Government Operations Protocol, Version 1.1. International Council for Local Environmental Initiatives – Local Governments for Sustainability USA: Denver, CO. May.

Stanwood's emissions were estimated for calendar year 2023, the most recent year with available data at the time of this inventory. All data is from 2023 unless noted in Appendix A. MFA completed calculations and analysis in Microsoft Excel and provided City staff with the supporting workbook.

### 1.1.2 Inventory Boundary and Emissions Sources

The City has chosen to define the boundary for the GHG emission inventory using Stanwood city limits. This approach reflects emissions occurring within the community's jurisdictional boundary and aligns with standard practices in community GHG emission inventories. However, some trans-boundary sources such as emissions associated with waste disposal (i.e., waste generated in Stanwood and disposed outside of city limits) were included as part of the inventory.

The inventory includes the sources shown in Table 1-1. Sources were selected and categorized to align with the Snohomish County 2022 Greenhouse Gas Emissions Analysis prepared for the Washington State Department of Commerce.

Methods and data considerations for each emissions source are provided in Appendix A.

**Table 1-1: Emissions Sources for Stanwood's 2023 GHG Emissions Inventory**

| Category          | Emission Sources                                       |
|-------------------|--------------------------------------------------------|
| Built Environment | Electricity<br>Natural gas<br>Propane<br>Fuel oil      |
| Refrigerants      | Refrigerants                                           |
| Land Use          | Tree cover change<br>Carbon sequestration <sup>1</sup> |
| Transportation    | On-road vehicles<br>Transit                            |
| Wastewater        | Treatment processes                                    |
| Solid Waste       | Landfilled waste                                       |

**Note**

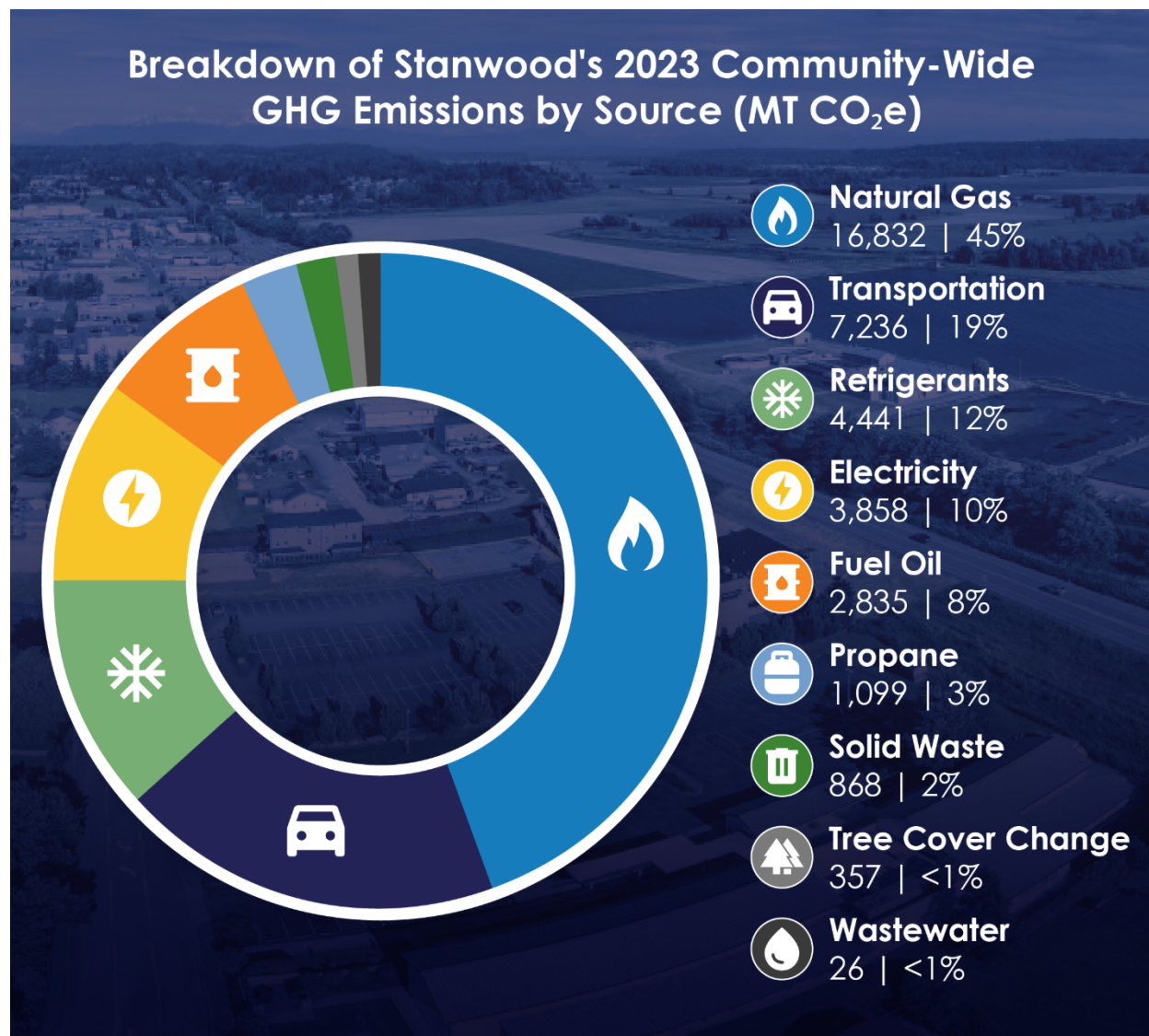
<sup>1</sup>The U.S. Community Protocol does not allow the reporting of net numbers (e.g., subtracting carbon sequestration emissions removals from a total emissions estimate). Emissions avoided via carbon sequestration (in this case, trees' removal of GHGs from the atmosphere) will be reported as a separate, informational line item from total emissions.

## 2 GHG Emissions Inventory Findings

### 2.1 Summary of Findings

In 2023, the Stanwood community produced an estimated 37,553 metric tons (MT) CO<sub>2</sub>e, or approximately 4.50 MT CO<sub>2</sub>e per capita. The largest sources of emissions were natural gas (45 percent of total emissions), transportation (19 percent of total emissions), refrigerants (12 percent

of total emissions), and electricity (10 percent of total emissions). Figure 2-1 and Table 2-1 below summarize 2023 community-wide emissions by category and source.



**Figure 2-1: Breakdown of Stanwood's 2023 GHG Emissions by Source**

**Table 2-1: Total and Per-capita GHG Emissions, by Category**

| Category                 | Total Emissions (MT CO <sub>2</sub> e) | Per-capita Emissions (MT CO <sub>2</sub> e) | Percent of Total Emissions |
|--------------------------|----------------------------------------|---------------------------------------------|----------------------------|
| <b>Built Environment</b> | <b>24,625</b>                          | <b>2.95</b>                                 | <b>66</b>                  |
| <b>Electricity</b>       | <b>3,858</b>                           | <b>0.46</b>                                 | <b>10</b>                  |
| Residential              | 1,332                                  | 0.16                                        | 4                          |
| Commercial               | 2,526                                  | 0.30                                        | 7                          |
| Industrial               | 0                                      | 0                                           | 0                          |
| <b>Natural Gas</b>       | <b>16,832</b>                          | <b>2.02</b>                                 | <b>45</b>                  |
| Residential              | 7,698                                  | 0.92                                        | 20                         |

| Category                            | Total Emissions<br>(MT CO <sub>2</sub> e) | Per-capita Emissions<br>(MT CO <sub>2</sub> e) | Percent of Total<br>Emissions |
|-------------------------------------|-------------------------------------------|------------------------------------------------|-------------------------------|
| Commercial                          | 9,134                                     | 1.09                                           | 24                            |
| Industrial                          | 0                                         | 0                                              | 0                             |
| <b>Propane</b>                      | <b>1,099</b>                              | <b>0.13</b>                                    | <b>3</b>                      |
| Residential                         | 555                                       | 0.066                                          | 1                             |
| Commercial                          | 208                                       | 0.025                                          | <1                            |
| Industrial                          | 336                                       | 0.040                                          | <1                            |
| <b>Fuel Oil</b>                     | <b>2,835</b>                              | <b>0.34</b>                                    | <b>8</b>                      |
| Residential                         | 137                                       | 0.016                                          | <1                            |
| Commercial                          | 354                                       | 0.042                                          | <1                            |
| Industrial                          | 2,345                                     | 0.28                                           | 6                             |
| <b>Refrigerants</b>                 | <b>4,441</b>                              | <b>0.53</b>                                    | <b>12</b>                     |
| <b>Land Use (Tree Cover Change)</b> | <b>357</b>                                | <b>0.043</b>                                   | <b>&lt;1</b>                  |
| <b>Transportation</b>               | <b>7,236</b>                              | <b>0.87</b>                                    | <b>19</b>                     |
| <b>On-Road Vehicles</b>             | <b>7,096</b>                              | <b>0.85</b>                                    | <b>19</b>                     |
| <b>Transit</b>                      | <b>140</b>                                | <b>0.017</b>                                   | <b>&lt;1</b>                  |
| <b>Wastewater</b>                   | <b>26.2</b>                               | <b>0.00314</b>                                 | <b>&lt;1</b>                  |
| <b>Solid Waste</b>                  | <b>868</b>                                | <b>0.10</b>                                    | <b>2</b>                      |
| <b>Total Emissions</b>              | <b>37,553</b>                             | <b>4.50</b>                                    | <b>100</b>                    |
| <b>Carbon Sequestration</b>         | <b>-411</b>                               | <b>-0.05</b>                                   | <b>-</b>                      |

**Note**

Values in "Percent of Total Emissions" column may not sum to 100 due to rounding.

## 2.2 Findings by Category

### 2.2.1 Built Environment

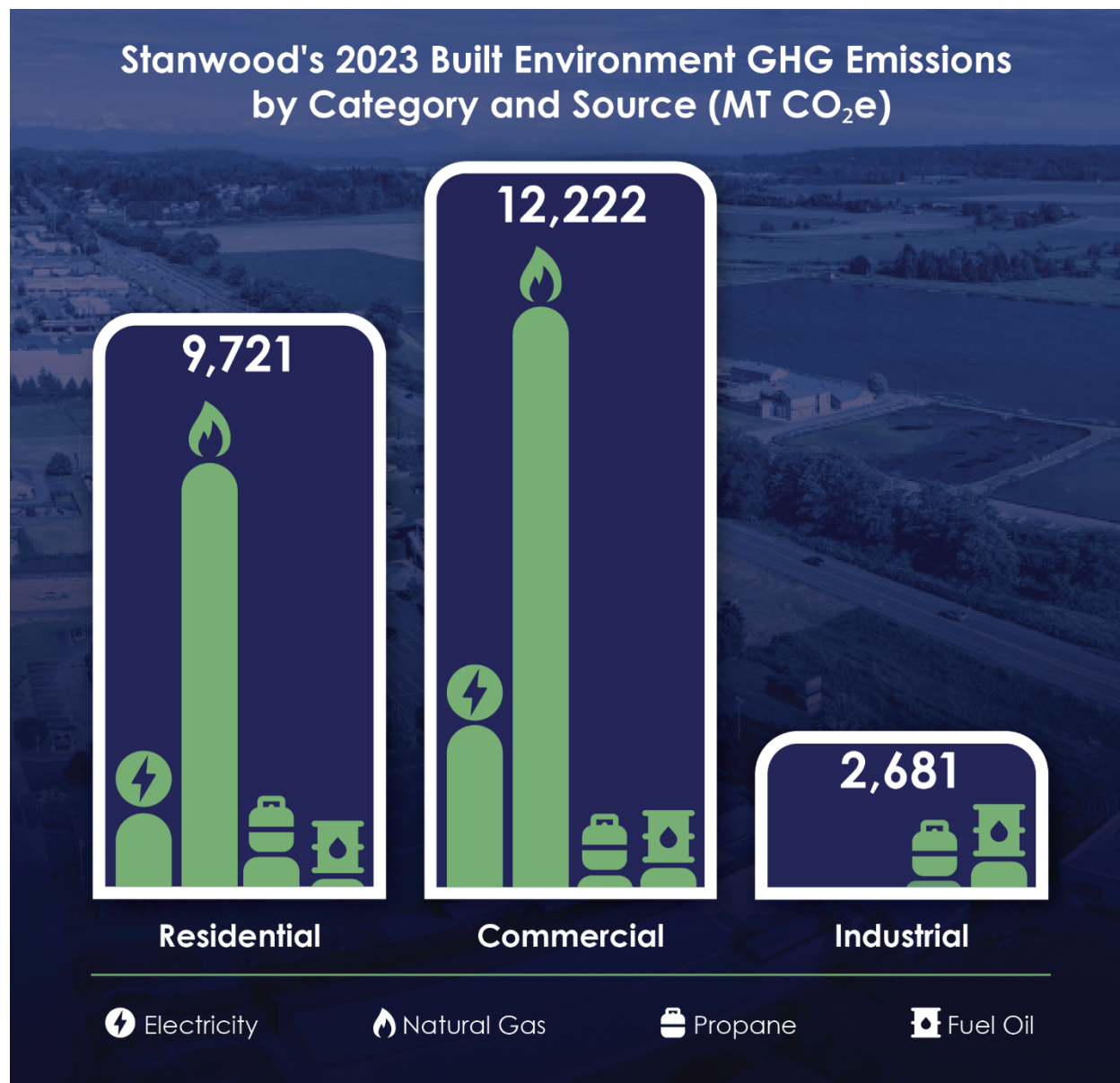
The built environment accounted for 66 percent of Stanwood's 2023 emissions, totaling 24,625 MT CO<sub>2</sub>e. This category includes emissions from electricity, natural gas, propane, and fuel oil used to heat, cool, and power buildings and stationary equipment for residential, commercial, and industrial uses.

As shown in Figure 2-1, natural gas and transportation made up the largest shares of Stanwood's emissions, at 45 and 19 percent respectively, while propane and fuel oil consumption contributed 3 percent and 8 percent, respectively.

Residential energy use (electricity, natural gas, propane, and fuel oil) accounted for 26 percent of total emissions. Commercial and industrial energy use (electricity, natural gas, propane, and fuel oil) accounted for 33 percent and 7 percent of total emissions, respectively. Figure 2-2 shows the relative magnitude of built environment GHG emissions by category and source.

Emissions from electricity were calculated using utility-specific emission factors obtained from Stanwood's electricity service provider, Snohomish County Public Utility District No. 1 (SnoPUD), as reflected in Table 2-1. SnoPUD's fuel mix for electricity generation is less emissions-intensive than the regional average.

To illustrate the impact of SnoPUD's fuel mix, emissions were also estimated using EPA Emissions & Generation Resource Integrated Database (eGRID) emission factors representing the regional (i.e., Western Power Pool) electric power mix. Using the eGRID emission factors, Stanwood's electricity emissions were approximately 27,680 MT CO<sub>2</sub>e, compared to only 3,858 MT CO<sub>2</sub>e using the utility-specific emission factors, highlighting the lower emissions intensity of SnoPUD-provided electricity.



**Figure 2-2: Built Environment GHG Emissions by Category and Source**

## 2.2.2 Refrigerants

The refrigerants category accounted for 12 percent of Stanwood's 2023 emissions, totaling an estimated 4,441 MT CO<sub>2</sub>e. Refrigerant category emissions (i.e., hydrofluorocarbons, perfluorocarbons, and CO<sub>2</sub>) come from the use and leakage of ozone-depleting substances. Due to

limited local data, Stanwood's refrigerant emissions were estimated using national data scaled to Stanwood's population.

### 2.2.3 Land Use

The land use category includes two subcategories: tree cover change and carbon sequestration.

Tree cover change accounted for less than 1 percent of Stanwood's 2023 emissions, contributing 357 MT CO<sub>2</sub>e. This emissions category captures factors such as conversion of forest land for other uses, decrease in urban tree canopy, deforestation and harvesting, and damage from insects, fire, or disease. Because Stanwood has limited tree canopy, particularly outside of public parks, there is relatively little tree cover to be gained or lost, so overall changes are expected to be small.

Trees and forests in Stanwood sequestered approximately 411 MT CO<sub>2</sub>e in 2023. Carbon sequestration refers to the removal of carbon dioxide from the atmosphere and is reported separately from emissions to avoid creating a net total of gains and losses (see Table 2-1).

Tree cover change and carbon sequestration estimates are based on remote sensing data and account for tree characteristics such as types, age, and health.

### 2.2.4 Transportation

The transportation category made up 19 percent of Stanwood's 2023 emissions, totaling an estimated 7,236 MT CO<sub>2</sub>e (see Figure 2-1 and Table 2-1). This includes emissions from:

- Vehicles traveling on city-owned roads;
- Vehicles traveling on SR 532 within city limits with destinations in northeast Stanwood, southeast Stanwood, or downtown Stanwood; and
- Island Transit and Community Transit services provided on roads in Stanwood.

Because transportation emissions are calculated based on the number of miles traveled, vehicle fuel type, and vehicle efficiency, greater vehicle miles traveled (VMT) generally results in greater emissions. According to the Washington State Department of Transportation's Highway Performance Monitoring System, on-road vehicles traveled approximately 11,355,000 miles on city-owned roadways in Stanwood in 2023. MFA estimated that vehicles traveling on SR 532 within city limits with a destination of northeast Stanwood, southeast Stanwood, or downtown Stanwood accounted for approximately 4,800,000 VMT. Combined, these emission sources contributed an estimated 7,096 MT CO<sub>2</sub>e. Island Transit and Community Transit service in Stanwood accounted for approximately 106,581 VMT and 140 MT CO<sub>2</sub>e.

### 2.2.5 Wastewater

The wastewater category made up less than 1 percent of Stanwood's 2023 emissions, contributing an estimated 26.2 MT CO<sub>2</sub>e (see Figure 2-1 and Table 2-1). This category includes emissions from the treatment of wastewater produced within the Stanwood wastewater treatment plant service area, which serves approximately 8,351 people.

Wastewater treatment plant emissions were attributed to process N<sub>2</sub>O emissions from wastewater treatment with nitrification and denitrification, and process N<sub>2</sub>O emissions from effluent discharge.

The wastewater treatment plant in Stanwood also produces emissions from energy used to power wastewater treatment processes. Energy consumption emissions at the wastewater treatment plant are accounted for in the commercial energy category to avoid double-counting between categories.

### 2.2.6 Solid Waste

The solid waste category made up 2 percent of Stanwood's 2023 emissions, contributing an estimated 868 MT CO<sub>2</sub>e (see Figure 2-1 and Table 2-1). This category includes methane emissions from the decomposition of organic material in landfilled waste, emissions from the collection and transportation of solid waste to landfill, and process emissions associated with landfill operations.

According to the Snohomish County Comprehensive Solid and Hazardous Waste Management Plan, most of the waste generated in Stanwood is transported by rail to the Roosevelt Regional Landfill in Klickitat County. The Roosevelt Regional Landfill has a system that recovers landfill gas for energy generation, which decreases the magnitude of Stanwood's solid waste emissions.

## 3 Conclusion

---

Stanwood's 2023 inventory identifies several areas where focused efforts can effectively reduce emissions. The built environment and transportation categories stand out as key areas for improvement due to their magnitude. Emissions reduction initiatives that improve building energy efficiency, expand renewable energy use, reduce energy consumption, and decrease VMT can significantly reduce emissions over time. While the City cannot directly control all community-wide emissions sources, local policies and programs can influence many of the activities that contribute to the emissions reflected in this inventory.

# Limitations

---

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

## Appendix A

---

### Greenhouse Gas Emissions Inventory Methods



MAUL  
FOSTER  
ALONGI



# Greenhouse Gas Emissions Inventory

## Methods

### Methods and Data Sources

Estimating Stanwood's greenhouse gas (GHG) emissions for the 2023 GHG Emissions Inventory involved collecting activity data from various sources, identifying relevant emission factors, and applying these emission factors to the activity data.

Table A-1 summarizes the following:

- Activity data, which quantify levels of GHG-generating activities, such as kilowatt-hours (kWh) of electricity consumed, vehicle miles traveled (VMT), or the amount of waste landfilled.
- Emission factors (e.g., metric tons of carbon dioxide equivalent (MT CO<sub>2</sub>e) per activity data unit) used to calculate emissions from the applicable activity levels.

Activity data sources and emission factor sources are fully documented in the Stanwood 2023 GHG Emissions Inventory spreadsheet.

**Table A-1: Activity Data and Emission Factors for Stanwood GHG Emissions Inventory**

| Category              | Activity Data                                                                                      | Emission Factors                                                                                                                                                               |
|-----------------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Built Environment     |                                                                                                    |                                                                                                                                                                                |
| Electricity           | Consumption within city limits provided by Snohomish County Public Utility District No. 1 (SnoPUD) | 1) SnoPUD-specific emission factor from SnoPUD 2023 GHG reporting<br>2) Emissions & Generation Resource Integrated Database emission factors (for informational purposes only) |
| Natural gas           | Consumption within city limits provided by Cascade Natural Gas (CNG)                               | Climate Registry emission factors                                                                                                                                              |
| Propane               | WA propane consumption by sector from U.S. Energy Information Administration (EIA)                 | 1) Climate Registry emission factors<br>2) EPA Emission Factors Hub                                                                                                            |
| Fuel oil              | WA fuel oil consumption by sector from U.S. EIA                                                    | 1) Climate Registry emission factors<br>2) EPA Emission Factors Hub                                                                                                            |
| Refrigerants          |                                                                                                    |                                                                                                                                                                                |
| Refrigerants          | EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990-2022                                | N/A (data reported in CO <sub>2</sub> e emissions)                                                                                                                             |
| Land Use              |                                                                                                    |                                                                                                                                                                                |
| Tree cover change     | ICLEI Land Emissions and Removals Calculator (LEARN)                                               | N/A (data reported in CO <sub>2</sub> e emissions)                                                                                                                             |
| Carbon sequestration* | ICLEI LEARN                                                                                        | N/A (data reported in CO <sub>2</sub> e emissions)                                                                                                                             |

| Category              | Activity Data                                                                                                                                                                   | Emission Factors                                                                                                            |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>Transportation</b> |                                                                                                                                                                                 |                                                                                                                             |
| On-road vehicles      | VMT data from Washington State Department of Transportation (WSDOT) Highway Performance Monitoring System (HPMS) and trip pattern data from State Route (SR) 532 Corridor Study | EPA Emission Factors Hub                                                                                                    |
| Transit               | VMT and fuel economy data from Island Transit and Community Transit                                                                                                             | EPA Emission Factors Hub                                                                                                    |
| <b>Wastewater</b>     |                                                                                                                                                                                 |                                                                                                                             |
| Treatment processes   | Wastewater treatment data from EPA Enforcement and Compliance History Online (ECHO)                                                                                             | U.S. Community Protocol default emission factors, customized based on data available from wastewater treatment plant        |
| <b>Solid Waste</b>    |                                                                                                                                                                                 |                                                                                                                             |
| Landfilled waste      | Tonnage collected within city limits for municipal solid waste from Waste Management (WM)                                                                                       | U.S. Community Protocol solid waste emission factors, customized for landfill characteristics (e.g., landfill gas recovery) |

**Note:**

Asterisk (\*) indicates avoided emissions or emissions removals that are reported as separate line items and not included in total inventory emissions.

## Built Environment

### Electricity

Emissions from electricity consumption were calculated using the amount of electricity consumed within Stanwood city limits in 2023, multiplied by SnoPUD's 2023 emission factor. SnoPUD supplied residential, commercial, and industrial electricity consumption data. For informational purposes, emissions from electricity were also calculated using EPA Emissions & Generation Resource Integrated Database emission factors which represent regional electric power mixes (see Sheet 6 in the GHG Inventory spreadsheet).

SnoPUD offers a Carbon Solutions program that allows customers to purchase renewable energy credits (RECs). SnoPUD supplied data for the quantity of energy offset through Carbon Solutions REC purchases within Stanwood city limits for the residential, commercial, and industrial sectors. In the market-based calculations, Carbon Solutions electricity was subtracted from total electricity use for each sector to account for the portion of electricity consumption matched with RECs (see Sheet 5 in the GHG Inventory spreadsheet).

### Natural Gas

Emissions from natural gas consumption were calculated using the amount of natural gas consumed within Stanwood city limits in 2023, multiplied by EPA emission factors. CNG provided residential, commercial, and industrial natural gas consumption data.

### Propane and Fuel Oil

Average residential household propane and fuel oil consumption were calculated using data from the 2023 U.S. Census American Community Survey (ACS) and U.S. EIA. Total residential use by fuel type

in Washington was divided by the number of households using propane or fuel oil for home heating in Washington. Average residential consumption was multiplied by ACS home heating fuel data for Stanwood and then multiplied by EPA emission factors.

Commercial and industrial propane and fuel oil emissions were calculated using statewide fuel consumption estimates downscaled by the number of commercial and industrial employees within Snohomish County as compared to total state employment. County-level estimates were further downscaled using the ratio of Stanwood population to Snohomish County population. Employment data were collected from the Washington Employment Security Department, which provides data on the number of employees across industries. Propane and fuel oil emissions were calculated using EPA emission factors.

## Refrigerants

Refrigerant emissions were calculated from the EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2022. National-level refrigerant emissions from 2022 were downscaled and attributed to Stanwood based on the ratio of Stanwood population to U.S. population.

## Land Use

### Tree Cover Loss and Carbon Sequestration

ICLEI's Land Emissions and Removals Navigator (LEARN) tool was used to estimate GHG emissions from tree cover loss and carbon sequestration from tree cover gain and maintenance within Stanwood's boundaries. The LEARN tool uses the National Land Cover Database produced by the United States Geological Survey as the land cover database for this analysis. The LEARN tool requires a minimum of a three-year analysis timeframe; totals from the 2021-2023 period were divided by three to determine an average annual value. At the time of this inventory, the tool was available through 2023, and a 2021-2023 timeframe was analyzed. Default factors used to calculate emissions for the "Trees Outside Forests" category are based on data for Seattle, Washington. The tool allows for customization to major metropolitan areas, but the only available Washington option is for Seattle.

It is not U.S. Community Protocol-compliant to report net numbers (e.g., to subtract avoided emissions or emissions removals from a total emissions estimate). Therefore, carbon sequestration (trees' removal of GHGs from the atmosphere) is reported as a separate line item from the emissions inventory total.

The LEARN tool is limited in scope to assessing land-use changes involving forests and trees outside forests. It does not currently address other major land uses that can have significant GHG emissions impacts, such as cropland and pasture.

## Transportation

### On-Road Vehicles

On-road emissions estimates were developed using 2023 VMT activity data from WSDOT HPMS and VMT estimates based on trip pattern data from the SR 532 Corridor Study.

VMT on SR 532 within Stanwood city limits was estimated using traffic volumes, trip distribution assumptions, and assumed segment lengths. Annual trips were calculated separately for eastbound

trips from Camano Island and westbound trips from areas east of Stanwood using weekday and weekend daily volumes and the number of weekdays and weekend days in 2023.

Trip distribution shares were applied to allocate trips to northeast Stanwood, southeast Stanwood, and downtown Stanwood. Only trips ending in these locations were included; through trips and trips ending outside Stanwood were excluded. SR 532 segments within city limits were defined by origin-destination pair, and segment lengths were estimated using Google Maps. Segment lengths were conservatively set higher to avoid undercounting VMT. VMT was calculated by multiplying the number of annual trips by the corresponding in-city segment length for each origin-destination pair and summing across all segments.

VMT from HPMS and the SR 532 estimate was then split into light, medium, and heavy-duty VMT based on WSDOT HPMS statewide freight percentages. For medium- and heavy-duty freight emissions, VMT was multiplied by fuel- and vehicle-specific emissions factors from the 2023 EPA Emission Factors Hub. For light-duty vehicles, 2023 vehicle registration data from Snohomish County was used to estimate VMT by fuel type, which was then multiplied by fuel-specific emissions factors from the EPA Emission Factors Hub. Consistent with the GHG inventory conducted for Snohomish County, MFA assumed most vehicles on the road are from 2016 or later and used the vehicle registration data and 2016 emission factors to create weighted emission factors for gasoline and diesel light-duty vehicles based on the split between passenger vehicles and light trucks in Snohomish County.

### Transit

Transit emissions estimates were developed using 2023 VMT and fuel economy data provided by Island Transit and Community Transit for routes passing through Stanwood in 2023. Total revenue miles for each route were multiplied by the percentage of round-trip miles traveled in Stanwood for each route. VMT were attributed to bus types (diesel and hybrid diesel) based on the agencies' 2023 fixed-route fleet composition. Estimated mileage by bus type was divided by average fuel economy by bus type to estimate gallons of fuel or kWh consumed. Fuel consumption data was then multiplied by EPA vehicle-specific emission factors.

## Wastewater

Wastewater treatment process emissions produced in the Stanwood service area were estimated based on 2023 data from EPA's Enforcement and Compliance History Online portal. Emissions were estimated based on the type of processes occurring at the plant and in the city (e.g., wastewater treatment in aerated basins) as well as the population served. Based on the data available, emissions were calculated using U.S. Community Protocol default equations.

## Solid Waste

### Landfilled Waste

City of Stanwood staff provided collection data for municipal solid waste for customers within Stanwood city limits (from a report automatically generated and sent by WM). The 2020-2021 Washington Statewide Waste Characterization Study was used to characterize community-generated waste sent to landfills (i.e., to estimate the mass fraction of each material type and multiply those mass fractions by the total tonnage sent to landfill).

Emissions were calculated by multiplying the estimated tons of waste generated in 2023 by material type-specific emission factors from the U.S. Community Protocol's Appendix E: Solid Waste Emissions Activities and Sources. The U.S. Community Protocol includes a default assumption of 75% collection efficiency for landfill gas recovery systems.

Emissions from waste collection, transportation of waste to landfills, and landfill operational processes were estimated using the total mass of waste sent to landfill and emission factors from Appendix E of the U.S. Community Protocol.

## Data Limitations

For some categories, data availability was limited or it was necessary to scale regional, state, or national data to estimate emissions. Data limitations and the local relevance of data sources for each category are summarized below.

### Built Environment

#### Electricity

- No notable limitations of data sources or approach.
- Electricity data reflect local conditions.

#### Natural Gas

- No notable limitations of data sources or approach.
- Natural gas data reflect local conditions.

#### Propane and Fuel Oil

- No notable limitations of data sources or approach.
- Residential, commercial, and industrial propane and fuel oil data are based on scaled regional and state data.

### Refrigerants

- At the time of analysis, 2023 refrigerant emissions data were not available, so 2022 data were used in calculations.
- Refrigerant data is scaled proportionally from national data based on population.

### Land Use

#### Tree Cover Loss and Carbon Sequestration

- The most recent data available for the LEARN tool at the time of this inventory was 2023, so the tree cover analysis was conducted for 2021-2023 and divided by three to determine an average annual value.
- Land use data reflect local conditions.

## Transportation

### On-Road Vehicles

- On-road VMT estimates were developed from WSDOT HPMS data and a supplemental SR 532 estimate based on traffic volumes and trip distribution shares from early 2021 and estimated in-city segment lengths. The SR 532 estimate excludes through trips and trips ending outside Stanwood. Segment lengths were conservatively estimated to avoid undercounting SR 532 VMT.
- WSDOT HPMS data generally reflect local conditions. HPMS data do not include VMT within Stanwood city limits on roads that are not city-owned (i.e., SR 532), so the supplemental SR 532 VMT estimate was added to capture emissions from local VMT on SR 532 in the inventory.

### Transit

- No notable limitations of data sources or approach.
- Data provided by Island Transit and Community Transit reflect local conditions.

## Wastewater

- No notable limitations of data sources or approach.
- Wastewater data reflect local conditions.

## Solid Waste

### Landfilled Waste

- No notable limitations of data sources or approach.
- Solid waste data reflect local conditions and are characterized using regional data.



# Technical Memorandum

To: Patricia Love, City of Stanwood Date: June 30, 2026  
From: Sarah Parker, Maul Foster & Alongi, Inc. Project No.: M1030.10.004  
Re: 2026 Climate Element Survey Results

---

## Introduction

As part of developing the new Climate Element for the City of Stanwood's (City's) 2029 Comprehensive Plan update, the City collected feedback from people who live, work, and own businesses in Stanwood. The survey asked community members about their experiences with climate-related hazards such as flooding, extreme heat, and wildfire smoke; their concerns for the future; and their ideas and priorities for building climate resilience and reducing greenhouse gas (GHG) emissions in Stanwood. The results will help shape the goals and policies included in the Climate Element.

The survey was conducted between June 8 and June 21, 2026, and was available online. The full list of survey questions is available as Attachment A. The community was informed of this survey through online channels and through staff outreach at Stanwood's Farmers Market on June 12. The survey received 37 responses from people around the community. Attachment B includes the charts and tables showing survey responses.

## Summary

### Themes Across All Survey Areas

Among all respondents, **thoughtful growth and resilience to flooding, extreme summer heat, and wildfire smoke** were the top concerns across multiple questions.

- The respondents that commented on growth also mentioned the need for supportive infrastructure—such as roads, stormwater control systems, and a major grocery store—as top concerns.
- With the recent 2025 winter floods in the area, ensuring that there is resilient infrastructure for flooding—such as levees, dikes, roads, and evacuation routes—was an important concern.
- Extreme heat and wildfire smoke were also top concerns; responders mentioned the need to combat poor air quality and shelter from heat and smoke as well as care for the most vulnerable in Stanwood.

## Priorities for Reducing Energy Use and GHGs

Respondent priorities for reducing energy use and GHGs included the following:

- Supporting energy efficiency improvements in homes and businesses
- Increasing tree canopy and shaded areas to help keep the community cooler
- Improving walking, biking, and transit options to reduce driving

## Perceptions of the City's Work

Respondents gave higher ratings to the City for the following:

- Flooding and stormwater management
- Providing walking and biking options
- Protecting water quality

Respondents rated the City's efforts lower in the following areas:

- Planning for future growth
- Maintaining infrastructure
- Protecting natural areas, tree canopy, and open space

## In Their Own Words—Emergent Themes

Across all open-ended survey questions in which respondents gave their thoughts related to the City's work in preparing for disasters and reducing energy use and GHGs, three themes emerged:

- **Rapid Growth**—Commenters most frequent concerns included rapid growth and the lack of infrastructure to support it as well as preserving Stanwood's "small town feeling."
- **Transportation Safety and Traffic**—Commenters would like the City to help improve safety on State Route 532, reduce traffic, and provide more options for pedestrians and cyclists.
- **Preparation for Events Related to Climate Change**—Some expressed concerns over the City's preparedness for events related to climate change and the resilience of related infrastructure.

## Who Responded to the Survey

Most respondents indicated that they live or work within Stanwood city limits (Table 1). Other responses (selected by participants who did not identify as living, working, or owning property within city limits) noted a range of connections to Stanwood. These respondents described living just outside city boundaries, in nearby unincorporated areas, or on Camano Island. As one of these respondents noted, they "utilize Stanwood for retail, dining, and community services." Another shared that "the decisions of the City affect the quality of life on [their] property," and another described living on Camano Island but "[supporting] nonprofits in Stanwood."

Respondents represented a range of age groups, with the largest shares falling within the 45–54 age range and 65 and older (Table 2). The respondent population was predominantly White (Table 3).

**Table 1. Connection to Stanwood**

| Category                                                                                                                    | # Respondents | Percentage |
|-----------------------------------------------------------------------------------------------------------------------------|---------------|------------|
| I live within Stanwood city limits                                                                                          | 18            | 58         |
| I work within Stanwood city limits                                                                                          | 7             | 22         |
| I go to school within Stanwood city limits                                                                                  | 0             | 0          |
| I own property or a business within Stanwood city limits                                                                    | 5             | 16         |
| Other (please specify)                                                                                                      | 7             | 22         |
| <b>Note</b><br>Percentages may total more than 100 percent because respondents were allowed to select more than one option. |               |            |

**Table 2. Age of Respondents**

| Age Range         | Percentage |
|-------------------|------------|
| Under 18          | 0          |
| 18-24             | 3          |
| 25-34             | 16         |
| 35-44             | 16         |
| 45-54             | 22         |
| 55-64             | 16         |
| 65+               | 22         |
| Prefer not to say | 3          |

**Table 3. Ethnicity of Respondents**

| Ethnicity                           | Percentage |
|-------------------------------------|------------|
| American Indian or Alaska Native    | 0          |
| Asian or Asian American             | 3          |
| Black or African American           | 0          |
| Hispanic or Latino/a/x              | 3          |
| Native Hawaiian or Pacific Islander | 0          |
| White                               | 77         |
| Prefer not to say                   | 22         |
| Another race or ethnicity           | 3          |

## Hazards Experienced by Respondents

Respondents were asked how much flooding (in roads, yards, and buildings), extreme summer heat, and wildfire smoke or poor air quality have affected them or their household in the past five years (Table 4). The majority of respondents (75 percent) listed wildfire smoke and poor air quality as the hazards that have affected respondents or their households most. Extreme summer heat was also an impactful hazard, with 72 percent listing it as either moderately or very impactful. Flooding was of great impact to fewer residents but was still a regular issue with 58 percent of respondents listing it as moderately or very impactful.

**Table 4. Hazards Experienced**

| Category                           | Selected not at all |            | Selected somewhat or a lot |            |
|------------------------------------|---------------------|------------|----------------------------|------------|
|                                    | # Respondents       | Percentage | # Respondents              | Percentage |
| Wildfire smoke or poor air quality | 9                   | 25         | 27                         | 75         |
| Extreme summer heat                | 10                  | 27         | 26                         | 72         |
| Flooding                           | 16                  | 43         | 21                         | 58         |

The 23 respondents who answered “Somewhat” or “A lot” for any of the listed hazards provided more detail through an open-ended question, expressing a variety of actions and concerns, listed below:

- **Poor air quality** exacerbating health issues and preventing time outside (10 respondents)
- **Regular flooding** issues (8 respondents)
- **Extreme heat** (6 respondents)

Five of the commenters mentioned the need for air conditioning and air filters to combat excessive heat and poor air quality caused by smoke from wildfires. Commenters also mentioned damage to roads and flood-control infrastructure, wildlife habitat, homes, and businesses due to flooding and/or water damage.

## Concerns Related to Hazards

Respondents were asked about the impacts that most concerned them when considering the hazards they currently experience. The two sources of greatest concern for those indicating they are moderately or very concerned are: 1) the potential economic impacts associated with increased repair, energy, or insurance costs, and 2) the potential health impacts for vulnerable community members. Of least concern was reduced access to or quality of parks and other outdoor amenities followed by damage to homes, businesses, or personal property (Table 5).

**Table 5. Community Concerns Related to Hazards**

| Category                                                                       | Selected not concerned |            | Selected moderately or very concerned |            |
|--------------------------------------------------------------------------------|------------------------|------------|---------------------------------------|------------|
|                                                                                | #                      | Percentage | #                                     | Percentage |
| Damage to homes, businesses, or personal property                              | 13                     | 36         | 14                                    | 38         |
| Damage to roads, utilities, or other public infrastructure                     | 8                      | 22         | 19                                    | 52         |
| Health impacts                                                                 | 10                     | 27         | 16                                    | 44         |
| Increased costs for residents or businesses                                    | 6                      | 16         | 21                                    | 58         |
| Disruptions to daily life                                                      | 11                     | 30         | 14                                    | 38         |
| Reduced access to or quality of parks, recreation areas, or outdoor activities | 16                     | 44         | 11                                    | 30         |
| Impacts to more vulnerable community members                                   | 6                      | 17         | 19                                    | 52         |

**Note**

Gray shading indicates topics of highest or lowest concern.

## City Planning and Policies

Respondents were asked to choose what they think the City's top three priorities for reducing energy use and GHG emissions should be. The most frequently selected priorities were supporting energy efficiency improvements in homes and businesses (57 percent), increasing tree canopy and shaded areas to help keep the community cooler (51 percent), and improving walking, biking, and transit options to reduce driving (48 percent) (Table 6).

**Table 6. Top Priorities for City Planning and Policies**

| Category                                                                | Selected in Top Three Responses |            |
|-------------------------------------------------------------------------|---------------------------------|------------|
|                                                                         | #                               | Percentage |
| Support energy efficiency improvements in homes and businesses          | 19                              | 57         |
| Increase tree canopy and shaded areas to help keep the community cooler | 17                              | 51         |
| Improve walking, biking, and transit options to reduce driving          | 16                              | 48         |
| Improve energy efficiency in City-owned buildings and vehicles          | 9                               | 27         |
| Expand community access to electric vehicle charging stations           | 8                               | 24         |
| Plan for more compact, connected development to reduce travel distances | 6                               | 18         |

Seven respondents chose to write their own responses, which included the following feedback:

- **Slowing development** until transportation infrastructure improves and concern over traffic (2 respondents)
- **Adding major retail** (e.g., grocery or department store) to reduce long-distance trips (1 respondent)
- **Identifying sea level measurements** (1 respondent)
- Beliefs that **climate change is not real** (2 respondents)
- Concern that “their tax dollars” are **funding the survey**<sup>1</sup> (1 respondent)

## How the City Is Doing

When asked how well the City is doing in certain areas today, respondents reported higher ratings for the City's work on flooding and stormwater management (66 percent gave the City a good or excellent rating), providing walking and biking options (55 percent selected good or excellent), and protecting water quality (48 percent selected good or excellent) (Tables 7 and 8).

Respondents rated the City lower in areas such as planning for future growth (55 percent rated the City as poor or fair); maintaining infrastructure (52 percent chose poor or fair); and protecting natural areas, tree canopy, and open space (48 percent chose poor or fair) (Tables 7 and 8).

<sup>1</sup> Note: This survey was funded by the Washington State Department of Commerce Climate Commitment Act funding.

With regard to encouraging energy-efficient homes and buildings, the response selected most often was that respondents were “not sure” of Stanwood’s efforts on the subject (Table 7), indicating an opportunity for promoting greater awareness among the community.

**Table 7. Respondent Ratings of Stanwood by Category**

| Category                                                      | Number Selecting Response |      |      |           |          |
|---------------------------------------------------------------|---------------------------|------|------|-----------|----------|
|                                                               | Poor                      | Fair | Good | Excellent | Not sure |
| Managing flooding and stormwater                              | 2                         | 6    | 15   | 7         | 3        |
| Preparing for and sharing information                         | 2                         | 13   | 11   | 5         | 2        |
| Access to spaces and resources that help people during events | 4                         | 9    | 11   | 1         | 8        |
| Maintaining infrastructure                                    | 6                         | 11   | 13   | 3         | 0        |
| Protecting natural areas, tree canopy, and open space         | 6                         | 10   | 9    | 5         | 3        |
| Protecting water quality and managing demand                  | 2                         | 8    | 11   | 5         | 7        |
| Providing options for walking and biking around town          | 7                         | 6    | 9    | 9         | 2        |
| Providing access to transit                                   | 3                         | 10   | 5    | 7         | 8        |
| Encouraging energy-efficient homes and buildings              | 4                         | 7    | 5    | 2         | 15       |
| Planning for future growth                                    | 12                        | 6    | 8    | 2         | 5        |

**Table 8. Respondent Ratings of Stanwood, Combined Categories and Percentages**

| Category                                                      | Poor or Fair | Percentage | Good or Excellent | Percentage |
|---------------------------------------------------------------|--------------|------------|-------------------|------------|
| Managing flooding and stormwater                              | 8            | 24         | 22                | 67         |
| Preparing for and sharing information                         | 15           | 45         | 16                | 48         |
| Access to spaces and resources that help people during events | 13           | 39         | 12                | 36         |
| Maintaining infrastructure                                    | 17           | 52         | 16                | 48         |
| Protecting natural areas, tree canopy, and open space         | 16           | 48         | 14                | 42         |
| Protecting water quality and managing demand                  | 10           | 30         | 16                | 48         |
| Providing options for walking and biking around town          | 13           | 39         | 18                | 55         |
| Providing access to transit                                   | 13           | 39         | 12                | 36         |
| Encouraging energy-efficient homes and buildings              | 11           | 33         | 7                 | 21         |
| Planning for future growth                                    | 18           | 55         | 10                | 30         |

## In Their Own Words

Respondents were asked to elaborate on their ratings (shown in Tables 7 and 8) of how well Stanwood is doing in certain areas. A total of 17 respondents provided comments. The major themes and concerns are as follows, presented by frequency of response:

- **Density, growth, and the effects of the state Growth Management Act** were a top concern for respondents (7 out of 17 commenters). Seven individuals mentioned that growth without supporting systems such as transportation, schools, adequate housing, and other infrastructure were concerns. Several expressed frustration that current residents are bearing the burden through congestion, taxes, levies, and reduced quality of life.
- Concurrently, **concerns about traffic** — specifically on State Route 532, Pioneer Highway, near schools, and around civic structures — were also mentioned frequently (7 out of 17)

commenters). Pedestrian and bicycle safety was mentioned by three respondents and one person expressed fears about the inadequacy of emergency evacuation routes.

- Concerns about **threats to the area's natural systems**, the environment in general, parks, and reduced tree canopy, and habitat quality for wildlife were mentioned (6 out of 17 commenters). Several mentioned the importance of natural systems related to keeping the effects of climate change in check.
- Two respondents **praised the City for addressing flooding issues**.

In general, the responses to show a strong concern that Stanwood's growth is happening too quickly and without sufficient supporting infrastructure, environmental protection, transportation planning, or preservation of community character.

## Community Priorities for Future Planning

### In Their Own Words

Respondents were asked to name one or two things that, in their own words, they thought the City could do to better prepare for flooding, extreme heat, wildfire smoke, or other disruptions.

- The majority (13 of 19 respondents) had **concerns related to stormwater and flood management**. Specific concerns included the following:
  - Improve, fix, or maintain diking systems, flood gates, levees, water diversions
  - Raise road between ditch and hill, improve road designs
  - Fix or install drainage systems for streets and roads
- Five commenters were **concerned with longer-term planning and solutions to all environmental hazards**, but, again, centered primarily on flooding, including the following:
  - Provide gage readings during flooding in the Stillaguamish River; involve the community in risk and vulnerability assessments; establish long-term or long-range plans to address flooding; provide a warning system and cooling stations for wildfire smoke
- One commenter advised the City to ensure that there was **enough of a police force for traffic control**.

### Top Priorities

Respondents were asked to select their top three priorities for the City as it plans for the future. The most frequently selected priorities were ensuring reliable infrastructure and services (61 percent), keeping costs affordable (52 percent), and protecting natural areas and open space (42 percent) (Table 9).

One respondent noted the need to plan for long-term conditions through 2100 and beyond.

**Table 9. Community Priorities**

| Category                                      | Selected in Top Three Responses |            |
|-----------------------------------------------|---------------------------------|------------|
|                                               | # Respondents                   | Percentage |
| Ensuring reliable infrastructure and services | 20                              | 61         |
| Keeping costs affordable                      | 17                              | 52         |
| Protecting natural areas and open space       | 14                              | 42         |
| Supporting local businesses and jobs          | 13                              | 39         |

| Category                                             | Selected in Top Three Responses |            |
|------------------------------------------------------|---------------------------------|------------|
|                                                      | # Respondents                   | Percentage |
| Protecting the City's history and heritage           | 11                              | 21         |
| Protecting health and safety                         | 10                              | 30         |
| Strengthening community character and sense of place | 7                               | 21         |

## Additional Thoughts

When asked whether there was anything else they would like the City to consider, 12 respondents provided additional comments. The themes that emerged underscored the concerns and issues that respondents had provided elsewhere in the survey: rapid growth in the City, transportation safety and traffic, and preparation for events related to climate change.

**Rapid Growth**—Several commenters (4 of 12) cited concerns about growth, noting that infrastructure to support growth has not caught up with the volume of added housing. Others felt that growth threatened the “small town feeling” that Stanwood has had.

**Transportation Safety and Traffic**—Another 4 of 12 commenters said they would like the City to help improve safety on State Route 532 and reduce traffic in general. Suggestions included installing roundabouts, improving public transit options, and providing more sidewalks for pedestrians and cyclists.

**Preparation for Events Related to Climate Change**—A few (3 out of 12) commenters expressed concerns over the City's preparedness for events related to climate change, suggesting the City involve the community in disaster mitigation efforts and bolstering resilience, provide cooling shelters, and monitor sea level rise.

Single commenters suggested stop permitting cell towers, especially near schools and neighborhoods; attract a large grocery store; and expanding recycling options.

## Attachments

A—Survey Instrument

B—Frequency Charts and Tables

# Attachment A

---

## Survey Instrument



MAUL  
FOSTER  
ALONGI

## **City of Stanwood: Planning for a Resilient Future**

### **Introduction**

The City of Stanwood is developing a Climate Element as part of its Comprehensive Plan, a required element under Washington State's Growth Management Act that will be included in the City's 2029 Comprehensive Plan update.

The Climate Element will identify how Stanwood can prepare for climate-related hazards, such as flooding, extreme heat, and wildfire smoke, and identify ways to reduce greenhouse gas emissions over time. This work is supported by a grant from the Washington State Department of Commerce.

We invite Stanwood residents and others connected to the community to share their input through this short survey. We're interested in your experiences with climate-related hazards, your concerns about the future, and your ideas for strengthening community resilience.

Your input will help shape the Climate Element. Survey responses are anonymous. The survey should take no more than 5-10 minutes to complete and is open through June 21, 2026.

### **Funding Acknowledgement**

*The WA Department of Commerce climate planning grant is supported with funding from Washington's Climate Commitment Act. The CCA supports Washington's climate action efforts by putting cap-and-invest dollars to work reducing climate pollution, creating jobs, and improving public health. Information about the CCA is available at [www.climate.wa.gov](http://www.climate.wa.gov).*

1. In the past 5 years, how much have the following affected you or your household?

|                                    | Not at all            | A little              | Somewhat              | A lot                 |
|------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Flooding (roads, yards, buildings) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Extreme summer heat                | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Wildfire smoke or poor air quality | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

2. If you selected "Somewhat or "A lot" for any item, please briefly describe your experience. This helps the City understand what impacts look like for residents and where improvements may be needed.

3. Looking ahead, how concerned are you about the following potential impacts from flooding, storms, extreme heat, wildfire smoke, and related conditions?

|                                                                                                    | Not concerned         | Slightly concerned    | Moderately concerned  | Very concerned        |
|----------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Damage to homes, businesses, or personal property                                                  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Damage to roads, utilities, or other public infrastructure                                         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Health impacts (e.g., heat-related illness, poor air quality)                                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Increased costs for residents or businesses (e.g., repairs, energy, insurance)                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Disruptions to daily life (e.g., road closures, power outages)                                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Reduced access to or quality of parks, recreation areas, or outdoor activities                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Impacts to more vulnerable community members (e.g., older adults, youth, people with disabilities) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

4. Overall, how well is Stanwood doing today in each of the following areas?

|                                                                                      | Poor                  | Fair                  | Good                  | Excellent             | Not sure              |
|--------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Managing flooding and stormwater                                                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Preparing for and sharing information during emergencies and disruptions             | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Access to spaces and resources that help people during events (e.g., cooling spaces) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Maintaining reliable roads, utilities, and infrastructure                            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Protecting natural areas, tree canopy, and open space                                | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Protecting water quality and managing water demand                                   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Providing options for walking and biking around town                                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Providing access to transit                                                          | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Encouraging energy-efficient homes and buildings                                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Planning for future growth                                                           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

5. If you would like to elaborate on any of your answers to question 4, please do so here.

6. What are one or two things the City could do to better prepare for flooding, extreme heat, wildfire smoke, or other disruptions?

\* 7. Which of the following should be the City's top priorities for reducing energy use and greenhouse gas emissions? Choose your top three.

- ☐ Improve energy efficiency in City-owned buildings and vehicles
- ☐ Expand community access to electric vehicle charging stations
- ☐ Improve walking, biking, and transit options to reduce driving
- ☐ Increase tree canopy and shaded areas to help keep the community cooler
- ☐ Support energy efficiency improvements in homes and businesses (e.g., retrofits, rebates, incentives)
- ☐ Plan for more compact, connected development to reduce travel distances
- ☐ Other (please specify)

\* 8. What is most important to you as the City plans for the future? Choose your top three.

- ☐ Keeping costs affordable
- ☐ Ensuring reliable infrastructure and services
- ☐ Protecting health and safety
- ☐ Supporting local businesses and jobs
- ☐ Protecting the City’s history and heritage
- ☐ Strengthening community character and sense of place
- ☐ Protecting natural areas and open space
- ☐ Other (please specify)

9. Is there anything else you’d like the City to consider?

\* 10. Which of the following best describes your relationship with Stanwood? Select all that apply.

- ☐ I live within Stanwood city-limits
- ☐ I work within Stanwood city-limits
- ☐ I go to school within Stanwood city-limits
- ☐ I own property or a business within Stanwood city-limits
- ☐ Other (please specify)

11. What is your age?

- ☐ Under 18
- ☐ 18-24
- ☐ 25-34
- ☐ 35-44
- ☐ 45-54
- ☐ 55-64
- ☐ 65+
- ☐ Prefer not to say

12. What is your ethnicity? Select all that apply.

- ☐ American Indian or Alaska Native
- ☐ Asian or Asian American
- ☐ Black or African American
- ☐ Hispanic or Latino/a/x
- ☐ Native Hawaiian or Pacific Islander
- ☐ White
- ☐ Prefer not to say
- ☐ Another race or ethnicity:

## Attachment B

---

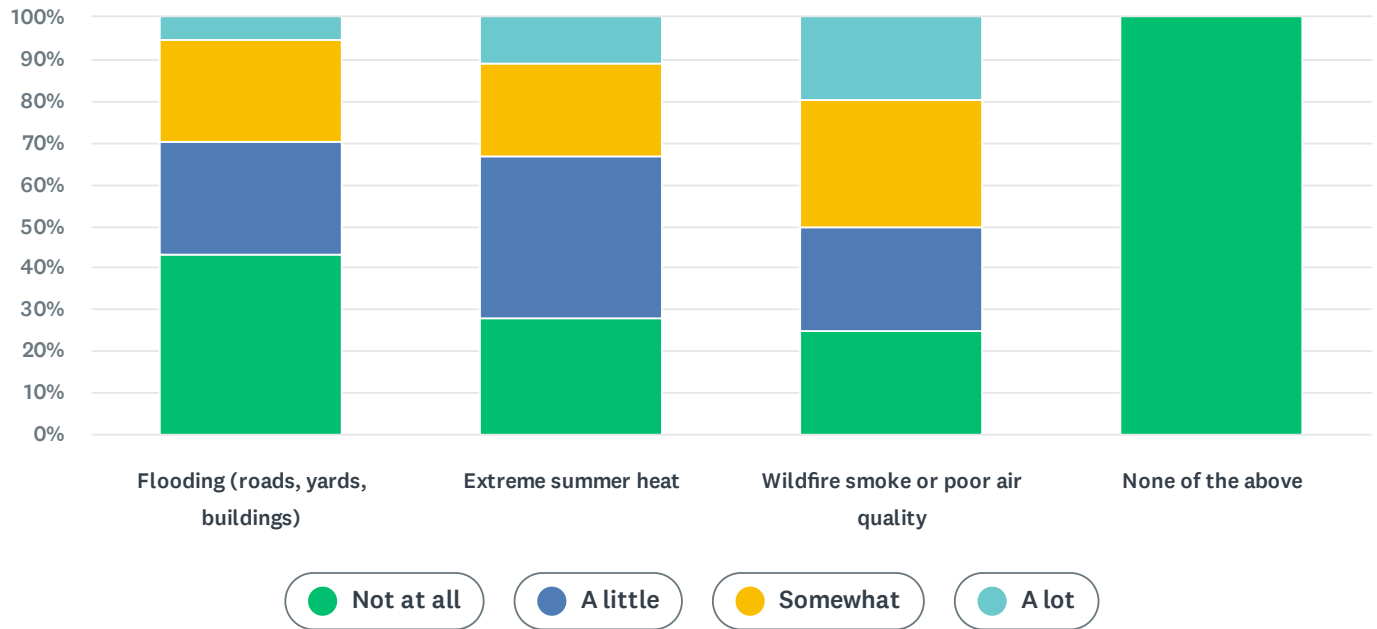
### Frequency Charts and Tables



MAUL  
FOSTER  
ALONGI

Q1 37 responses

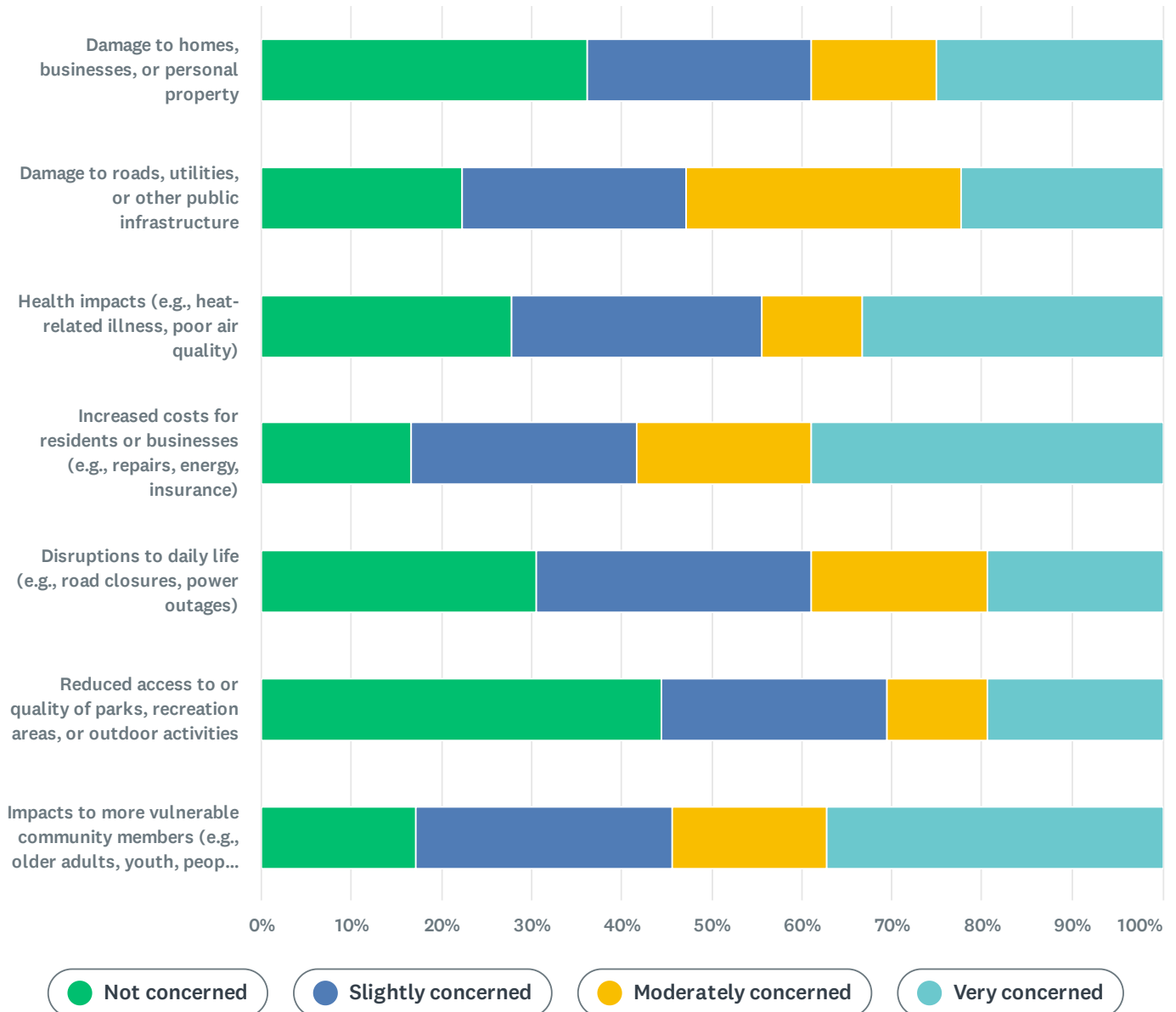
In the past 5 years, how much have the following affected you or your household?



|                                    | ● Not at all | ● A little   | ● Somewhat   | ● A lot     | Total |
|------------------------------------|--------------|--------------|--------------|-------------|-------|
| Flooding (roads, yards, buildings) | 43.24%<br>16 | 27.03%<br>10 | 24.32%<br>9  | 5.41%<br>2  | 37    |
| Extreme summer heat                | 27.78%<br>10 | 38.89%<br>14 | 22.22%<br>8  | 11.11%<br>4 | 36    |
| Wildfire smoke or poor air quality | 25.00%<br>9  | 25.00%<br>9  | 30.56%<br>11 | 19.44%<br>7 | 36    |
| None of the above                  | 100.00%<br>1 | 0%<br>0      | 0%<br>0      | 0%<br>0     | 1     |
|                                    |              |              |              |             | 110   |

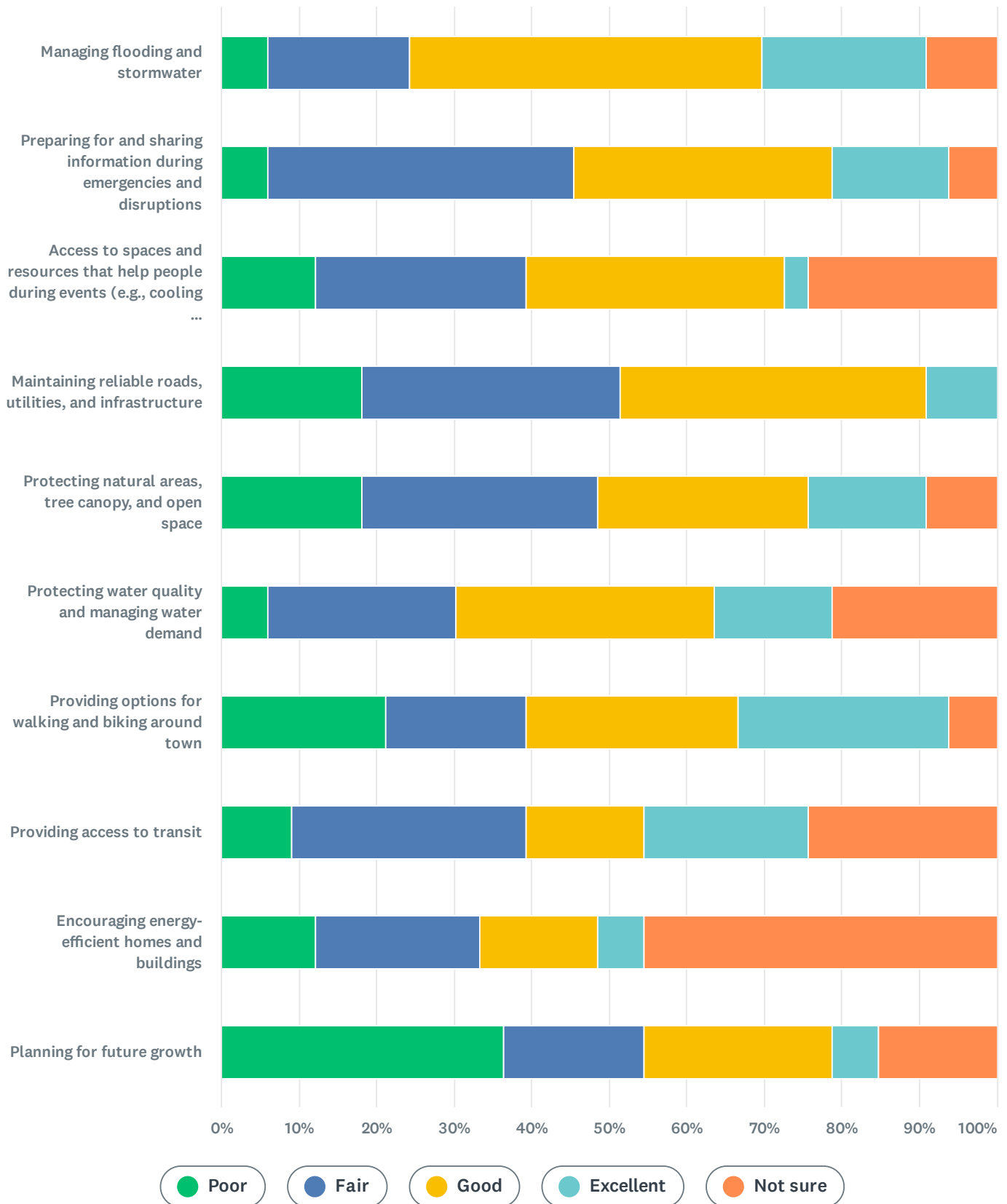
Q3 36 responses

**Looking ahead, how concerned are you about the following potential impacts from flooding, storms, extreme heat, wildfire smoke, and related conditions?**



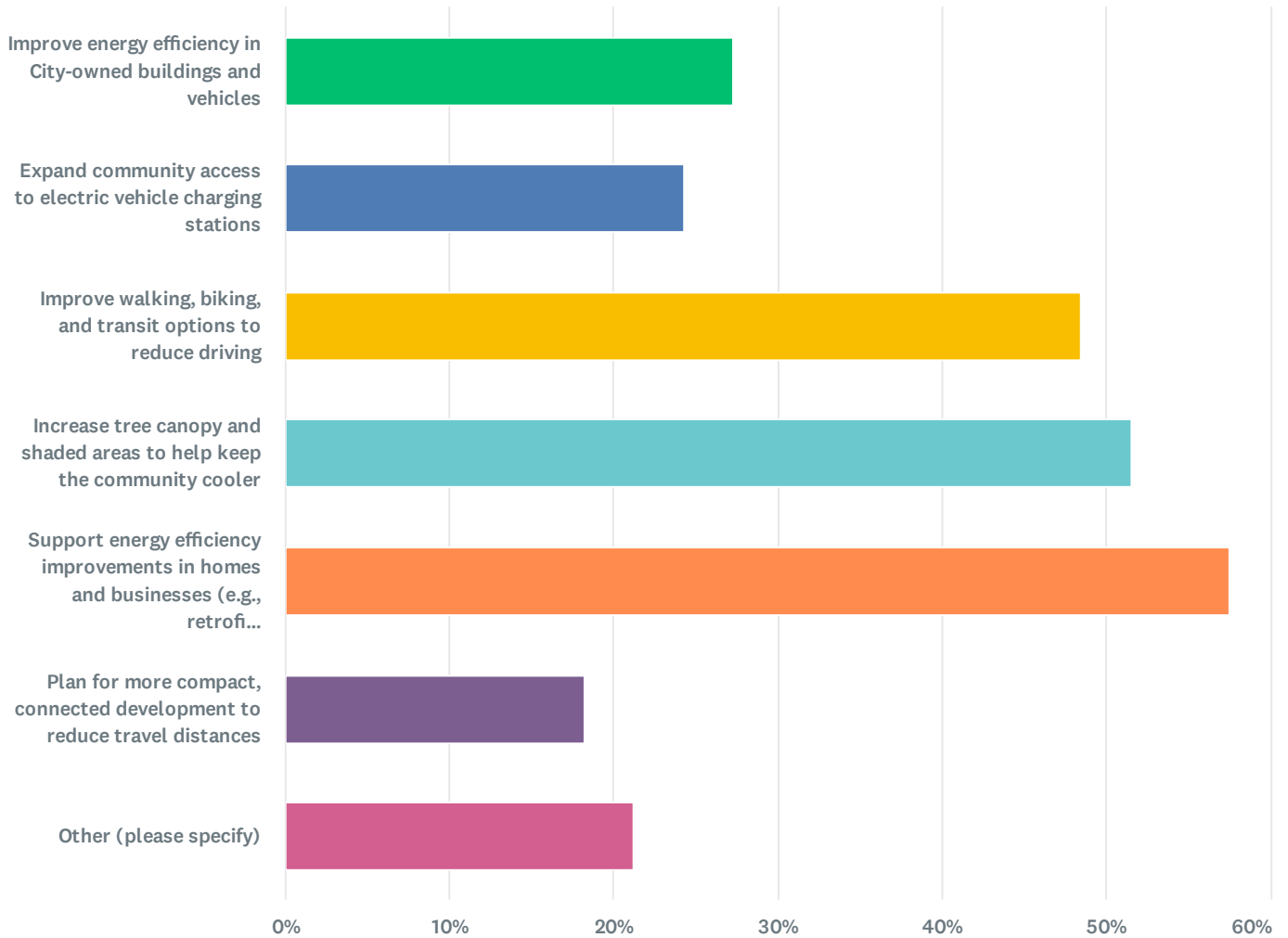
Q4 33 responses

## Overall, how well is Stanwood doing today in each of the following areas?



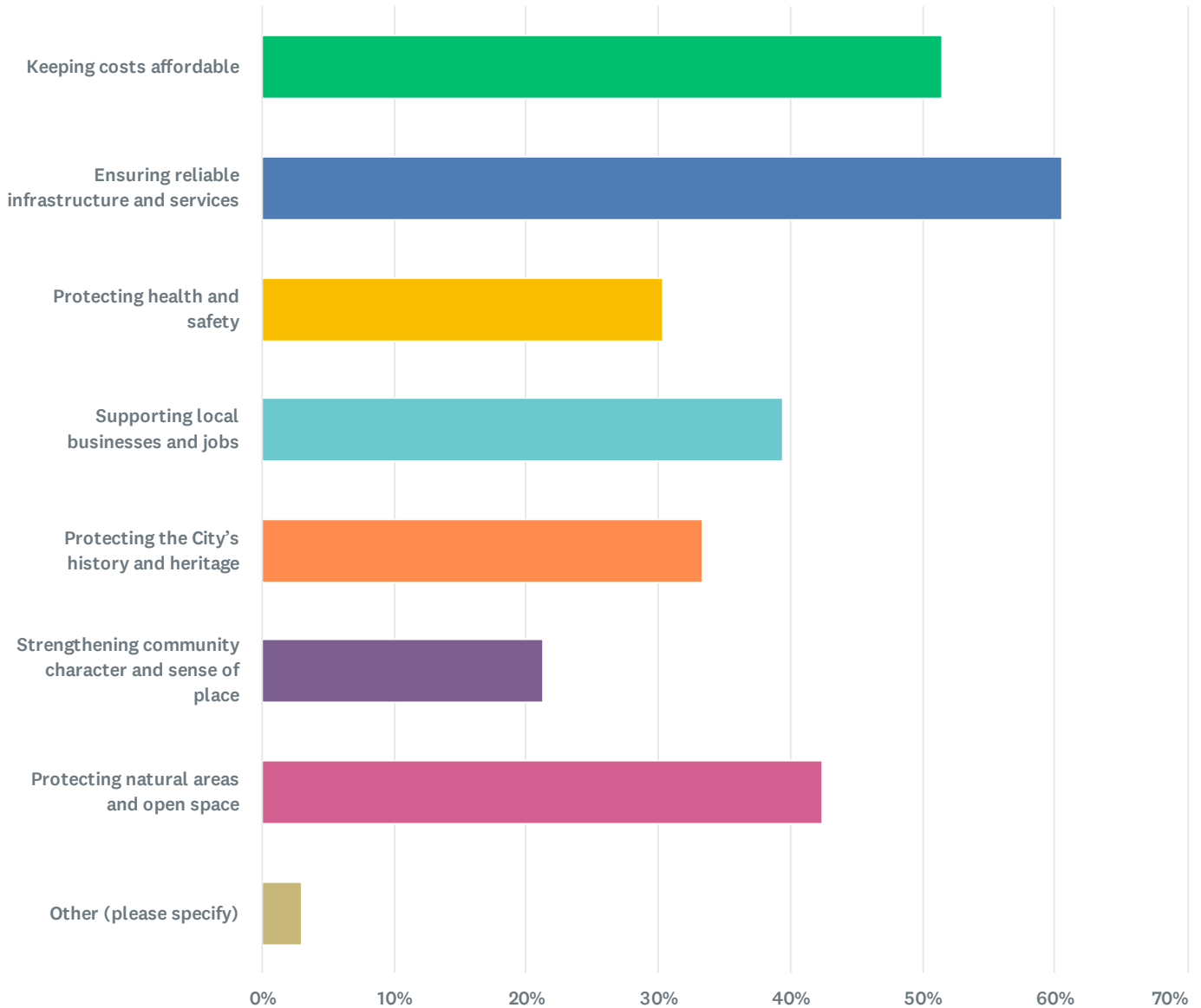
**Q7** 33 responses

**Which of the following should be the City's top priorities for reducing energy use and greenhouse gas emissions? Choose your top three.**



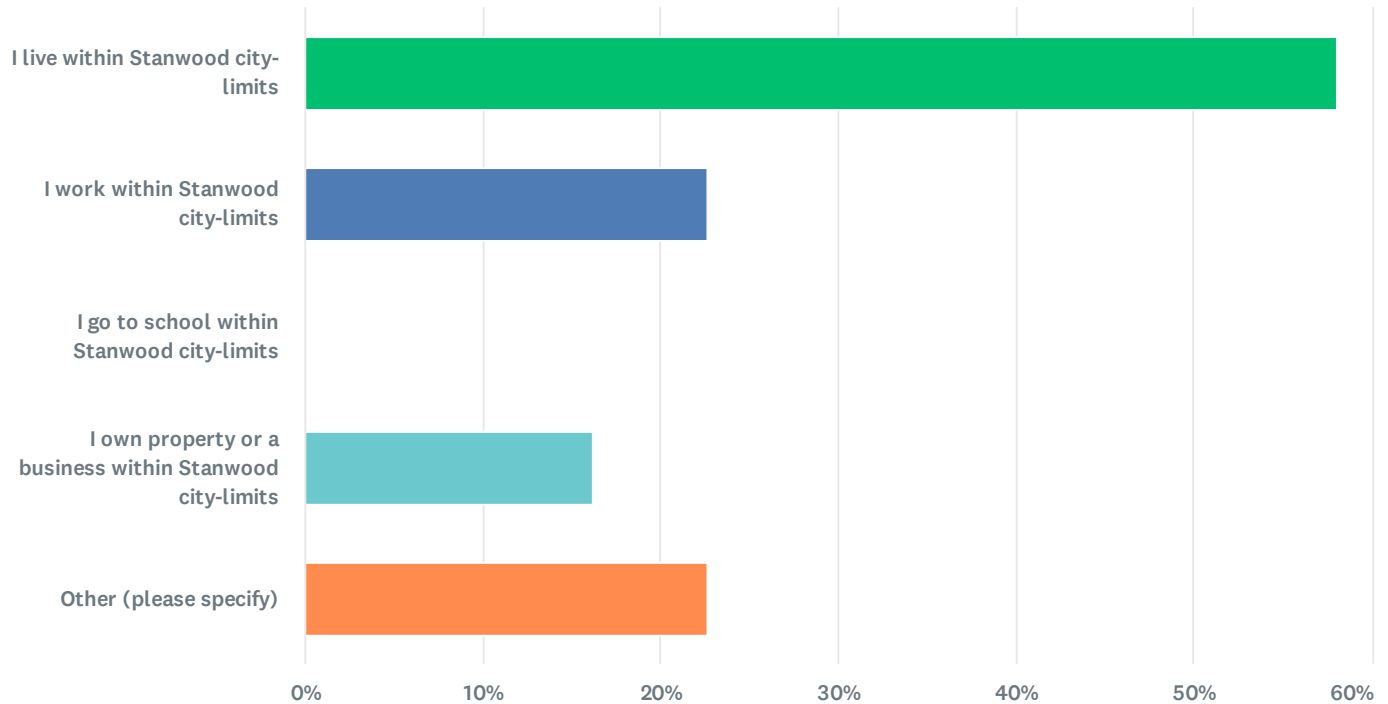
Q8 33 responses

**What is most important to you as the City plans for the future? Choose your top three.**



Q10 31 responses

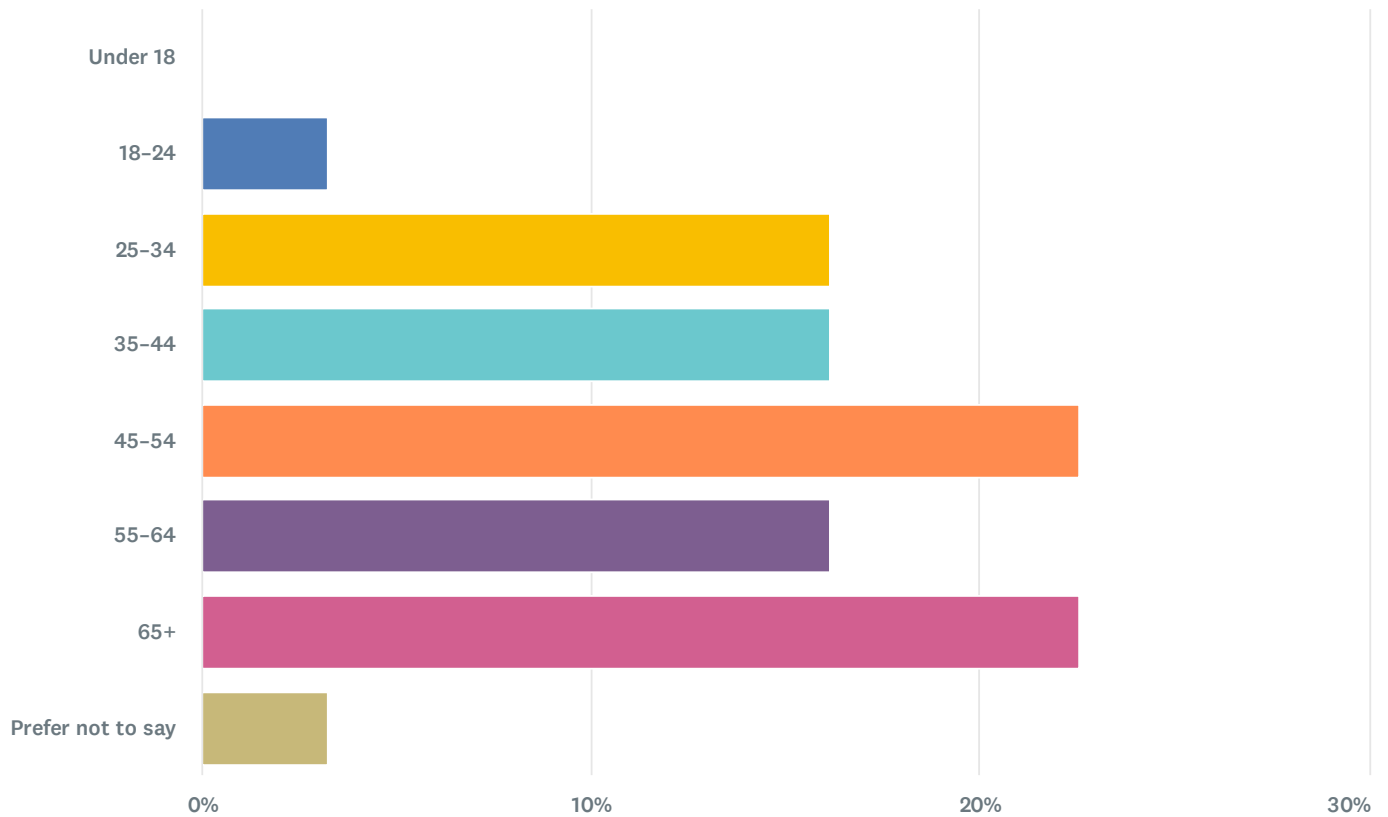
Which of the following best describes your relationship with Stanwood? Select all that apply.



| Answer Choices                                                                               | Percentage | Responses |
|----------------------------------------------------------------------------------------------|------------|-----------|
| <span style="color: green;">●</span> I live within Stanwood city-limits                      | 58.06%     | 18        |
| <span style="color: blue;">●</span> I work within Stanwood city-limits                       | 22.58%     | 7         |
| <span style="color: yellow;">●</span> I go to school within Stanwood city-limits             | 0%         | 0         |
| <span style="color: teal;">●</span> I own property or a business within Stanwood city-limits | 16.13%     | 5         |
| <span style="color: orange;">●</span> Other (please specify)                                 | 22.58%     | 7         |
| <b>Total</b>                                                                                 |            | <b>37</b> |

Q11 31 responses

### What is your age?



**Q12** 31 responses

**What is your ethnicity? Select all that apply.**

