CITY OF AUBURN WASHINGTON	**City Council Study Session PWCD SFA** **August 27, 2018 - 5:30 PM** **Council Chambers - City Hall** **AGENDA** **Watch the meeting LIVE!** **Watch the meeting video** Meeting videos are not available until 72 hours after the meeting has concluded.

I. CALL TO ORDER

A. Roll Call

II. ANNOUNCEMENTS, REPORTS, AND PRESENTATIONS

A. Draft Climate Action Plan (Tate) (15 Minutes)

B. King County-Cities Climate Collaboration (K4C) (Tate) (15 Minutes)

III. AGENDA ITEMS FOR COUNCIL DISCUSSION

A. We Care Clinic (Tate) (20 Minutes)
MIT to provide a presentation of the We Care Clinic concept

B. Airport Runway Enhancement Update (Gaub) (30 Minutes)

IV. PUBLIC WORKS AND COMMUNITY DEVELOPMENT DISCUSSION ITEMS

A. Capital Project Status Report (Gaub) (20 Minutes)

B. UW Livable City Update (Tate) (20 Minutes)
Provide a one year check in for all of the UW projects

V. OTHER DISCUSSION ITEMS

A. Follow up on Identity Theft Questions (Gross) (10 Minutes)

VI. NEW BUSINESS

VII. MATRIX

A. Matrix

VIII. ADJOURNMENT

Agendas and minutes are available to the public at the City Clerk's Office, on the City website (http://www.auburnwa.gov), and via e-mail. Complete agenda packets are available for review at the City Clerk's Office.

AGENDA BILL APPROVAL FORM

Agenda Subject:
Draft Climate Action Plan (Tate) (15 Minutes)

Date:
August 21, 2018

Department:
Community Development

Attachments:
Exhibit A - Auburn GHG Inventory Report
Exhibit B - Draft Climate Action Plan
Exhibit C - COA Climate Action Plan Slideshow

Budget Impact:
Current Budget: $0
Proposed Revision: $0
Revised Budget: $0

Administrative Recommendation:

Background Summary:

In 2014, the Auburn City Council approved a $50,000.00 line item in the 2015/2016 budget for the purpose of updating the Greenhouse Gas Inventory and preparing an Auburn Climate Action Plan. In October 2016 the City entered into a contract with Cascadia Consulting Group for the purposes of updating the city's 2010 Greenhouse Gas Inventory and to prepare a draft Climate Action Plan. Cascadia prepared the update to the Greenhouse Gas Inventory during the end of 2016 and into 2017 (attached as Exhibit A); they then prepared the Climate Action Plan in 2017 and into 2018 (attached as Exhibit B). Exhibit C is the set of slides that will be presented on August 27, 2018.

SUMMARY OF UPDATED GREENHOUSE GAS INVENTORY

The January 2018 Greenhouse Gas Inventory is an update to the baseline report that had previously been prepared in 2010 (however, utilizing 2008 data). Page 4 of the Greenhouse Gas Inventory provides the Executive Summary of the updated document. Then inventory covers both **municipal** and **community** inventories in the areas of four emission sources (1) electricy consumption, (2) natural gas, (3) gasoline, and (4) diesel. Highlights of the inventory are as follows:

Municipal

- The inventory covers the following **municipal** inventories (1) building energy use, (2) fleet fuel consumption, (3) electricity used by water and wastewater pump stations, (4) solid waste, (5) refrigerants, (6) traffic and street lights, (7) business travel, (8) employee commuting.
- From 2008 to 2015 the city reduced carbon dioxide emissions generated from its **municipal** operations by 20%.
- The largest source of **municipal** emissions is electricity (representing 52% of **municipal** operations).

- From 2008 to 2015 the city was able to significantly reduce emissions from electricity use. However, employee commute and travel is an area that experienced an increase in emissions. This will be an area of opportunity for future improvement.

Community

- The inventory covers the following **community** inventories (1) transportation, (2) solid waste, (3) residential, commercial and industrial energy use.
- From 2008 to 2015 the **community** reduced carbon dioxide emissions by 16% despite population growth.
- The largest source of **community** emissions is electricity (representing 48% of **community** actions)
- From 2008 to 2015 the community was able to reduce emissions from transportation by about 35% (despite the fact that it continues to remain as the largest contributor). Waste emissions increased notably however it remains a small overall percentage of total community emissions.

The inventory also provides insight into future emission forecasts and trends, and the methodologies and assumptions used in collecting data and developing conclusions.

SUMMARY OF DRAFT CLIMATE ACTION PLAN

The Draft Climate Action Plan builds off of the data that was collected in the Greenhouse Gas Inventory to help inform policy action, investments, and priorities that the City can activate in order to achieve reductions in emissions and overall contribution to greenhouse gas output. As stated in the DRAFT document:

> *"The Plan is intended to provide a roadmap for an efficient path forward for the City to reduce its environmental impacts while strengthening its local economy and increasing community resilience. As the City begins implementing actions and new information becomes available, the Plan can serve as a platform for an ongoing conversation around emissions reductions, climate action, and the goals and aspirations Auburn has for its future."*

The Plan also speaks to ways in which the City can work towards improving **municipal** operations as well as actions that the Auburn **community** can take to reduce its carbon footprint. Page 8 of the Plan provides a 1-page summary of the recommendations associated with **municipal** City operations. Page 9 then provides a 1-page summary of the recommendation associated with **community** actions.

The Plan is organized into three focus areas (1) Energy, (2) Transportation, and (3) Materials and Waste. The Plan provides a comprehensive overview of each of these three areas that includes a description, progress to date, and specific strategies and actions divided into **municipal** and **community** categories. The strategies and actions outlined in each section are the same strategies and actions summarized on pages 8 and 9 of the Plan.

DISCUSSION:

1. Are there any immediate thoughts, comments, questions or concerns related to the DRAFT Plan?

2. Does City Council have interest in moving this Plan forward for a future City Council action to endorse the Plan via resolution? Alternatively, via ordinance to incorporate as an element of the Comprehensive Plan?

Reviewed by Council Committees:

Councilmember: **Staff:** Tate

Meeting Date: August 27, 2018 Item Number:

Greenhouse Gas Inventory

for the City of Auburn, Washington

January 25, 2018

Prepared by

CASCADIA CONSULTING GROUP

Acknowledgements

Mayor and City Council

Nancy Backus, Mayor
Largo Wales, Deputy Mayor
Bob Baggett, Councilmember
Claude DaCorsi, Councilmember
John Holman, Councilmember
Bill Peloza, Councilmember
Yolanda Trout-Manuel, Councilmember
Rich Wagner, Councilmember

City Departments

Finance
Human Resources / Facilities/ Risk & Property Management
Information Services
Legal
Mayor's Office
Parks, Arts & Recreation
Planning & Development
Police
Public Works

Other Agencies

ICLEI – Local Governments for Sustainability
King County Metro
Puget Sound Energy
Puget Sound Regional Council
Sound Transit
Valley Regional Fire Authority

Cascadia

Kendra White, Kirstin Hervin, and Emily Wright of Cascadia Consulting Group compiled this report with the help of many staff members at the City of Auburn.
Cascadia gratefully acknowledges Mayor Backus and the members of the Auburn City Council for their support of this project.

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Executive Summary

The City of Auburn began tracking its greenhouse gas emissions in 2009 to measure progress toward its emission reduction commitment, which former City of Auburn Mayor Peter Lewis formalized when he signed the U.S. Mayors' Climate Protection Agreement in 2007. Auburn's first greenhouse gas emissions inventory for the City's municipal operations and—on a more limited basis—the Auburn community, established 2008 as a baseline year for setting targets and measuring progress. Seven years later, the City contracted with Cascadia Consulting Group again to conduct a second inventory to understand changes in Auburn's emissions, measure progress toward targets, and inform climate action strategies for achieving emission reduction goals.

This report summarizes the results from the 2015 inventory and compares it to the 2008 baseline to assess how far Auburn has come and where there is still work to do toward reducing emissions.[1] It also forecasts municipal and community emissions for 2020, 2025, 2030 to inform planning efforts.[2] The municipal and community inventories cover different *sectors*, listed to the right, and four emissions *sources*: electricity consumption, natural gas, gasoline, and diesel.

Municipal inventory sectors:

- Building energy use
- Fleet fuel consumption
- Electricity used by water and wastewater pump stations
- Solid waste
- Refrigerants
- Traffic and street lights
- Business travel
- Employee commuting

Community inventory sectors:

- Transportation
- Solid waste
- Residential, commercial, and industrial energy use

MUNICIPAL INVENTORY RESULTS

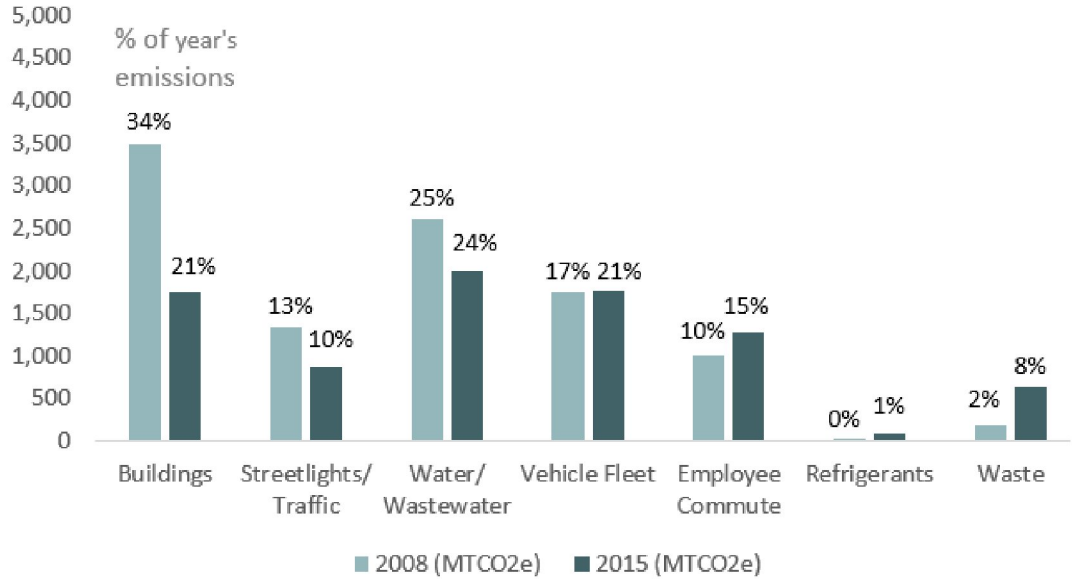
In 2015, The **City of Auburn's municipal operations** generated over 8,000 metric tons of carbon dioxide equivalents ($mtCO_2e$), representing a nearly 20% reduction from municipal emissions in 2008. This translates to a 34% per capita reduction. At the municipal level, electricity consumption was the single largest source of emissions, representing 52% of total municipal emissions. Noteworthy changes in municipal emissions, by sector, include:

[1] Comparison of the 2015 inventory results with the 2008 baseline inventory is imperfect due to methodological changes made to the ICLEI inventory tool. See the full report for more information.

[2] Although the 2008 inventory report included recommendations and best practices for Auburn to consider taking to reduce municipal and community emissions, these elements will be included in the climate adaptation plan, anticipated to be later in 2018, and therefore are not provided in this report.

- The City cut **electricity use** in buildings and facilities significantly, which was the single-largest contributor in 2008. These savings made a considerable impact, helping to reduce this sector's emissions contribution from almost 34% in 2008 to 21% in 2015.
- Reductions were also achieved in the **water and wastewater** treatment sector, despite Auburn's growing population.
- **Employee commuting and travel** is an area for future improvement in emissions reductions. Emissions from this sector increased and its contribution to total City emissions increased from less than 10% in 2008 to over 15% in 2015.

Figure 1. Municipal Inventory by Emissions Sector ($MTCO_2e$) 2008, 2015



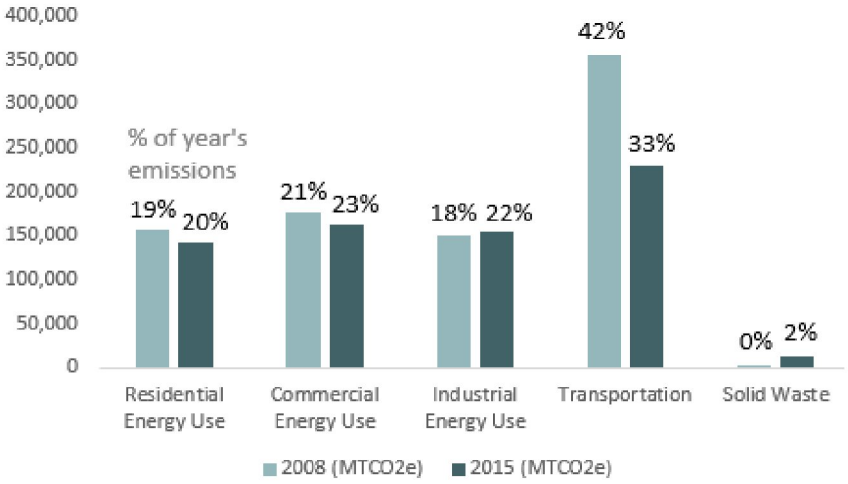
COMMUNITY INVENTORY RESULTS

In 2015, the **Auburn community** generated just over 700,000 $mtCO_2e$, which represents a 16% reduction from community emissions in 2008.[3] This reduction was achieved despite population growth during this period, resulting in a 27% reduction in per capita emissions to reach 9.15 $mtCO_2e$ per person. For the community inventory, electricity use was also the single largest source of emissions, accounting for 48% of emissions. Noteworthy changes in community emissions, by sector, include:

[3] There are inherent methodological and data collection challenges to accounting for community emissions that result in a less precise figure than municipal emissions. However, the figures are based on real data and are considered the best available estimate of community emissions.

- **Transportation emissions** decreased by about 35%, attributable to declines in diesel and gasoline usage. Transportation remained the largest sector contributor, though its portion decreased from 42% of total emissions in 2008 to 33% in 2015.
- **Residential and commercial energy** users reduced their emissions as well by approximately 9% and 8%, respectively, again despite Auburn's growing population.
- **Waste emissions** increased notably, but still represents less than 2% of the community's emissions in 2015.

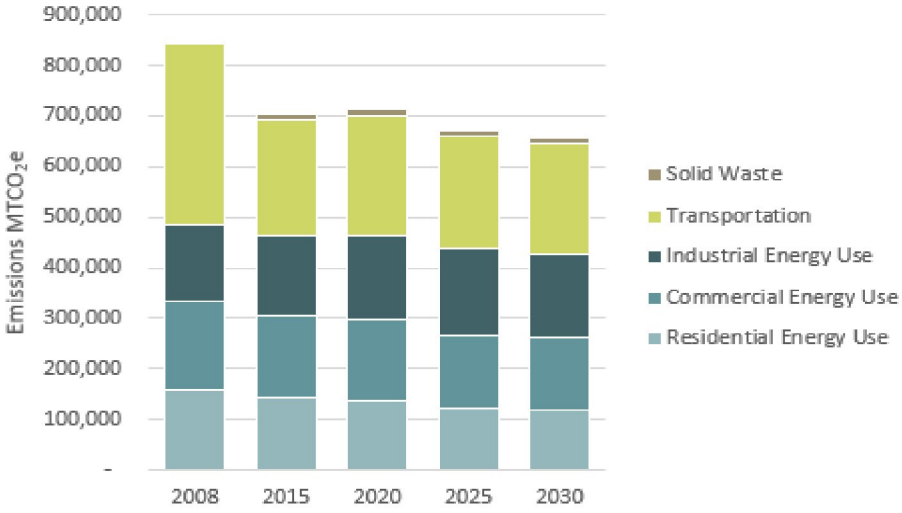
Figure 2. Community Inventory by Emissions Sector ($MTCO_2e$) 2008, 2015



FUTURE EMISSIONS

Cascadia also forecasted community emissions for the years 2020, 2025, and 2030 based on current use and regional resource use projections. The forecast is based on existing state and federal policies and programs. All actions that the City takes to reduce emissions will exaggerate the decrease shown in the forecasts. Furthermore, taking such action will help Auburn keep in step with local peers, such as Redmond. Kirkland, and Renton—all of whom have all committed to reducing emissions by 80% by 2050.

Figure 3. Community Emissions Forecast for 2020, 2025, and 2030 (MTCO2e)



Community emissions are expected to increase 1% above 2015 levels by 2020, driven by slightly increasing loads for commercial energy users, but then ultimately decrease 5% below 2015 levels by 2025, and 7% by 2030, due, in part, to expected efficiencies driven by federal regulations and state and municipal standards.

Greenhouse Gas Inventory

Background and Key Objectives

Conducting a periodic greenhouse gas (GHG) inventory is important for measuring progress toward goals and refining strategies for reducing emissions in the City of Auburn. Key objectives for this project include:

- Producing an accurate and well-documented inventory that can be compared to previous and future inventories.
- Obtaining an understanding of the most significant greenhouse gas sources at the municipal and community levels and the changes in emission levels and sources since the previous inventory.
- Collecting the data necessary to inform climate action planning efforts, including potential policy action by the Auburn City Council to set targets for reducing emissions.

This report presents the methodology and results for Auburn's municipal and community greenhouse gas inventories for 2015. It also includes emissions forecasts for municipal and community emissions in 2020, 2025, and 2030.

Greenhouse Gas Inventory Methodology

This section provides an overview of the methodology for Auburn's community and municipal inventories. Planning for and conducting the inventories included these three primary steps:

1. **Define the scope and set the base year.**
2. **Collect data.**
3. **Analyze data and calculate emissions.**

The sections below explain each of these steps in more detail.

STEP 1. DEFINE THE SCOPE AND SET THE BASE YEAR

The first step in conducting a greenhouse gas inventory is to determine which activities to include in the inventory and to draw boundaries. Using a standard methodology, including consistent boundaries, allows for inventory results and benchmarking that can be compared with other entities conducting similar inventories. In 1998, the World Resources Institute (WRI), an environmental think tank, and the World Business Council for Sustainable Development (WBCSD), a coalition of 200 international companies focused on sustainable development, convened the Greenhouse Gas Protocol (GHGP), a nongovernmental organization dedicated to

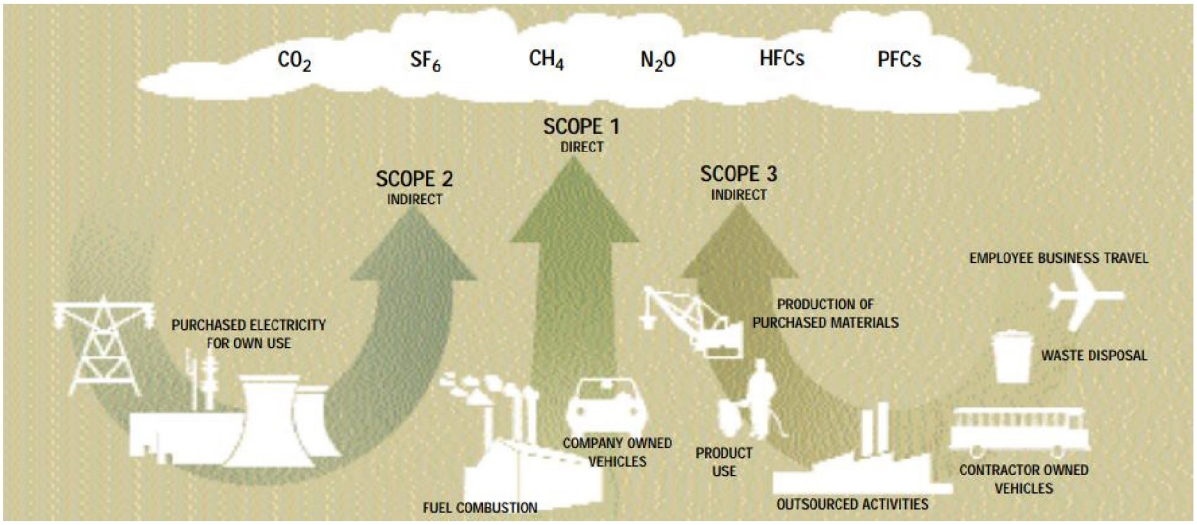
addressing the need for standardized methods for GHG accounting. In 2001, the GHGP released *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard*. Now widely used as the basis for greenhouse gas accounting, this protocol delineates emissions sources using the three following scopes:

- **Scope 1** includes all direct sources of greenhouse gas emissions that originate from equipment and facilities owned or operated by the entity. Scope 1 sources include fuels burned through on-site combustion (such as natural gas consumption in buildings or fleet diesel and gasoline consumption), on-site refrigerant losses, and electricity produced on the site, if applicable.
- **Scope 2** includes all indirect greenhouse gas emissions from electricity, heat, or steam imported from other entities.
- **Scope 3** includes all other indirect sources of greenhouse gas emissions that may result from the activities of the institution but that occur from sources owned or controlled by another company or entity, such as emissions from leased spaces, business travel and employee commuting (when not conducted in an organization's own fleet); embodied emissions in material goods purchased by the institution; emissions from solid waste disposal; and emissions from vendor services such as shipping or catering.

The World Resources Institute developed Figure 4 below to illustrate this method for drawing boundaries for inventories.[4] WRI and WBCSD suggest that entities separately account for and measure emissions from Scopes 1 and 2 at a minimum.

[4] *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard* (Revised Version), World Resources Institute and World Business Council for Sustainable Development, Figure 3. "Overview of scopes and emissions across a value chain." Available online at http://www.ghgprotocol.org/corporate-standard.

Figure 4. Overview of Emissions Sources and Scopes



Graphic courtesy of World Resources Institute

While most municipal and community inventories generally follow the three scopes outlined above, more specific guidelines are needed for the special situations common to inventories of communities and city government operations, which differ from GHG accounting for individual businesses. The sections below describe these considerations in more detail.

Municipal Inventory

In 2008, City staff and Cascadia determined that the *Local Government Operations Protocol* (LGOP) was the most appropriate guide for Auburn's municipal inventory, which was used again for the 2015 inventory. Although the LGOP generally adheres to the principals and methods outlined in *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard*, the LGOP is specifically tailored for local governments and offers guidance on how to draw system boundaries, what activities and information to include in the greenhouse gas inventories, and how to translate collected data into greenhouse gas emissions. The California Air Resources Board, California Climate Action Registry, ICLEI—Local Governments for Sustainability, and The Climate Registry developed the LGOP and released the initial version in September 2008 and an updated version in May 2010. Using this protocol better enables Auburn to compare its greenhouse gas inventory with other municipalities that have drawn similar boundaries by following the LGOP, although no two inventories are exactly alike.[5]

[5] Emissions inventories may look very different depending on which community service operations are under a city's purview, which may include water conveyance, wastewater treatment, public transit operation, solid waste collection, and landfilling.

The LGOP recommends that cities measure emissions using an "operational control approach" in which emissions from buildings, equipment, and activities under their own operational control are the basis of the emissions inventory. The LGOP states that this approach "most accurately represents the emissions sources that local governments can influence."[6] Based on this approach, facilities and activities over which the City of Auburn has operational control (including the authority to introduce operating policies) are included as Scope 1 or 2 emissions. Other emissions sources are included as "optional" Scope 3 emissions.

Following the guidelines provided in the LGOP, emissions from activities at buildings owned and operated by the City of Auburn are included as Scope 1 and 2 emissions. These buildings include City Hall, police and parks facilities, and other buildings that are owned by the City and primarily house City staff and are used for City functions. Similarly, emissions from municipal operations such as water pumps, street and traffic lights, and vehicle fleet use are included as Scope 1 or 2. While the City does own a municipal airport, the emissions from the airport are considered Scope 3 because the City does not operate the airport.[7] Similarly, several buildings that the City owns but leases to tenants are included in the inventory and are considered Scope 3 emissions.[8] This category includes City-owned spaces that are leased to the Auburn Avenue Theater, among others. Employee commuting, business travel, and waste disposal are also included as Scope 3 emissions. More information on each of these emissions sources is provided below.

- **Municipal Scope.** The municipal inventory includes greenhouse gas emissions from sources under the operational control of the City of Auburn. Primary emissions sources include the following list.
  - **Building energy use.** Includes natural gas and electricity consumption in City-owned buildings. Natural gas that is combusted on-site is considered Scope 1, and electricity is

[6] *Local Government Operations Protocol: For the Quantification and Reporting of Greenhouse Gas Emissions Inventories*, Version 1.1, May 2010, p. 14. California Air Resources Board, California Climate Action Registry, ICLEI—Local Governments for Sustainability, The Climate Registry. Available online at https://s3.amazonaws.com/icleiusaresources/lgo_protocol_v1_1_2010-05-03.pdf.

[7] The Auburn Municipal Airport is operated by an outside contractor which has control over maintenance, utility payments, and daily operations.

[8] Emissions attributable to surface parking lot lighting structures owned by the City, including those that are leased to tenants, are included in Scope 2 of the inventory, but emissions from parking lots lights under private ownership are excluded.

considered Scope 2. City-owned spaces that are leased and operated by outside tenants are included as Scope 3 emissions.

- **Vehicle fleet.** Includes gasoline, diesel, propane, and other fuels used in both on-road and off-road vehicles and equipment. All emissions from fleet vehicles are considered Scope 1.
- **Street lights and traffic signals.** Includes electricity used by street lights and traffic signals. All emissions from municipal electricity consumption are considered Scope 2.
- **Water stations.** Includes electricity used by water pump stations. All emissions from municipal electricity consumption are considered Scope 2.
- **Wastewater stations.** Includes electricity used by wastewater pump stations. All emissions from municipal electricity consumption are considered Scope 2.
- **Solid waste.** Includes all solid waste produced by municipal operations including waste from City-owned facilities, street cleaning, and parks. Emissions are based on greenhouse gas emissions from solid waste decomposition in landfill. All solid waste emissions from municipal wastes are considered Scope 3.[9]
- **Refrigerants.** Includes refrigerants used in building and vehicular air conditioning. All refrigerant-based emissions from City-owned facilities and fleet vehicles are considered Scope 1.
- **Employee commuting.** Includes employee travel to the City of Auburn for work each day not conducted in City-owned vehicles. All emissions from employee commuting are considered Scope 3.
- **Business travel.** Includes employee travel for City business not conducted in City-owned fleet. Does not include daily commuting to and from City for work each day. May be within City boundaries or outside City boundaries. All emissions from business travel are considered Scope 3.

Community Inventory

The Auburn community greenhouse gas inventory was conducted according to the Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC), a joint project of ICLEI—Local Governments for Sustainability, the World Resources Institute, and C40 Cities

[9] Solid waste collection is conducted by an outside contractor, and emissions from contracted solid waste collection vehicles are not included in the municipal inventory. These vehicles are included in total transportation emissions within the community of Auburn in the community inventory. Emissions from upstream manufacturing of goods consumed in City operations or in the community are not included in the inventory.

Climate Leadership Group.[10][11] Because the emissions from the community are from a variety of residential, commercial, industrial, and municipal sources, the emissions from the community inventory do not fall into Scope 1, 2, and 3 categories that are used for an entity measuring its own emissions, such as the City's municipal operations inventory.

- **Community Scope.** The community inventory includes greenhouse gas emissions sources throughout the City and also includes Auburn's municipal operations. Primary emissions sources include:
  - **Residential energy use.** Includes natural gas and electricity consumption from residences within the City of Auburn's boundaries.
  - **Commercial energy use.** Includes natural gas and electricity consumption from commercial buildings within the City of Auburn's boundaries.
  - **Industrial energy use.** Includes natural gas and electricity consumption from industrial facilities within the City of Auburn's boundaries.
  - **Transportation**. Includes vehicle miles traveled on roads within the City of Auburn's boundaries. Does not differentiate between trips made by City residents, trips that originate or end in City boundaries, and other drive-through traffic (such as trips through Auburn's boundaries on State Routes 167 and 18).
  - **Solid waste**. Includes emissions from the solid waste produced by Auburn's residential, commercial, and industrial sectors. Waste from municipal operations is included in the commercial sector. Does not include emissions from solid waste collection services, which are included in "transportation" emissions.

Setting a Base Year

Equally important as determining boundaries is setting a base year and determining which year to inventory. Considerations include which years offer a complete and accurate data set and will be representative of the general level of annual emissions, providing a useful base year to

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[10] *Global Protocol for Community-Scale Greenhouse Gas Emission Inventories: An Accounting and Reporting Standard for Cities*, December 2014, pp. 176, World Resources Institute, ICLEI-Local Governments for Sustainability, C40 Cities Climate Leadership Group. Available online at http://c40-production-images.s3.amazonaws.com/other_uploads/images/143_GHGP_GPC_1.0.original.pdf?1426866613.

[11] At the time of the 2008 inventory, the GPC was still in the early stages of development. Therefore, Auburn's community protocol for the 2008 inventory was based largely on ICLEI standards and common standards used by other ICLEI members and available for review in their completed community inventory reports. Community inventories typically include energy use within city boundaries, solid waste produced in city boundaries, and vehicle miles traveled on roads within city boundaries.

forecast emissions for future years. Based on these factors, the City of Auburn, in consultation with Cascadia Consulting Group, designated the 2008 calendar year as its base year, as it reflected an expansion of the City's boundaries that occurred in January of that year and featured a more complete data set than previous years.

STEP 2. COLLECT DATA

Collecting data is often the most time-intensive step of conducting a greenhouse gas inventory. Many Auburn staff members, working with utility providers and other vendors, provided extensive sets of data for the various facilities and activities included in the municipal and community inventories.

The City of Auburn's Community Development & Public Works Department coordinated data collection for the inventory. The main sources of data included utility bills and fleet records. **Table 1** shows key data elements and sources for the community and municipal inventories. For more information, see *Appendix A: Detailed Data Sources and Resulting Documents*. Emissions sources with special considerations regarding data sources are discussed below.

Table 1: Data Collection Elements and Sources

Main Data Elements	Data Sources
Community	
Electricity and natural gas usage	Puget Sound Energy (PSE)
Vehicle miles traveled	Puget Sound Regional Council
Street traffic counts	City of Auburn Department of Public Works
Solid waste	City of Auburn, drawn from Waste Management and Republic Services collection reports
Municipal	
Utility invoices	City of Auburn Department of Finance and Puget Sound Energy
Vehicle fleet records	City of Auburn Maintenance & Operations Department
Employee business travel miles traveled	City of Auburn Travel Information Records
Employee commuting miles traveled	Commute Trip Reduction Survey, web survey of City of Auburn employees
Solid waste	Waste Management collection records

Leased Space Emissions

Emissions from leased spaces (facilities owned by the City but operated by outside entities), including the municipal airport, are considered an "optional" Scope 3 emission in the LGOP and

are included in this base year inventory. Because the City does not pay utility bills directly for these spaces, the City requested permission from tenants to obtain these utility records.

Business Travel

Business travel in 2015 was calculated using travel information records from the City. At the time of the 2008 inventory, business travel information was not tracked in a central form or location. Business travel for that year was thus was calculated by reviewing reimbursed expenses in each department.

Utility Use at Individual Facilities

Utility use at individual facilities was calculated based on meter data from PSE electricity and natural gas invoices collected by the City of Auburn Finance Department.

Employee Commuting

Employee commuting habits were based on the findings of Auburn's Commute Trip Reduction (CTR) survey completed in 2015.[12] The data collection methodology was slightly different for the 2008 inventory since the CTR was not conducted during that year. For the baseline year, Cascadia surveyed all City staff members employed during the time of conducting the inventory (summer 2009) who were also employed by the City during the year 2008. Over 370 staff, or 84% of employees, completed the online survey regarding their commuting habits. While calculations of commuting emissions based on these two sources were as consistent as possible, the two surveys differed slightly in their level of specificity and scope of participants.

Solid Waste

Through contracts with waste haulers for residential and commercial waste collection, the City of Auburn receives free waste pick-up from its municipal operations. Waste tonnages for each City building were compiled from waste hauler collection records in 2015.

STEP 3. ANALYZE DATA AND CALCULATE EMISSIONS

In consultation with Cascadia, the City of Auburn chose to use the ICLEI Clean Air and Climate Protection (CACP) software for the Auburn inventory in 2008. The CACP tool was developed by ICLEI in partnership with the National Association of Clean Air Agencies (NACAA) and the U.S.

[12] City employees complete a CTR survey every two years. The Washington State Department of Transportation requires all Washington organizations with more than 100 employees to complete a CTR report, as mandated by the state's Commute Trip Reduction laws.

Environmental Protection Agency. The software is intended to help local governments conduct greenhouse gas inventories, quantify the benefits of specific initiatives to reduce GHGs, and create climate action plans for their communities and municipal operations.

The CACP software is no longer available or supported by ICLEI. Instead, ICLEI supports ClearPath, which is an online, cloud-based software platform for completing greenhouse gas inventories, forecasts, and online monitoring of municipal and community inventories. In September 2015, ICLEI release updates to the ClearPath software that further align the software with the Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC). Auburn's 2015 inventories were calculated both within the ClearPath tool and in Excel worksheets—with results compared across sources—to increase transparency in the data sources and calculations, as well as make results visible to all City staff with the ClearPath logon information.

Entering and Analyzing Data

While the ClearPath software has some emissions factors and data pre-loaded to facilitate greenhouse gas calculations, several decisions had to be made prior to adding city-specific data. In these decisions, Cascadia followed the 2008 inventory methodology, where feasible, for comparability. Where the LGOP, City of Auburn staff, ICLEI staff, and other city inventories in the region to standardize the inventory to the extent possible.

The City of Auburn had two possible sources of emissions factors for electricity. The first source of data is actual emissions reports from the City's utility provider, Puget Sound Energy (PSE). The second source of data is the U.S. Environmental Protection Agency's Emissions & Generation Resource Integrated Database (eGRID). USEPA compiles and updates the eGRID database of regional emissions factors on annual basis, though there is several year lag. The most recent eGRID data (eGRID 2014) was published in 2017 for calendar year 2014.

Though Puget Sound Energy supplies electricity to the City of Auburn, the consultant team, in consultation with City staff, chose to use eGRID emissions data for several reasons. First, while PSE publishes information on its own fuel mix, over half of the electricity it provides is purchased from other utility providers.[13] Thus, using PSE's specific emissions factor based on its own fuel production may not accurately reflect the emissions from purchased energy. Second, having a

[13] Puget Sound Energy, "Electric Supply." Available online at https://pse.com/aboutpse/energysupply/pages/electric-supply.aspx. Accessed July 2017.

common regional emissions factor facilitates comparisons among greenhouse gas inventories of different cities.

Another decision involved determining the appropriate "level" for entering data into the ClearPath tool. While some data were only available at one level (for instance, the community electricity and natural gas information from PSE covered aggregate use citywide), other data were available in more detail. For instance, fleet data could be entered into the ClearPath by individual vehicle, by vehicle type, or by department. Following the 2008 inventory, Cascadia chose to enter data at the department level (separated by fuel type) wherever possible in order to provide some additional detail on the source of emissions.

After working with Auburn staff to determine the most appropriate emissions factors, level of detail, and additional indicators, Cascadia staff members calculated all emission in separate workbooks and upload activity data and factor sets (emission factors) to the ClearPath tool. Information was checked for accuracy, and ICLEI staff members were consulted where anomalies existed. Emissions are reported in metric tons of carbon dioxide equivalent ($mtCO_2e$), the standard unit used in the LGOP and other greenhouse gas reporting.

Key Findings

This section presents the key findings from Auburn's community and municipal greenhouse gas inventories. These results are intended to provide an understanding of Auburn's greenhouse gas impacts, including the sources and sectors contributing to the city's emissions. The findings will also assist the City in climate action planning efforts and provide the ability to track progress in reducing greenhouse gas emissions in future years.

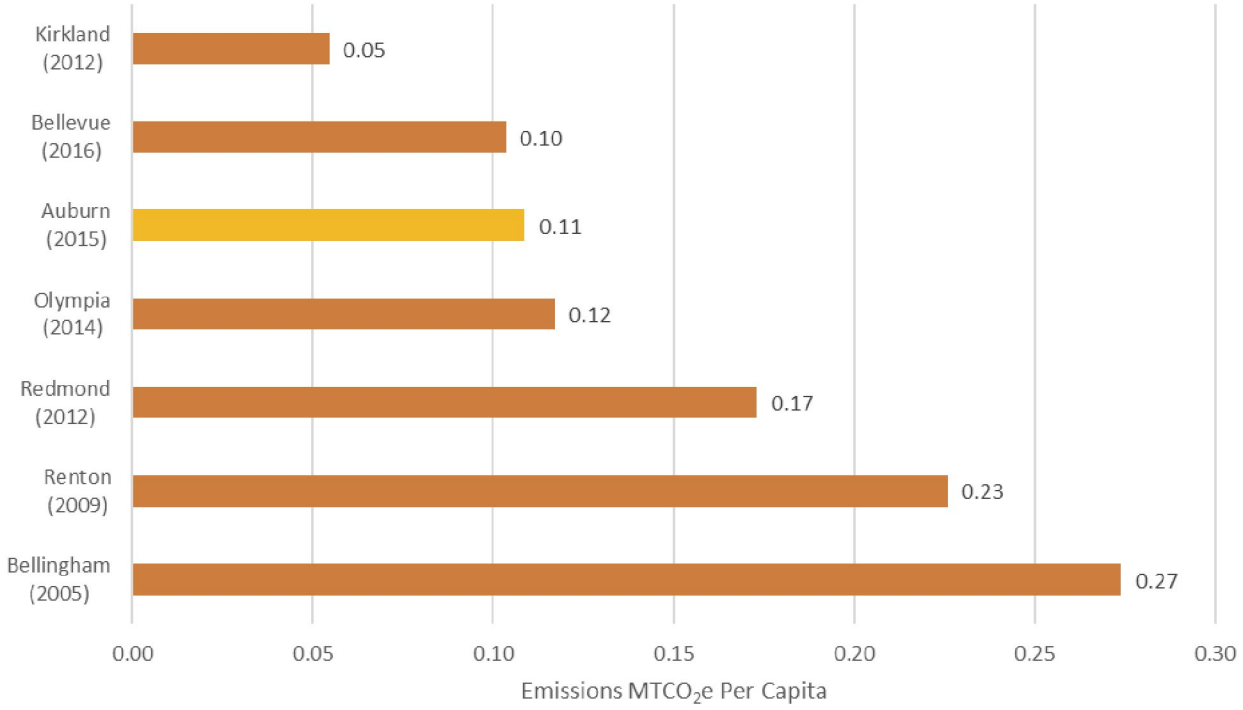
MUNICIPAL INVENTORY

Auburn's municipal inventory is a measure of all greenhouse gas emissions produced by the City of Auburn's municipal facilities and operations in a given year. Cascadia calculated Auburn's greenhouse gas inventories for the year 2015. In 2015, the City's operations generated over 8,000 $mtCO_2e$.[14]

On a per capita basis, Auburn's municipal operations generate approximately 0.11 $mtCO_2e$ of emissions. This rate is within the lowest three per capita emissions among surrounding jurisdictions, as indicated in **Error! Not a valid bookmark self-reference.**.

[14] Although emissions tonnages are presented in tables and graphs as exact figures, all reported emissions in this report are estimates.

Figure 5. Municipal emissions (MTCO2e) per capita for Auburn and surrounding jurisdictions*



Sectors are industry or activity types such as transportation, industrial energy use, or waste. As Figure 6 illustrates, building operations and vehicle fleet are the largest emissions sectors for municipal operations.[15] In addition to emissions sectors, emissions *sources* are energy types such as electricity, natural gas, diesel, and gasoline. Figure 7 shows electricity is the single largest source of emissions, accounting for 52% of emissions from municipal operations. Building emissions for the year 2015 include the municipal airport and other leased spaces for 2015.

[15] The use of pie charts to represent emissions is not intended to indicate that 100% of emissions are accounted for. This is an estimate of emissions, and while Scope 1 and 2 emissions are as complete as possible, only a few key Scope 3 emissions sources are included in the inventory. Each pie chart in this document is meant to only represent the emissions measured in this inventory based on the boundaries recommended by the LGOP.

Figure 6: 2015 Municipal Inventory by Emissions Sector ($mtCO_2e$)

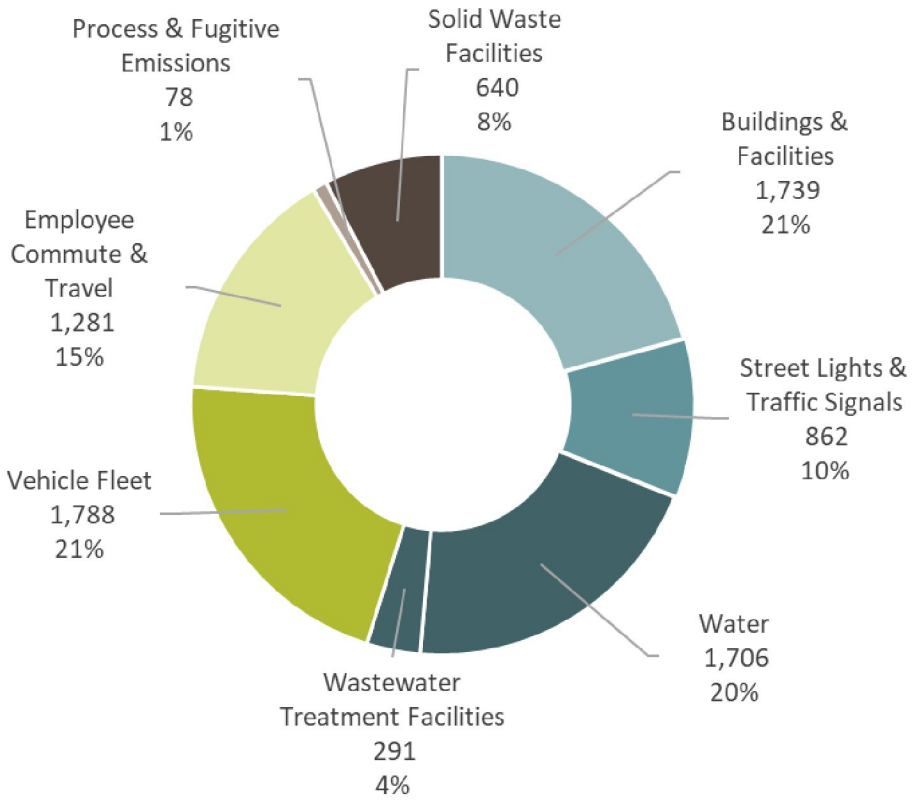
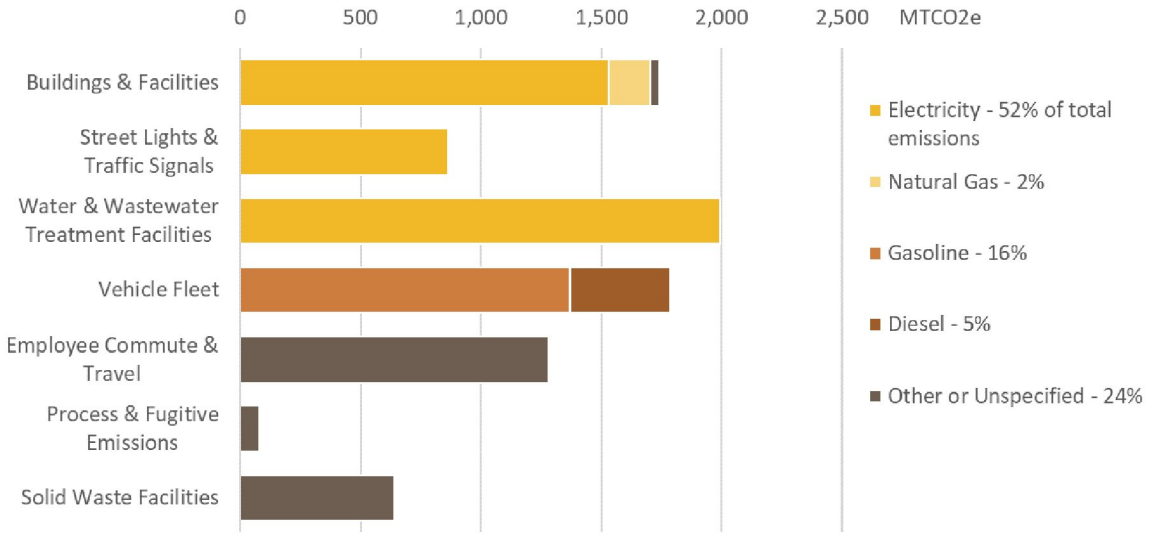


Figure 7: 2015 Municipal Inventory by Emissions Sector and Source ($mtCO_2e$)



In the baseline year of 2008, the City's operations generated an estimated total of 10,000 $mtCO_2e$. Figure 8 and Figure 9 show a breakdown of these emissions by sector and source.

Figure 8: 2008 Municipal Inventory by Emissions Sector ($mtCO_2e$)

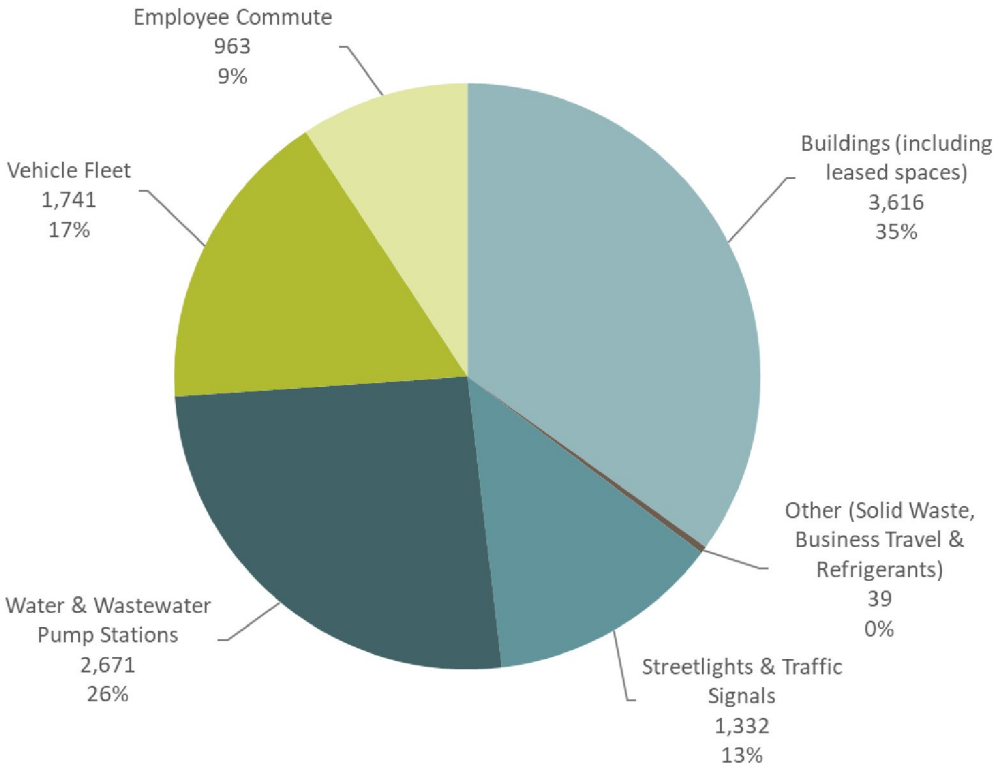
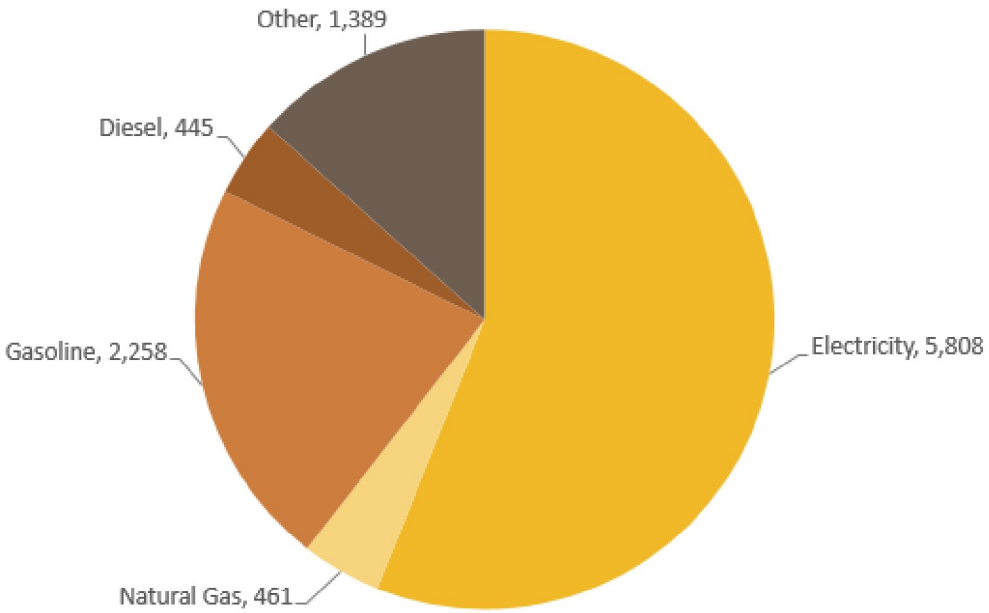


Figure 9: 2008 Municipal Inventory by Emissions Source ($mtCO_2e$)



**Other sources include solid waste, refrigerants, and business travel.*

In 2008, buildings and water/wastewater operations were the sectors responsible for the most emissions. Electricity use was the single largest source of emissions, representing 56% of total emissions. The inventory for the baseline year 2008 includes emissions from all leased spaces including the municipal airport.

Overall emissions decreased from 2008 to 2015, and the breakdown of emissions by sector shifted. Emissions from water and wastewater treatment facilities and building energy use became a smaller portion of total emissions in 2015, while vehicle fleet and street and traffic lighting emissions became a larger portion of the inventory. The rough breakdown of emissions by source stayed the same from 2008 to 2015, with electricity use as the largest source of emissions, accounting for 49% of total emissions in 2015. Table 2 shows the changes by source and sector.

Table 2: Comparison between 2008 and 2015 Municipal Emissions by Sector and Source

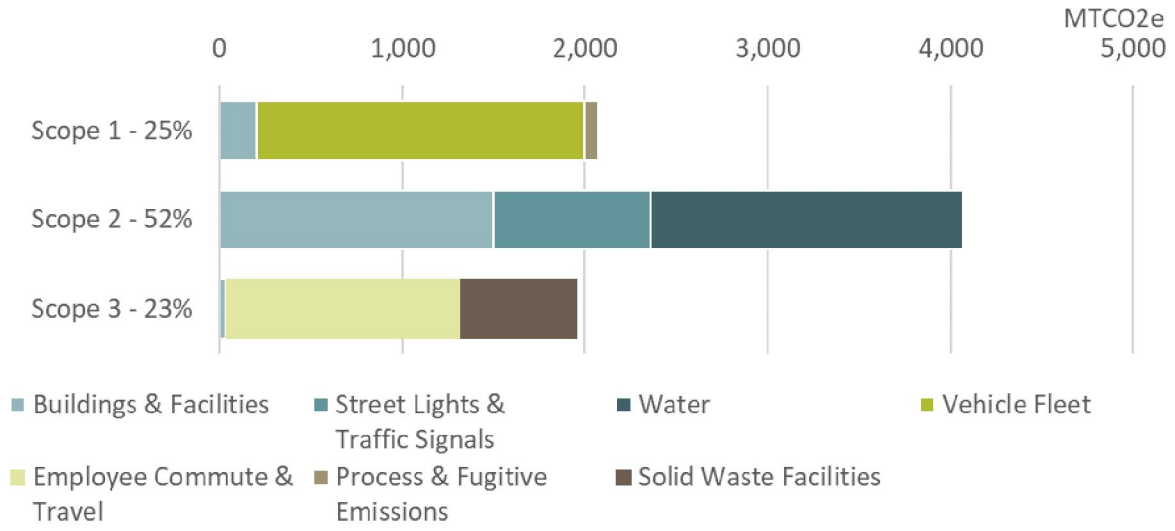
	2008 CO2e Emitted	2015 CO2e Emitted	% Change per Capita
Buildings & Facilities	**3,490**	**1,740**	**-59%**
Electricity	3,030	1,530	-59%
Natural Gas	460	170	-69%
Propane	NC	40	NA
Other Electricity Usage	**3,940**	**2,860**	**-41%**
Street Lights & Traffic Signals	1,330	860	-47%
Water & Wastewater Treatment Facilities	2,610	2,000	-38%
Transportation	**2,750**	**3,040**	**-10%**
On Road Vehicle Fleet	1,610	1,660	-16%
Off Road Vehicle Fleet	130	100	-40%
Employee Commute & Travel	1,010	1,280	4%
Process & Fugitive Emissions	**4**	**80**	**1,491%**
Waste	**190**	**640**	**181%**
Total Emissions	**10,370**	**8,360**	**-34%**

As Table 2 shows, process and fugitive emissions (primarily from air conditioning refrigerant losses) was the area with the greatest growth in emissions from 2008 to 2015. Given that refrigerants are a small source of overall emissions, however, this change makes a relatively small difference in overall emissions. In addition, refrigerant emissions can fluctuate widely on an annual basis depending on the refilling schedules. Emissions also increased from waste and, to a lesser degree, employee commute and travel. Emissions from all other sectors, including buildings, street and traffic lighting, water and wastewater treatment, and vehicle fleet, decreased from 2008 to 2015.

2015 MUNICIPAL EMISSIONS

Figure 6 and Figure 7 below show Auburn's 2015 municipal emissions broken down by sector and source, respectively. *Scope* is also a helpful framework to detail emissions sources (see discussion on page 7 for more information). Figure 10 shows municipal emissions by scope and sector for 2015, and Table 3 shows how this changed from the 2008 inventory.

Figure 10: 2015 Municipal Emissions by Scope and Sector ($mtCO_2e$)



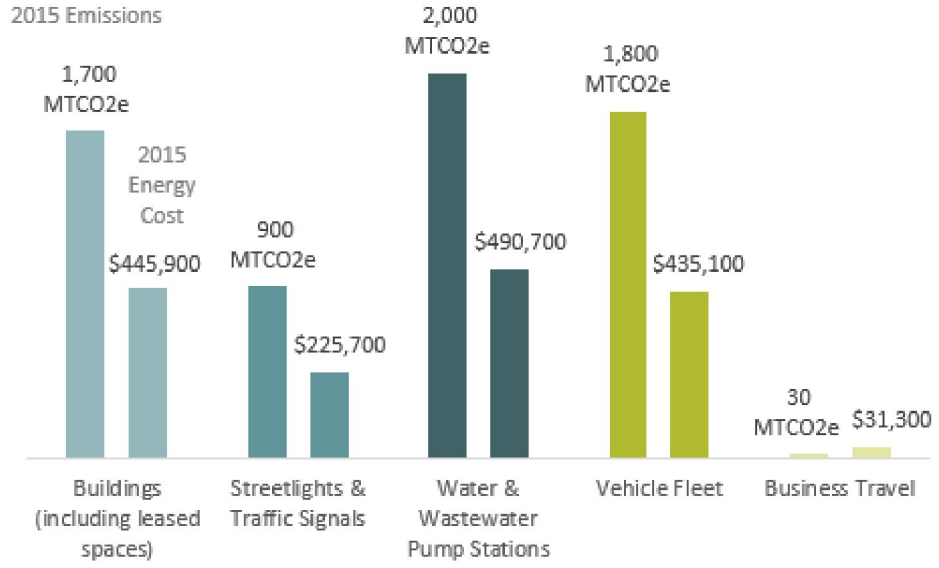
Scope 2 emissions, or electricity use for City-owned and operated facilities, are the largest source of emissions at over 4,000 $mtCO_2e$, or 52% of total emissions. **Scope 1** emissions, which include emissions from the vehicle fleet, refrigerant losses, and natural gas usage at City-owned and operated buildings account for a little more than 2,000 $mtCO_2e$, or 25% of all emissions. **Scope 3** emissions, which include emissions from employee commuting, business travel, leased spaces, and solid waste account for nearly 2,000 $mtCO_2e$, or 23% of total emissions.

Table 3: Comparison of 2008 and 2015 Municipal Emissions by Scope and Sector ($mtCO_2e$)

	2008 CO_2e Emitted	2015 CO_2e Emitted	% Changed
Scope 1	**2,204**	**2,080**	
Buildings & Facilities	460	210	-54%
Vehicle Fleet	1,740	1,790	3%
Process & Fugitive Emissions	4	80	1900%
Scope 2	**5,670**	**4,360**	
Buildings & Facilities	1,730	1,500	-13%
Water & Wastewater Treatment Facilities	2,610	2,000	-23%
Street Lights & Traffic Signals	1,330	860	-35%
Scope 3	**2,510**	**1,950**	
Buildings & Facilities	1,310	30	-98%
Employee Commute & Travel	1,010	1,280	27%
Solid Waste Facilities	190	640	237%
Total Emissions	**10,380**	**8,390**	

Energy use in various sectors (e.g., building energy use, employee commuting) is the largest source of municipal emissions in 2015. In addition, energy consumption in each sector represents a significant portion of the City operations budget. Figure 11 shows the relative costs and emissions from energy consumption in each sector. Electricity consumption in buildings and by the vehicle fleet represent the two largest contributor to overall emissions at approximately 2,000 $mtCO_2e$ each. However, the largest energy cost to the City is from electricity at water and wastewater pump stations at roughly $490,700 annually.

Figure 11: 2015 Municipal Emissions and Costs by Sector



In addition to cost, other metrics allow for comparison across years and benchmarking with similar municipal operations. Table 4 provides metrics for Auburn's overall municipal greenhouse gas inventory and for the City's specific sectors and sources. Metrics and information on the emissions from each sector are provided in more detail below.

Table 4: Key Metrics for the 2015 Municipal Inventory

	2008		2015	
	MT CO2e	Cost ($)	MT CO2e	Cost ($)
Building Emissions (per 1,000 sq ft)	9.90	$1,547	5.52	$1,415
Water/Sewage Emissions (per capita)	0.04	$8.42	0.03	$6.37
Vehicle Feet Emissions (per FTE)	3.91	$10.90	3.32	$808.77
Employees Commute (per FTE)	2.16	n/a*	2.38	n/a*
Business Travel (per FTE)	0.11	$96.22	0.06	$58.09
Waste Emissions (per FTE)	0.11	n/a*	1.19	n/a*
Overall Emissions (per capita)	**0.15**	**n/a**	**0.11**	**n/a**

**The City of Auburn pays for neither waste disposal from municipal operations (free municipal solid waste pickup is included in the City's waste contract) nor employee commuting costs, and therefore does not have direct cost data.*

Buildings

As illustrated in Figure 12, the City's buildings contribute 21% of Auburn's municipal footprint.

Figure 12: Portion of 2015 Municipal Emissions from Buildings, Street and Traffic Lighting, and Water and Wastewater

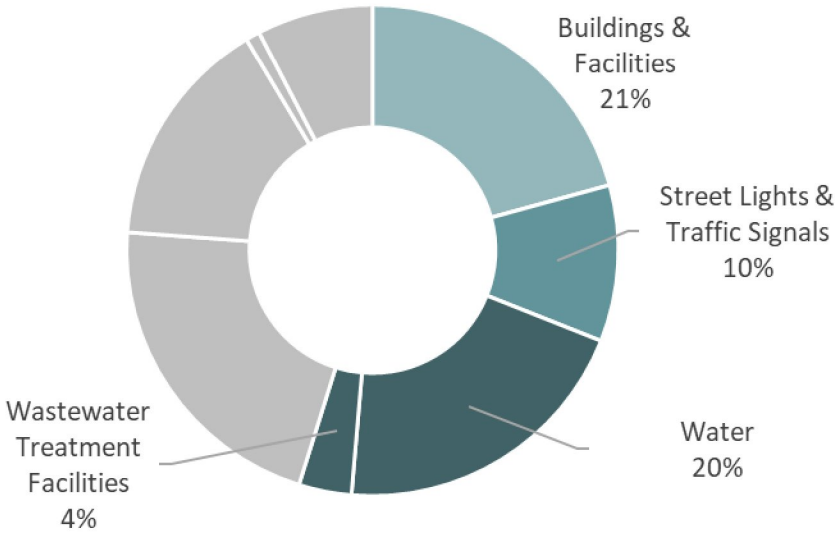
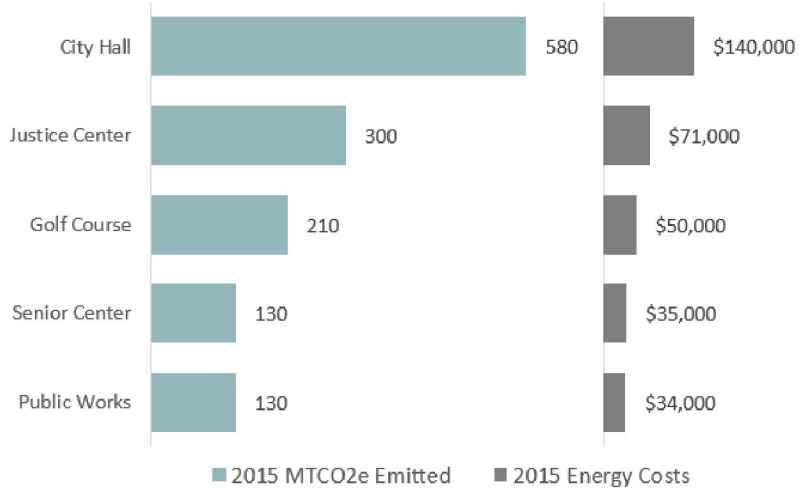


Figure 13 shows the emissions and energy costs of the five buildings with the largest emissions, which collectively produce nearly 75% of the City's building emissions.

Figure 13: 2015 Emissions and Energy Cost for Buildings with the Highest Energy Use



Energy efficiency is another way to identify significant emissions contributors. Table 5 shows the emissions and energy costs per 1,000 square feet of the 13 least efficient buildings, excluding leased buildings.

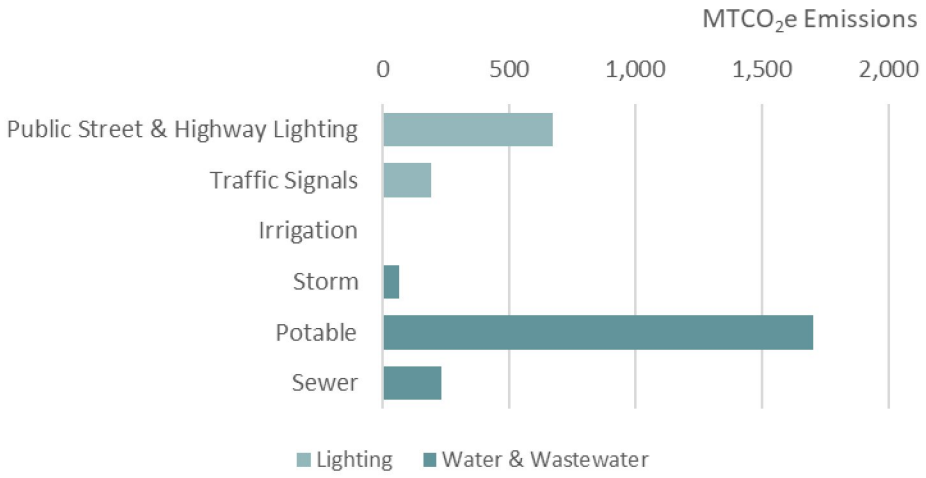
Table 5. 2015 Emissions and Energy Costs per 1,000 Square Feet of Least Efficient Buildings

Buildings and Facilities	CO2e/1,000 sq ft	$/1,000 sq ft
Golf Course	15.11	$3.57
Senior Center	11.23	$2.93
City Hall	10.10	$2.45
Justice Center	8.25	$1.97
Public Works	7.45	$1.79
Mountain View Cemetery	6.26	$1.63
Veteran's Memorial Building	5.28	$1.47
Parks Maintenance	2.95	$0.71
White River Museum	3.71	$0.53
PRAB	2.21	$0.53
Maintenance & Operation	0.58	$0.16
GSA	0.33	$0.11
Auburn Municipal Airport	0.07	$0.02

Street and Traffic Lights

Cumulatively, street and traffic lighting make up 10% of the total municipal inventory, as shown in Figure 12 on page 24. The City has two kinds of street and traffic lights: metered and flat-rate. Electricity use for metered lights is measured by PSE, and the City pays for these lights based on monthly electricity consumption. Flat-rate lights are not metered; the City pays PSE a flat monthly rate for these lights. Figure 14 shows the emissions from street and highway lighting and traffic signals. The electricity used for street and traffic lighting in 2015 was approximately 14% of total municipal costs, as seen in Figure 11 on page 23.

Figure 14: 2015 Emissions from Lighting and Water and Wastewater Pump Stations ($mtCO_2e$)



Water and Wastewater Pump Stations

Auburn does not have a wastewater treatment plant within its boundaries, so emissions from the treatment of water and wastewater are not included in Auburn's municipal inventory (the City of Auburn is served by the King County Wastewater Treatment Division). However, Auburn does operate municipal water pumps. The energy used to pump and deliver clean water, remove wastewater from the community, and pump excess stormwater contributed nearly 2,000 $mtCO_2e$ to Auburn's municipal inventory in 2015, representing approximately 24% of Auburn's total municipal inventory. As Figure 14 above illustrates, 85% of these emissions result from water delivery. Figure 11 on page 23 shows the cost of electricity used at water, wastewater, and stormwater pump stations at $490,700 in 2015, accounting for roughly 30% of Auburn's total municipal energy costs.

Vehicle Fleet

Auburn's fleet contributes nearly 2,000 $mtCO_2e$ to the City's overall municipal footprint, representing roughly 21% of the 2015 municipal emissions, as depicted in Figure 15. The breakdown of vehicle emissions by department is shown in Figure 16.

Figure 15: Portion of 2015 Municipal Emissions from Vehicle Fleet and Employee Commute and Travel

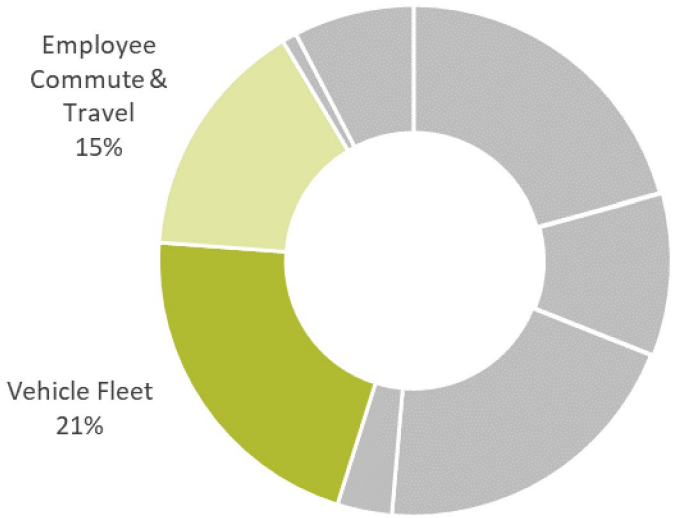
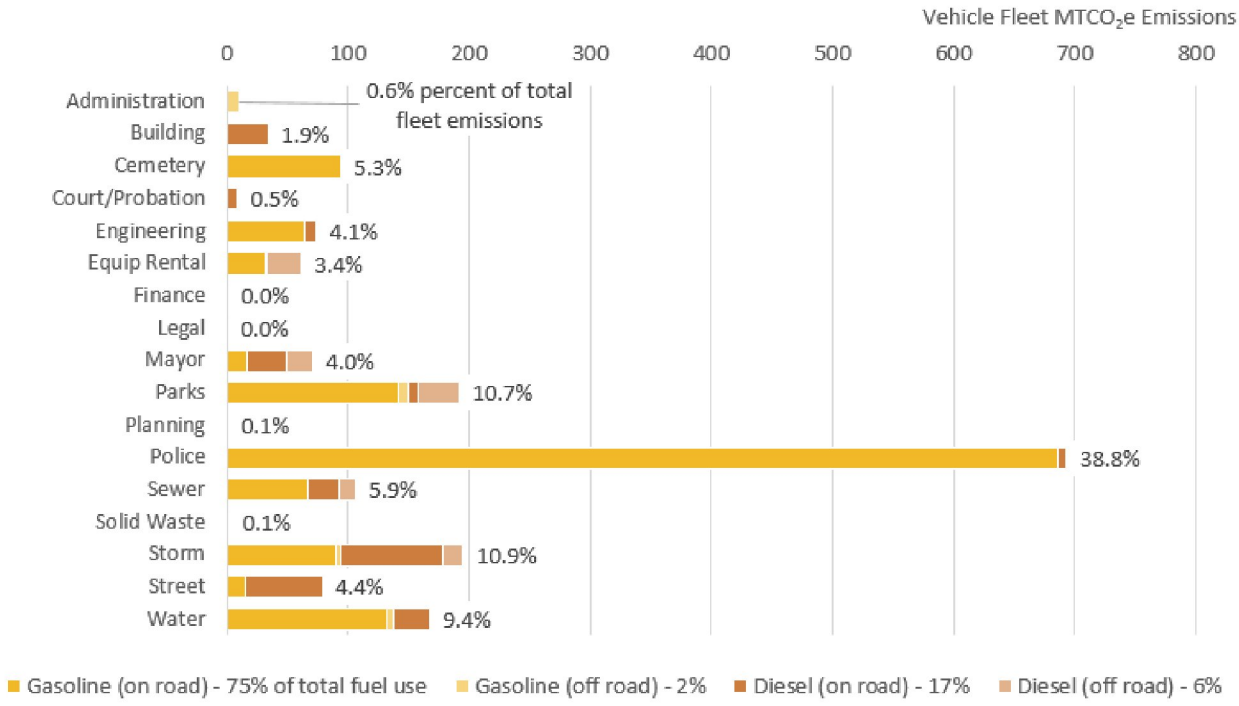


Figure 16: 2015 Vehicle Fleet Emissions by Department ($mtCO_2e$)



Cost

Auburn's vehicle fleet is a significant source of municipal energy costs. As shown in Figure 11 on page 23, vehicle fuel costs accounted for 27% of Auburn's energy-related costs in 2015 (total costs also include buildings, streetlights and traffic signals, water and wastewater pump stations, and business travel). Figure 17 shows the fuel costs for the vehicle fleet by department. Fuel efficiency is a useful indicator of greenhouse gas impacts. Figure 18 shows the emissions, average fuel efficiency for fleet vehicles, and municipal fleet costs for 2015 by department.

Figure 17. Municipal Energy Costs by Sector with Vehicle Fleet Detail by Department

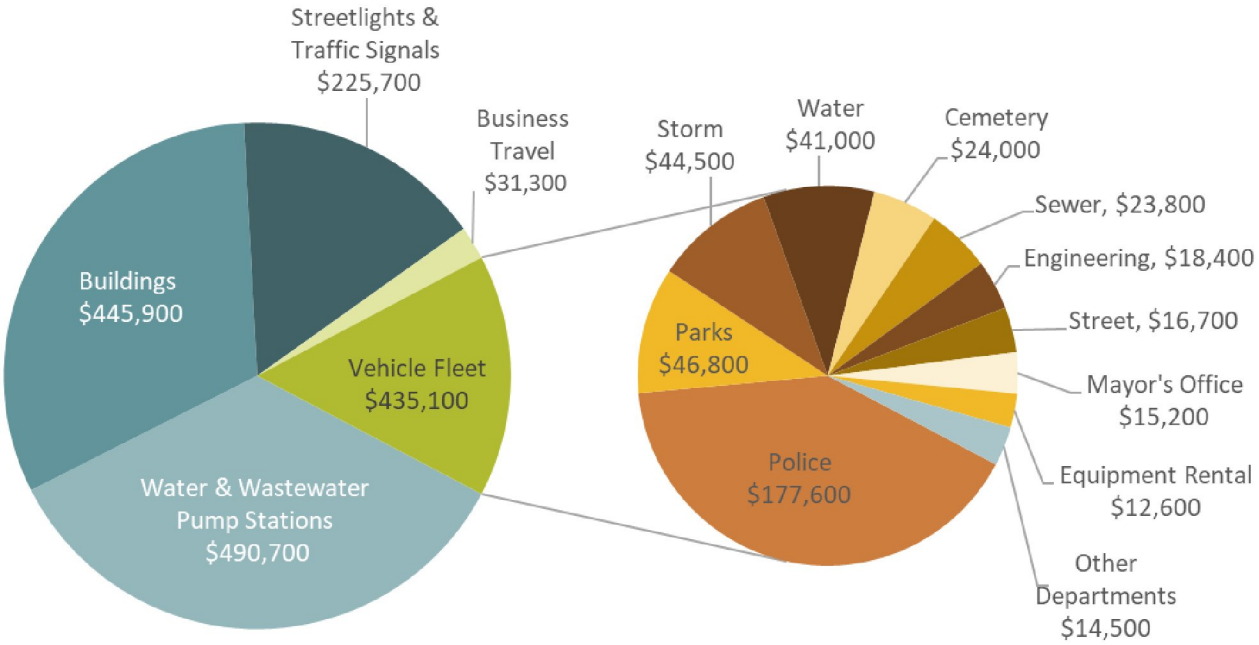
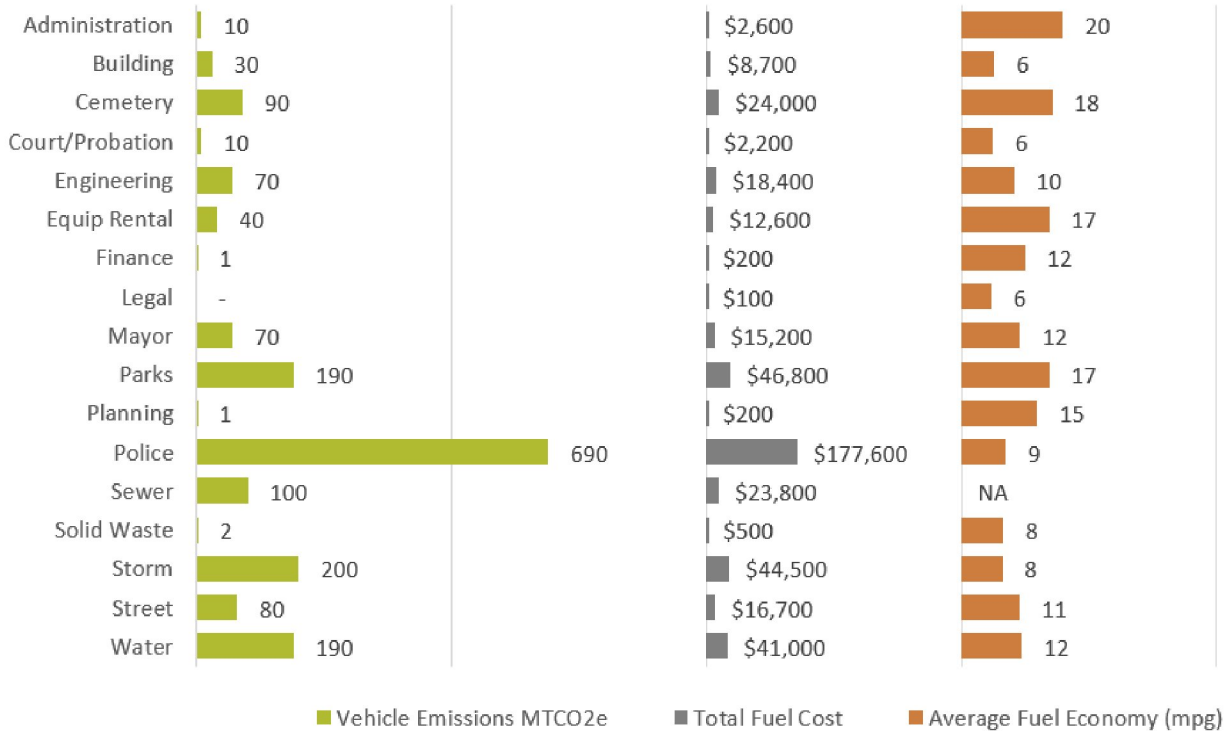


Figure 18: 2015 Municipal Fleet Emissions, Costs, and Fuel Economy by Department

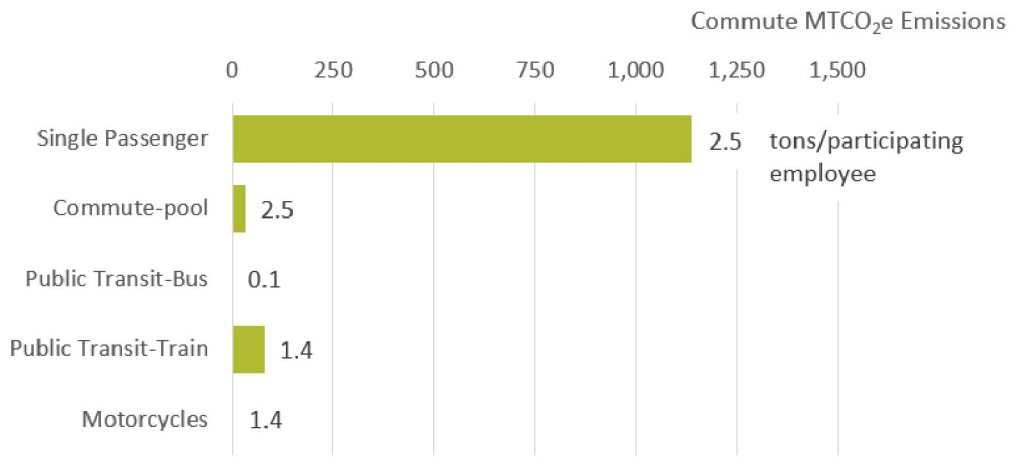


**Does not include off-road vehicles. Fuel efficiency is calculated by dividing total miles traveled in on-road vehicles by fuel purchased for on-road vehicles.*

Employee Commuting

Employee commuting and business travel combined makes up approximately 15% of Auburn's municipal inventory, as illustrated in Figure 15 on page 27. Auburn employees use various forms of transportation for commuting, including driving, carpooling, taking the bus, taking the train, walking, and biking. Figure 19 shows the per-employee and total emissions generated by each mode, based on the number of employees that participate in that mode at least once per week.

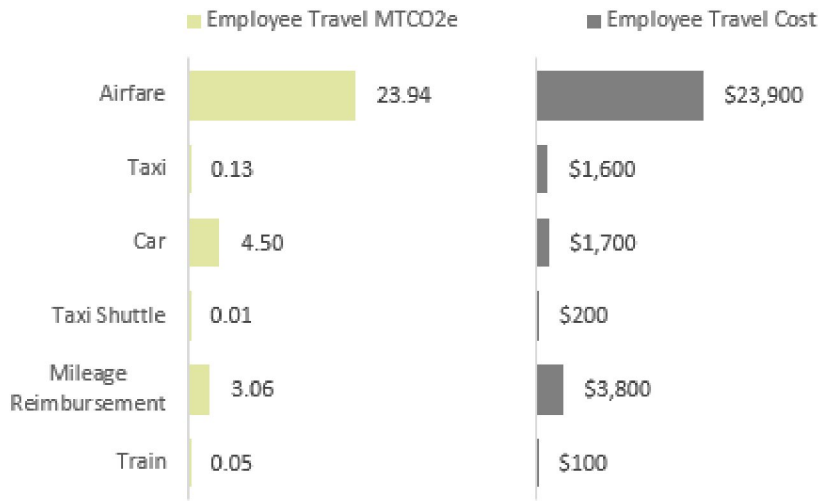
Figure 19: 2015 Emissions from Auburn Employee Commuting by Mode



Business Travel

At 30 $mtCO_2e$ in 2015, business travel accounts for less than half of 1 percent of Auburn's overall inventory, but it does represent over $30,000 in expenses to the City. Figure 20 shows the emissions and cost by mode of business travel.

Figure 20: Miles, Emissions, and Cost for 2015 Employee Business Travel



Waste

Emissions from solid waste produced by the City of Auburn contributed 640 $mtCO_2e$ to Auburn's emissions in 2015, or 8% of the municipal inventory, as shown in Figure 21. For a more thorough discussion of emissions from waste, see

	2008 CO_2e Emitted	2015 CO_2e Emitted	% Change
Residential	**157,400**	**143,700**	
Electricity	107,300	102,000	-5%
Natural Gas	50,100	41,700	-17%
Commercial	**177,800**	**163,200**	
Electricity	131,100	127,800	-3%
Natural Gas	46,700	35,400	-24%
Industrial	**150,900**	**154,600**	
Electricity	104,300	109,400	5%
Natural Gas	46,600	45,200	-3%
Transportation	**356,200**	**229,900**	
Diesel	57,600	15,700	-73%
Gasoline	298,500	213,800	-28%
CNG or Ethanol	NC	300	NA
Waste	**1,100**	**13,600**	
Total Emissions	**843,400**	**705,000**	**-16%**

Solid Waste Discussion on page 36. Regardless of the methodology used to calculate emissions from waste, several metrics can help track progress in waste reduction.

As part of its solid waste contact, the City receives free solid waste pick-up at all City buildings. At the time of the 2008 inventory, solid waste tonnages generated by municipal operations at City buildings were not tracked through invoices, and thus the City estimated the solid waste tonnages based on the size of containers and the frequency of collection. In the 2015 inventory, the waste hauler provided the City with collection reports for tonnages collected at each City facility.

Based on the estimates of solid waste tonnages, the City of Auburn achieved a 12% recycling rate in the year 2015 for municipal waste generation. Figure 22 shows the emissions from solid waste in addition to the recovery rate of recycling and organics by building or activity.

Figure 21: Portion of 2015 Municipal Emissions from Solid Waste

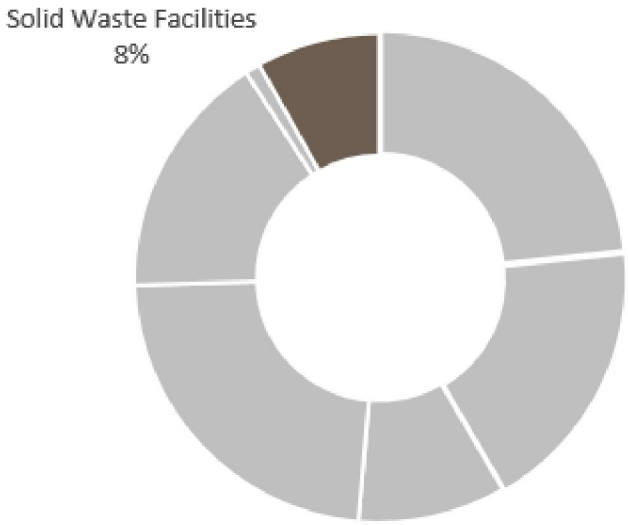
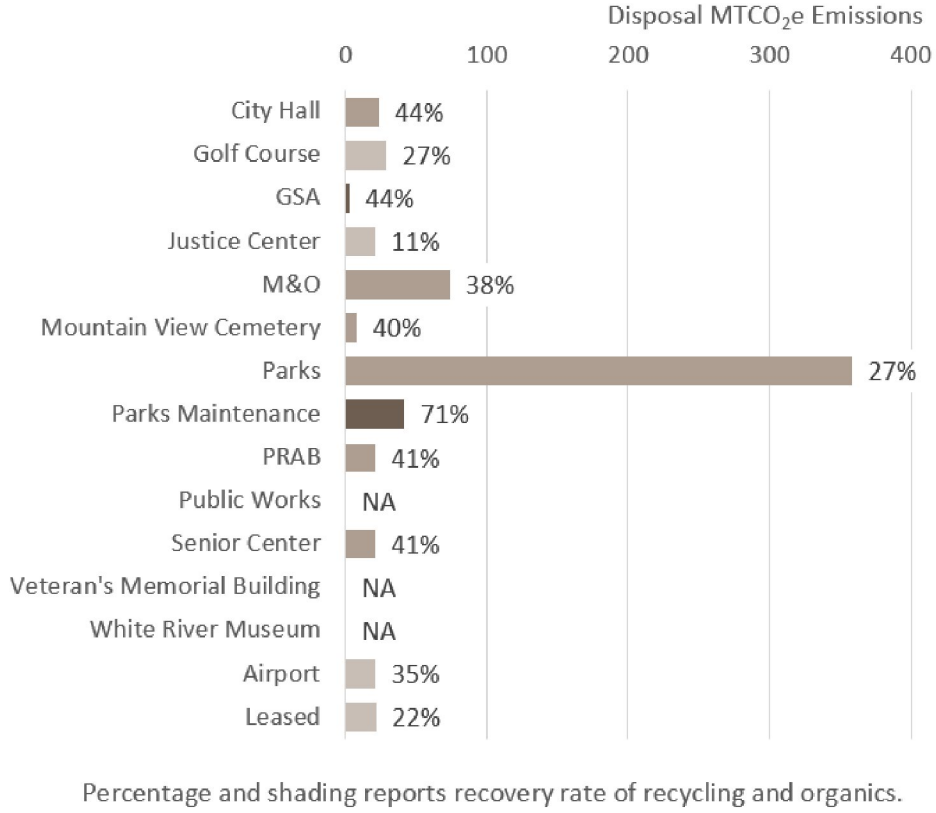


Figure 22: 2015 Emissions from Solid Waste and Recovery Rates by Building/Activity ($mtCO_2e$)

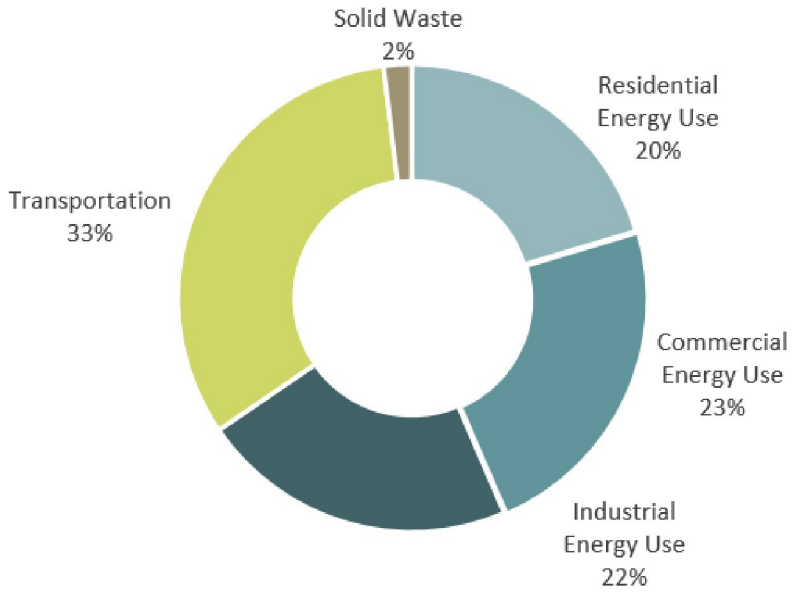


COMMUNITY INVENTORY

Auburn's community inventory is a measure of the greenhouse gas emissions resulting from activities within the city limits. The inventory was compiled for 2015.

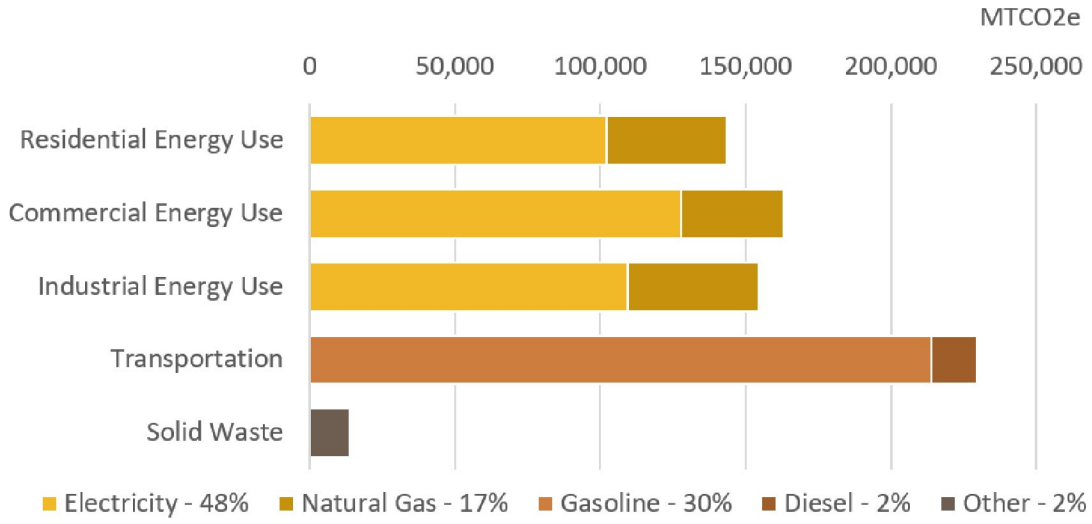
In 2015, the Auburn community generated approximately 700,000 metric tons of carbon dioxide equivalents ($mtCO_2e$). Figure 23 and Figure 24 show the breakdown of community emissions by sector and source.[16] As in the municipal inventory, *sectors* are industry or activity types such as transportation, industrial energy use, or waste. Emissions *sources* are energy types such as electricity, natural gas, diesel, and gasoline.

Figure 23: 2015 Community Inventory by Emissions Sector ($mtCO_2e$)



[16] Although emissions tonnages are presented in tables and graphs as exact figures, all reported emissions in this report are estimates.

Figure 24: 2015 Community Inventory by Emissions Sector and Source ($mtCO_2e$)



Transportation accounts for approximately 230,000 $mtCO_2e$, or 33% of the Auburn's community emissions for 2015. This figure is lower than similar estimations of transportation's impact in other regional and statewide inventories. In 2013, the State of Washington found that transportation made up 43% of emissions statewide.[17] Commercial energy use was the second largest sector contributing to community emissions, accounting for approximately 163,000 $mtCO_2e$, or 23% of total community emissions. Electricity and gasoline were the two largest emissions sources in 2015, accounting for 48% and 30% of the inventory, respectively.

In the base year 2008, the Auburn community generated 843,000 $mtCO_2e$. Figure 25 and Figure 26 show the breakdown of 2008 community emissions by source and sector.

[17] "Report to the Legislature on Washington Greenhouse Gas Emissions Inventory: 2010-2013," State of Washington Department of Ecology, October 2016. Available online at https://fortress.wa.gov/ecy/publications/documents/1602025.pdf. Accessed April 2017.

Figure 25: 2008 Community Inventory by Emissions Sector ($mtCO_2e$)

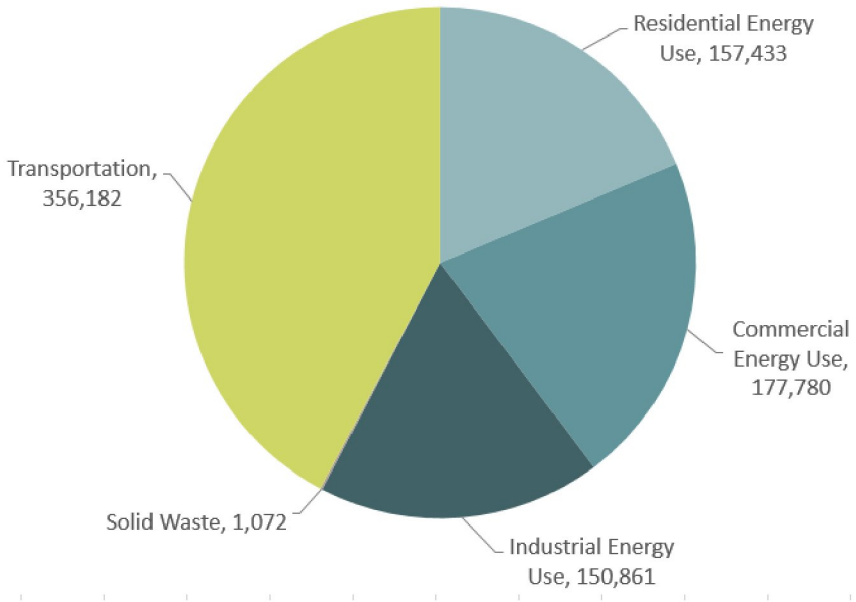
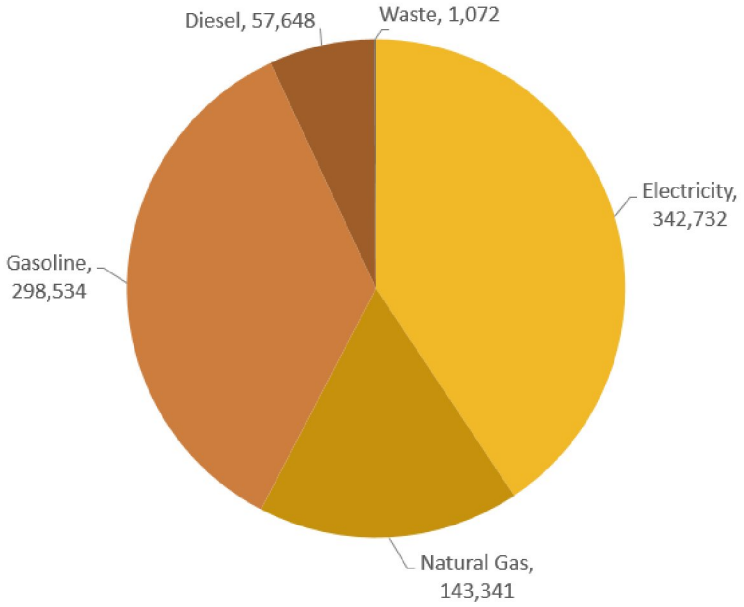


Figure 26: 2008 Community Inventory by Emissions Source ($mtCO_2e$)



In 2008, transportation emissions accounted for approximately 356,000 $mtCO_2e$, or 42%, of the city's community emissions for 2008. Commercial energy use was the second largest sector contributor to community emissions, accounting for approximately 178,000 $mtCO_2e$, or 21% of total community emissions. Electricity was the single largest emissions source in 2008. Electricity emissions accounted for 41% of the community inventory, or 343,000 $mtCO_2e$. Gasoline was the

second largest source of emissions, accounting for 35% of the community inventory by source. Solid waste accounted for less than 1% of emissions in 2008, and 2% of 2015 community emissions.

Emissions from all sectors, except for industrial electricity and waste, decreased from 2008 to 2015. Table 6 provides a comparison between 2008 and 2015 community emissions by source and sector.

Table 6: Comparison between 2008 and 2015 Community Emissions by Sector and Source

	2008 CO_2e Emitted	2015 CO_2e Emitted	% Change
Residential	**157,400**	**143,700**	
Electricity	107,300	102,000	-5%
Natural Gas	50,100	41,700	-17%
Commercial	**177,800**	**163,200**	
Electricity	131,100	127,800	-3%
Natural Gas	46,700	35,400	-24%
Industrial	**150,900**	**154,600**	
Electricity	104,300	109,400	5%
Natural Gas	46,600	45,200	-3%
Transportation	**356,200**	**229,900**	
Diesel	57,600	15,700	-73%
Gasoline	298,500	213,800	-28%
CNG or Ethanol	NC	300	NA
Waste	**1,100**	**13,600**	
Total Emissions	**843,400**	**705,000**	**-16%**

Solid Waste Discussion

The solid waste section of the ClearPath tool has several inputs. First, a user specifies the total waste production in tons. In this inventory, the community of Auburn generated roughly 44,000 tons of municipal solid waste during 2015. Second, the user specifies whether the receiving landfill has methane collection. Auburn's municipal solid waste is sent to the King County's Cedar Hills Landfill, a managed landfill that has methane collection. In fact, King County reports that Cedar Hills attains a 90% methane capture rate.[18] Then, the user specifies the waste composition mix by percentage of the following: Mixed MSW, Newspaper, Office Paper, Corrugated Cardboard, Magazines/Third Class Mail, Food Scraps, Glass, Leaves, Branches and Dimensional Lumber. Data for the three included waste characterizations included came from the following sources:

- Public Administration Disposal: 2014 CalRecycle Generator Study results for Public Administration.

[18] Personal Communication Mizanur Rahman, Ph.D., MBA, P.Eng., Engineer III and Project Manager, Engineering Services Section, Solid Waste Division, King County Dept. of Natural Resources & Parks. August 04 2009.

- King County Residential Disposal: 2015 King County Waste Characterization and Customer Survey Report.
- King County Non-Residential Disposal: 2015 King County Waste Characterization and Customer Survey Report.

A USEPA report from 2009, the most recent year available, notes that material production and waste management are responsible for 42% of U.S. emissions.[19] Emissions from waste do not account for any upstream processing or embodied emissions of products or for the energy used for waste collection or processing. The emissions shown in this inventory are only from decomposition of waste in a landfill. A more thorough review of the emissions associated with materials consumed in the City of Auburn was beyond the scope of this inventory.

Discussion of Community Inventory

Auburn's community inventory shows that, like Washington State as a whole, transportation emissions are the largest contributor to community emissions. Although transportation emissions actually decreased between 2008 and 2015, transportation emissions account for over 30% of the overall footprint of the community for both inventory years. The largest emissions source for the 2015 inventory was electricity.

Key metrics, developed for the baseline 2008 inventory, allow the City to track progress in reducing emissions and draw comparisons across years. Table 7 provides key metrics for Auburn's overall community emissions in relevant categories for 2008 and 2015. Emissions per capita decreased by 27% from 2008 to 2015, despite a 22% increase in population during this period. This trend is partly attributable to efficiencies achieved through improved technology, which may have been motivated by regulatory changes to support resource efficiencies in the transportation, industrial, commercial, and residential sectors.

[19] "Opportunities to Reduce Greenhouse Gas Emissions through Materials and Land Management Practices," U.S. Environmental Protection Agency Office of Solid Waste and Emergency Response, September 2009. Available online at https://www.epa.gov/sites/production/files/documents/ghg-land-materials-management.pdf. Accessed April 2017.

Table 7: Key Metrics for 2008 and 2015 Community Inventories

Sector	2008 Emissions $mtCO_2e$	2015 Emissions $mtCO_2e$	% Change
Residential emissions per household	5.22	4.96	-5%
Residential emissions per capita	2.33	1.87	-20%
Commercial and Industrial emission per employee	14.66	9.26	-37%
Transportation emissions per capita	5.67	2.98	-47%
Waste emissions per capita	0.02	0.18	786%
Overall Community emissions per capita	**12.5**	**9.15**	**-27%**

In addition to key metrics, viewing Auburn's community emissions in relation to county, state, and federal emissions may provide context. Table 8 shows annual emissions estimates for the world, the United States, Washington State, King County, and the City of Auburn. Auburn makes up approximately 0.002% of global emissions, while accounting for 0.001% of the world population. More locally, Auburn is responsible for 1.3% of King County's emissions while comprising 3.6% of the population.

Table 8: Auburn Annual Community Emissions in Context[20]

Locations	$mtCO_2e$	% World GHG Emissions	Population	% World Population
World	36,000,000,000	100.0%	7,400,000,000	100.0%
United States	6,600,000,000	18.3%	320,000,000	4.4%
Washington State	94,000,000	0.26%	7,300,000	0.10%
King County	55,000,000	0.15%	2,114,000	0.03%
City of Auburn	700,000	0.002%	77,000	0.001%

[20] Adapted from *King County 2007 Climate Action Plan*, p. 52. Updated King County data available online at http://www.kingcounty.gov/services/environment/data-and-trends/indicators-and-performance/kingstat/2015/indicators/climate-change/ghg-emissions.aspx. Accessed July 2017. Additional data from The World Bank, http://geo.worldbank.org/, and U.S. Census Bureau, Population Division, https://www.census.gov/programs-surveys/popest.html. These estimates are provided to give a sense of the City of Auburn's place in a larger global greenhouse gas context and does not represent a precise comparison of all emissions.

Community Emissions Forecast

According to the Puget Sound Regional Council (PSRC), Auburn is one of the ten fastest growing cities in the Puget Sound region, and the only city other than Seattle that experienced real population growth between 2010 and 2015, as opposed to growth due to annexation.[21] To determine how emissions levels for the community are likely to change, Cascadia calculated an emissions forecast for the years 2020, 2025, and 2030 based on data from the baseline year (2008) and 2015. Emissions forecasts are calculated by scaling baseline emissions (calculated in the inventory) to approximate the rate of growth of key indicators including population, economic growth, and energy demand. To provide a long-range forecast of emissions, Cascadia staff reviewed available data sources and identified 2030 as the longest-term goal with reliable forecasts for population, economic growth, and energy demand. 2020 and 2025 were chosen as interim years to provide a view of shorter-term emissions changes.

Based on population forecast data from PSRC and energy information from the U.S. Department of Energy's Energy Information Administration, initial forecasts show that community emissions are projected to increase 1% above 2015 levels by 2020, but decrease 5% by 2025 and 7% by 2030, in the absence of new efforts to reduce emissions.[22] The initial increase is likely to be driven by slightly increasing loads for commercial energy users. Figure 27 shows the change in each sector from 2008 and 2015 levels to 2020, 2025, and 2030 projections. The projected trend

---

[21] *Puget Sound Trends,* Puget Sound Regional Council. Released November 2015. Available online at https://www.psrc.org/sites/default/files/trend-d3.pdf. Accessed April 2017.

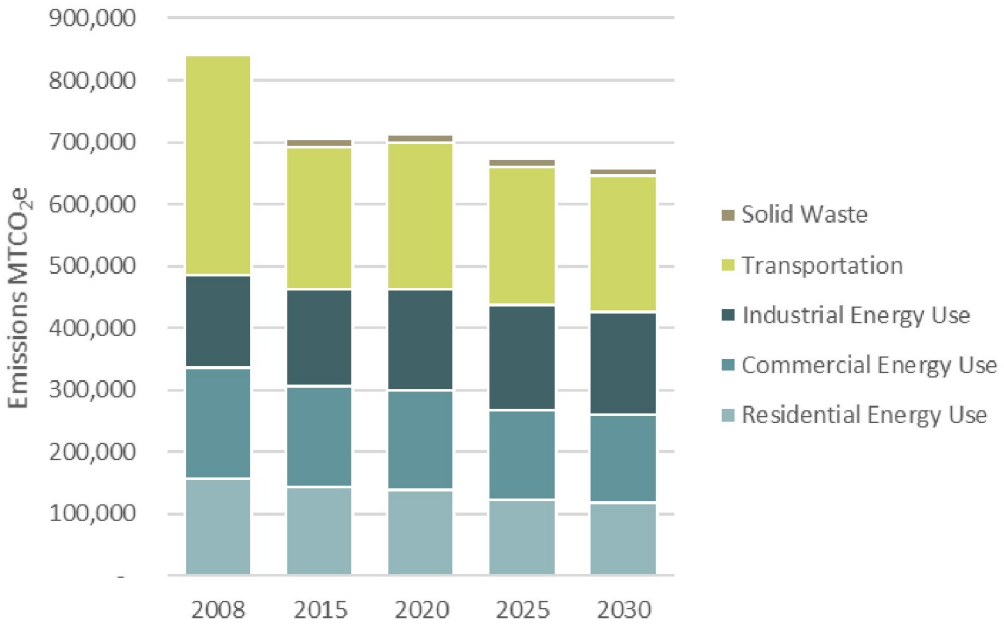
[22] Population data from: *2006 Sub-County (Small Area) Forecasts of Population and Employment, Central Puget Sound Region,* Puget Sound Regional Council. Released October 26, 2006. Available online at http://www.psrc.org/data/forecasts/index.htm. Accessed September 2009.

Energy data from: *Annual Energy Outlook 2017, Table 18 Energy-Related Carbon Dioxide Emissions by Sector and Source, Supplemental Tables to the Annual Energy Outlook 2017,* Energy Information Administration. Released October 2016. Available online at https://www.eia.gov/outlooks/aeo/tables_ref.php. Accessed September 2017.

Population data from PSRC's Puget Sound Trends (https://www.psrc.org/sites/default/files/trend-population-201707.pdf) indicates Auburn is one of the fastest growing cities in the Puget Sound area, which suggests that using the average Pacific Region values from the EIA would not be suitable for Auburn. Instead, the commercial, industrial, and transportation factors from the EIA data were calibrated relative to the residential factor, which was then set as the population increase factor to calculate the other three sectors.

is partly attributable to expected efficiencies driven by federal regulations as well as state and local standards that may be adopted.

Figure 27: Community Emissions Forecast for 2020, 2025, and 2030 (in $mtCO_2e$)



Discussion of Auburn's Inventory and Forecast

Cascadia used the inventory and forecast findings to identify possible emissions reduction opportunities in the context of population growth as well as anticipated political and economic conditions, which may help inform the City's climate adaptation and action planning process that is currently underway.

MUNICIPAL INVENTORY

Emissions from building energy consumption (including leased buildings), travel in the City's vehicle fleet, and energy used by street lights and traffic signals account for over 4,000 $mtCO_2e$ or approximately 52% of emissions from municipal operations. Therefore, aggressive energy-saving measures in these areas – such as building system optimization, energy efficiency retrofits, fuel-efficiency requirements, and vehicle maintenance best practices – may dramatically reduce emissions. Furthermore, the City has direct control over these emissions sources and can readily implement energy-saving measures. While the municipal inventory is likely to increase in the absence of new efforts to reduce emissions, population growth is unlikely to affect overall municipal emissions at the same rate as community emissions.

As the City takes action to reduce emissions, it is also worth noting that initiatives that reduce energy consumption generally will reduce costs as well. Although many efforts may require upfront investment, they will also help the City cut total operating costs over time.

COMMUNITY INVENTORY AND FORECAST

The single largest source of emissions in the community of Auburn is transportation, but building energy use from residential, commercial, and industrial sources combined represent roughly 65% of the community inventory. Although the City can encourage Auburn residents and businesses to reduce vehicle miles and reduce energy consumption, the City does not have direct control over most of the emissions in the community inventory. Initiatives to encourage energy conservation include educational campaigns regarding utility partnerships and energy efficiency rebates, or city code amendments to support energy efficiency in new and existing buildings. Outreach campaigns to reduce commute trip emissions, bike lane improvements and expansions, additional park-and-ride spaces, and improved access to public transportation are examples of ways to help reduce vehicle miles traveled. These activities are important to supporting emission reductions, but may take longer to generate observable changes.

Furthermore, due in part to Washington State's efforts to reduce emissions statewide through the Growth Management Act, the City of Auburn will likely take on significant population growth over the coming decades. This population growth within the City of Auburn helps the state to meet its own emissions reduction goals through increased urban density and reduced land sprawl, but may mean that even if Auburn significantly reduces emissions reductions per person, its overall (or absolute) emissions may continue to grow. This situation does not mean that the City cannot take important action to reduce emissions from community sources, but it may suggest that an absolute emissions reduction goal will be difficult to reach.

Appendix A: Detailed Data Sources

Municipal Inventory Data Sources	
Organization/ Department	**Data Supplied**
City of Auburn Cemetery	Cemetery vehicle fleet
City of Auburn Finance	Finance Department Liaison, requested data from PSE
City of Auburn Finance	Relevant PSE account numbers for Auburn facilities, cost information on PSE electric and natural gas accounts, list of business travel invoices used to pull records, fuel data
City of Auburn Engineering	Public Works greenhouse gas inventory liaison
City of Auburn Engineering	Electricity use for street and traffic lights
City of Auburn Golf Course	Golf course fleet data
City of Auburn Human Resources	Square footage, addresses of non-parks City facilities, PSE data release forms for renters living in COA properties, occupancy data
City of Auburn Maintenance & Operations	Auburn fleet data, fuel usage, refrigerants, pump station list
City of Auburn Maintenance & Operations	Auburn fleet data
City of Auburn Parks	Parks Facilities energy use, Parks Department travel
City of Auburn Parks	Parks Department liaison
City of Auburn Police	Police Department liaison, Police Department travel
City of Auburn Legal	Legal Department liaison, Legal Department travel
City of Auburn Finance Department	Solid waste data estimates (based on container size and frequency of pick-up)
City of Auburn White River Valley Museum	White River Valley Museum electricity and natural gas account numbers, cost information and data release
Puget Sound Energy	Electricity and natural gas consumption

Community Inventory Data Sources	
Organization/ Department	**Data Supplied**
Puget Sound Regional Council (PSRC)	Average Weekday VMT in City of Auburn boundaries
City of Auburn Public Works	City of Auburn Traffic Counts
Puget Sound Energy	Community Electricity and Natural Gas Consumption
City of Auburn Finance Department	Data from Waste Management, Allied Waste Services, and Murrey's Disposal on community waste generation
City of Auburn Human Resources Department	CTR report (2014)

Other Data Sources	
Organization/Department	**Data Supplied**
City of Auburn Engineering Department	City transportation projects that may reduce greenhouse gases
City of Auburn Finance Department	Full time Employee counts for City of Auburn – used for metrics
City of Auburn Human Resources Department	City Facilities projects that may reduce greenhouse gases
City of Auburn Maintenance and Operations Department	Total gallons pumped by water pump stations – used for metrics
City of Auburn Mayor's Office	Demographic data, City economic development efforts
City of Auburn Planning & Development Department	City planning projects and city code changes that may reduce greenhouse gases
Washington Office of Financial Management	Information on Auburn population – used for metrics and forecasting
Puget Sound Regional Council	Information on expected population growth in region – used for forecasting
The Department of Energy, Energy Information Administration	Information on expected growth in energy demand by region and sector – used for forecasting

Climate Action Plan of the City of Auburn

March 2018 – DRAFT

Acknowledgments

Auburn Mayor and City Council

Nancy Backus	Mayor
Largo Wales	Deputy Mayor
Bob Baggett	Councilmember
Claude DaCorsi	Councilmember
John Holman	Councilmember
Bill Peloza	Councilmember
Yolanda Trout-Manuel	Councilmember
Larry Brown	Councilmember

Auburn Climate Action Plan Team

Maggie Gipson and Jenna Leonard, *leads*

Randy Bailey	Ashley Riggs
Ingrid Gaub	Jacob Sweeting
Jamie Kelly	Jeff Tate
Lisa Moore	Tyler Thompson
Joan Nelson	Lisa Tobin
Scott Nutter	James Webb

Prepared for the City of Auburn by

CASCADIA CONSULTING GROUP

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Executive Summary

In 2007 the City of Auburn joined the U.S. Mayors' Climate Protection Agreement, committing to reducing its greenhouse gas emissions, and in 2009 published its first greenhouse gas inventory. Since that time, the City has worked to enhance its environmental and economic performance through energy and resource efficiency upgrades in its facilities, improved recycling practices, sustainable design of capital projects, and policies and programs that support emissions reductions.

In 2017–2018, the City updated its greenhouse gas inventory and prepared this Climate Action Plan. The Plan is intended to provide a roadmap for an efficient path forward for the City to reduce its environmental impacts while strengthening its local economy and increasing community resilience. As the City begins implementing actions and new information becomes available, the Plan can serve as a platform for an ongoing conversation around emissions reductions, climate action, and the goals and aspirations Auburn has for its future.

By taking action to mitigate the worst impacts of climate change, Auburn is living out its commitment to its core community values of environmental stewardship, economic vibrancy, and sustainability (see value statements to right).[1] Steps to use less energy through more efficient technology and behavior, and using fewer resources by recycling and reuse can reduce emissions, conserve resources, and save money. Making it easier to use public transit, carpool, and bike or walk to get around leads to fewer emissions, less pollution, better air quality, and improved fitness and wellbeing. In other words, the actions outlined in the Plan are likely to generate multiple benefits for Auburn's community while also improving conditions for the global community.

AUBURN COMMUNITY VALUES

We will protect the natural environment, preserve open space, and create appropriate access.

We will provide a diverse and vibrant local economy with employment, retail, and entertainment opportunities for citizens and a growing marketplace for homegrown and regional-scale businesses.

We will balance natural resource protection, economic prosperity, and cultural vibrancy in order to build a thriving and long-lasting community.

The Plan is organized into three focus areas: Energy, Transportation, and Materials and Waste. Within these areas, the City has adopted 20 strategies and actions to improve municipal

[1] City of Auburn, "Comprehensive Plan," 2015.

operations as well as to advance the City's role in fostering community-based action on climate change, sustainability, and efficiency. In each focus area, the Plan summarizes what the City has already done to reduce emissions, presents further actions the City can take, and highlights actions that Auburn residents and businesses can take to reduce their own carbon footprint and increase efficiency. The following sections provide a brief summary of how the Plan addresses each of these.

What Auburn is Doing

In addition to the Climate Action Plan, the City of Auburn has several plans, policies, and programs that support the goals and objectives outlined in the Plan. In its municipal operations, the City has implemented water conservation efforts, waste audits and recycling and composting practices, incentives to encourage more efficient employee commuting, and energy audits and efficiency projects in City facilities. The City is also considering climate change as it plans and undertakes large capital projects, such as the new Community and Events Center that achieved LEED Silver Certification. In addition, Auburn has taken steps to align many of its policies and plans with its commitment to GHG emissions reductions, including its codes to require the use of Low Impact Development for stormwater management. The Climate Action Plan builds on this foundation by identifying opportunities to further move the needle in some of these areas that have shown initial success as well as initiate action in areas where there is room for improvement.

Greenhouse Gas Emissions Reductions

Figure 1. Municipal Inventory 2008 and 2015

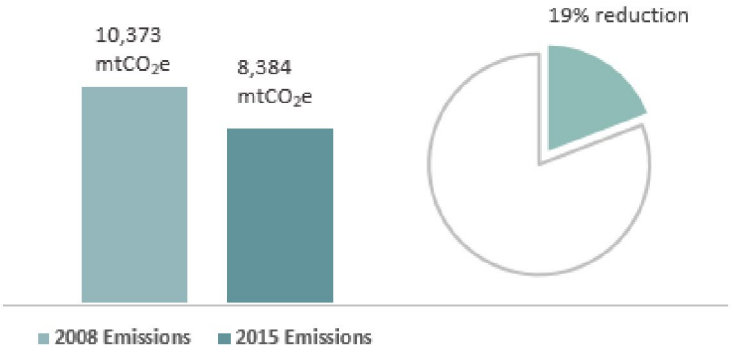


Figure 2 compares the municipal and community inventories in 2008 and 2015. Between 2008 and 2015, the City achieved a 19 percent reduction in municipal emissions, representing a reduction of 34 percent per capita. During this same period, emissions from the Auburn community declined by 16 percent, achieving a per capita reduction of 27 percent. While it is

noteworthy that Auburn achieved these reductions despite a 22 percent growth in its population, there is still more work that will be needed to further reduce emissions as the city is expected to continue growing in the future.

Figure 1. Municipal Inventory 2008 and 2015

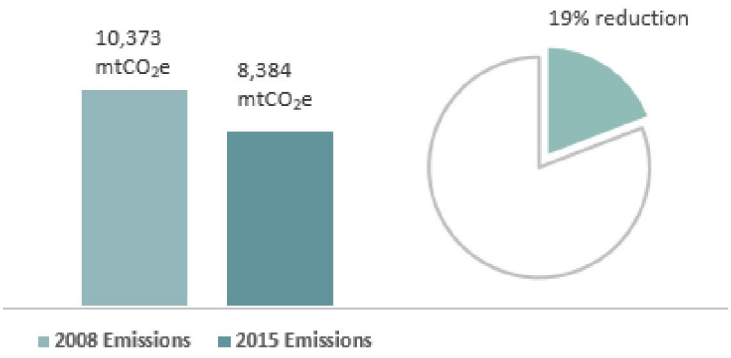
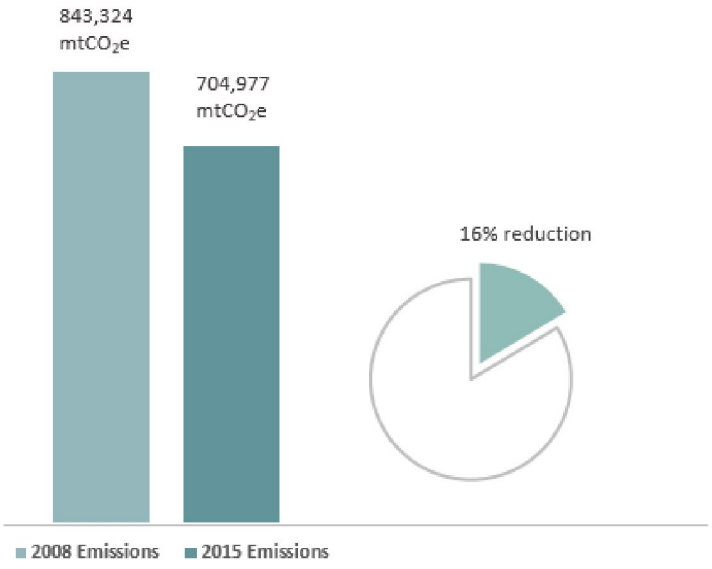


Figure 2. Community Inventory 2008 and 2015



As a signatory to the U.S. Mayors' Climate Protection Agreement, the City of Auburn is committed to meeting the GHG emissions reduction targets developed in the Kyoto Protocol. The agreement suggested a 7 percent reduction from 1990 levels by 2012, but the intention of target-setting is to take action rather than achieve a specific numerical goal. While the City has not yet adopted its own emissions reduction targets, it is advancing the conversation around targets with the publication of the Climate Action Plan and is considering the goals of neighboring communities to contribute to regional progress on emissions reduction.

Recommendations for City Operations

The Plan includes 10 recommendations for actions the City can take to reduce emissions generated in its municipal operations. Recommendations are designed to align with existing guiding policy documents as well as upcoming opportunities to integrate potential climate impacts with other City priorities. The top ten strategies the City can take to improve municipal operations are as follows.

Focus Area Key

- Energy
- Transportation
- Materials and Waste

1. **Update and retrofit traffic and street lights** to increase energy efficiency (E-1).
2. **Optimize heating, ventilation, and air-conditioning (HVAC) systems** at City facilities by installing more efficient equipment and technology and implementing operational changes to increase energy efficiency (E-2).
3. **Adopt performance standards** for all City buildings, including renovations on existing buildings and design of new buildings, and establish a tracking system that makes the benchmarking scores of City buildings publicly available (E-3).
4. **Optimize building envelope energy efficiency** at City facilities by installing more efficient materials and technology (E-4).
5. **Develop a policy to include consideration of greenhouse gas emissions impacts** and opportunities to reduce them when updating and implementing transportation and land use plans, codes, and zoning, as well as identifying and carrying out relevant projects (T-1).
6. **Adopt increasing fuel-efficiency standards** for the City's fleet vehicles (T-2).
7. **Provide incentives and adequate facilities to encourage sustainable employee commuting** (T-3).
8. **Enhance flex-time policy and support telecommuting** to reduce emissions related to employee commuting and support employee satisfaction, while meeting customer service needs (T-4).
9. **Adopt standards for City buildings to use best practices** for recycling, composting, reuse, and waste reduction (M-1).
10. **Adopt a citywide purchasing policy** that includes environmental impacts (M-2).

Community Actions

The City of Auburn also seeks to improve energy efficiency and reduce environmental impacts by fostering community actions that advance these goals. The top ten strategies are listed below.

Focus Area Key

- Energy
- Transportation
- Materials and Waste

1. **Implement audits and technical assistance to increase building energy efficiency** (E-5).
2. **Adopt performance standards for residential and commercial building codes** to increase building energy efficiency (E-6).
3. **Support cleaner energy sources** (E-7).
4. **Promote water efficiency and conserve community water resources** (E-8).
5. **Support the transition to plug-in hybrids and electric vehicles** within the community by facilitating the installation of EV-charging stations and requiring installation of charging stations in new multifamily housing developments (T-5).
6. **Create a pedestrian and bicycle master plan** to address mobility gaps, improve safety, and increase convenience by improving infrastructure, services, and community development for people walking and biking (T-6).
7. **Support more climate-friendly development and land use**, including improvements to street infrastructure to reduce fuel use, congestion, and idling (T-7).
8. **Increase ride-sharing and reduce driving alone** through incentives and changes to transportation infrastructure (T-8).
9. **Identify gaps in recycling and composting programs and take steps to expand service** (M-3).
10. **Support "collaborative consumption" community projects** that encourage shared use and exchanges (M-4).

Introduction

Auburn and Climate Change

Nestled in the heart of the Green River Valley with Mt. Rainer as a backdrop, Auburn is a historic and welcoming community with an innovative industrial-based economy and a wealth of outdoor and cultural activities at its doorstep. Yet the vitality, livelihoods, and surrounding environment that makeup the fabric of Auburn's community is threatened by human-driven climate change as concentrations of carbon dioxide (CO_2) and other greenhouse gases in the atmosphere continue rising to levels not measured for millions of years.

The following regional climate change impacts have already been observed, introducing disturbance and instability to the ecosystems and the natural resources on which the Auburn community and the entire Puget Sound region depend.

Rising temperatures. In the Pacific Northwest, average annual temperatures rose 1.5°F over the last century.[2] In 2015, the state of Washington experienced the warmest year on record, resulting in record low snowpack across the Cascade Mountains.[3] Temperatures in over 80 percent of surveyed streams and rivers in King County exceeded state standards for salmon habitat protection in 2012.[4]

More extreme droughts, floods and storms. Between the 1950s and 2000s, snowpack in the Cascade Mountains decreased by 25 percent, reaching a record low in 2015 that led to statewide drought.[5] This change has lowered summer flows in major King County rivers over the past 40 years, while more severe storms in fall and winter have caused higher flows.[6]

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[2] A. K. Snover, G. S. Mauger and L. C. Whitely Binder, "Climate Change Impacts and Adaptation in Washington State: Technical Summaries for Decision-Makers," Seattle: Climate Impacts Group, University of Washington, 2013.
[3] King County, "2015 Environmental impacts of climate change," http://www.kingcounty.gov/services/environment/data-and-trends/indicators-and-performance/kingstat/2015/indicators/climate-change/environmental-impacts.aspx. Accessed November 2017.
[4] King County, "Strategic Climate Action Plan," 2015. Available at: http://your.kingcounty.gov/dnrp/climate/documents/2015_king_county_scap-full_plan.pdf
[5] King County, "Strategic Climate Action Plan," 2015.
[6] King County, "Strategic Climate Action Plan," 2015.

Increasing sea level and acidifying oceans. Sea levels in the Puget Sound have risen more than 8 inches over the past century, and in recent years the rate of rise has increased.[7] Meanwhile, early in 2012, Washington State classified the entire Puget Sound as "waters of concern" due to the threat that ocean acidification presents to local shellfish and fish resources.[8] For example, ocean acidification contributed to a 60 to 80 percent drop in production at a Puget Sound shellfish hatchery.[9]

The impacts of climate change will have tangible effects on public health and quality of life for Auburn's residents and visitors.

- Warmer temperatures and extreme heat can increase **heat stress** and worsen **air quality** that could heighten allergy symptoms and exacerbate respiratory illnesses.
- More heavy rain events and higher winter streamflow could **increase flooding risk** by compromising stormwater drainage infrastructure designed for lighter rainfall events.
- Less precipitation during the summer could **reduce electricity production** at hydropower facilities.
- Rising seas could **overrun low-lying railways, highways**, and other transportation networks, and **increase erosion** of unstable shorelines.
- As lower summertime flows and warmer water in rivers **reduce salmon habitat**, commercial and recreational fisheries could face declines in catch.

Unfortunately, many of these climate risks will disproportionately affect certain groups. In the United States, communities of color, non-English speaking households, and low-income populations have historically been underserved by public programs and investments, resulting in limitations such as fewer transportation options, less resilient housing, and less reliable healthcare options. These inequities may limit the ability of these populations to respond to the impacts of climate change or benefit from new investments and actions taken to address climate pollution.

Roles and Responsibilities for Climate Action

There is global consensus among climate scientists that without action to curb the growth of greenhouse gas emissions, climate change will continue at an accelerating pace. The Intergovernmental Panel on Climate Change (IPCC) estimates that, in the absence of sharp emissions reductions, the resilience of many ecosystems is likely to be exceeded by the end of this century, threatening the existence of many animal species, and jeopardizing the health and

[7] King County, "Strategic Climate Action Plan," 2015.
[8] Berwyn, B. "Research suggests climate change impacts to Puget Sound." Summit Voice, September 9, 2012.
[9] Dolan, M. "Are Oysters Doomed?" Slate.com, February 18, 2013.

well-being of human societies.[10] Even with aggressive action to reduce GHG emissions, scientists say some impacts are already "locked in," leading to unavoidable changes in the local environment, such as sea level rise and continued decline in spring snowpack.

According to the best available science as outlined by the IPCC, and committed to by over 140 signatory parties to the Paris Agreement, global temperature rise in this century should not exceed 2 degrees Celsius (3.6 degrees Fahrenheit) above pre-industrial levels, and additional efforts should be taken to limit the increase even further to 1.5 degrees Celsius (2.7 degrees Fahrenheit), to avoid the most devastating impacts of climate change.[11]

Climate change is a global challenge, requiring global action. Governments at all levels, from all regions of the world, play an important part in developing and implementing solutions. With over 54 percent of the global population living in urban areas and as hubs of industry and infrastructure in 2016, cities play a significant role in both contributing to greenhouse gas emissions as well as generating innovative solutions and taking action to address climate change.[12]

If cities are to be successful in their efforts to reduce emissions, actions by individuals are critical. Reducing GHG emissions by taking public transit, installing water-efficient fixtures in their homes, and recycling and reusing products before purchasing new ones are just a few of the steps residents can take that will contribute to cities' progress toward emission reduction goals. Corporations and businesses also have a leading role to play, from developing innovative technologies and sustainable supply chains to reducing their own resource consumption and climate impacts.

Policies, actions, and innovative solutions embraced by cities like Auburn, their residents, and businesses are critical to meet the challenge of climate change. Steps taken today to save energy, reduce waste, and conserve natural resources will pay significant dividends for future generations in Auburn, the Puget Sound region, and around the world.

Building on a Foundation in Auburn

In 2007, former City of Auburn Mayor Peter Lewis signed the U.S. Mayors' Climate Protection Agreement, formalizing Auburn's commitment to reduce greenhouse gas emissions according

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[10] International Panel on Climate Change. "Climate Change 2014: Synthesis Report." Contribution of Working Groups I, II and III to the Fifth Assessment Report of the IPCC. Geneva, Switzerland, 151 pp. 2014.
[11] United Nations Framework Convention on Climate Change, "Summary of the Paris Agreement," http://bigpicture.unfccc.int/#content-the-paris-agreemen. Accessed November 2017.
[12] The World Bank, "World Urbanization Prospects," United Nations Population Division https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?end=2016&start=1960&view=chart. Accessed February 2018.

to the Kyoto Protocol, which stipulated a 7 percent reduction of emissions below 1990 levels by 2012. In 2009, the City conducted its first greenhouse gas inventory to understand its municipal and community carbon footprint, set reduction targets, and establish a baseline year of 2008 for measuring progress. The City conducted a subsequent inventory for the year 2015 to identify changes in its impact, monitor progress toward its targets, and inform strategic actions detailed in the Climate Action Plan. By conducting periodic GHG emissions inventories, the City has established a critical foundation for taking informed, strategic next steps toward climate action.

In addition to the Climate Action Plan, the City of Auburn has several plans, policies, and programs that support the goals and objectives outlined in the Plan. In its own **operations**, the City has already implemented many noteworthy projects and practices that reduce GHG emissions and put the City on track to further reduce its climate impact. Examples include:

- **Water conservation** efforts through rate structures, automated metering, infrastructure monitoring and improvements, and efficient fixtures giveaways.
- **Waste audits and robust recycling and composting** in City operations with new signage at facilities.
- **Incentives to reduce emissions from employee commuting** by offering monthly subsidies, reflective of fare increases, for taking public transit instead of driving and partnering with commuter transit services in King and Pierce Counties.
- **Energy audits** and a performance agreement with the energy utility to reduce energy consumption in facilities.

CELEBRATING SUCCESS

Efficient buildings for cost savings
In 2011, as part of the Resource Conservation Management program, the City entered into a performance agreement with Puget Sound Energy and MacDonald Miller for a HVAC controls integration project at the Justice Center. The goal of the project was to reduce energy consumption by $10,800 annually and last year the total savings were $19,872. Since the completion of this project the City has seen a savings of $81,025.

- **Conversion of street lights to LEDs** to use less energy and save in energy costs.

Auburn City Hall

Actions that promote emission reduction have also been included in several large **capital projects** undertaken by the City. Examples include Auburn's new Community and Event Center, completed in 2016, which achieved LEED Silver Certification, and recent efficiency upgrades to the City Hall building.

Auburn has also enacted **policies and plans** that help reduce GHG emissions, including the following examples:

- Downtown zoning that includes building **energy performance standards**.
- Codes requiring the use of **Low Impact Development** measures for stormwater management.
- **Comprehensive transportation plan** that includes a bike and pedestrian plan.
- **Anti-idle policy** to reduce emissions and pollution.
- **Flex-time policy** to reduce emissions from employee commuting as part of the Commute Trip Reduction Plan.
- Compliance with state code mandating **construction and demolition materials reuse** and recycling.
- Alignment with King County **recycling goals** (currently being updated).

CLIMATE ACTION PLAN GOALS

The Climate Action Plan builds on this foundation and commitment to sustainability. Through the 2017 Auburn Climate Action Plan, the City hopes to achieve the following three goals:

1. Communicate to the community what the City has already done and quantify the changes in emissions from municipal operations and the community.
2. Identify areas for improvement in GHG emissions reductions and make recommendations for additional City actions to make progress in those areas.
3. Inform the community about how residents and businesses can address climate change.

While there are many possible strategies to reduce emissions, the City chose to focus its effort and resources on high-priority actions based on the factors listed below. The Climate Action Plan presents those actions that scored highest across these categories.

- **Effectiveness:** degree of emissions reductions.

- **Feasibility:** ability of the City to implement the action given capacity and cost constraints.
- **Cost-effectiveness:** payoff time, return on investment, and cost-benefit analysis.
- **Co-benefits:** non-emissions outcomes like grant competitiveness, public health, equity, natural habitat and recreation, jobs and economic benefits, local litter/waste reduction.
- **Local benefit:** outcomes for the local community, economy, and environment.
- **Visibility:** degree of impact observable in the community.

Ultimately, the Auburn Climate Action Plan strives to provide the important steps that City officials and staff, as well as Auburn residents and businesses, can take to reduce GHG emissions and protect our abundant northwest environment, as part of the global effort to address climate change.

Auburn's Greenhouse Gas Emissions

How Is Auburn Doing?

The City of Auburn's first greenhouse gas emissions inventory for the City's municipal operations and—on a more limited basis—the Auburn community, established 2008 as a baseline year for setting targets and measuring progress. In 2015, the City conducted a second inventory to understand changes in Auburn's emissions, measure progress toward targets, and inform climate action strategies for achieving emission reduction goals.[13] The municipal and community inventories covered different *sectors*, listed to the right, and four emissions *sources*: electricity consumption, natural gas, gasoline, and diesel.

Municipal inventory sectors:

- Building energy use
- Fleet fuel consumption
- Electricity used by water and wastewater pump stations
- Solid waste
- Refrigerants
- Traffic and street lights
- Business travel
- Employee commuting

Community inventory sectors:

- Transportation
- Solid waste
- Residential, commercial, and industrial energy use

In 2015, the **City of Auburn's municipal operations** generated over 8,000 metric tons of carbon dioxide equivalents ($mtCO_2e$), equal to the emissions from 1,713 passenger vehicles on the road for one year.[14] Meanwhile the **Auburn community** generated just over 700,000 $mtCO_2e$, or 9.15 $mtCO_2e$ per person.[15] This is equivalent to one year of 149,893 passenger vehicles on the road.

Sources of Auburn's Emissions

In both Auburn's municipal operations and community at large, electricity consumption was the single largest source of emissions in 2015, accounting for 52 percent of total municipal emissions and 48 percent of community emissions. Figure 3 and Figure 4 show the breakdown of municipal and community emissions by sector.

[13] Comparison of the 2015 inventory results with the 2008 baseline inventory is imperfect due to methodological changes made to the greenhouse gas inventory tool (published by ICLEI). See the 2015 inventory report for more information.

[14] U.S. EPA, Greenhouse Gas Equivalencies Calculator, https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator.

[15] There are inherent methodological and data collection challenges to accounting for community emissions that result in a less precise figure than municipal emissions. However, the figures are based on real data and are considered the best available estimate of community emissions.

In municipal operations, the **water and wastewater** treatment sector generated the most emissions in 2015 (24 percent), followed by the City's **vehicle fleet** and **buildings and facilities** tied as the second most emitting sectors (21 percent). **Employee commuting and travel** was the fourth largest contributing sector.

In the community inventory, the **transportation** sector contributed the most—33 percent—to total emissions in 2015. **Commercial, industrial, and residential energy use** each contributed 20 to 23 percent of the community's emissions. The **waste** sector represented less than 2 percent of total emissions.

Figure 3. Municipal Inventory by Emissions Sector (mtCO2e) 2015

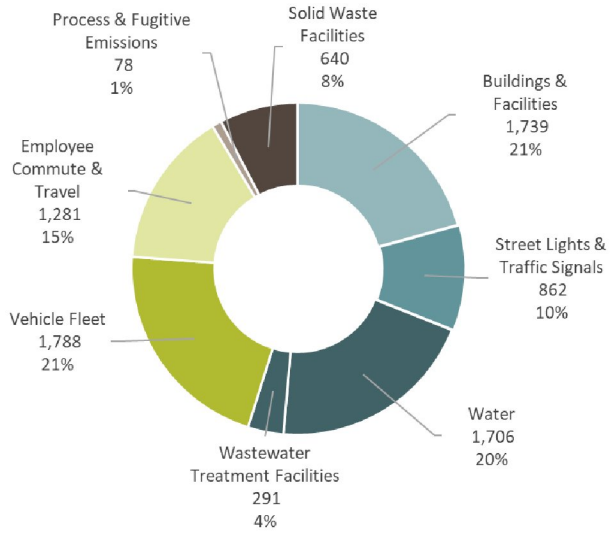
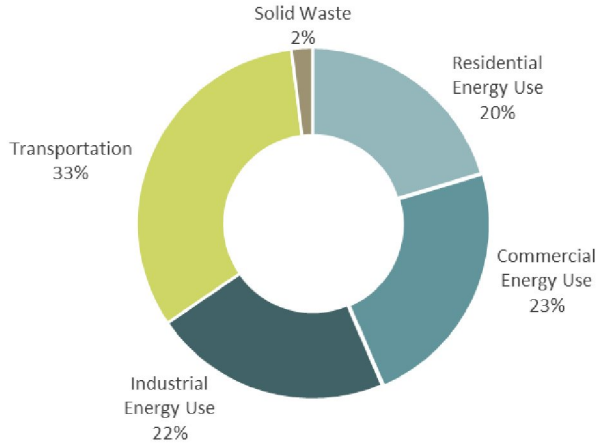


Figure 4. Community Inventory by Emissions Sector (mtCO2e) 2015



Changes in Emissions over Time

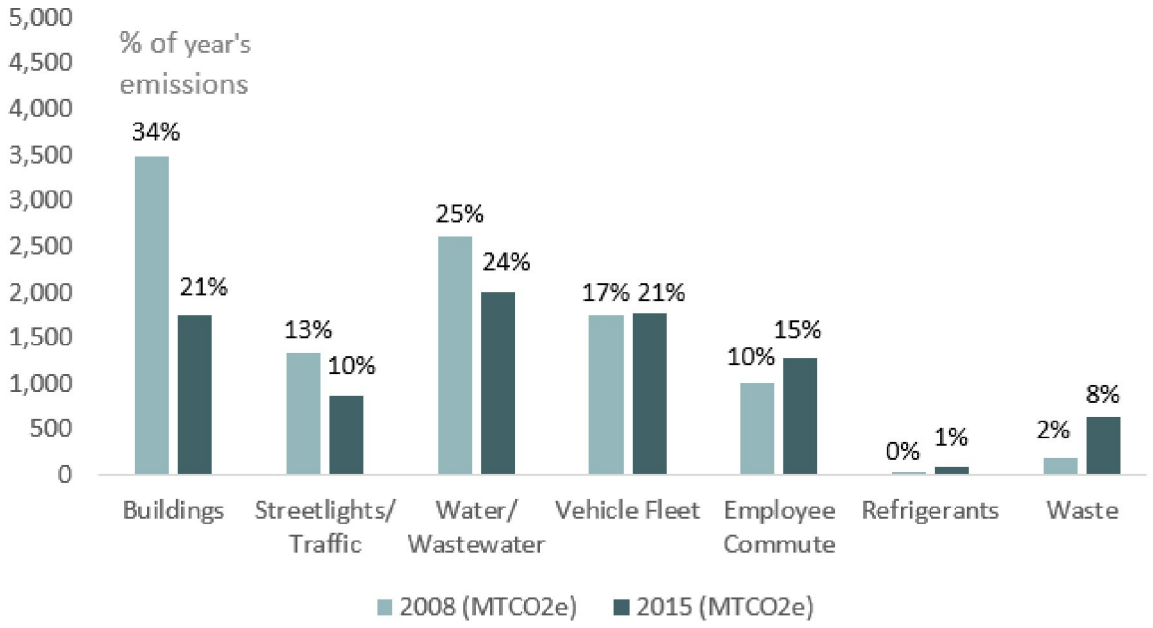
The City reduced its municipal emissions by nearly 20 percent since 2008, a 34 percent per capita reduction, while emissions from the Auburn community declined by 16 percent during this time, resulting in a 27 percent reduction in per capita emissions. These reductions were achieved despite a 22 percent population increase in Auburn between 2008 and 2015.

As Figure 5 illustrates, noteworthy changes in **municipal emissions**, by sector, include:

- The City cut **electricity use in buildings and facilities** significantly, which was the single-largest contributor in 2008, reducing this sector's contribution from almost 34 percent in 2008 to 21 percent in 2015.
- Reductions were also achieved in the **water and wastewater** treatment sector, despite Auburn's growing population.

- Emissions from **employee commuting and travel** increased, with its contribution to total City emissions growing from less than 10 percent in 2008 to over 15 percent in 2015.

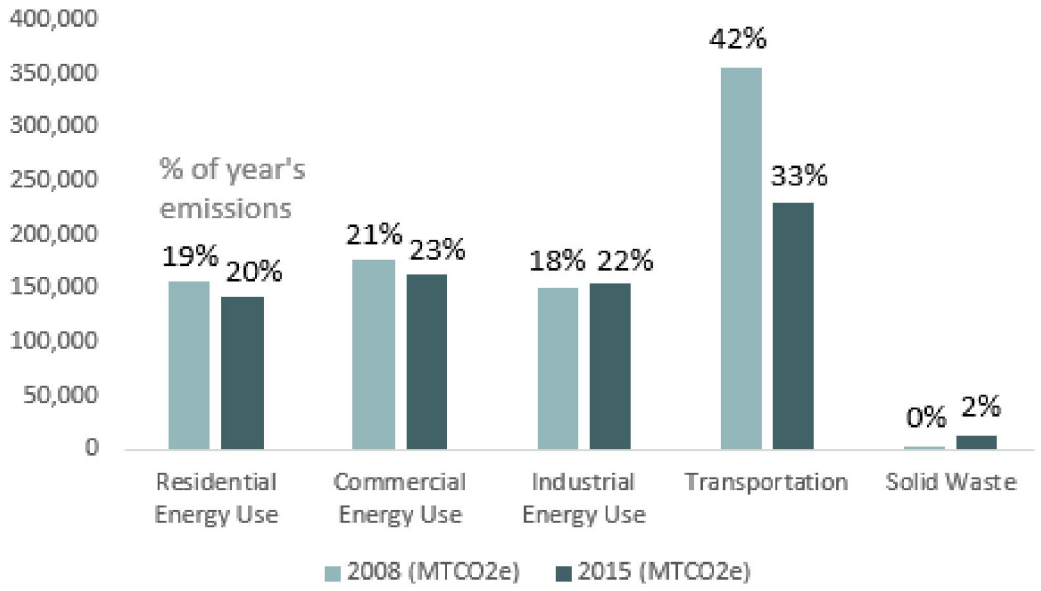
Figure 5. Municipal Inventory by Emissions Sector ($MTCO_2e$) 2008, 2015



Noteworthy changes in **community** emissions, by sector, illustrated in Figure 6 include:

- **Transportation emissions** decreased by about 35 percent, attributable to declines in diesel and gasoline usage. Its portion of total emissions decreased by 9 percentage points from 2008 to 2015.
- **Residential and commercial energy** users reduced their emissions as well by approximately 9 percent and 8 percent, respectively, despite Auburn's growing population.
- **Waste emissions** increased notably, but still represents a marginal amount of the community's emissions.

Figure 6. Community Inventory by Emissions Sector (MTCO2e) 2008, 2015



Greenhouse Gas Emissions Reduction Targets

While Auburn's reductions in community and municipal greenhouse gas emissions are commendable, work towards reducing the City's greenhouse gas emissions is not yet finished. The City has not yet set GHG emissions targets, but is considering options for identifying targets in the future to fulfill its emissions reduction commitment as a signatory to the U.S. Mayors' Climate Protection Agreement. Although it includes a quantitative target, the agreement's emphasis is on taking action rather than on the specific numerical goal, especially now that the time frame for meeting the target set in the agreement (by 2012) has passed. Given that, many other cities that are signatories of the agreement have followed up on their commitment with longer-term goals, often linked to more recent baseline years. In addition, many of these cities specify separate goals for community and municipal operations, which the U.S. Mayors' Climate Protection Agreement does not distinguish. Emissions reduction goals of local municipalities are listed in Table 1 and Table 2. Auburn can look to these examples as it continues the conversation around setting emissions reduction targets, taking an important step to advance that conversation with this Climate Action Plan.

Once Auburn sets future emissions targets, meeting those targets will require more reductions in greenhouse gas emissions in Auburn than the City has demonstrated to-date (see Figure 5 and Figure 6). The City government will have to take bold action to reduce its major municipal emissions sources, and help Auburn residents, businesses, school district, and other community partners find opportunities to reduce the emissions associated with living and working in Auburn.

Table 1. Local Municipalities' Reduction Goals for their Municipal Emissions

Municipality	Base Year	Municipal Inventory ($mtCO_2e$)	Population in Base Year	Emissions per capita	Emission reduction goal
Bellingham	2000	19,945	67,171	0.30	70% below 2000 levels by 2020
Bellevue	2001	14,716	109,569	0.13	7% below 1990 levels by 2012
Kirkland	2000	5,422	45,054	0.12	80% below 2005 levels by 2050
Mercer Island	2007	*	23,788		80% below 2007 levels by 2050
Olympia	2005	8,257	44,286	0.19	80% below 2005 levels by 2050
Redmond	2008	8,462	49,931	0.17	80% below 2008 levels by 2050
Shoreline	2009	881	52,775	0.02	Zero net emissions by 2030

*Emission reduction goal set but inventory not yet complete.

Table 2. Local Municipalities' Reduction Goals for their Community Emissions

Municipality	Base Year	Community Inventory ($mtCO_2e$)	Population in Base Year	Emissions per capita	Emission reduction goal
Bellingham	2000	950,793	67,171	14	28% below 2000 levels by 2020
Bellevue	2001	1,692,197	109,569	34	7% below 1990 levels by 2012
Issaquah	2007	281,090	24,710	11	80% below 2007 levels by 2050
Olympia	2005	659,063	44,286	15	80% below 2005 levels by 2050
Redmond	2008	1,245,169	49,931	25	80% below 2008 levels by 2050
Shoreline	2009	315,197	52,775	6	80% below 2009 levels by 2050

Understanding and Reducing Your Greenhouse Gas Emissions

The Climate Action Plan presents more than 23 actions that Auburn residents can take to reduce their own carbon footprint, which begins with understanding how choices you make affect the climate. As the City of Auburn takes steps to reduce its carbon footprint, you can learn about and commit to reducing your own:

Calculate your carbon footprint. Answer a handful of questions about your travel, housing, food, and shopping habits, and the Household Carbon Footprint Calculator, developed by the CoolClimate Network can estimate your annual carbon footprint and recommend action to reduce emissions.[16]

Take the CoolerSmarter Pledge. Get tips and ideas for reducing your footprint from the Union of Concerned Scientists at CoolerSmarter.org. Explore the CoolerSmarter infographic that shows how individual actions can add up to big changes in energy use and GHG emission reductions.[17]

Take on one of these **BIGGEST IMPACT** actions.[18] Here are the top seven areas that offer the greatest potential to reduce household GHG emissions:

The car you drive: Driving a more efficient vehicle helps your pocketbook and your carbon footprint. When you buy your next car, look for the one with the best fuel economy in its class. If you own more than one vehicle, use the most fuel-efficient one whenever possible.

How you get around: The use of vehicles for transportation account for more than half of Auburn's community carbon footprint. Choose other modes of transport, such as public transit, whenever possible.

Where you live: Choosing alternative forms of transportation is easier when you live close to where you work, shop, and play. The next time you move, include proximity in your decision.

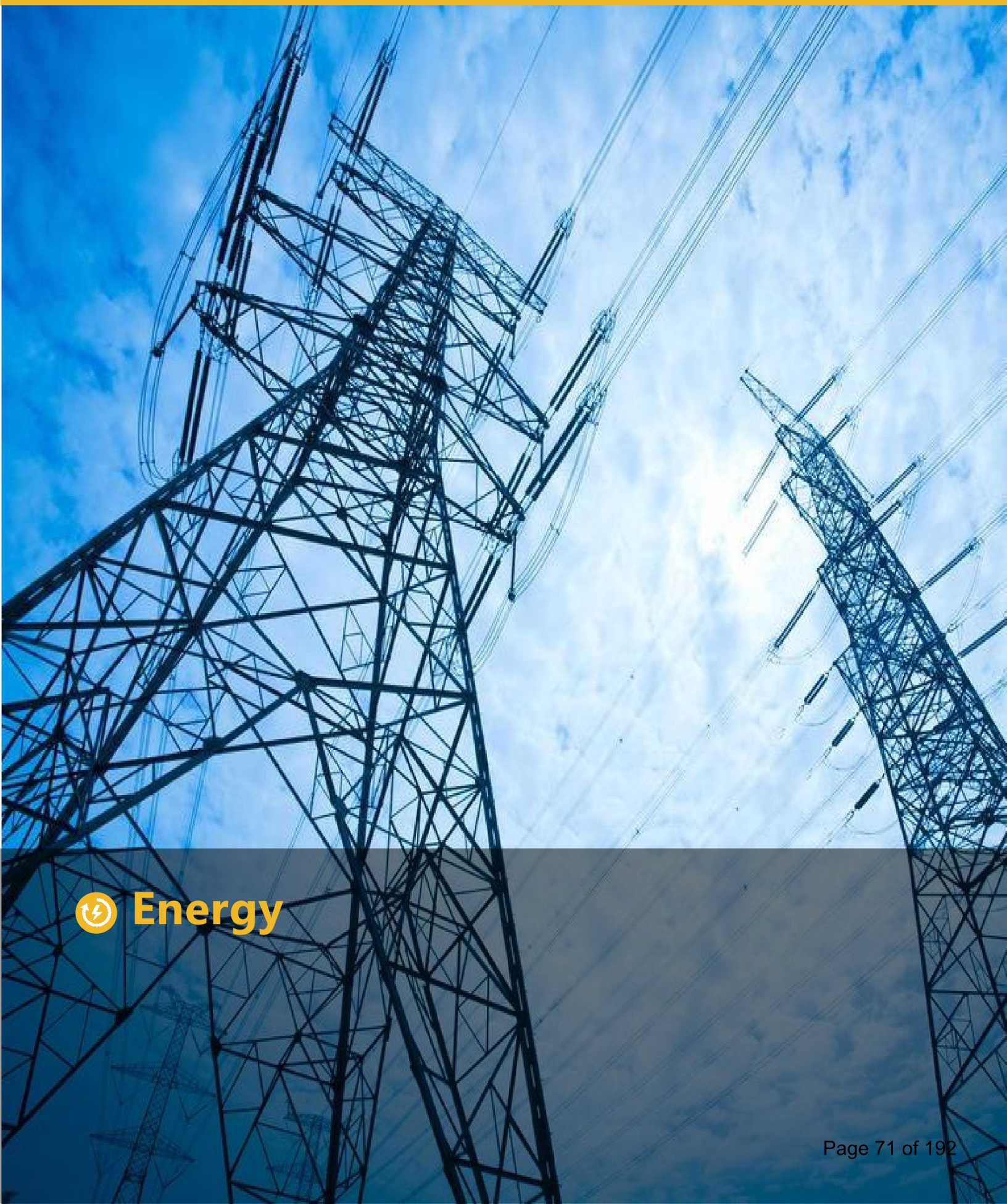
Home energy use: Residential energy use makes up one-fifth of GHG emissions in Auburn. A home energy audit identifies simple, affordable measures to reduce emissions, such as using a programmable thermostat.

What you eat: The United Nations Food and Agricultural Organization has estimated that almost 20 percent of global GHG emissions are from raising animals for meat and dairy production.[19] Eating a diet rich in fruits and vegetables could reduce your climate impact, and improve your family's health.

What you don't eat: The average family of four in the U.S. tosses out more than $1,600 a year in wasted food, about 25% of food purchases.[20] Reduce food waste by implementing shopping, meal planning, and proper food storage that helps you buy what you need and preserve what you buy.

The products you buy and use: When clothing, furniture, or other household items are manufactured, GHG emissions are "embodied" in the product. Making the most of that product can help avoid the need for additional emissions. Try to repair, repurpose, or rehome household items.

[16] Household Carbon Footprint Calculator, http://coolclimate.berkeley.edu/calculator
[17] CoolerSmarter, http://coolersmarter.org/
[18] Stockholm Environmental Institute U.S. (SEI-US), Identifying High Priority Household Behaviors. Memo prepared for the King County Community GHG Emissions Inventories and Measurement Framework Project, October 31, 2011 (DRAFT).
[19] Food and Agriculture Organization of the United Nations, Livestock's Long Shadow. Rome, 2006.
[20] Bloom, J. American Wasteland. De capo Press, 2010.



Energy

Energy

Although many people think of cars and trucks as primary contributors to greenhouse gas emissions, buildings are some of the largest energy users and therefore are responsible for a large portion of greenhouse gas emissions. Another lesser-known but significant energy user are water and wastewater systems. Collectively, Auburn's buildings and water systems account for nearly one-half of the City's total emissions, more than all types of transportation combined. These two sectors represent a significant opportunity to reduce Auburn's emissions.

Every turn of the thermostat, faucet, and light switch emits a specific and quantifiable amount of greenhouse gases. That amount depends on three primary factors: each person's action, the region's mix of energy-producing resources, and the efficiency of facilities and equipment used. Personal actions to reduce resource use, a cleaner sources of energy, and more efficient equipment all lower the greenhouse gas emissions impacts from energy production, transport, and use. By adopting behaviors, strategies, and efficient technologies that reduce water and energy use, the City of Auburn can enjoy a cleaner environment, more highly functioning facilities, and reduced risks to energy supply and price fluctuations, while contributing to climate protection for future generations.

Progress to Date

Emissions associated with the City of Auburn's municipal energy use decreased substantially from 2008 to 2015 with a 50 percent reduction in emissions from building electricity use. Even with this impressive reduction, emissions associated with electricity were still the largest source of municipal emissions in 2015, accounting for 52 percent of the total municipal inventory.

Auburn's community GHG emissions from energy use decreased by 24,600 mtCO2e from 2008 to 2015, equivalent to 5,268

CELEBRATING SUCCESS

More efficient street lighting

Over the last 3 years, the City has switched from street lights being incandescent bulbs to LED bulbs. The new LED bulbs are expected to save the City 60% in energy costs and result in less waste, as the LED bulbs have a much longer lifespan. Currently, all new street lights are being fitted with LED bulbs. In the future, the City will continue to evaluate programs and funding to replace current street lights with LEDs.

passenger vehicles driven for one year.[21] This change is equal to a 5 percent reduction in community emissions and is due to substantial reductions in both the residential and commercial sectors. Emissions from the industrial sector rose slightly from 2008 to 2015. Commercial energy accounted for the largest share of energy-related emissions, comprising 23 percent of the total community GHG inventory.

Auburn has already taken several steps to reduce energy consumption at municipal facilities. The City has made operational changes, such as turning computers off at night and installing occupancy sensors in many buildings. They have also made investments in technology and infrastructure, including purchasing Energy Star-certified appliances and installing a more efficient heating, ventilation, and air conditioning (HVAC) system in City Hall.

Strategies and Actions

To increase efficiency and reduce environmental impact of its municipal operations, the City of Auburn plans to take the following actions to maximize energy efficiency of City buildings, facilities, and other energy-intensive equipment and operations.

Municipal Action E-1

Update and retrofit traffic and street lights to increase energy efficiency. Upgrades may include converting traffic lights and street to light-emitting diode (LED) lighting and installing solar-powered fixtures for signage and lighting where appropriate.

Municipal Action E-2

Optimize heating, ventilation, and air-conditioning (HVAC) systems at City facilities by installing more efficient equipment and technology and implementing operational changes to increase energy efficiency. Such efforts may include the following:

- Conducting HVAC energy efficiency audits to identify cost-effective upgrades.

USE LESS ENERGY, LOWER COSTS

Efficiency upgrades and building performance standards can generate significant cost savings in addition to reductions in GHG emissions. Buildings that regularly track their energy performance for efficiency typically cut their energy bills by 2.4 percent per year.[22] For a 500,000 square-foot office building, that could lead to cost savings of $120,000 over three years.

[21] U.S. EPA, Greenhouse Gas Equivalencies Calculator, https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator.
[22] ENERGY STAR, "The business case for energy efficiency," https://www.energystar.gov/buildings/about-us/how-can-we-help-you/build-energy-program/business-case. Accessed February 2018.

- Installing building automation systems (BAS).
- Installing high-efficiency motors, dampers, and multi-speed motors for air handling.
- Phasing out chlorofluorocarbons (CFCs) in air-conditioning and refrigeration equipment.
- Educating staff to ensure and maintain peak efficiency and operating conditions.

Municipal Action E-3

Adopt performance standards for all City buildings, including renovations on existing buildings and design of new buildings, and establish a tracking system that makes the benchmarking scores of City buildings publicly available. Relevant building performance standards may include the following:

- Standards from LEED-EB, the Leadership in Energy and Environmental Design rating system for Existing Buildings.
- Building commissioning requirements.
- Lighting power densities (LPDs) and controls that go beyond existing energy code requirements.
- Wall insulation, window performance, and envelope air tightness standards that go beyond existing energy and building code requirements.
- LEED and/or ENERGYSTAR certification for buildings larger than a specified size.

Municipal Action E-4

Optimize building envelope energy efficiency at City facilities by installing more efficient materials and technology. Relevant upgrades may include the following:

- Conducting audits to identify cost-effective upgrades for weatherization and building envelope components.
- Replacing single-pane windows with insulated glazing with low-e film.
- Replacing or increasing interior wall insulation and roof insulation during major renovations.
- Adding additional batt or rigid insulation and thermal barriers during interior renovations.

Moving Forward

As the City of Auburn begins implementing these strategies and actions, potential next steps may include:

- Building on initial success in performance contracts with Puget Sound Energy (PSE), explore additional contracts and partnership opportunities with PSE to implement efficiency upgrades and achieve energy performance goals.
- Utilize King County's roadmap for local cities to expand the municipal green building program.[23]
- Design a benchmarking program that works for Auburn by consulting guidance documents and adapting existing benchmarking programs in municipalities locally and across the country. [24, 25]
- Incorporate green building standards, especially those specific to the Puget Sound region, into requests for proposals and contracts.[26]

LEARNING FROM OTHERS

Tracking energy use in municipal facilities, *City of Bellevue*
The City of Bellevue passed a resolution in November 2016 to require annual benchmarking, or tracking, and reporting of energy use in municipal facilities over 5,000 square feet. Using Portfolio Manager, a free online tool provided by the U.S. Environmental Protection Agency, the City can calculate the energy use intensity (EUI), or the energy used per square foot, for each property. Over time, Bellevue will be able to identify the buildings that are the most energy intensive and explore opportunities for improvement.

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[23] King County, "King County GreenTools Roadmap to a Green Building Program," 2012, https://www.kingcounty.gov/~/media/depts/dnrp/solid-waste/green-building/documents/master-roadmap.ashx?la=en.
[24] American Council for an Energy-Efficient Economy, "Building Benchmarking, Rating, & Transparency," https://database.aceee.org/city/benchmarking-disclosure.
[25] U.S. Department of Energy, "Designing a Benchmarking Program," 2013, https://www.energy.gov/sites/prod/files/2017/09/f36/tap_designing_a_benchmarking_plan.pdf.
[26] King County, "Green building standards and guidance for RFPs, RFQs and contracts," https://www.kingcounty.gov/depts/dnrp/solid-waste/programs/green-building/sustainable-cities/city-government/contracts-standards-guidance.aspx.

The Community's Role

The City of Auburn also seeks to improve energy efficiency and reduce environmental impacts by fostering community actions that advance these goals. The top strategies are summarized below. The remainder of this chapter also presents individual actions that people in Auburn can take to help make a positive difference.

Community Action E-5

Implement audits and technical assistance to increase building energy efficiency. Such a program could address single-family, multifamily, and/or commercial buildings. Elements could include weatherization strategies, direct-installation of energy and water conservation materials, appliance trade-in/exchanges, home and business conservation kits, and rooftop solar and solar hot water projects.

Community Action E-6

Adopt performance standards for residential and commercial building codes to increase building energy efficiency. The standards can address single-family, multifamily, and commercial renovations, existing buildings, and new buildings. The City can also require that building performance ratings be publicly available, to help inform prospective tenants and buyers about the energy performance status of buildings.

EQUITABLE ACCESS TO COST SAVINGS

Low-income families typically spend about 15 percent of their income on energy bills, compared to only 2 percent among high-income households.[27] By improving access to tools and resources for low-income families, Auburn can more equitably distribute the cost saving benefits from energy efficiency among the community.

[27] Energy Efficiency for All, "Making multifamily homes healthy and affordable through energy efficiency," http://energyefficiencyforall.org/sites/default/files/EEFA%20Fact%20Sheet%204.15_0.pdf. Accessed February 2018.

Community Action E-7

Support cleaner energy sources. Potential efforts include supporting community-scale renewable energy projects and efficient small-scale on-site power generation, working with local utilities to use cleaner energy sources, and encouraging Auburn businesses and residents to offset their energy use.

Community Action E-8

Promote water efficiency and conserve community water resources. Transporting and treating drinking water, wastewater, and stormwater requires energy and generates pollution. The City can foster water conservation through incentives, information, and requirements that residents and business adopt water-efficiency practices and technologies, in addition to Low Impact Development that it already requires. The City can also help ensure that existing codes do not pose any barriers that discourage or prevent the use of water conservation practices on public and private property.

CELEBRATING SUCCESS

Helping Auburn save water

The City of Auburn has a goal for its customers to reduce their water use by 1 percent annually. Water saved through conservation is then available for new customers, reducing the need to develop new sources of water supply to meet the needs of a growing city. Auburn has implemented an Automated Metering system that enables the City to quickly identify unusually high water use (such as from leaks), and help the customer resolve the problem before wasting water. Once the City implements its Customer Portal, customers will be able to monitor their own water usage on a daily basis, which will further encourage conservation of water.

Here's What You Can Do

ENERGY EFFICIENCY

Residential and commercial electricity, natural gas, and heating oil use contribute to over 43 percent of the community's carbon footprint. Here are some quick and simple steps to reduce your impact (and energy bill).

Lower the temperature on your hot water heater.
It takes more energy to keep your hot water heater at a high temperature than at a lower temperature. To reduce greenhouse gases, and to prevent the possibility of being burned by water at a high temperature, turn down the temperature to 120°F.

Program your thermostat to turn down or off when you're not at home.
According to the U.S. Energy Administration, about 42% of home energy costs go to heating and cooling. Heating and cooling unused spaces or while people are asleep wastes energy and money. Installing a programmable thermostat to turn down 10° to 15° for 8 hours, can save you 5-15% a year on your heating bill.

When replacing appliances, purchase ENERGY STAR models.
ENERGY STAR qualified appliances use 10-50% less energy than standard appliances. From refrigerators to washing machines, ENERGY STAR appliances save energy and money, enhance performance, and reduce emissions. Browse a list of appliances at EnergyStar.gov.

Get an energy audit to identify efficiency improvements.
A recent study in King County found that retrofitting homes to use less energy through weatherization and upgrades to heating and air conditioning systems can reduce household emissions by 45 percent. You can get a free home energy audit through Puget Sound Energy by signing up today at their website.[28]

RENEWABLE ENERGY

Using renewable energy can bring numerous benefits – and it may be easier than you think. Renewable energy can insulate you from energy price fluctuations, make you a leader in your community, and help combat climate change. Here are some ways you can boost your use of renewable energy.

Use solar-powered outdoor lighting.
There are many outdoor solar-powered lighting options for your yard and outdoor spaces. Next time you are considering adding outdoor lighting, consider solar.

[28] Puget Sound Energy Home Energy Assessment, https://pse.com/savingsandenergycenter/Rebates/Pages/Home-energy-assessment.aspx

Supporting community solar projects.
Through community-based solar projects, you can purchase renewable energy even if you are unable to install solar panels on your home or business. Seattle City Light has four community-based solar projects across their service area. Residential and business customers who enroll receive an annual incentive credit for the electricity generated by the project. You can help make community solar happen—learn how today.[29]

Consider renewable energy.
Installing a solar energy system in your property doesn't have to be expensive or difficult. Across the Puget Sound region, residents and businesses are finding affordable ways to install solar panels by taking advantage of federal tax credits, Seattle City Light's net metering, and Washington State's incentives. Begin exploring how renewable power could work for your property by reading Seattle City Light's Guide to Installing Solar Electric System, which covers the basics from contracting and permits to financial incentives.[30]

WATER CONSERVATION

Transporting and treating the water that flows into and out of your pipes is energy intensive, but simple behavior changes and fixture replacements can help you conserve water and save energy.

Install high-efficiency water fixtures.
If your showerhead, faucet, or toilet is more than five years old, chances are that new, inexpensive fixtures or retrofits can reduce your water use by 30% to 60%. When upgrading your fixtures, look for ENERGY STAR or WaterSense labels, which indicate the product is resource-efficient.

Use native plants in your landscaping.
Native plants are adapted to our climate of wet winters and dry summers, and require less water and attention than non-natives. Visit King County's Native Plant Guide to integrate native plants, such as Beach strawberry, Red elderberry, and Big leaf maple into your yard or garden.[31]

Install a green roof.
Consider installing a green roof on your property, as they moderate water flows during storm events, keep buildings cool in the summer and warm in the winter, remove greenhouse gases from the atmosphere, provide wildlife habitat, and help make your roof last longer. Businesses as well as private homes can host green roofs—over a third of green roofs in Seattle are small projects found on private residential homes.[32]

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[29] Seattle City Light Community Solar, http://www.seattle.gov/light/solarenergy/commsolar.asp
[30] Seattle City Light's Guide to Installing Solar Electric System, http://www.seattle.gov/light/solarenergy/docs/SCL_ElectricSolarGuide_110615.pdf
[31] King County's Native Plant Guide, https://green2.kingcounty.gov/gonative/Index.aspx
[32] McIntosh, Annika, Green Roofs in Seattle, 2010, https://www.seattle.gov/Documents/Departments/OSE/Green-Roofs-In-Seattle.pdf.

Transportation

Transportation

The movement of goods, people, and services is central to Auburn's economy and community—and one of the largest GHG-emitting sectors. Employee commuting and the City's vehicle fleet combined accounted for over one-third (36 percent) of municipal emissions in 2015, and transportation also generated one-third (33 percent) of emissions in the community. Greenhouse gas emissions from transportation result largely from the combustion of petroleum-based fuels in cars, sport utility vehicles, pickup trucks, and minivans. Reducing emissions from vehicles, the vast majority of which burn fossil fuels, is challenging because unlike buildings, they are difficult to retrofit in ways that improve their efficiency or reduce GHG emissions.

While electric vehicles are becoming more available and affordable, near-term progress on reducing Auburn's transportation-related emissions can focus on reducing reliance on personal vehicles by improving public transit access and convenience, and by improving urban design to support higher densities while keeping housing affordable. Also worth noting are potential climate-driven impacts on alternative forms of transportation. With increased temperatures that can support more smog and reduce air quality, biking and walking may become more hazardous and thus increase reliance on vehicles. Addressing challenges like these is crucial to improving the resilience and reducing the greenhouse gas emissions footprint of Auburn's transportation.

Climate change also puts Auburn's infrastructure at greater risk of damage or destruction. More frequent and severe floods may threaten roads, bridges, and real estate, and hotter summers may increase the rate of deterioration of some building materials. Culverts and road crossings may not be sized to withstand increased flooding, and roads bordering rivers and streams may be at risk of inundation. The City, its residents, and private property owners will need to work together to reduce the risks that extreme weather events pose to Auburn's infrastructure.

Progress to Date

The City of Auburn's municipal operations resulted in an increase in transportation emissions between 2008 and 2015. While emissions from the vehicle fleet only increased slightly, energy consumed for employee commute and travel resulted in a 33 percent increase in emissions from this sector.

Auburn's community GHG emissions from transportation were reduced by 35 percent from 2008 to 2015. This is due to a dramatic reduction in diesel and gasoline fuel use. Savings in transportation fuel use were by far the leading contributor to Auburn's overall 16 percent emissions reduction between 2008 and 2015. Changes in the transportation sector account for roughly 90 percent of the community reductions achieved.

Auburn has made strides in reducing emissions from municipal operations by shifting toward a more fuel-efficient fleet and implementing operational processes to optimize fuel use, including preventative maintenance practices and an informal policy for taking the most fuel-efficient vehicle for work trips. As a participant in Washington's Commute Trip Reduction program, the City encourages employees to use more sustainable modes of transportation for commuting.

Strategies and Actions

Through this Plan, the City of Auburn is taking actions to increase the energy, fuel, and cost efficiency of its City vehicle fleet and employee commuting. The top actions are summarized below.

Municipal Action T-1

Develop a policy to include consideration of greenhouse gas emissions impacts and opportunities to reduce them when updating and implementing transportation and land use plans, codes, and zoning, as well as identifying and carrying out relevant projects. These steps will support more climate-friendly development and land use in Auburn.

Municipal Action T-2

Adopt increasing fuel-efficiency standards for the City's fleet vehicles. Policies to procure fuel-efficient vehicles should include considering hybrid and electric options that meet its needs for transportation, reliability, and public safety. Regional, state, and federal incentives may be available to support this fleet transition.

Municipal Action T-3

Provide incentives and adequate facilities to encourage sustainable employee commuting. Transportation choices may include hybrid or electric vehicles (EVs), carpooling, public transportation, biking, walking, and telecommuting. Incentives could include pre-tax transit passes, carpool and EV parking, and rebates to employees who do not use employer

ACTIVE COMMUTING FOR FITNESS

By encouraging biking and walking to work through infrastructure improvements and incentives, cities also support improved health outcomes. Commuters who regularly bike have shown a 46 percent lower risk of developing heart disease.[33] Just a 20-minute commute can mean up to 40 minutes of cardiovascular activity each day—a step toward improved physical fitness and mental wellbeing.

[33] Celis-Morales, C. et al. "Association between active commuting and incident cardiovascular disease, cancer, and mortality: prospective cohort study," BMJ, 2017: 357. https://doi.org/10.1136/bmj.j1456.

parking facilities. Facilities may include showers, lockers, covered/secured bike parking, and EV charging stations.

Municipal Action T-4

Enhance flex-time policy and support telecommuting to reduce emissions related to employee commuting and support employee satisfaction, while meeting customer service needs. Measures may include offering a compressed work week, providing technical and logistical support to employees who can work from home, and establishing electronic security approaches for telecommuters. Maintaining or improving the City's level of service to its residents and businesses will be a key consideration in setting flexible work policies.

Moving Forward

As the City of Auburn begins implementing these strategies and actions, potential next steps may include:

- Review examples of other municipal policies, best practices, and guidance documents for mitigating climate change through transportation and land use planning. [34, 35, 36]
- Adopt a policy that requires planners and project engineers to use a tool, such as Envision, to evaluate sustainable practices when designing and planning infrastructure, as well as to evaluate sustainability outcomes after project completion.[37]
- Pursue incentives to support purchasing electric and alternative fuels fleet vehicles and installing charging and alternative fueling stations, such as:
    - The federal Congestion Mitigation and Air Quality Improvement (CMAQ) Program, disbursed through the Puget Sound Regional Council.[38]
    - Washington's sales tax exemption for clean alternative fuel or plug-in hybrid vehicles, available until July 1, 2019.[39]
    - Washington's tax exemptions for natural gas when used for transportation fuel.[40]

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[34] For example, see the Sustainability Plan for the City of Grand Rapids, Michigan. https://www.grandrapidsmi.gov/Government/Departments/Sustainability.
[35] Floater, G. et al. "Co-benefits of urban climate action: A framework for cities," 2016, http://www.c40.org/researches/c40-lse-cobenefits.
[36] Condon, P., Cavens, D., and Miller, N., "Urban Planning Tools for Climate Change Mitigation," Lincoln Institute of Land Policy, 2009.
[37] Institute for Sustainable Infrastructure, "Envision," http://sustainableinfrastructure.org/envision/.
[38] U.S. Department of Transportation, Federal Highway Administration, Congestion Mitigation and Air Quality Improvement (CMAQ) Program, https://www.fhwa.dot.gov/environment/air_quality/cmaq/.
[39] Washington State Department of Licensing, Alternative Fuel Vehicles and Plug-In Hybrids Washington State Tax Exemptions, http://www.dol.wa.gov/vehicleregistration/altfuelexemptions.html.
[40] U.S. Department of Energy, Alternative Fuels Data Center, Natural Gas Tax Emptions, https://www.afdc.energy.gov/laws/11421.

    - State sales and excise tax exemptions for public lands used for electric vehicle infrastructure, as well as for plug-in electric vehicle batteries and labor and services related to batteries and infrastructure.[41]
- Appoint staff to monitor and pursue funding opportunities as they arise, such as:
    - U.S. Department of Transportation's grant program.[42]
    - Washington State Department of Transportation's expansion of its pilot program to deploy electric vehicle fast-charging infrastructure along highway corridors.[43]
    - Puget Sound Energy's rebates for transportation electrification.[44]

LEARNING FROM OTHERS

Innovations for commuting emissions reductions, *City of Redmond*

The City of Redmond takes several strategies to reduce emissions from employee commuting and increase mobility options for employees. Its commute trip reduction program offers incentives for City employees to use alternatives to driving alone, and they provide bus passes to both regular and supplemental employees for commuting as well as attending meetings. The City also manages transportation demand beyond municipal staff by offering incentives for commuters to use other transportation options than driving alone, and for employers to implement commute trip reduction programs. The City's website GoRedmond.com provides commuters, employers, and families with incentives and resources to find ride-sharing opportunities and get to work and school in more efficient and climate-friendly ways.

[41] U.S. Department of Energy, Alternative Fuels Data Center, Electric Vehicle (EV) Infrastructure and Battery Tax Exemptions, https://www.afdc.energy.gov/laws/6532.
[42] U.S. Department of Transportation, Federal Transit Administration, Grant Programs, https://www.transit.dot.gov/grants.
[43] Washington State Department of Transportation, Electric Vehicle Charging Infrastructure, https://www.wsdot.wa.gov/Funding/Partners/EVIB.htm.
[44] Puget Sound Energy, Electric Vehicles, https://www.pse.com/savingsandenergycenter/AlternativeFuelVehicles/Pages/Electric-vehicles.aspx.

The Community's Role

The City of Auburn is working to support more efficient vehicles and modes of transportation throughout the community through improvements in transportation and land use. Top actions include the following.

Community Action T-5

Support the transition to plug-in hybrids and electric vehicles within the community by facilitating the installation of EV-charging stations and requiring installation of charging stations in new multifamily housing developments.

Community Action T-6

Create a pedestrian and bicycle master plan to address mobility gaps, improve safety, and increase convenience by improving infrastructure, services, and community development for people walking and biking. Improvements may include bike-sharing programs, personal motor vehicle-free streets in the downtown area, "complete streets," infrastructure repairs and upgrades, and incentives for people biking and walking.

Community Action T-7

Support more climate-friendly development and land use by making improvements to street infrastructure to reduce fuel use, congestion, and idling. Examples may include replacing stop signs and traffic signals with roundabouts or recalibrating the timing of traffic signals on all arterials.

CELEBRATING SUCCESS

Lowering Auburn's development impact

The City of Auburn's National Pollutant Discharge Elimination System (NPDES) Phase II permit required Auburn to modify its development and redevelopment city codes to require the use of Low Impact Development (LID) for stormwater management, if feasible. LID measures are intended to keep rainwater on the property where it falls, reducing runoff and providing an opportunity for the land and plants to cleanse the water within the development. Although the program is only one year old, Auburn has developed a number of checklists and informational materials to help customers comply with the new requirements. Auburn looks forward to adding new LID measures to augment those already in existence around the City to help meet Auburn's goals of sustainability and environmental preservation.

Community Action T-8

Increase ride-sharing and reduce driving alone through incentives and changes to transportation infrastructure. Improvements may include additional park-and-ride lots, increased parking spaces for carpools and vanpools, infrastructural support for car-sharing, and safety enhancements for people walking and biking.

Here's What You Can Do

REDUCE FOSSIL FUEL CONSUMPTION IN YOUR VEHICLE

Car and truck transportation makes up the highest amount of total household greenhouse gases in King County, contributing 20 percent of the average household's carbon footprint. Actions that increase the efficiency of vehicles we drive can help lower that footprint and save money at the gas pump.

Keep your tires properly inflated.
The National Highway Traffic Safety Administration found that 12 percent of cars manufactured from 2004-2011 have at least one tire that is underinflated by 25 percent or more.[45] Driving on underinflated tires can decrease fuel efficiency and cost you up to $0.11 more per gallon.[46] To ensure that your tires are properly inflated, regularly check your tire pressure and adjust it to meet the specifications for your vehicle, which is listed on the sticker on the driver's side door jamb or glove box. This helps keeps you safer and helps your tires last longer.

When purchasing a new vehicle, choose a high-efficiency or electric model.
Purchasing a highly efficient car is one of the most impactful decisions a household can make to reduce greenhouse gas emissions. Next time you're in the market for a new vehicle, visit FuelEconomy.gov to find information on the cleanest and most fuel-efficient vehicles.[47]

REDUCE YOUR USE OF SINGLE OCCUPANCY VEHICLES

Driving solo substantially increases your carbon footprint. If just one person switches to take public transportation for a daily commute, household greenhouse gas emissions are reduced by 10% per year.[48] This has a greater impact than most other actions, such as replacing light bulbs with LEDs or adding R-40 insulation to a home attic. Here are some ways to reduce your single occupancy vehicle climate impact.

Choose to bike, walk, take public transit, or carpool.
Short trips around town can be easier, quicker, and more enjoyable by foot, bike, or bus. Biking and walking to work or to run errands is a great way to get some fresh air and stay fit. Carpooling with co-workers fosters collaboration, friendship, and can be faster when using an HOV lane. For your next trip to work, a friend's house, or the grocery store, ditch the keys and the driving stress and explore a new mode of travel.

Don't know where to start? RideshareOnline.com provides ride-matching services and SchoolPool carpooling programs. It also has a free online tool to help develop and implement customized employee benefit programs.

Eliminate your household's second vehicle.
Owning a vehicle can be a major household expense. According to the American Public Transportation Association, car owners could save $10,064 annually if they chose to take public transit instead of driving,

given the costs of fuel, maintenance, insurance, registration, and parking.[49] Using alternative transportation options, coordinating transportation, and utilizing car-sharing services can eliminate the cost of owning a second vehicle and reduce your carbon footprint.

Start a King County InMotion program.
The King County InMotion program helps neighborhoods start a community campaign to encourage residents to commit to alternative-mode commuting.[50] The program, which has been successfully implemented in 40 neighborhoods, allows employees to track progress and receive recognition for using alternative modes of transportation.

MAKING ALTERNATIVE TRANSPORTATION SAFE AND ACCESSIBLE

The safety and accessibility of walking, biking, and public transit is not just dependent on permanent infrastructure such as signage, lanes, trails, and bus stops. As a fellow traveler and resident, you have a responsibility to make the road, trail, and sidewalk safe for everyone. Here are some ways to help create an alternative transportation-friendly environment for your neighbors.

Share the road with cyclists and pedestrians.
On the road, cyclists and pedestrians are in far greater danger than vehicles. When driving, be cognizant of non-motorized residents, and take actions to make their experience safer. That includes not using your cell phone, passing slowly, leaving plenty of space (3 feet is the rule of thumb), and watching for pedestrians and cyclists before pulling into the crosswalk area, turning right, or merging.

Help children walk to school safely.
A walking school bus is a group of children walking to school with one or more adults. Your participation in a walking school bus can help address safety concerns, fight childhood obesity, and build positive behaviors. Find more information at WalkingSchoolbus.org.

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[45] National Highway Traffic Safety Administration, Tire Maintenance Factsheet, 2013, https://one.nhtsa.gov/nhtsa/Safety1nNum3ers/june2013/theProblemJune2013.html?intcmp=na-pagena-article-data_reason-external
[46] U.S. Department of Energy, https://www.fueleconomy.gov/
[47] US Department of Energy, Keeping Your Car in Shape, 2013, http://www.fueleconomy.gov/feg/maintain.shtml
[48] American Public Transportation Association, Benefits of Public Transportation, https://www.apta.com/resources/reportsandpublications/documents/greenhouse_brochure.pdf
[49] American Public Transportation Association, Transit Savings Report, http://www.apta.com/mediacenter/pressreleases/2014/Pages/140814_Transit-Savings.aspx
[50] King County InMotion, https://www.kingcounty.gov/depts/transportation/metro/programs-projects/transit-education-outreach/in-motion.aspx

Materials and Waste

Materials and Waste

Every step in a product's life cycle—from its manufacturing and distribution to its eventual disposal—releases greenhouse gases into our atmosphere. Although solid waste is responsible for a relatively small fraction of Auburn's total greenhouse gas emissions, the inventories do not account for the "upstream" emissions from the manufacturing and distribution of materials, products, and food, as they were outside the scope of study. However, we are all responsible for emissions throughout the life cycles of the products we buy, use, and discard. Since one ton of greenhouse gases released in Beijing creates the same impact as one ton released in Auburn, the City and community has a responsibility to take action to reduce emissions from materials and waste.

Landfills produce large amounts of methane, a powerful greenhouse gas, which is released when organic matter decomposes. We can substantially reduce the amount of methane released by sending fewer materials to our landfills through waste prevention strategies—recycling (including composting), reuse, and reduction. These strategies also generate other benefits, such as lower rates for garbage collection, the conservation of open space, and economic benefits from the sale of recyclable materials. Buying recycled materials and more durable products, repairing and reusing products, and buying less can significantly cut emissions and natural resources associated with mining, manufacturing, and transportation of materials.

Progress to Date

Solid waste emissions from municipal operations rose to account for 8 percent of the municipal inventory in 2015, up from 1 percent in 2008. The City achieved a 12 percent recycling rate in 2015 based on estimates of solid waste tonnages.

Auburn's GHG emissions from materials and waste management rose by 12,500 mtCO2e between 2008 to 2015. This change is partly driven by a 22 percent growth in Auburn's population during that period. However, solid waste still only accounted for 2 percent of 2015 community emissions.

The City of Auburn has robust infrastructure to recycle a wide range of materials—including electronic waste—and in all City buildings and capacity to compost food waste in several buildings. The City has implemented operational processes to reduce use of disposable materials and encourages reusable products and equipment sharing. In the community, the City provides recycling infrastructure in most public parks. They also monitor their waste production through audits of City buildings, parks, and facilities.

Strategies and Actions

The City of Auburn is working to increase recycling, composting, and reuse in its own operations as well as to reduce waste through its purchasing. Key actions are summarized below.

Municipal Action M-1

Adopt standards for City buildings to use best practices for recycling, composting, reuse, and waste reduction. Standards can recommend practices such as placing more recycling bins at workstations, collecting organics more frequently and garbage less frequently, and installing more water bottle filling stations in facilities.

Municipal Action M-2

Adopt a citywide purchasing policy that includes environmental impacts. Environmentally Preferable Purchasing (EPP) policies can prioritize reusing products and materials, purchasing durable goods, avoiding disposable goods, and reducing energy use, greenhouse gas emissions, and lifecycle costs and impacts. EPP policy may include targets, measures to track impacts, strategies for implementation, and references to existing standards (e.g., EPEAT, ENERGYSTAR, and LEED).

RECYCLE GOODS, GROW GREEN JOBS

The more cities recycle and compost their materials, the greater the demand for those services. Recycling and composting collectors and processors respond to that demand, expanding services in areas where it is high. This translates to more jobs to support the regional green economy. For instance, one job in recycling collection supports 8 jobs in manufacturing those materials into new products.[51]

Moving Forward

As the City of Auburn begins implementing these strategies and actions, potential next steps may include:

- Review existing resources and case studies to guide efforts, such as those compiled by the U.S. Environmental Protection Agency's municipal government recycling toolkit.[52]

[51] National Recycling Coalition cited by Stanford Land, Buildings, and Real Estate, https://lbre.stanford.edu/pssistanford-recycling/frequently-asked-questions/frequently-asked-questions-benefits-recycling. Accessed February 2018.
[52] U.S. EPA, "Municipal Government Toolkit," https://archive.epa.gov/region4/rcra/mgtoolkit/web/html/index.html.

- Conduct a waste characterization study to learn what is in the municipal operations waste stream and use findings to identify priority areas for diversion.[53]
- Establish a green team of City staff from different departments to lead implementation of best practices in municipal operations.[54]
- Draft an EPP policy using guidance and examples of sustainable purchasing practices and policies in municipalities across the state provided by the Washington Department of Ecology.[55]

LEARNING FROM OTHERS

Purchasing environmentally friendly materials, *City of Bellingham*

The Bellingham City Council passed a resolution in 2007 encouraging City departments to purchase environmentally preferable products as long as its price is no more than 20% more than the conventional product. As of 2017, the City's suite of products that it purchases include green cleaning supplies and recycled paper, toilet paper, and office supplies. The City's EPP also applies to office equipment including computers, which must meet the gold or silver standard by the Electronic Product Environmental Assessment Tool (EPEAT), and must be manufactured with minimal materials, energy consumption, and packaging waste.

[53] For example, see King County's Waste Characterization Study and Customer Survey Report completed in 2015, available at https://www.kingcounty.gov/depts/dnrp/solid-waste/about/waste-monitoring/waste-documents.aspx.

[54] See City of Portland's Green Team Guide for support, available at https://www.portlandoregon.gov/sustainabilityatwork/article/497862.

[55] Washington Department of Ecology, "Buying green – sustainable purchasing," https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Sustainable-purchasing.

The Community's Role

The City of Auburn supports actions to expand recycling, composting, and reuse throughout the community, including the following steps.

Community Action M-3

Identify gaps in recycling and composting programs and take steps to expand service. The City can help identify locations, communities, and building types that are underserved by recycling and composting programs, such as multifamily apartment buildings. The City can work with haulers and through policies to improve service and increase recycling and composting.

Community Action M-4

Support "collaborative consumption" community projects that encourage shared use and exchanges. Examples projects may include tool libraries or repair cafes, which the City can support through partnerships or grants with nonprofit and community organizations.

LESS LITTER, MORE COMMUNITY

By helping residents and businesses become more mindful of the materials they consume and the waste they produce, the City can inspire more community-positive behaviors like less littering or dumping of trash. Opportunities to share resources, tools, and skills with neighbors also helps build relationship and resilience within the Auburn community.

Here's What You Can Do

RECYCLING AND REUSE

Turn food waste into a resource.
About 35% of what goes to our landfills is food scraps and materials that can be recycled as compost in curbside yard waste carts—diverting waste from landfills, lowering your costs, and creating fertilizers for your garden or local landscapers and farmers. Learn about how to compost by visiting King County's website.[56]

Recycle unconventional items curbside or at transfer centers.
You can recycle unconventional items in your curbside cart, including Tupperware and bundled plastic bags. "Hard-to-recycle" items, like mattresses and electronic waste, are accepted at recycling and transfer centers. Find out more by visiting King County's "What Do I Do With…?" website.[57]

Repair, sell, or donate items to extend their useful life.
Before you toss a broken item, learn how to fix it yourself at the Auburn Repair Café.[58] When you are ready to part with an item, post it on craigslist.org or donate it to a secondhand store.

FOOD AND MATERIAL CONSUMPTION

Eat carbon-friendly.
Animal products are more GHG-intensive to produce than plants. Eating less meat and dairy can make a big cut in emissions. Eating regionally-grown, organic food can also reduce emissions from transport and support the local economy. Try growing your own food at home or in a community garden, and purchasing from local farmers at the Auburn Farmers Market.[59]

Plan, prepare, and store food carefully to waste less food.
In America, approximately 40% of food never makes it to our dining tables—meaning the energy and water involved in producing this food is wasted. Careful planning and proper food storage can go a long way towards reducing food waste and saving you money. Try smart shopping lists that identify how much food you need, storing fresh food in the fridge when ripe, and planning meals before shopping. Tools like the EatByDate website can help you get started.[60]

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[56] King County, Compost More. Waste Less, https://your.kingcounty.gov/solidwaste/garbage-recycling/recycle-food.asp
[57] King County's "What Do I Do With…?", https://your.kingcounty.gov/solidwaste/wdidw/
[58] Auburn Repair Café, https://your.kingcounty.gov/solidwaste/ecoconsumer/repair-auburn.asp
[59] Auburn Farmers Market, http://www.auburnfarmersmarket.org/
[60] EatByDate, http://www.eatbydate.com/

Share stuff first with neighbors.
Before buying your own tools, equipment, or other items, try borrowing them first through a collaborative network. By sharing resources within the community, you can get to know your neighbors while saving money. One network serving the Auburn area is the South King Tool Library, which allows residents, businesses, and non-profits to borrow tools and equipment.[61]

[61] South King Tool Library, http://www.southkingtools.org/

Conclusions and Next Steps

The actions presented in the Climate Action Plan offer a pathway forward for the Auburn community. While the City has been committed to greenhouse gas emissions reductions for over a decade and has demonstrated that commitment in its operations, projects, and policies, the Plan provides clear steps for the City to build on its success and make even greater strides toward reducing its emissions.

With the Plan completed, the City will now be able to use the information from its two greenhouse gas inventories to set emissions targets and plan a timeline with specific goals and milestones for implementing the actions outlined in the Plan. The next phase will require the City to lead and engage the Auburn community to carry out the actions. The City will also need to monitor progress along the way to see which actions have been accomplished, which require more resources, and which should be adjusted as new information arises.

Through committed action by all Auburn residents, businesses, and the City government, using the Plan as a guiding framework, the City can enter a new chapter of fulfilling its commitment to the global community as well as to Auburn's core community values of environment stewardship, economic vibrancy, and sustainability.

CLIMATE ACTION PLAN OF THE CITY OF AUBURN

August 27, 2018

CASCADIA
CONSULTING GROUP

AUBURN'S CLIMATE LEADERSHIP

2007 — Joined the **U.S. Mayors' Climate Protection Agreement**

2009 — First **greenhouse gas inventory**

2017-2018 — Updated **inventory** and prepared this **Climate Action Plan**

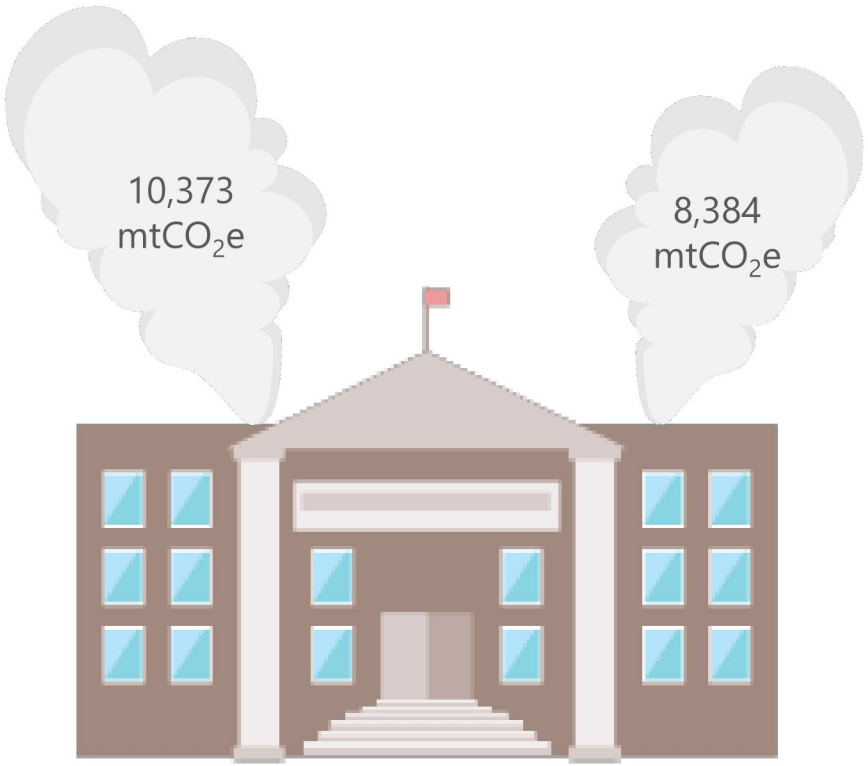
AUBURN COMMUNITY VALUES

We will protect the natural environment, preserve open space, and create appropriate access.

We will provide a diverse and vibrant local economy with employment, retail, and entertainment opportunities for citizens and a growing marketplace for homegrown and regional-scale businesses.

We will balance natural resource protection, economic prosperity, and cultural vibrancy in order to build a thriving and long-lasting community.

GREENHOUSE GAS EMISSIONS: 2008-2015



2008 Emissions

2015 Emissions

19% reduction in municipal emissions

34% per capita reduction

2008 Emissions

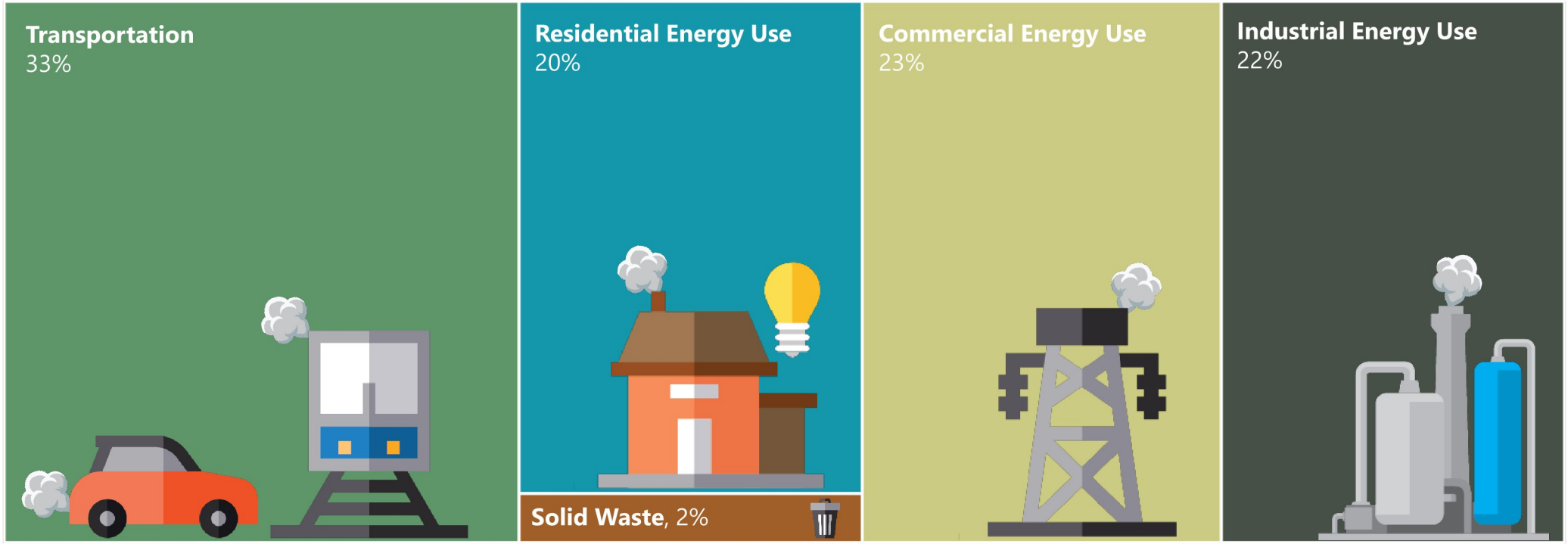
2015 Emissions

16% reduction in community emissions

27% per capita reduction

SOURCES OF EMISSIONS

Community Emissions by Sector (mtCO2e) 2015



SOURCES OF EMISSIONS

Municipal Emissions by Sector (mtCO2e) 2015

CLIMATE CHANGE IN AUBURN

Rising temperatures. In the Pacific Northwest, average annual temperatures rose 1.5°F over the last century.

More extreme droughts, floods and storms. Snowpack decreased by 25 percent, reaching a record low in 2015 that led to statewide drought.

Increasing sea level and acidifying oceans. Sea levels have risen more than 8 inches over the past century. The entire Puget Sound is threatened by ocean acidification.

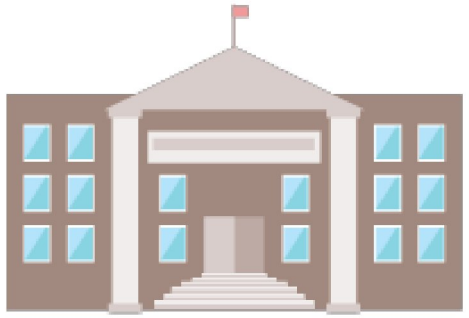
CLIMATE ACTION FOCUS AREAS

Energy

Transportation

Materials and Waste

CITY OPERATIONS



10 recommendations to reduce municipal emissions

Energy Recommendations

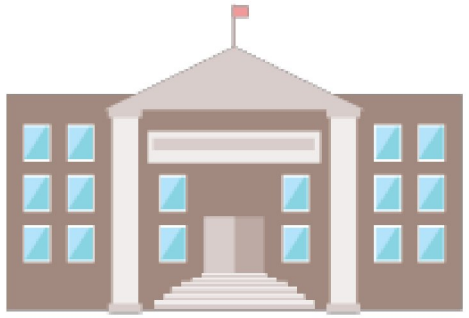
Update and retrofit traffic lights to increase energy efficiency (E-1).

Optimize heating, ventilation, and HVAC systems at City facilities by installing more efficient equipment and technology and implementing operational changes to increase energy efficiency (E-2).

Adopt performance standards for all City buildings, including renovations on existing buildings and design of new buildings, and establish a tracking system that makes the benchmarking scores of City buildings publicly available (E-3).

Optimize building envelope energy efficiency at City facilities by installing more efficient materials and technology (E-4).

CITY OPERATIONS



10 recommendations to reduce municipal emissions

Transportation Recommendations

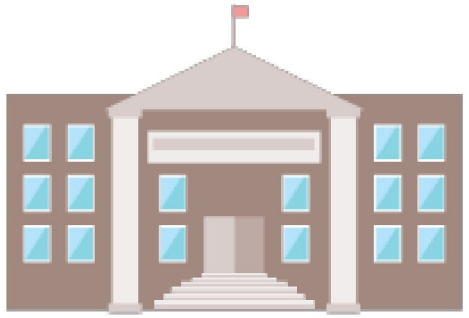
Develop a policy to include consideration of greenhouse gas emissions impacts and opportunities to reduce them when updating and implementing transportation and land use plans, codes, and zoning, as well as identifying and carrying out relevant projects.

Adopt increasing fuel-efficiency standards for the City's fleet vehicles (T-2).

Provide incentives and adequate facilities to encourage sustainable employee commuting (T-3).

Enhance flex-time policy and support telecommuting to reduce emissions related to employee commuting and support employee satisfaction, while meeting customer service needs (T-4).

CITY OPERATIONS



10 recommendations to reduce municipal emissions

Materials & Waste Recommendations

Adopt standards for City buildings to use best practices for recycling, composting, reuse, and waste reduction (M-1).

Adopt a citywide purchasing policy that includes environmental impacts (M-2).

COMMUNITY

10 recommendations to reduce community emissions

Energy Recommendations

- **Implement audits and technical assistance to increase building energy efficiency (E-5).**
- **Adopt performance standards for residential and commercial building codes** to increase building energy efficiency (E-6).
- **Support cleaner energy sources (E-7).**
- **Promote water efficiency and conserve community water resources (E-8).**

COMMUNITY

10 recommendations to reduce community emissions

Transportation Recommendations

Support the transition to plug-in hybrids and electric vehicles within the community by facilitating the installation of EV-charging stations and requiring installation of charging stations in new multifamily housing developments (T-5).

Create a pedestrian and bicycle master plan to address mobility gaps, improve safety, and increase convenience by improving infrastructure, services, and community development for people walking and biking (T-6).

Support more climate-friendly development and land use, including improvements to street infrastructure to reduce fuel use, congestion, and idling (T-7).

Increase ride-sharing and reduce driving alone through incentives and changes to transportation infrastructure (T-8).

COMMUNITY

10 recommendations to reduce community emissions

Materials & Waste Recommendations

Identify gaps in recycling and composting programs and take steps to expand service (M-3).

Support "collaborative consumption" community projects that encourage shared use and exchanges (M-4).

A PATH FORWARD

Plan a timeline for implementation

Engage the Auburn community

Monitor progress

AGENDA BILL APPROVAL FORM

Agenda Subject:
King County-Cities Climate Collaboration (K4C) (Tate) (15 Minutes)

Date:
August 21, 2018

Department:
Community Development

Attachments:
Attachment A - 2016 K4C Letter of Committment
Attachment B - 218 K4C Summit Intro, History, and Overview
Attachment C - K4C Interlocal Agreement
Attachment D - Presentation to City Council

Budget Impact:
Current Budget: $0
Proposed Revision: $0
Revised Budget: $0

Administrative Recommendation:

Background Summary:

Update:

on June 25, 2018, staff provided an overview of the King County-Cities Climate Collaboration (K4C). At the conclusion of the presentation, City Council requested that staff from the K4C initiative provide additional information at a future Study Session. Under cover of this memo are all of the same materials that were provided to City Council on June 25, 2018 as well as additional information provided by K4C staff who will be present during the August 27, 2018 Study Session.

K4C overview:

the King County-Cities Climate Collaboration (K4C) was founded in 2012 as a voluntary but formal partnership between cities and King County. The purpose of this initiative is for partners to collaborate on outreach, solutions, funding, and resources that are designed to reduce carbon pollution and emissions.

Attached to this memo are the following items that help provide additional background information, mission and purpose, and the template document that would formalize Auburn as a K4C partner agency.

Attachment A: The K4C "Joint Letter of Commitment" which outlines the program and its purpose, objectives, principles for collaboration, commitments, goals, and examples of how goals and commitments are achieved.

Attachment B: A recent PowerPoint presentation provided by K4C at their 2018 Elected Officials Summit. The presentation provides additional background information and some of the current efforts that K4C is working on.

Attachment C: The K4C Interlocal Agreement that the City of Auburn would enter into if the

City has interest in participating in the initiative.

Specific examples of what Auburn's involvement in K4C will look like are as follows:

- Participate in the development of messaging and tools for climate change outreach to engage decision makers, other cities and the public.
- Collaborate on adopting consistent standards, benchmarks, strategies and overall goals to respond to climate change.
- Share local success stories, challenges, data and products that support and enhance climate mitigation efforts.
- Collaborate to secure grant funding and other shared resource opportunities to support climate related projects and programs.
- Engaging with the Washington State Legislature and utility purveyors regarding clean power.

As stated in the interlocal agreement, it is not the intent of the agreement to create, supplant, preempt or supersede the authority or role of the City. The agreement also states that tools, outreach materials, data, and collaborative efforts and resources developed as part of the initiative are optional for the City to adopt or utilize.

As shown in Attachment C, in order for the City of Auburn to join K4C there is an annual financial obligation of $2,000.00 per year and a requirement that the Mayor enter into an interlocal agreement with King County.

If the City of Auburn chooses to join the K4C initiative, the City will have to appoint a designee and an alternate to serve as representatives. The designee and alternate is assigned to City staff who meet on a monthly basis along with elected official attendance at annual or semi-annual summits/events.

DISCUSSION:

1. Does City Council have interest in joining the K4C initiative?
2. Prior to making a commitment, would City Council prefer to arrange for a presentation by K4C at a future Study Session in order to learn more or ask more specific questions?

Reviewed by Council Committees:

Councilmember: **Staff:** Tate

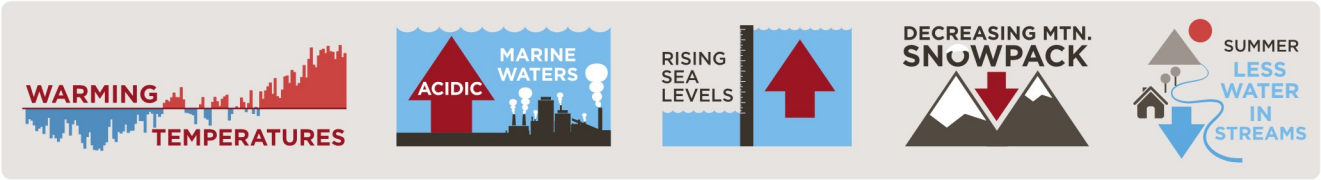
Meeting Date: August 27, 2018 Item Number:

KING COUNTY-Cities
CLIMATE COLLABORATION

Joint Letter of Commitment: Climate Change Actions in King County

Climate change is a paramount challenge of this generation and has far-reaching and fundamental consequences for our economy, environment, public health, and safety.

Across King County and its cities, we are already experiencing the impacts of climate change: warming temperatures, acidifying marine waters, rising seas, decreasing mountain snowpack, and less water in streams during the summer.



These changes have the potential for significant impacts to public and private property, resource based economies like agriculture and forestry, and to residents' health and quality of life.

The decisions we make locally and regionally, such as where our communities will grow and how they will be served by transportation, will set the stage for success or failure in reducing carbon pollution, making sound long-term investments, and ensuring our communities are livable and resilient to climate change impacts.

Current science indicates that to avoid the worst impacts of global warming we need to reduce global greenhouse gas emissions sharply. The King County Growth Management Planning Council – a formal body of elected officials from across King County - voted unanimously on July 23, 2014 to adopt a shared target to reduce countywide sources of greenhouse gas (GHG) emissions, compared to a 2007 baseline, by 25% by 2020, 50% by 2030, and 80% by 2050.

Based on our shared assessment of emissions in King County, and review of potential strategies to reduce emissions, we believe that these targets are ambitious but achievable.

Building on the work of the King County-Cities Climate Collaboration (K4C) - a partnership between the County and cities to coordinate and enhance local government climate and sustainability efforts – more than a dozen cities and the County came together in the first half of 2014 to chart opportunities for joint actions to reduce GHG emissions and accelerate progress towards a clean and sustainable future.

The attached ***Principles for Collaboration*** and ***Joint County-City Climate Commitments*** are focused on practical, near-term, collaborative opportunities between cities and King County. These shared commitments build on the significant work that many of our cities and County are already taking. By signing this letter, we pledge our support for the shared vision that these principles and actions represent. Our cities commit to actively pursue those strategies and catalytic actions where our jurisdictions can make the most impact given our size, location, and development patterns.

Through focused, coordinated action, we will maximize the impact of our individual and shared efforts.

KING COUNTY-Cities
CLIMATE COLLABORATION

Elected Officials of King County and King County Cities

Dow Constantine
King County Executive

Larry Phillips
King County Council Chair

Bruce Bassett
Mayor, City of Mercer Island

Matthew Larson
Mayor, City of Snoqualmie

Shari E. Winstead
Mayor, City of Shoreline

Jim Haggerton
Mayor, City of Tukwila

Edward B. Murray
Mayor, City of Seattle

Denis Law
Mayor, City of Renton

Amy Walen
Mayor, City of Kirkland

John Marchione
Mayor, City of Redmond

Fred Butler
Mayor, City of Issaquah

Claudia Balducci,
Mayor, City of Bellevue

Tom Vance
Mayor, City of Sammamish

Lucy Krakowiak
Mayor, City of Burien

KING COUNTY-Cities
CLIMATE COLLABORATION

Principles for Collaboration

1. Climate change is the paramount challenge of our generation, and has fundamental and far-reaching consequences for our economy, environment, and public health and safety.
2. Strong action to reduce GHG emissions is needed, and the time is now.
3. Local governments can reduce greenhouse gas (GHG) emissions through many decisions related to transportation and land use, energy and green building, forests and farms, and consumption and materials management.
4. Many cities in King County have set individual climate goals and are taking steps to reduce local GHG emissions, and we need to build on this leadership.
5. Local solutions need to be implemented in ways that build a cleaner, stronger and more resilient regional economy.
6. Progress will require deeper engagement with communities of color and low income, immigrant, and youth populations. These communities can be more vulnerable to the impacts of climate change–from increasing flood risks to rising costs of fossil fuels – and historically less likely to be included in community-scale solutions or as leaders. We are committed to work in ways that are fair, equitable, empowering, and inclusive and that also ensure that low income residents do not bear unfair costs of solutions.
7. Federal and state policies and laws can help us achieve our goals, but countywide and local policy, programs and partnerships are needed to fill the existing gap to achieve local GHG targets.
8. Progress will require deep partnerships between the County, cities, utilities, businesses, nonprofit organizations, and other public sector agencies.
9. King County and nine cities have formed the King County-Cities Climate Collaboration (K4C), and we will work to build on this initial pledge, both in increased action and increased participation from additional cities.
10. We can accomplish more with a shared vision and coordinated action; collaboration will increase the efficiency of our efforts and magnify the impact of our strategies beyond what each of us could achieve on our own.
11. Our cities support the shared vision that the Joint County-City Climate Commitments represent, but it is not the intention that each city will pursue every catalytic action. Cities and King County will actively pursue strategies where they have the most impact and influence.
12. We will reconvene at least annually to share progress. We also dedicate a staff point person from our cities and from the County to help coordinate implementation of the following Joint County-City Climate Commitments, and to serve as a point person to the K4C.

Joint County-City Climate Commitments ●○○○

I. Shared Goals

Pathway: Adopt science-based countywide GHG reduction targets that help ensure the region is doing its part to confront climate change.

Catalytic Policy Commitment: Collaborate through the Growth Management Planning Council, Sound Cities Association, and other partners to adopt countywide GHG emissions reduction targets, including mid-term milestones needed to support long-term reduction goals.

Catalytic Project or Program: Build on King County's commitment to measure and report on countywide GHG emissions by sharing this data between cities and partners, establishing a public facing dashboard for tracking progress, and using the information to inform regional climate action.

II. Climate Policy

Pathway: Support strong federal, regional, state, countywide and local climate policy.

Catalytic Policy Commitment: Advocate for comprehensive federal, regional and state science-based limits and a market-based price on carbon pollution and other greenhouse gas (GHG) emissions. A portion of revenue from these policies should support local GHG reduction efforts that align with these Joint County-City Climate Commitments, such as funding for transit service, energy efficiency projects, and forest protection and restoration initiatives.

III. Transportation and Land Use

Pathway: For passenger vehicles and light trucks, reduce vehicle miles traveled by 20% below 2012 levels by 2030 and GHG emissions intensity of fuels by 15% below 2012 levels by 2030.

Catalytic Policy Commitment: Partner to secure state authority for funding to sustain and grow transit service in King County.

Catalytic Policy Commitment: Reduce climate pollution, build our renewable energy economy, and lessen our dependence on imported fossil fuels, by supporting the adoption of a statewide low carbon fuel standard that gradually lowers pollution from transportation fuels.

Catalytic Policy Commitment: Focus new development in vibrant centers that locate jobs, affordable housing, and services close to transit, bike and pedestrian options so more people have faster, convenient and low GHG emissions ways to travel.

Catalytic Project or Program: As practical, for King County and cities developing transit oriented communities around high capacity light rail and transit projects, adopt the Puget Sound Regional Council's Growing Transit Communities Compact. For smaller cities, participate in programs promoting proven alternative technology solutions such as vehicle electrification, as well as joint carpool and vanpool promotional campaigns.

Joint County-City Climate Commitments ○●○○

IV. Energy Supply

Pathway: Increase countywide renewable electricity use 20% beyond 2012 levels by 2030; phase out coal-fired electricity sources by 2025; limit construction of new natural gas based electricity power plants; support development of increasing amounts of renewable energy sources.

Catalytic Policy Commitment: Build on existing state renewable energy commitments including the Washington State Renewable Portfolio Standard (RPS) to partner with local utilities, state regulators and other stakeholders on a countywide commitment to renewable energy resources, including meeting energy demand through energy efficiency improvements and phasing out fossil fuels.

Catalytic Project or Program: In partnership with utilities, develop a package of county and city commitments that support increasingly renewable energy sources, in areas such as community solar, green power community challenges, streamlined local renewable energy installation permitting, district energy, and renewable energy incentives.

V. Green Building and Energy Efficiency

Pathway: Reduce energy use in all existing buildings 25% below 2012 levels by 2030; achieve net-zero GHG emissions in new buildings by 2030.

Catalytic Policy Commitment: Join the Regional Code Collaboration and work to adopt code pathways that build on the Washington State Energy Code, leading the way to “net-zero carbon” buildings through innovation in local codes, ordinances, and related partnerships.

Catalytic Project or Program: Develop a multi-city partnership to help build a regional energy efficiency retrofit economy, including tactics such as: collaborating with energy efficiency and green building businesses, partnering with utilities, expanding on existing retrofit programs, adopting local building energy benchmarking and disclosure ordinances, and encouraging voluntary reporting and collaborative initiatives such as the 2030 District framework.

Joint County-City Climate Commitments ○○●○

VI. Consumption and Materials Management:

Pathway: By 2020, achieve a 70% recycling rate countywide; by 2030, achieve zero waste of resources that have economic value for reuse, resale and recycling.

Catalytic Policy Commitment: Partner through the Metropolitan Solid Waste Management Advisory Committee on policy, projects and programs focused on (1) waste prevention and reuse, (2) product stewardship, recycling, and composting, and (3) beneficial use.

Catalytic Project or Program: Develop a regional strategy through the Comprehensive Solid Waste Management Plan process to reach 70% recycling through a combination of education, incentives and regulatory tools aimed at single-family, multi-family residents, businesses, and construction projects in King County.

VII. Forests and Farming

Pathway: Reduce sprawl and associated transportation related GHG emissions and sequester biological carbon by focusing growth in urban centers and protecting and restoring forests and farms.

Catalytic Policy Commitment: Partner on Transfer of Development Rights (TDR) initiatives to focus development within the Urban Growth Area, reduce development pressure on rural lands, and protect our most valuable and important resource lands.

Catalytic Project or Program: Protect and restore the health of urban and community trees and forests, for example through public-private-community efforts such as Forterra's Green Cities Partnerships.

Catalytic Project or Program: Partner on collaborative efforts to expand forest and farm stewardship and protection, for example through King Conservation District's farm management planning, landowner incentive, and grant programs.

Catalytic Project or Program: Expand our local food economy, for example by supporting urban and community farming, buying locally produced food, and participating in the Farm City Roundtable forum.

Joint County-City Climate Commitments

VIII. Government Operations

Pathway: Reduce GHG emissions from government operations in support of countywide goals.

Policy Commitment: Develop and adopt near and long-term government operational GHG reduction targets that support countywide goals, and implement actions that reduce each local government's GHG footprint.

Catalytic Project or Program: In support of the Section V. Green Building and Energy Efficiency pathway targets to reduce energy use in existing buildings 25% below 2012 levels by 2030 and achieve net-zero GHG emissions in new buildings by 2030: execute energy efficiency projects and initiatives at existing facilities, measure existing building performance through EPA's Energy Star or equivalent program, implement high-efficiency street and traffic light replacement projects, and construct new buildings to LEED or Living Building Challenge standards and infrastructure to equivalent sustainability standards.

IX. Collaboration

Policy Commitment: Participate in or join the King County-Cities Climate Collaboration (K4C) – focused on efforts to coordinate and enhance city and County climate and sustainability efforts – to share case studies, subject matter experts, resources, tools, and to collaborate on grant and funding opportunities.

Catalytic Project or Program: Engage and lead government-business collaborative action through efforts such as the Eastside Sustainable Business Alliance.

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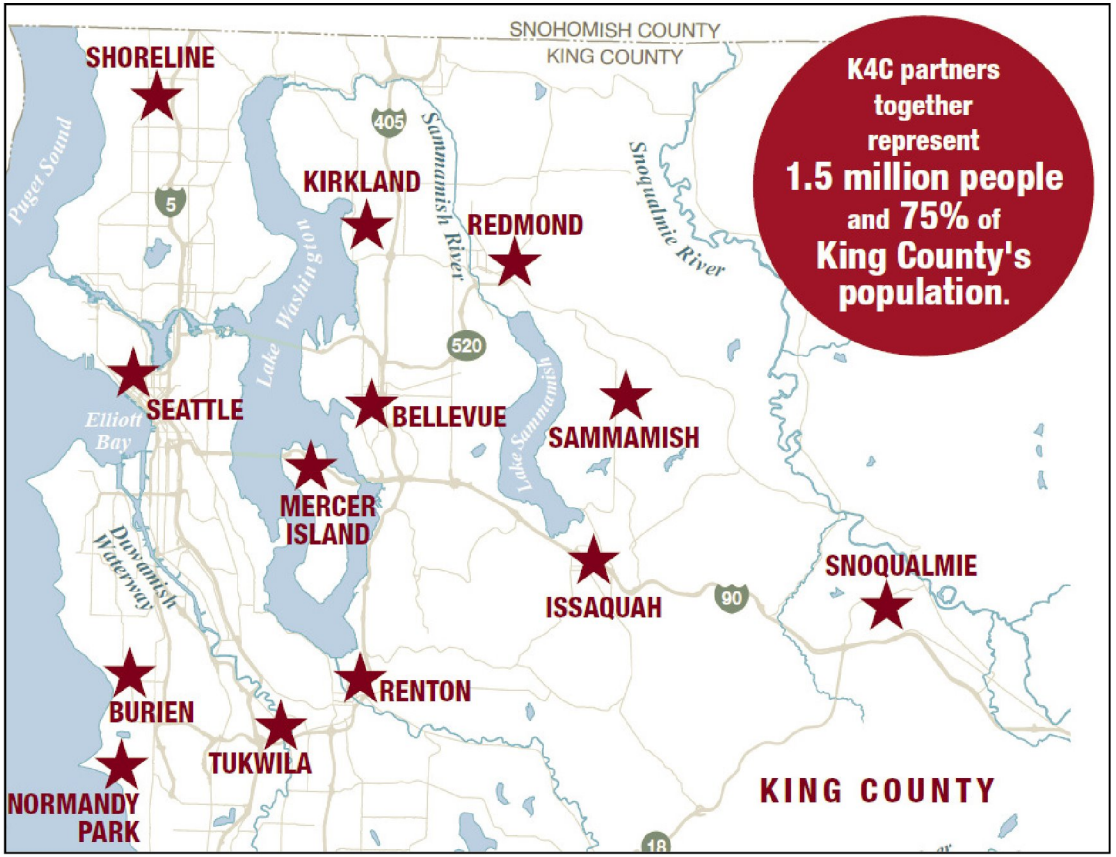
K4C Elected Official Summit

February 7, 2018

King Street Center

8th Floor Conference Center

K4C Highlights: Who we are



K4C: Benefits of Collaboration

- Identify goals and hold ourselves **accountable**
- **Share resources** – staff time and expertise, training, and funding
- Speak with a collective voice for **greater impact**
- Coordinate outreach and messaging to advocate for **solutions**
- Raise the profile of **local governments**' climate work
- **Engage** elected officials and other leadership **on action**

Five K4C Elected Official Summits since 2014

K4C Partner Staff in 2016

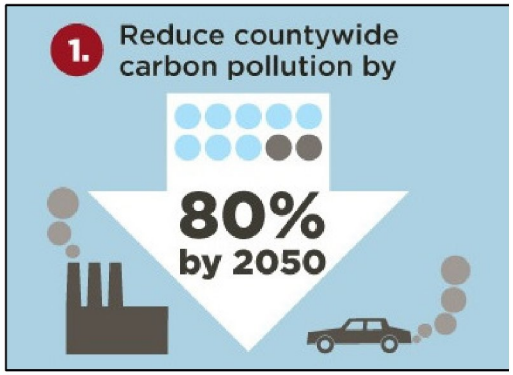
K4C Highlights: History and Charter

2012: Founding

- **Voluntary but formal** (via Interlocal Agreement) partnership between cities and King County
- Partner on **outreach, solutions and funding and resources**

2014: Adoption of shared climate goals

- Formalized through Countywide Planning policies; 50% by 2030, 80% by 2050 v. 2007 baseline



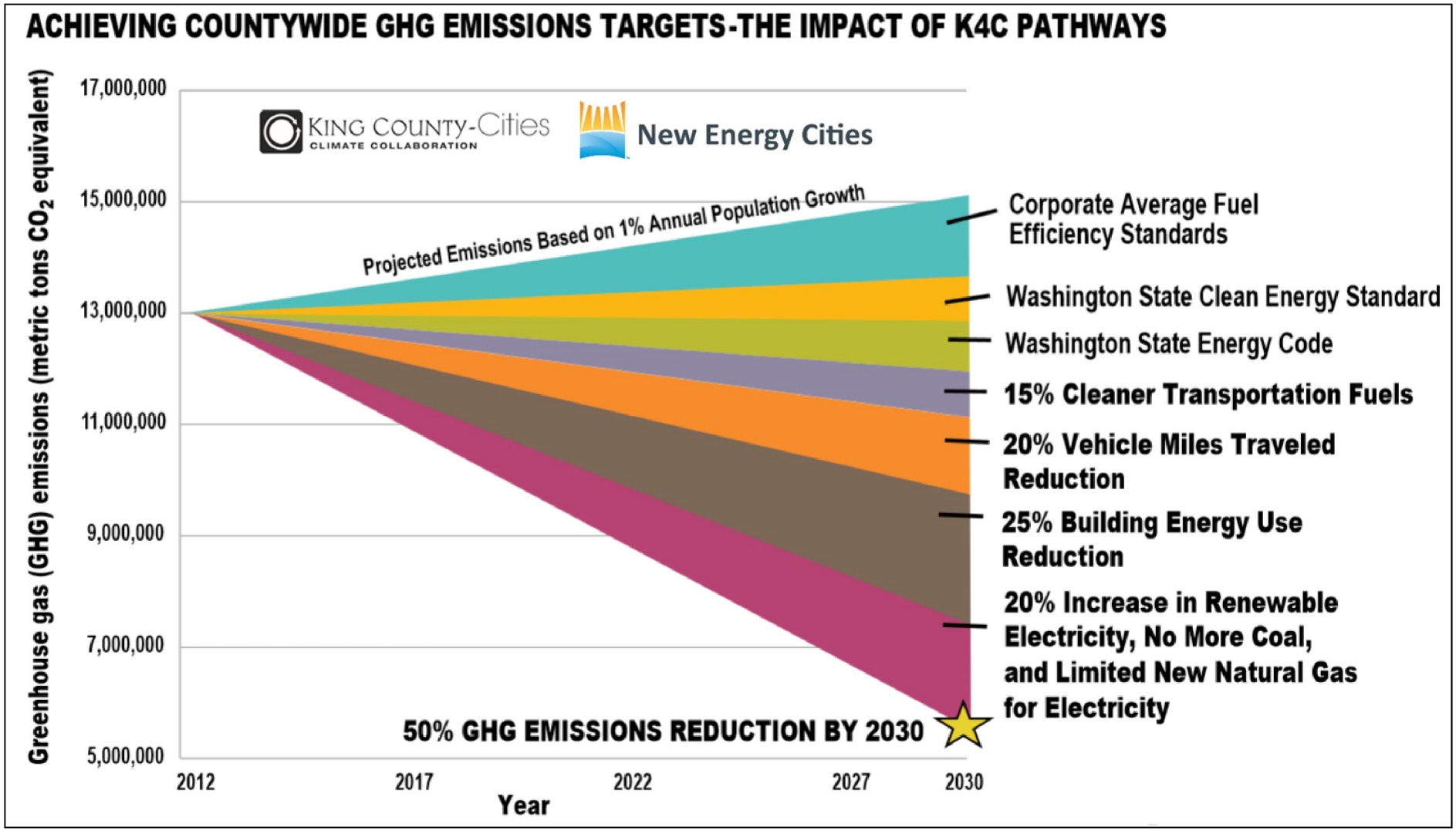
2015: Development of Joint Commitments

- Based on pathways to cut emissions 50% by 2030
- Land use and transportation, building energy, electricity supply, forestry and agriculture

KING COUNTY-Cities
CLIMATE COLLABORATION

K4C Highlights: "Carbon Wedge" Analysis

Doing the math to know what it will take to achieve shared GHG reduction targets



K4C Elected Official Summit: Today's agenda

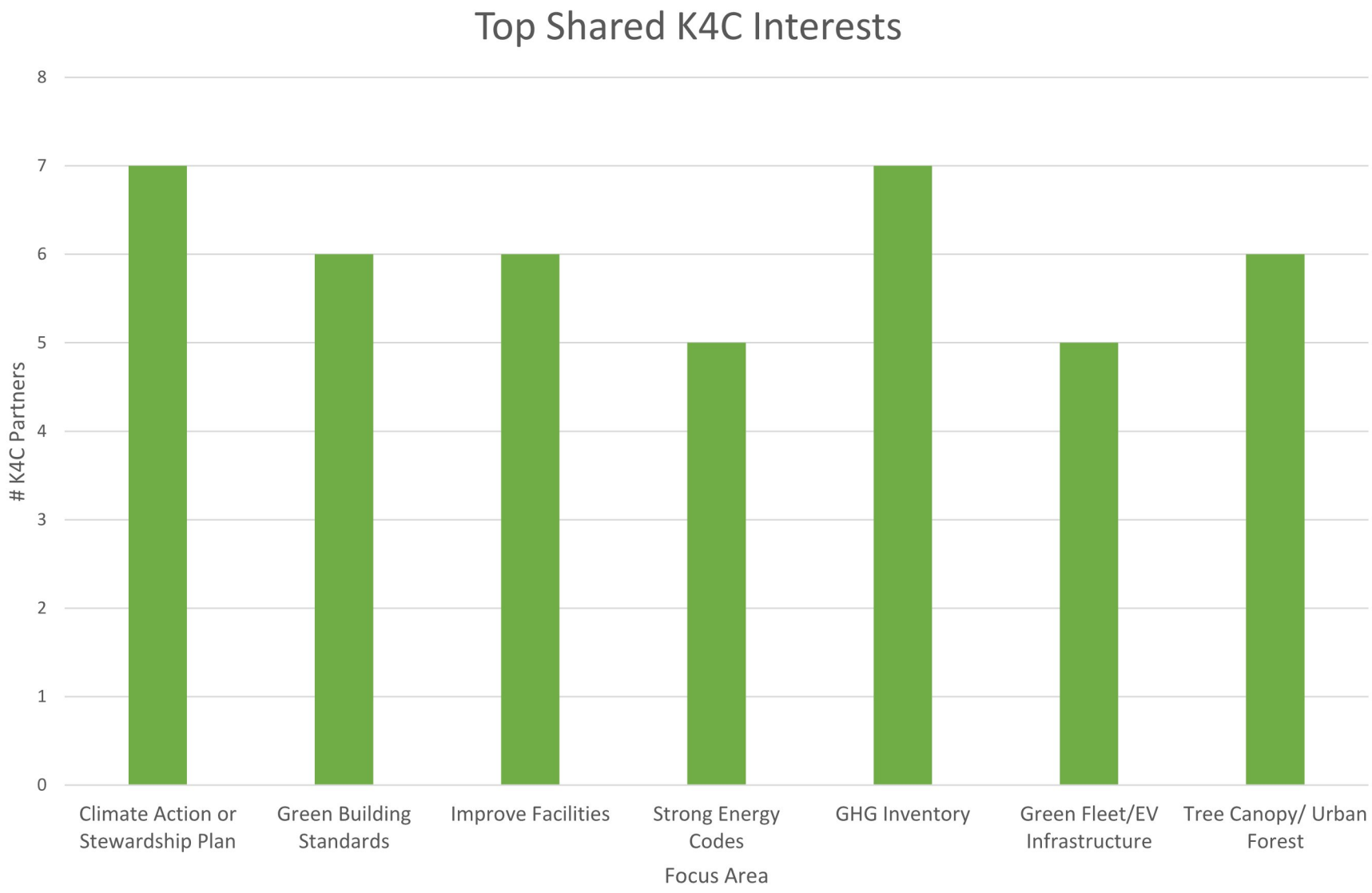
Joint County-City Climate Commitments

Focus of Today's Summit !

K4C Highlights: 2017 Shared Work

- **Measure progress towards shared GHG targets**
- **Develop technical analysis for achieving 90% renewable electricity**
- **Joint comments and testimony on energy and climate policies**
  - Electric vehicles; Colstrip closure; Clean Power Plan repeal
- **Technical and funding assistance to support city sustainability initiatives**
  - Transportation: Fleet Managers Workgroup
  - Energy Efficiency: Cities - Fund to Reduce Energy Demand
  - Renewable Energy: Green Direct tariff development and enrollment
  - Green Building: GreenTools and Regional Code Collaboration support; Salmon Safe training
  - Community: Sustainable Cities Roundtables

Individual Interests and Actions – November Staff Retreat



K4C Shared Interests

Top Shared Interests

These are the top interests identified by staff in November 2017. The local governments listed below each topic have taken steps to implement programs and policy, or want to investigate the action more thoroughly before implementing.

Climate Action or Stewardship Plan	Green Building Standards	GHG Inventory	Tree Canopy/Urban Forest
King County	King County	King County	King County
Bellevue	Issaquah	Bellevue	Bellevue
Kirkland	Redmond	Issaquah	Burien
Redmond	Shoreline	Kirkland	Redmond
Seattle	Snoqualmie	Shoreline	Sammamish
Shoreline	Port of Seattle	Tukwila	Snoqualmie
Snoqualmie		Port of Seattle	

Improve Facilities	Strong Energy Codes	Green Fleet/EV Infrastructure
King County	King County	Bellevue
Bellevue	Issaquah	Burien
Redmond	Mercer Island	Redmond
Snoqualmie	Seattle	Seattle
Issaquah	Tukwila	Tukwila
Port of Seattle		

Clean Energy: Joint Action Opportunities

Cities Fund to Reduce Energy Demand

- Loan program for energy efficiency and renewable energy projects
- Modelled after successful internal King County loan program
- Life Cycle Cost Analysis shows pay off in under 10 years
- Streamline bond financing
- Requirement to repay loan – can use utility savings
- King County Council review of program is pending; committee hearing 2/14
- If approved, will move quickly to solicit projects

Clean Energy: Joint Action Opportunities

Model Resolution/Clean Energy Future

- Foundation is K4C climate goal and shared commitments + past comment letters
- Phase out coal by 2025; replacement with renewables, 90% renewable by 2030
- Increase energy efficiency through partnerships, shared approaches, loans, grants
- Seek federal and state policy changes supporting increasing use and production of renewables
- Pursue in manner that creates improvement in air quality and economic opportunity for most impacted communities

Clean Energy: Joint Action Opportunities

Sign on letter to Utilities and Transportation Commission on PSE's Long-Range Plan

- Seeking signature by 2/20
- Strengthen assumptions/recommendations on efficiency, renewables, batter storage, demand management, carbon pricing
- Clear timeline for phase out of coal/replacement with renewables

Testimony at 2/21 Public Hearing in Renton

State Legislation

Wrap Up: Actions and Contacts

- ❑ Partner with Million Trees? (Jamie.Stroble@KingCounty.gov)
- ❑ Support/participate in cities loan program? Rachel.Brombaugh@KingCounty.gov
- ❑ Sign-on to PSE comment letter? (Rachel)
- ❑ Pursue clean energy resolution? (Megan.Smith@KingCounty.gov)
- ❑ Weigh in on state bills: stronger energy efficiency codes, costs and benefits of renewable energy, clean fuels, carbon pricing (Rachel)
- ❑ Develop City-specific climate change infographic using King County-provided template (Jamie)
- ❑ Stay tuned for final recommendations from Clean Energy Pathways consulting (Rachel)
- ❑ Join K4C? (Rachel)

INTERLOCAL AGREEMENT FOR CLIMATE COLLABORATION

This Agreement ("Agreement") is entered into pursuant to Chapter 39.34 RCW among participating **Cities of King County**, (hereinafter referred to as the "Cities"), and **King County,** (hereinafter referred to as the "County"), 201 S. Jackson, Suite 701, Seattle, WA 98104 (collectively, "the Parties") Chapter 39.34 RCW.

Whereas, we, King County and the undersigned Cities of King County, wish to work together to directly respond to climate change and reduce global and local sources of climate pollution;

Whereas, we believe that by working together we can increase our efficiency and effectiveness in making progress towards this goal;

Whereas, we are interested in achieving this goal in a way that builds a cleaner, stronger and more resilient regional economy;

Whereas, we are interested in focusing on local solutions to leverage and partner with related collaborative efforts;

Whereas, partnering on sustainable solutions will advance progress towards Cities' environmental, climate change, and energy goals such as those adopted by the nearly half of King County Cities that have signed on to the U.S. Conference of Mayors Climate Protection Agreement;

NOW, THEREFORE, the Cities and King County mutually agree as follows:

1. Purpose and Scope of this Agreement

1.1 The purpose of this Agreement is to outline responsibilities and tasks related to the County and Cities that are voluntarily participating in the King County-Cities Climate Collaboration. The Parties will develop and coordinate on the following efforts:

(a) Outreach: Develop, refine, and utilize messaging and tools for climate change outreach to engage decision makers, other cities, and the general public.

(b) Coordination: Collaborate on adopting consistent standards, benchmarks, strategies, and overall goals related to responding to climate change.

(c) Solutions: Share local success stories, challenges, data and products that support and enhance climate mitigation efforts by all partners.

(d) Funding and resources: Collaborate to secure grant funding and other shared resource opportunities to support climate related projects and programs.

1.2 It is not the purpose or intent of this Agreement to create, supplant, preempt or supersede the authority or role of any individual Party.

1.3 All tools, outreach materials, data, collaborative efforts, and other resources that are developed as part of this Agreement are optional for Cities and King County to adopt or utilize.

2. Organization

2.1 Each Party shall appoint one designee and an alternate to serve as its representative. Upon the effective execution of this Agreement and the appointment of designees and alternate designees for each Party, designees shall meet and choose, according to the voting provisions of this section, representatives to serve as **Chair** and **Vice Chair** to oversee and direct the activities associated with meetings including the development of the agendas, running the meeting and providing leadership.

2.2. No action or binding decision will be taken without the presence of a quorum of active designees or alternates. A quorum exists if a majority of the designees present at the meeting. Each designee shall have an equal vote, with a supermajority vote of 75% of all designees being required to approve the final scope of the collaboration program or amend the scope. Any vote to increase the amount of funding required by each Party, however, shall only be binding on those who specifically agree to such increase.

2.3 Designees shall have the authority and mandate to administer the Tasks outlined in Section 3.

2.4 Designees may approve a Request for Qualifications (RFQ) to secure a vendors or consultants needed to accomplish any Task, and shall interview one or more applicants and make an appointment provided sufficient funds are available.

2.5 Designees shall meet and report on a quarterly basis to ensure that Tasks are efficiently, effectively and responsibly delivered in the performance of this Agreement, including the allocation of resources.

2.6 Designees shall develop an initial annual work plan and budget, which will be finalized within one month of approval of the Agreement by the Parties. Subsequent annual work plans will be developed and approved on or before the anniversary of the adoption of the first years' work plan in conjunction

with budget planning for consideration and adoption by the Parties' legislative bodies.

2.7 If direct payment in support of the annual work plan, such as for consultant services or hiring staff, can be arranged by participating Cities, this is preferred. If direct payment occurs, these funds will be accounted for towards that city's contribution. If this is not possible, funds collected from any source on behalf of the Parties shall be maintained in a special fund by the County as *ex officio* treasurer on behalf of the Collaboration. The County shall also serve as the contractual agent for the Parties in acquiring any serviced needed to complete Tasks of the Agreement.

3. Tasks

3. 1 Climate Collaboration Work Plan.

Finalize the Scope of Work for this King County-Cities Collaboration consistent with this Agreement. This will take place after commencement per Section 5 of this Agreement and is funding-dependent.

3.2 Sustain the King County Cities Climate Collaboration (Budget $10,000)

Pay necessary expenses to support expansion of the King County SWD Green Tools Roundtable program to include every other-month forums on climate-related sustainability issues. The Roundtables will be held at various venues throughout King County and topics will focus on the collaborative actions highlighted in the King County-Cities Climate Pledge: outreach, coordination, solutions, funding and resources. Speakers will include King County and City staff and other invited partners.

3.3 Hire a staff member, partial staff member, or consultant to support achieving the priorities identified in the King County-Cities Climate Pledge (Budget $9,000-$80,000 depending on commitments made)

(a) The staff member will help lead implementation of the King County-Cities Climate Collaboration initiatives, including but not limited to: sustainable transportation; clean fuel vehicles; community energy retrofits; renewable energy projects; community outreach; and other topics defined and agreed upon in the final Scope of Work or annual Work Plans. Staff could develop and implement a general countywide program that supports City sustainability projects or programs. Staffing options include hiring a part- to full-time staff from King County or a participating King County City to lead the effort

(b) Products that will be developed, to be clarified in the process of finalizing the Scope of Work, and dependent on funding, include:

1. Directory of local climate solutions related resources to include:
    a. County technical expert pool. A list of relevant County technical experts on staff that already support city sustainability projects and programs. This could be expanded with mechanisms for cities to directly contract with County staff to support implementation of specific projects and programs.
    b. Technical experts from all participating jurisdictions that could help support other cities' efforts, share local success stories, or potentially be contracted out to work with other cities.
    c. Technical experts from academia, research institutions, utilities and other organizations.
    d. List of consultants with local experience and expertise on a diverse range of climate and sustainability related functions.
    e. Best practices and lessons learned from relevant local projects and programs.

2. Symposium for city and County staff focused on local climate solutions.

3. Forum for all local technical experts – a broader group than those engaged in the King County-Cities Climate Collaboration – to share information and best practices

4. Opportunities for local governments to increase understanding and gather information on specific climate change mitigation efforts.

5. Other products as defined and agreed upon in the process of finalizing the Scope of Work, provided they are consistent with the King County-Cities Climate Pledge and focused on sustainability and climate change related outreach, coordination, solutions, or funding and resources.

4. <u>Funding</u>

4.1 The minimum required financial contribution for each King County City to participate in this Agreement is shown below. In no event shall the Cities be responsible for amounts incurred by King County in excess of what is set forth in this Agreement without an amendment according to the terms hereof.

4.2 To the extent this Agreement is renewed annually, the Parties shall update the work plan and contribute funds to King County for estimated costs, as described below, in advance of services provided. Any funds not used in any given year will be used in the execution of the following year's Work Plan or refunded, on a proportional basis based on initial contributions, within forty-five (45) days in the event of a Party's termination of this Agreement.

4.3 The Parties represent that funds for service provision under this Agreement have been appropriated and are available. To the extent that such service provision requires future appropriations beyond current appropriation authority, the obligations of each Party are contingent upon the appropriation of funds by that Party's legislative authority to complete the activities described herein. If no such appropriation is made, the Agreement shall terminate as to that Party provided the Party provides notice of termination prior to the other parties prior to the adoption of the annual work plan per Section 2.6.

Population Categories	Jurisdiction	Population
Under 5,000	$500	Level 1
	Skykomish	198
	Beaux Arts Village	299
	Hunts Point	394
	Milton	831
	Yarrow Point	1001
	Carnation	1,786
	Medina	2,969
	Clyde Hill	2,984
	Algona	3,014
	Black Diamond	4,151
5,000 - 19,999	$700	Level 2
	North Bend	5,731
	Normandy Park	6,335
	Pacific	6,514
	Duvall	6,695
	Newcastle	10,380
	Enumclaw	10,669
	Snoqualmie	10,670
	Woodinville	10,938
	Lake Forest Park	12,598
	Bothell	17,090
	Covington	17,575
	Tukwila	19,107

Population Categories	Jurisdiction	Population
20-39,999	$1,200	Level 3
	Kenmore	20,460
	Maple Valley	22,684
	Mercer Island	22,699
	SeaTac	26,909
	Des Moines	29,673
	Issaquah	30,434
	Burien	33,313
40- 65,000	$2,000	Level 4
	Sammamish	45,780
	Kirkland	48,787
	Shoreline	53,007
	Redmond	54,144
	Auburn	62,761
Over 65,000	$2,500	Level 5
	Federal Way	89,306
	Renton	90,927
	Kent	92,411
	Bellevue	122,363
Over 250,000	$5,000	Level 6
	Seattle	608,660
King County	$10,000	Level 7

Note: Population data from the Puget Sound Regional Council's download of 2010 census data

5. Duration

This Agreement is effective upon execution by King County and a minimum of eight King County Cities, which will contribute at least $9,000 total, after approval by the legislative body of each Party. The Agreement will be posted on the web site of each Party after authorization in accordance with RCW 39.34.040. and .200. The Agreement will have a term of one year and will automatically renew each year unless terminated as provided in Section 7.

6. Latecomers

Non-party King County cities may opt into this Agreement at any time. If cities join after an annual work is finalized, they will pay a pro-rated amount, calculated as the preceding year's annual financial contribution for that jurisdiction multiplied by the percentage of the remaining time in the year.

7. Termination

7.1 In addition to termination for lack of appropriation under Section 5, a Party may end its participation in this Agreement upon written notice to the other Parties prior to October 1st to be effective at the end of the calendar year. Except as set forth in 7.2, no refunds will be paid to individual Parties who terminate.

7.2 In the event of individual terminations that result in fewer than eight remaining City participants, this Agreement shall be deemed terminated and all funding remaining after all services, fees and costs incurred to that date are paid, shall be returned by King County to the remaining participants pro rata based on their original relative contribution amounts. Such payment shall be made within forty-five (45) days of the termination date.

8. Communications

The following persons shall be the contact person for all communications regarding the performance of this Agreement.

King County	**City of**
Matt Kuharic	
King County Department of Natural Resources and Parks Director's Office	
201 South Jackson, Suite 701, Seattle, WA 98104	
Phone: 206-477-4554	Phone:
E-mail address: matt.kuharic@kingcounty.gov	Email address:

9. **Indemnification**

To the extent permitted by state law, and for the limited purposes set forth in this Agreement, each Party shall protect, defend, hold harmless and indemnify the other Parties to include the officers, employees, agents and contractors of the Party, while acting within the scope of their employment as such, from and against any and all claims (including demands, suits, penalties, liabilities, damages, costs, expenses, or losses of any kind or nature whatsoever) arising out of or in any way resulting from such Party's own negligent acts or omissions, torts and wrongful or illegal acts related to such Party's participation and obligations under this Agreement. Each Party agrees that its obligations under this subsection extend to any claim, demand and/or cause of action brought by or on behalf of any of its employees or agents. For this purpose, each Party, by mutual negotiation, hereby waives, with respect to the other Parties only, any immunity that would otherwise be available against such claims under the industrial insurance act provisions of Title 51 RCW. The provisions of this subsection shall survive and continue to be applicable to Parties exercising the right of termination pursuant to this Agreement.

In no event do the Parties intend to assume any responsibility, risk or liability of any other Party or otherwise with regard to any Party's duties or regulations.

10. Compliance with All Laws and Regulations

The Parties shall comply with all applicable local, state, and federal laws, regulations and standards necessary for the performance of this Agreement.

11. Non- exclusive Program

Nothing herein shall preclude any Party from choosing or agreeing to fund or implement any work, activities or projects associated with any of the purposes hereunder by separate agreement or action.

12. No Third Party Rights

Nothing contained in this Agreement is intended to, nor shall it be construed to, create any rights in any third party, or to form the basis for any liability on the part of any Party , or their officers, elected officials, agents and employees, to any third party.

13. Amendments

This Agreement may be amended, altered or clarified only the unanimous consent of the Parties represented by affirmative action of their legislative bodies.

14. Entire Agreement

This Agreement is a complete expression of the intent of the Parties and any oral or written representations or understandings not incorporated herein are excluded.

15. Waiver

Waiver of any default shall not be deemed to be waiver of any subsequent default. Waiver of breach of any provision of this Agreement shall not be deemed to be a waiver of any other or subsequent breach and shall not be construed to be a modification of the terms of the Agreement unless stated to be such through written approval by the Parties which shall be attached to the original Agreement.

16. RCW 39.34 Required Clauses

a) Purpose. See Section 1 above
b) Duration. See Section 5 above.
c) Organization of separate entity and its powers. No new or separate legal or administrative entity is created to administer the provisions of this Agreement.
d) Responsibilities of the Parties. See provisions above.
e) Agreement to be filed and recorded. The City shall file this Agreement with its City Clerk. The County shall place this Agreement on its web site. The Agreement shall also be recorded.
f) Financing. Each Party shall be responsible for the financing of its contractual obligations under its normal budgetary process.
g) Termination. See Section 7 above.

17. Counterparts

This Agreement may be executed in counterparts.

The persons signing below, who warrant they have the authority to execute this Agreement.

By: _____	By: _____
Dow Constantine	Mayor
King County Executive	City of
Date: _____	Date: _____

K4C Overview

Megan Smith, Director of Climate and Energy Initiatives
Rachel Brombaugh, Energy Policy and Partnerships Specialist
King County

August 27, 2018

Climate impacts are happening now.

A GLIMPSE OF THE FUTURE?

RECENT YEARS OFFER A PREVIEW OF FUTURE CONDITIONS IF NO ACTION IS TAKEN.

FLOODING

JANUARY 2015: Warm storms bring torrential rain and flooding.

RECORD LOW SNOWPACK

SPRING 2015: Record low snowpack in the Central Cascades.

RECORD TEMPERATURES

2015: Hottest year on record for Washington State.

SUMMER 2017: Hottest and driest summer on record for Seattle.

RECORD WILDFIRES

2014 & 2015: Low snow and high summer temperatures lead to record fires. More than 1 million acres burned in 2015.

LANDSLIDE RISKS

WINTER 2017: Wettest winter on record creates flooding and landslide hazards throughout the Puget Sound region.

POOR AIR QUALITY

SUMMER 2017: Northwest forest fires create unprecedented summer air quality problems in the Puget Sound region.

MORE FOOD-BORNE ILLNESSES

SUMMER 2017: More than 50 people sickened by *Vibrio*, a bacterial illness in shellfish associated with warmer temperatures.

Climate change impacts our health and economy.

WHAT IS THE RISK FOR OUR REGION NOW AND IN THE FUTURE?

IF WE DON'T ACT NOW, THE COSTS AND CONSEQUENCES WILL GROW.

ENVIRONMENT

Increasing stress for salmon.

Impacts on forests from insects, disease and fire.

Changes in habitat important to local species.

More harmful algal blooms in lakes and Puget Sound.

ECONOMY

Greater risks to homes, businesses, and infrastructure from increased coastal and river flooding.

Marine-based economies suffer as fish and shellfish diminish.

Increased summer drought stress.

HEALTH

Health impacts from heat exposure.

Changes in illnesses carried by ticks and mosquitos.

Increased risks for people with asthma and heart illness due to more summer air pollution.

Greater risk of injury and property damage from more extreme weather events.

Why take action?

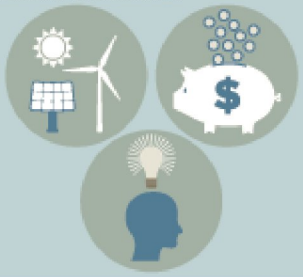
WHY ACT NOW ON CLIMATE CHANGE?

REDUCING CARBON POLLUTION AND PREPARING FOR CLIMATE IMPACTS MAKES OUR COMMUNITIES HEALTHIER AND MORE RESILIENT.

Increasing regional mobility options reduces pollution and improves quality of life.

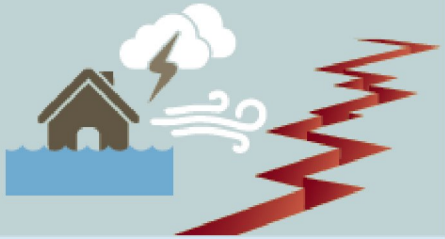
Conserving resources and reducing waste saves money now and in the future.

Investing in a clean energy future promotes innovation and economic benefits.



Building green makes our homes and workplaces healthier and reduces utility costs.

Preparing for climate change makes us more resilient to today's extreme weather events and other emergencies.



Addressing climate change has benefits for health outcomes, our environment, and air quality.

Climate change: Why does City action matter?

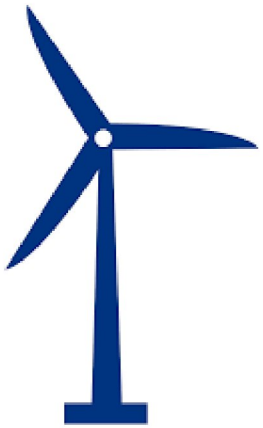
- High impact: King County cities under 100,000 residents are 44% of total population
- 98% of new growth in King County happening in urban areas
- Growing constituent interest in climate issues
- Can save money and resources

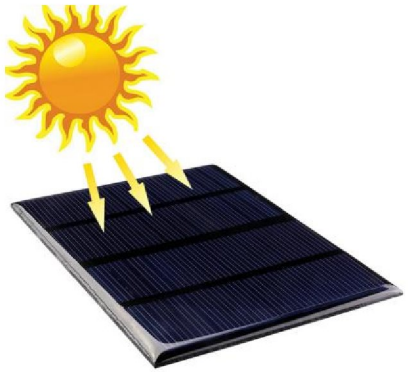
Local Governments have impact and influence!

- Land use and transportation planning
- Building codes
- Purchasing
- Renewable energy production
- Weighing in on federal and state policies for electricity supply, clean vehicles and fuels, and energy efficiency

Case Study of Local Government Action

- For many years, King County and partners asked Puget Sound Energy for cleaner electricity supplies
- PSE developed “Green Direct”, a program that will supply wind and solar generated electricity to subscribers.
- Under this program, King County will reduce operational emissions by 20%, and save money because of the lower price of renewable electricity.
- The program puts new renewable systems on the grid and creates construction and operations jobs.

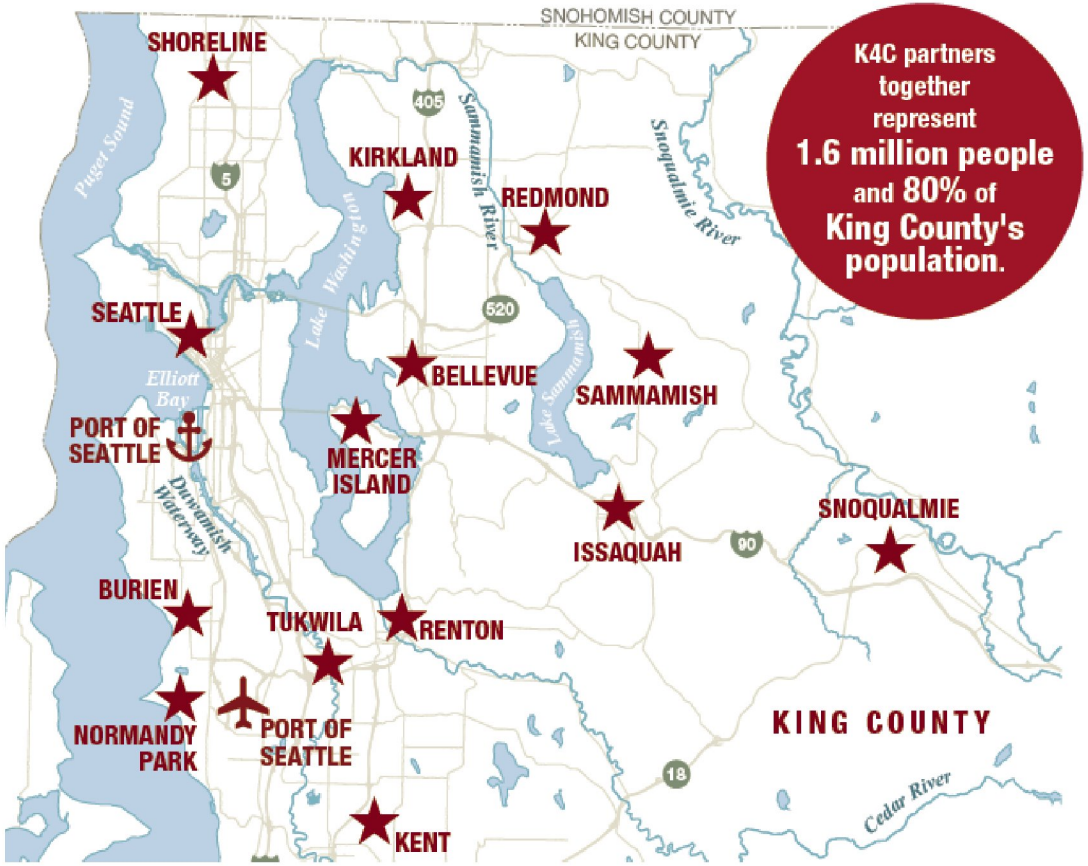




What is the King County-Cities Climate Collaboration?

- **Voluntary but formal collaboration** of local governments working together to reduce greenhouse gas emissions in King County.
- **Areas of collaboration include:** seeking supportive state policies for renewable energy, collaborating on green building codes, improving energy efficiency, public engagement.

Who is the K4C?



K4C partners together represent **1.6 million people** and **80%** of **King County's population.**

King County

City of Normandy Park Washington

City of Mercer Island

City of Issaquah Washington

Cityof Redmond Washington

City of Kirkland Washington

Kent Washington

City of Seattle

Burien

City of Shoreline

Port of Seattle

City of Renton

City of Snoqualmie

City of Sammamish Washington

What are the benefits of the K4C?

- **Share learning and tools – be a resource**
- **Respond to constituents**
- Ensure that our individual local actions have **regional impact**
- Speak with a collective voice for **greater influence**
- Coordinate outreach and messaging to advocate for **solutions**

Five K4C Elected Official Summits since 2014

How do you join K4C? What is the resource commitment?

- **Members sign on through an Interlocal Agreement**
  - Outlines broad commitment to collaboration and goals
  - Defines annual financial contributions based on population

- **Members can make stronger *optional* pledge to more specific Joint County-City Climate Commitments**

- **Staff meet 8-10 times a year. For smaller cities, this is their "green team"**

- **Elected official summits are convened by County Executive and held 1-2 times a year**

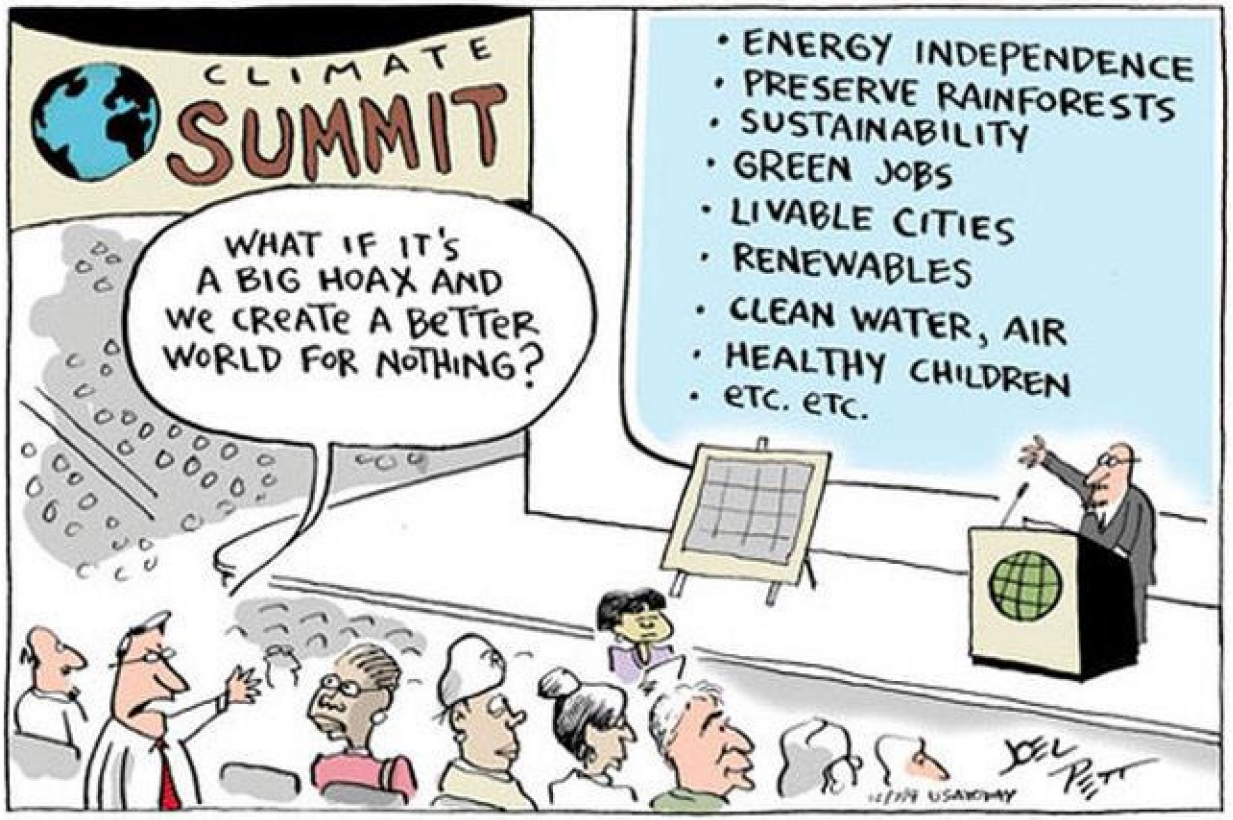
K4C Annual Financial Commitment

Population Categories	Jurisdiction	Population
Under 5,000	$500	Level 1
	Skykomish	198
	Beaux Arts Village	299
	Hunts Point	394
	Milton	831
	Yarrow Point	1001
	Carnation	1,786
	Medina	2,969
	Clyde Hill	2,984
	Algona	3,014
	Black Diamond	4,151
5,000 - 19,999	$700	Level 2
	North Bend	5,731
	Normandy Park	6,335
	Pacific	6,514
	Duvall	6,695
	Newcastle	10,380
	Enumclaw	10,669
	Snoqualmie	10,670
	Woodinville	10,938
	Lake Forest Park	12,598
	Bothell	17,090
	Covington	17,575
	Tukwila	19,107

Population Categories	Jurisdiction	Population
20-39,999	$1,200	Level 3
	Kenmore	20,460
	Maple Valley	22,684
	Mercer Island	22,699
	SeaTac	26,909
	Des Moines	29,673
	Issaquah	30,434
	Burien	33,313
40- 65,000	$2,000	Level 4
	Sammamish	45,780
	Kirkland	48,787
	Shoreline	53,007
	Redmond	54,144
	Auburn	62,761
Over 65,000	$2,500	Level 5
	Federal Way	89,306
	Renton	90,927
	Kent	92,411
	Bellevue	122,363
Over 250,000	$5,000	Level 6
	Seattle	608,660
King County	$10,000	Level 7

Note: Population data from the Puget Sound Regional Council's download of 2010 census data

In closing….


CLIMATE
SUMMIT
WHAT IF IT'S A BIG HOAX AND WE CREATE A BETTER WORLD FOR NOTHING?
• ENERGY INDEPENDENCE
• PRESERVE RAINFORESTS
• SUSTAINABILITY
• GREEN JOBS
• LIVABLE CITIES
• RENEWABLES
• CLEAN WATER, AIR
• HEALTHY CHILDREN
• ETC. ETC.

How can you get more information or a briefing?

Please contact:

Rachel Brombaugh, Energy Policy & Partnerships Specialist, Office of King County Executive

206-263-9633

Rachel.Brombaugh@kingcounty.gov

Matt Kuharic, Climate Change Program Coordinator, King County Department of Natural Resources and Parks

206-477-4554

Matt.Kuharic@kingcounty.gov

Nicole Sanders, Long Range Planner, City of Snoqualmie

425-888-5337 x1143

Nsanders@ci.Snoqualmie.wa.us

More information on line at: King County Cities Climate Collaboration

Thank you for your interest!

AGENDA BILL APPROVAL FORM

Agenda Subject:
We Care Clinic (Tate) (20 Minutes)

Date:
August 22, 2018

Department:
Community Developement

Attachments:
Exhibit A - Resolution No. 5306
Exhibit B - Daily Clinic Deck for Auburn Clinic

Budget Impact:
Current Budget: $0
Proposed Revision: $0
Revised Budget: $0

Administrative Recommendation:

Background Summary:

The Muckleshoot Indian Tribe will provide a presentation to City Council that describes a proposed clinic that they are seeking to establish within Auburn.

The We Care Clinic provides clinically administered medication to individuals within the community who are recovering from addiction. Based upon information provided by MIT, the facility is staffed by physicians and nurse practitioners who will provide 100% of the medication that is administered as well as credentialed professionals who provide treatment and counseling services.

City Council enacted Resolution 5306 on July 17, 2017. Resolution No. 5306 is a resolution of the City Council opposing the siting of illegal substance injection facilities within Auburn. MIT has indicated that the We Care Clinic provides services that are consistent with and supportive of Resolution No. 5306. Resolution No. 5306 is attached as Exhibit A.

DISCUSSION:

1. Does City Council have any objection to providing future statements of support in the event other agencies and organizations require this for permitting, licensing, or funding?

Reviewed by Council Committees:

Councilmember:

Staff: Tate

Meeting Date: August 27, 2018

Item Number:

RESOLUTION NO. 5 3 0 6

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF AUBURN, WASHINGTON, OPPOSING THE SITING OF ILLEGAL SUBSTANCE INJECTION FACILITIES WITHIN AUBURN CITY LIMITS

WHEREAS, addiction to heroin and other illegal drugs deteriorates individual and community quality of life, fosters criminal activity, increases mortality, and burdens taxpayer funded services like police, hospitals, and schools; and

WHEREAS, the King County Board of Health adopted Resolution No. 17-01 endorsing the Heroin and Prescription Opiate Addiction Task Force Final Report and Recommendations calling on local and state actors to implement the public health policies outlined in the report, including the establishment of at least two pilot community health engagement locations (CHELs); and

WHEREAS, there is not currently evidence that CHELs reduce drug addiction rates within the communities where they are located; and

WHEREAS, CHELs attract additional criminal activity, such as drug trafficking, burglary, and theft; and

WHEREAS, King County Public Health data indicates that south King County, including the City of Auburn, is home to larger populations of vulnerable community members that may be especially harmed by the siting of a CHEL within the City of Auburn; and

WHEREAS, resources for drug addiction treatment are already available within the City of Auburn and surrounding communities; and

WHEREAS, on June 26, 2017, the King County Council passed Amendment 3A as part of Ordinance No. 2017-0136.2 that CHEL sites will only be established in cities which choose to establish such a location by vote of its elected governing body; and.

WHEREAS, the City Council finds that the siting of a safe injection facility with the City of Auburn would be detrimental to the public health, safety, and welfare of the residents of Auburn; and

WHEREAS, the City Council opposes the siting of safe injection facilities within the City of Auburn.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF AUBURN, WASHINGTON, HEREBY RESOLVES as follows:

Section 1. Distribution. The Mayor is hereby directed to disseminate this Resolution to the King County Council, Pierce County Council, Seattle King County Public Health, Pierce County Public Health, and other relevant representatives of federal, state, and local governments as appropriate.

Section 2. Implementation. The Mayor is hereby authorized to implement such administrative and legal procedures as may be necessary to carry out the directions of this legislation.

Section 3. Effective date. This Resolution shall take effect and be in force upon passage and signatures thereon.

DATED and SIGNED this 17th day of July, 2017.

CITY OF AUBURN

Nancy Backus

NANCY BACKUS, MAYOR

ATTEST:

Danielle E. Daskam

Danielle E. Daskam, City Clerk

APPROVED AS TO FORM:

Douglas P. Ruth

FOR Daniel B. Heid, City Attorney

We Care DAILY CLINIC

Saving lives and reconnecting families while improving your community

PURPOSE & INSPIRATION

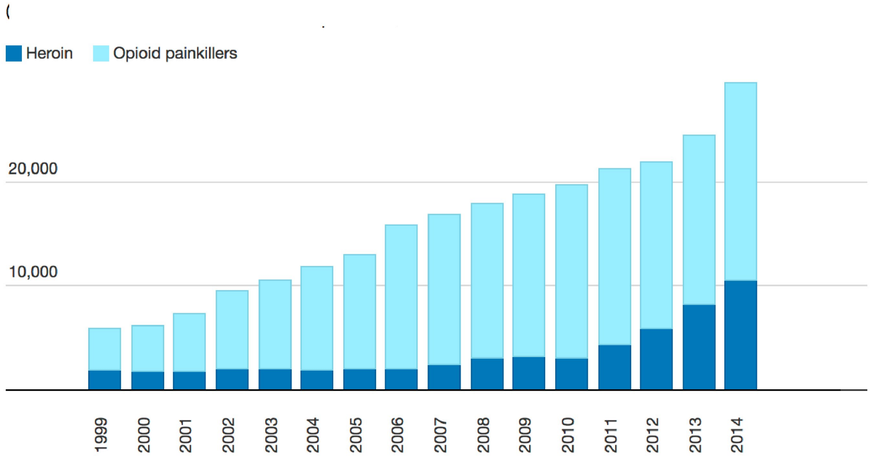
We Care Daily Clinics provides Medication Assisted Treatment Programs to substance abuse patients by combining FDA-approved medication with behavioral health counseling.

- The Muckleshoot Indian Tribe has one of the leading Office Based Opioid Treatment Programs in the country serving Native Americans.
- We are nationally recognized by the PEW Research Center for excellence in behavioral healthcare.
- Based on years of highly successful tribal behavioral health programs - we are now expanding to serve natives and non-natives.
- Historically our Tribe has a strong commitment to helping our neighbors and building communities throughout the state.
- This is our opportunity to take care of our people and the people in the broader community.

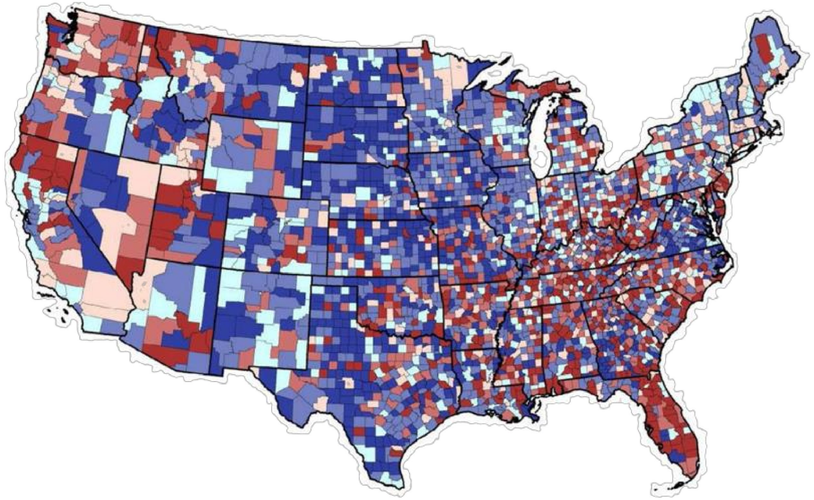
We Care DAILY CLINIC

A National Epidemic

259M
Prescriptions Written Every Adult with a Bottle

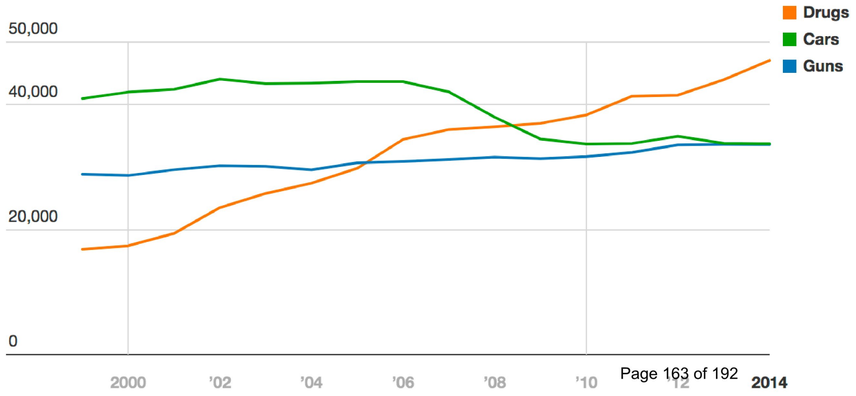


Uniform Increases
Every Zip Code Every Race Every Income



1 in 4
People who receive prescription opioids for chronic pain in primary care settings struggle with addiction

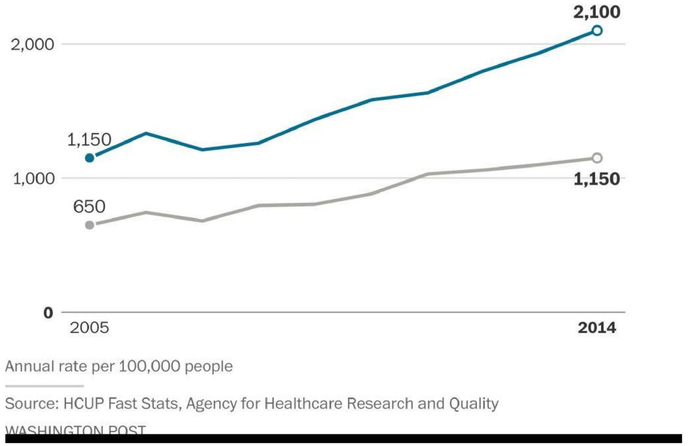
Overdose Deaths
Exceed Gun and Car Related Deaths



Someone Dies
From Opioids or Heroin Every

20
Minutes

1.3M
Million Hospital Stays per Year



A Local Problem

In communities across Washington, the opioid epidemic is devastating families and overwhelming law enforcement and social services. Auburn has already taken important steps to address this Epidemic by creating the Blue Ribbon Committee with the goal of transforming the City of Auburn into the healthiest city in Washington by 2020.

The King County Heroin and Prescription Opiate Addiction Task Force, which convened in 2016, stated that they “will make Medication Assisted Treatment more accessible and available in communities with the greatest need.” **We are here to help Auburn address this need:**

718 — **Number of Washingtonians who died in 2015 from opioid overdoes, more than from car accidents.**

85.21% — **The seized amount of heroin by Auburn Police Department from 2014 to 2015 increased by 85.21%**

58% — **Fatal overdoses linked to heroin climbed by 58% in King County last year, the largest rise in local drug-related deaths in 17 years.**

12 Per 1000
Opioid Related Admissions

83%
Capacity Gap

2 Per 1000
WA Capacity to Treat

We Care DAILY CLINIC

WHAT IS MAT?

How it works

Our Medication-Assisted Treatment program implements a holistic approach by combining FDA-approved medications with behavioral health counseling.

The goal for our Medical Providers who treat these patients with opioid addiction is to enable the patients to resume functionality and become productive, healthy citizens. **The #1 outcome metric of success is to get the patient back into the workforce, i.e. vocational rehabilitation.**

BEHAVIORAL HEALTH COUNSELING

Our program works to modify the underlying behaviors that may lead patients to misuse opioids and also treats any other existing psychiatric disorders through counseling or cognitive behavioral therapy.

FDA-APPROVED MEDICATION

Medication Assisted Treatment (MAT) patients receive medication allowing them to feel normal, think clearly, and stop using illicit substances. The treatment allows people to get back to responsible daily living on a pathway toward cessation and a healthy life free of drugs.

We Care DAILY CLINIC

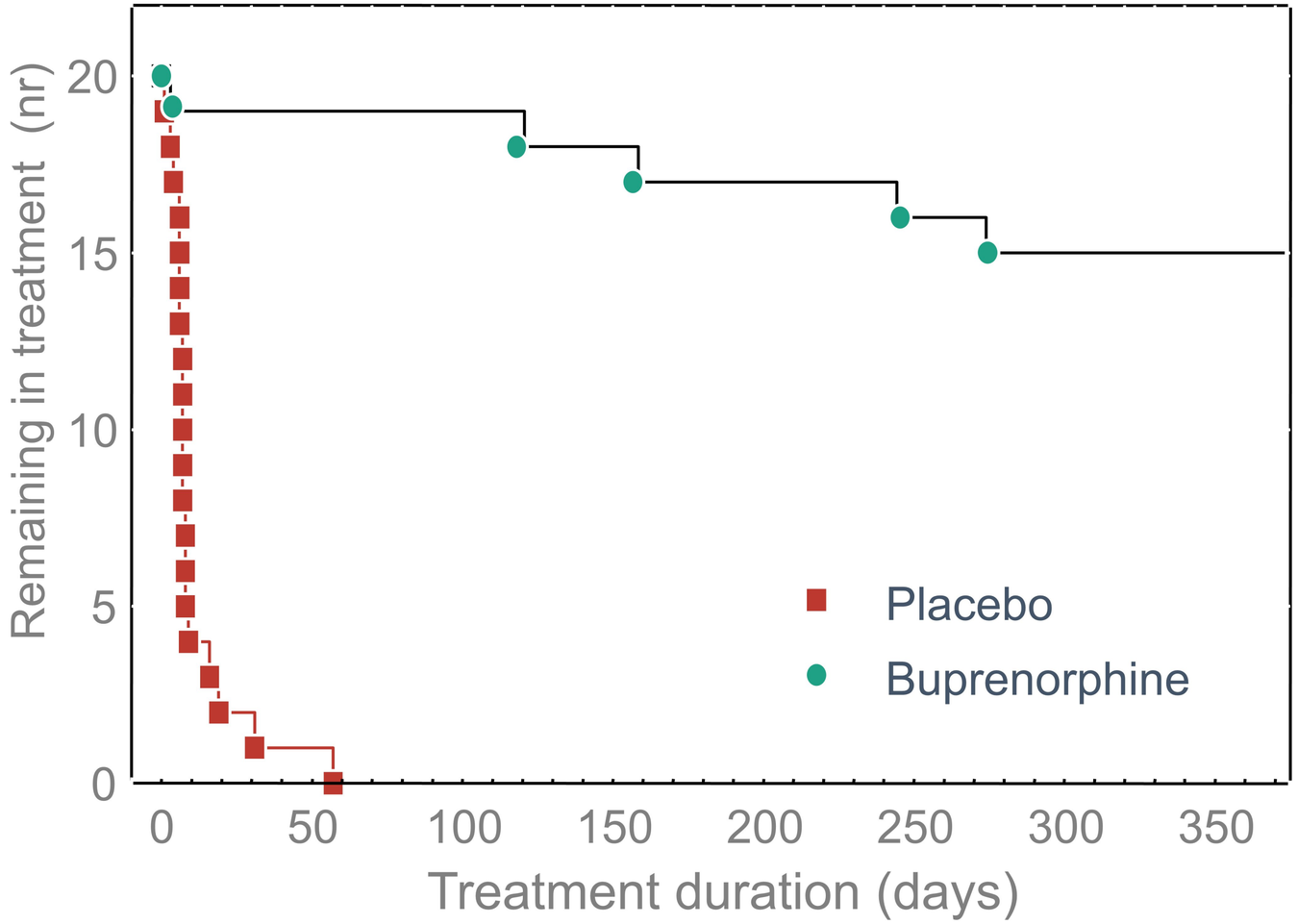
Study: Treatment Retention and Mortality BUP vs Placebo

BUP Patients

- 75% retention
- 75% tested negative for drugs

Placebo Patients

- 20% died over course of 12 months
- 100% relapsed
- Study was cut short due to ethical concerns for Placebo Patients



All patients received Behavioral Health Counseling

We Care DAILY CLINIC

RRies 2017
Kakko J et al. Lancet 2003

THE GOAL

INCREASING ACCESS

Alleviate the socioeconomic, logistical and psychological barriers opioid treatment patients encounter.

SAVING LIVES

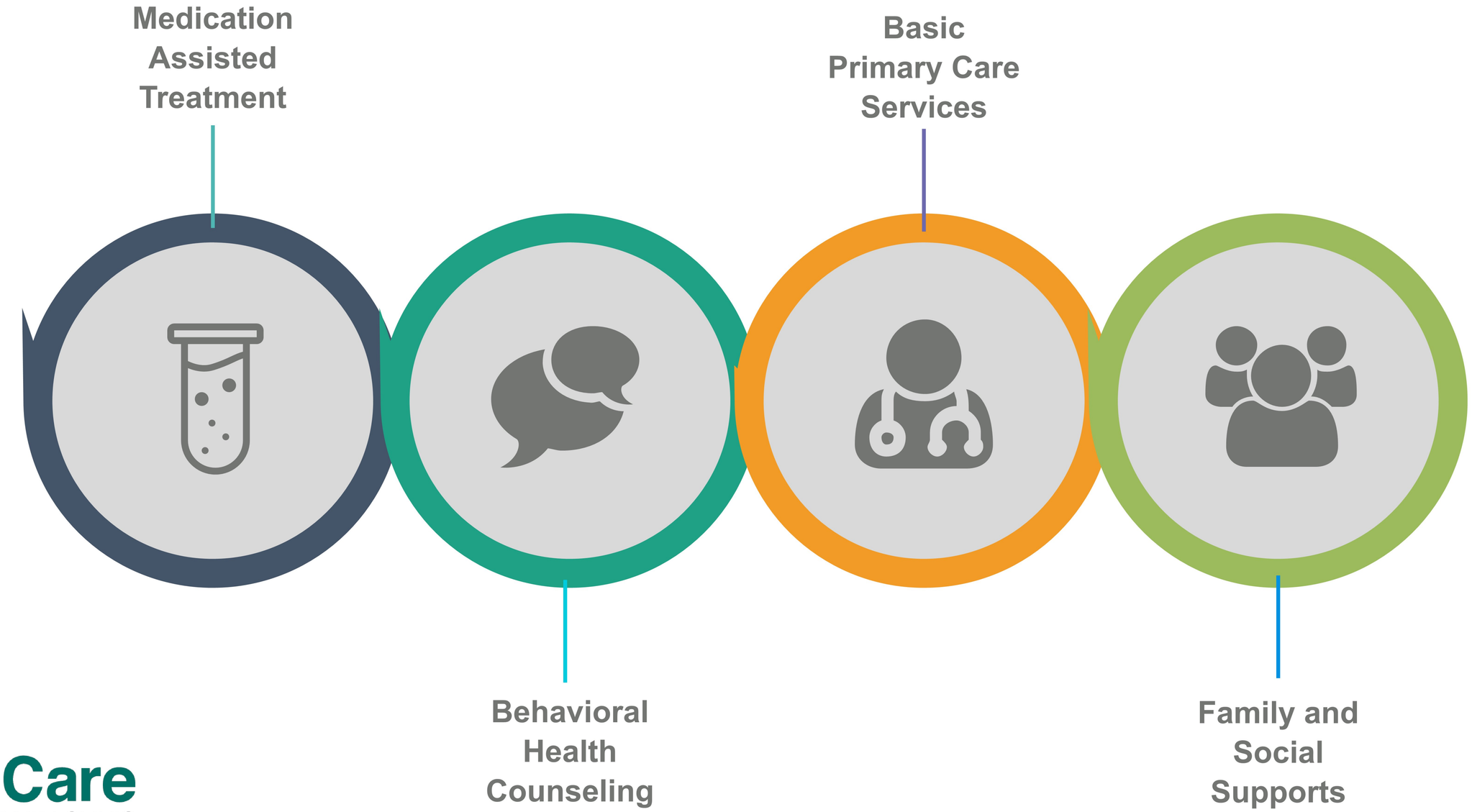
Help people remain in treatment, avoid relapse, and build skills necessary for long-term recovery.

IMPROVING COMMUNITIES

Provide a local solution to addiction problems, a catalyst toward crime prevention, and a positive impact on the community.

We Care DAILY CLINIC

Commitment to Patient-Centered Care



We Care DAILY CLINIC

The Location

We have carefully considered locations and have decided on 3320 Auburn Way North. Here's why:

Transportation

Located conveniently near 2 bus lines and directly off Auburn Way North. We will also provide transportation to and from the facility.

Capacity

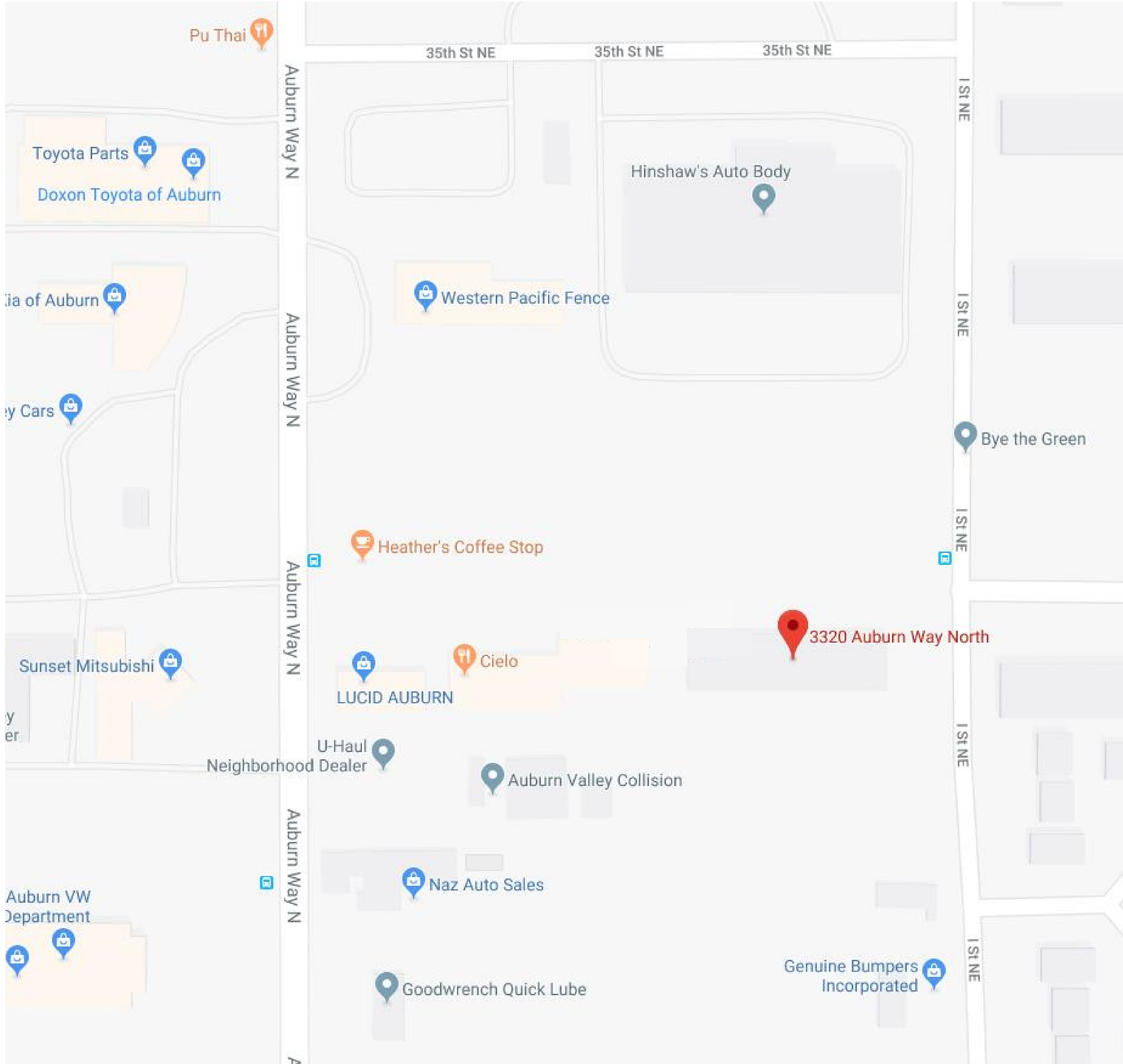
Building Net Square Footage is 11,990 square feet. Large amount of parking spaces are available outside the building.

Business

The building was built in 1987 and is currently unoccupied. Located in Heavy Commercial Zone in North Auburn.

Logistics

By having reasonable capacity for the clinic, there is space for programs promoting overall wellness and stability of patients.



We Care DAILY CLINIC

SAFETY & SECURITY

PATROLLING & SURVEILLANCE

PLANNED PATIENT TRANSPORTATION

CLEAR SIGNAGE

24/7 SECURITY GUARDS

EMERGENCY HOTLINE

PROTOCOLS & MITIGATION PLANNING

We Care DAILY CLINIC

THANK YOU

For more information or to send us your feedback,
please visit our website at:

WECAREDAILYCLINIC.ORG

We Care
DAILY CLINIC

AGENDA BILL APPROVAL FORM

Agenda Subject:
Airport Runway Enhancement Update (Gaub) (30 Minutes)

Date:
August 21, 2018

Department:
Public Works

Attachments:
Airport Master Plan Map

Budget Impact:
Current Budget: $0
Proposed Revision: $0
Revised Budget: $0

Administrative Recommendation:

For discussion only.

Background Summary:

CP1516, Airport Runway Enhancements, was originally scoped to include the enhancement of Runway 16/34 to be consistent with the 2015 Approved Airport Layout Plan and Master Plan. This would involve the extension of the runway from 3,400 feet to 4,118 feet, the relocation of the taxiway connections to the runway, relocation of an airport storm facility, and pavement markings. As previously discussede, during the grant process with the Federal Aviation Administration (FAA), an issue was raised regarding the runway length justification and specifically the length that could be approved within the criteria of the Airport Improvement Program (AIP) grant funding. Previous discussions with Council were to put the project on hold while this issue was pursued with the FAA.

Since the last discussion, City staff have continued to pursue the project through both legislative representatives and the FAA. This has resulted in some progress on the potential length of the runway that can be justified under the AIP program today. The revised options for this project were reviewed with the Airport Advisory Board on August 18, 2018 and a recommendation from the Board was made. Staff will review these same options with the Council and discuss the Board's recommendation.

Reviewed by Council Committees:

Councilmember:

Staff: Gaub

Meeting Date: August 27, 2018

Item Number:

RUNWAY 3400' X 75' (EXISTING)

NOTE:
1. THE INFORMATION DEPICTED IN THIS FIGURE IS FOR RUNWAY LENGTH ILLUSTRATION PURPOSES ONLY AND DOES NOT REFLECT A SPECIFIC RECOMMENDATION OR RUNWAY CONFIGURATION.

RUNWAY 4060' X 75' (SMALL AIRPLANES WITH 10 OR MORE SEATS)

AUBURN MUNICIPAL AIRPORT | AIRPORT MASTER PLAN

CITY OF AUBURN WASHINGTON

RUNWAY LENGTHS FOR PLANNING | **FIG. 4-9**

CENTURY WEST ENGINEERING CORPORATION

AGENDA BILL APPROVAL FORM

Agenda Subject:
Capital Project Status Report (Gaub) (20 Minutes)

Date:
August 16, 2018

Department:
Public Works

Attachments:
August 2018 CPS

Budget Impact:
Current Budget: $0
Proposed Revision: $0
Revised Budget: $0

Administrative Recommendation:

For discussion only.

Background Summary:

The purpose of this discussion is to inform the Council and Public of the overall status of the City's Capital Project program managed by the Engineering Services Division and to present this quarter's feature capital project: Auburn Way South Sidewalk Improvement project (Project No. CP1705). The grant funded project will improve pedestrian and vehicular safety on Auburn Way South from 17th Street SE to Muckleshoot Plaza by constructing missing sections of sidewalk along the north side of the roadway corridor. It is anticipated that this project will begin construction in the fall of 2018.

The Capital Project Group of Engineering Services is currently managing 39 projects. Of these projects, 25 are in design and 14 are under construction. The busy construction season continues as we anticipate 8 more projects to enter the construction phase over the next several weeks.

Reviewed by Council Committees:

Councilmember:

Staff: Gaub

Meeting Date: August 27, 2018

Item Number:

Capital Project Status Report

Community Development And Public Works Department - Engineering General Services Division

Project Status: CONSTRUCTION

Project Number	Project Name & Description	Project Budget: Street/Utilities	Project Budget: Other	Project Budget: Total Budget	Total Estimated Costs	Design % Complete	Design Finish Date	Construction % Complete	Construction Finish Date	Project Manager	Status	Design Consultant	Contractor
CP1407	MARCHINI MEADOWS This project will complete the required public improvements that the developer for the Marchini Meadows did not complete. Improvements are prioritized and will be completed based on available funds.		$70,000 (Developer Settlement)	$70,000	$70,000	100%	SUMMER 2017	97%	FALL 18	Aleksey Koshman	Overlay of 132nd Ave completed by project CP1402 (2014 Pavement Patching & Overlay). Replacing broken sidewalks and driveways was completed by Project CP1710 (2017 Citywide Sidewalk R&R). Remaining landscape work to be completed in October 2018. Design and construction finish dates updated to reflect final landscape work schedule.	N/A	Various
CP1218	Auburn Way South Corridor Safety (Muckleshoot Plaza to Dogwood St SE) This project will construct corridor improvements to AWS between Muckleshoot Plaza and Dogwood Street SE. Improvements include designated U-turns, access management, driveway consolidation, addition of a 2nd left turn lane from eastbound AWS into the MIT Casino, bus pull-outs, medians, signal improvements, and sidewalks.	$1,284,027 (Streets) $1,161,340 (Water)	$2,333,108 (Federal) $466,191 (WSDOT) $46,381 (Other Reimbursements)	$5,291,047	$5,291,047	100%	WINTER 2017	99%	SUMMER 18	Matt Larson	Substantial completion granted. Contractor completing punchlist work.	CH2M	Miles Resources
C222A	277TH-AUBURN WAY N TO GREEN RIVER BRIDGE This project will complete the widening of S 277th from the intersection of Auburn Way North to L Street NE, including the construction of a pedestrian trail and relocation of the floodway along S 277th.	$1,633,267 (Streets) $135,000 (Water)	$1,020,700 (Federal) $2,300,000 (Developer) $3,933,990 (TIB)	$9,017,000	$8,935,740	100%	SPRING 2014	99%	FALL 18	Kim Truong	Construction is substantially completed. Remaining work includes cleanup and punchlist items.	Parametrix	Scarsella Bros.
CP1406	MAIN ST SIGNAL UPGRADES This project will reconstruct the existing signal at C Street SW and Main Street.	$638,802 (Street)		$638,802	$636,489	100%	SUMMER 2017	90%	FALL 18	Kevin Thompson	Construction is underway. New signal is up and functioning. Punchlist work remaining.	DKS	West Coast Signal, Inc.

Capital Project Status Report

Community Development And Public Works Department - Engineering General Services Division

Project Status: CONSTRUCTION

Project Number	Project Name & Description	Project Budget: Street/Utilities	Project Budget: Other	Total Budget	Total Estimated Costs	Design % Complete	Design Finish Date	Construction % Complete	Construction Finish Date	Project Manager	Status	Design Consultant	Contractor
CP1502	37TH ST SE AND A ST TRAFFIC SIGNAL This project will improve the safety at the intersection by installing a traffic signal, improving ADA ramps, widening the northeast corner of the intersection to accommodate U-turns, and pavement restoration.	$236,666 (Streets)	$792,260 (Federal)	$1,025,306	$1,004,321	100%	FALL 2017	20%	FALL 18	Luis Barba	Construction is underway. Installing electrical conduit for the new signal.	KPG	Road Constructio n Northwest
CP1312	STORM REPAIR & REPLACEMENT This project will replace and/or repair aging and damaged storm lines throughout the City.	$1,193,797 (Storm) $595,650 (Water) $50,000 (Street)		$1,839,447	$1,740,216	100%	SPRING 2018	60%	FALL 18	Seth Wickstrom	Construction is underway. Contractor currently working on M St SE between 21st St SE and 25th St SE.	N/A	Rodarte
CP1513	22nd St NE and I St NE Intersection Improvements This project will construct a round-a-bout and complete the design of intersection bicycle and pedestrian safety improvements at 22nd St NE and I St NE.	$315,000 (Streets) $29,890 (Sewer) $405,000 (Water)	$200,000 (State Grant) $940,000 (Federal Grant)	$1,822,013	$1,784,015	100%	SUMMER 2017	99%	SUMMER 18	Seth Wickstrom	Punchlist work underway. The roundabout is open to all through traffic.	Reid Middleton	DPK, Inc.
CP1521	15th Street NE/NW Preservation Project This project will rehabilitate and preserve the existing pavement in the 15th Street NW/NE and Harvey Road SE corridor between State Route 167 and 8th Street NE. Furthermore, grind and overlay 15th Street NW/NE from State Route 167 to Auburn Way N., and grind and overlay Harvey Road NE from Auburn Way N to 8th Street NE.	$2,624,987 (Streets) $65,000 (Storm) $50,000 (Sewer)	$817,500 (Federal Grant)	$2,554,987	$2,533,552	100%	SPRING 2014	45%	FALL 18	Kim Truong	Construction is underway. Contracting installing traffic signal loops.	Parametrix (partial)	ICON Materials

Capital Project Status Report

Community Development And Public Works Department - Engineering General Services Division

Project Status: CONSTRUCTION

Project Number	Project Name & Description	Project Budget: Street/Utilities	Project Budget: Other	Total Budget	Total Estimated Costs	Design % Complete	Design Finish Date	Construction % Complete	Construction Finish Date	Project Manager	Status	Design Consultant	Contractor
CP1614	2017 Local Street Reconstruction and Preservation Project This project will reconstruct the 28th St SE loop east of R St., 27th St SE, 26th St SE, S St SE, T St SE and U St SE; reconstructed 19th St SE and G St SE near Olympic Middle school, and preserve 53rd Ave S, S 302nd Pl and associated cul-de-sacs in the Westhill.	$2,556,000 (Streets) $500,000 (Water) $200,000 (Storm)		$3,256,000	$2,900,000	100%	SPRING 2017	95%	FALL 18	Jai Carter	Construction work in suspension for coordinating the addition of work on 8th St SW. It is anticipated that construction of the added work will begin in late August.	Jacobs Engineering , Inc.	Tucci and Sons
CP1707	A St. SE Corridor Signal Safety & Operations Improvements This purpose of this project is to design for and improve traffic signal timing and operations, corridor coordination, traffic signal head visibility, and pedestrian accessibility along the A St SE Corridor between 3rd St SE and East valley Highway Access Road.	$81,396 (Street)	$412,700 (Federal Grant)	$494,096	$564,095	100%	SUMMER 2018	0%	FALL 18	Kim Truong	Budget numbers updated to reflect the bid opening. Budget shortfall to be addressed in Budget Amendment No. 7. Preconstruction meeting scheduled for September 6, 2018.	PH Consulting, LLC & DKS Associates	Titan Earthwork
CP1717	2018 Local Streets Pavement Reconstruction This project will reconstruct/overlay selected local streets, improve City owned utilities, and rebuild curb ramps to meet ADA standards. The work at each location varies and may include water, sanitary sewer, and storm drainage improvements as needed for each project street. Improvements are proposed at the following locations: 17th Street NE between Auburn Way N and I St NE; K Street NE between 12th St NE and 14th St NE; 122nd Ave SE south of SE 316th St; and SE 286th St east of 112th Ave SE.	$1,651,201 (Streets) $369,598 (Water) $138,075 (Sewer) $317,300 (Storm)		$2,476,174	$2,693,170	100%	SUMMER 2018	20%	WINTER 18	Matt Larson	Construction is underway. 17th St NE to be closed to through traffic beginning July 11, 2018 to August 31, 2018 for construction activities.	Jacobs Engineering	Tucci & Sons
CP1114	WSDOT SR164 Overlay - SR18 to 17th St SE This is a WSDOT project that will replace the roadway surface on Auburn Way South from SR-18 to 17th St SE. WSDOT is also constructing City requested and funded improvements at 12th St SE (Project CP1114). City improvement include reconstructing the 'pork chop' islands, new ADA curb ramps and pedestrian pushbuttons, and pavement restriping.	$200,000 (Streets)	$213,600 (WSDOT)	$413,600	$200,000	100%	SPRING 2018	15%	FALL 18	Jacob Sweeting	Construction work is underway.	WSDOT	Tucci

Capital Project Status Report

Community Development And Public Works Department - Engineering General Services Division

Project Status: CONSTRUCTION

Project Number	Project Name & Description	Project Budget: Street/Utilities	Project Budget: Other	Total Budget	Total Estimated Costs	Design % Complete	Design Finish Date	Construction % Complete	Construction Finish Date	Project Manager	Status	Design Consultant	Contractor
CP1718	S 277th Street Preservation Project The purpose of the project is to rehabilitate and preserve the existing pavement on S 277th between Auburn Way North and the SR167 North Bound Off Ramp.	$662,380 (Streets)	$662,380 (Federal)	$1,324,760	$1,324,760	100%	SUMMER 2018	5%	FALL 18	Luis Barba	Construction underway. Survey activities in progress.	N/A	Miles Resources, LLC
CP1605	Les Gove Crescent This project constructs a concrete plaza area, trail, and lighting at the Les Gove Community Campus.		$661,542 (Parks)	$661,542	$726,226	100%	WINTER 18	100%	SUMMER 18		Project construction is complete. Final payment underway.	Berger Group	HB Hansen
CP1725	2018 Citywide Patching and Overlay Project Pavement preservation for Arterial & Local streets. Streets to be grind & overlayed: Auburn W N - 45th St NE to S 277th St; Terrace View Dr - R St NW to W St NW; 8th Street NE - Auburn W N to M St NE; & R Street SE - E Main St to T St SE. Streets to be thin overlayed: Vista View in West Hill; Lea Hill Village in Lea Hill. Street to be patched - Lakeland Hills W SE - Mill Pond Dr SE to 57th Dr SE. Also to be addressed limited sidewalk repairs, curb & gutter repairs, & upgrading 47 curb ramps	Arterial Street Preservation fund = $1.7M Local Street Preservation fund = $850K Project grand total $2.55M		$2,550,000	$2,571,500	100%	SPRING 2018	35%	FALL 18	Jai Carter	Construction is underway.	N/A	Lakeside Industries
CP1822	C St SW Boeing Rail Crossing Median Barriers The purpose of this improvement is to prevent motorists from driving around train crossings on C Street SW at the Boeing/GSA track south of 15th Street SW by installing 100 feet of median barriers with delineators to the north and south side of the train tracks.		$35,652 (Washington Utilities and Transportation Commission)	$35,652	$35,652	100%	SUMMER 2018	100%	SUMMER 18	Aleksey Koshman	Construction is complete. Final pay issued on July 28, 2018.	N/A	Apply-A-Line

Capital Project Status Report

Community Development And Public Works Department - Engineering General Services Division

Project Status: DESIGN

Project Number	Project Name & Description	Project Budget: Street/Utilities	Project Budget: Other	Total Budget	Total Estimated Costs	Design % Complete	Design Finish Date	Construction % Complete	Construction Finish Date	Project Manager	Status	Design Consultant	Contractor
CP1416	F ST SE NON-MOTORIZED IMPROVEMENTS This project will reconstruct F St SE from 4th St SE to Auburn Way South, including adding new sidewalks, curb and gutter, bike lanes, wayfinding signage, street lighting, streetscape elements, and safety improvements, and will include a bike share program with bike boulevard components. Some ROW acquisition is necessary. Some sections of water and sewer lines will be replaced on F St SE between 4th St SE and Auburn Way S.	$170,000 (Streets) $30,000 (Water) $27,704 (Sewer)	$520,000 (Federal)	$747,704	$3,657,704	90%	SUMMER 2018	0%	FALL 21	Seth Wickstrom	Design and property acquisition work is underway. City has preliminary indication from PSRC that project may be awarded construction funding available in 2021.	Jacobs	TBD
CP1516	Auburn Municipal Airport Runway Enhancements The purpose of the project is to improve safety and the ability to accommodate the current and forecast fleet of multi-engine piston aircraft for both takeoff and accelerate-stop distances at the Auburn Municipal Airport by extending both ends of Runway 16/34.		$124,269 (Airport) $120,495 (Federal) $2,170,253	$2,415,018	$2,405,586	16%	TBD 18	0%	TBD 19	Seth Wickstrom	Discussions with FAA are on-going regarding ultimate runway length and configuration. For property acquisition status see MS1811.	CenturyWest	TBD
CP1603	Coal Creek Springs Transmission Main Repair The project will construct a second, parallel transmission pipeline over the White River suspended from a new pedestrian bridge, inspect the existing steel transmission main for possible leaks and repair the leaks, if any, and line the portion of the existing steel transmission main to improve its structural integrity and prevent leaks, and to construct another 12" to 18" parallel river crossing casing for providing water service and utility conduit to wilderness game farm park.	$300,000 (DWSRF) $185,000 (Water)		$485,000	$485,000	18%	TBD	0%	TBD	Seth Wickstrom	Environmental feasibility analysis underway. Budget numbers updated to reflect completing design work only.	JACOBS	TBD
CP1709	Reservoir 1 Seismic Control Valve This project will design and construct a seismic control valve on the City's largest reservoir.	$175,000 (Hazard Mitigation Grant) $25,000 (Water)		$200,000	$509,000	100%	SUMMER 2018	0%	SPRING 19	Kevin Thompson	Final bid documents being prepared. Waiting for approval from FEMA to advertise the project for construction bids.	Parametrix	TBD

Capital Project Status Report

Community Development And Public Works Department - Engineering General Services Division

Project Status: DESIGN

Project Number	Project Name & Description	Project Budget: Street/Utilities	Project Budget: Other	Total Budget	Total Estimated Costs	Design % Complete	Design Finish Date	Construction % Complete	Construction Finish Date	Project Manager	Status	Design Consultant	Contractor
CP1705	Auburn Way South (SR164) Sidewalk Improvements This project will construct the missing gap of sidewalk along the north side of Auburn Way South between the existing sidewalk terminations near 17th St SE to the west and Muckleshoot Plaza to the east. The project length is approximately 1,700 feet.	$400,000 (TIB Grant) $430,000 (Streets)		$830,000	$830,000	92%	SUMMER 2018	0%	SPRING 19	Matt Larson	Design Underway; Received verbal approval from WSDOT for preliminary design and speed reduction.	N/A	TBD
CP1719	Sewer Pump Station Telemetry (SCADA) Improvements This project will add telemetry and SCADA capabilities to the 22nd Street NE and R Street NE Sewer Pump Stations.	$290,000 (Sewer)		$290,000	$322,523	92%	FALL 2018	0%	WINTER 18	Matt Larson	Final bid documents being prepared.	Parametrix	TBD
CP1802	Green River Pump Station Emergency Power This project will provide back up power to the existing Green River Pump Station located at Isaac Evans Park.	$1,000,000 (Water)	N/A	$1,000,000	$1,000,000	40%	SPRING 2019	0%	SUMMER 19	Luis Barba	Design is underway.	BHC	TBD
CP1724	37th St NW Flood Control The purpose of the project is to alleviate significant annual flooding at the 1000 block of 37th St NW of Auburn, Washington, by upgrading the drainage system with a box culvert.	$81,000 (Storm)	$200,000 (Grant)	$291,000	$218,942	20%	SPRING 2019	0%	SUMMER 19	Luis Barba	Design is underway. Completing storm modeling in support of the design effort.	N/A	TBD

Capital Project Status Report

Community Development And Public Works Department - Engineering General Services Division

Project Status: DESIGN

Project Number	Project Name & Description	Project Budget: Street/Utilities	Project Budget: Other	Total Budget	Total Estimated Costs	Design % Complete	Design Finish Date	Construction % Complete	Construction Finish Date	Project Manager	Status	Design Consultant	Contractor
CP1804	AWN Sidewalk Improvement Project The purpose of the project is to construct two missing sections of sidewalk, construct ADA improvements, construct a Rectangular Rapid Flashing Beacon (RRFB) at the intersection of Auburn Avenue and 5th Street NE, and install LED lighting along Auburn Way North between E Main St and 5th St NE	$351,000 (Streets)		$351,000	$391,045	90%	FALL 2018	0%	SPRING 19	Luis Barba	Design is underway.	N/A	TBD
CP1726	2019 Local Street Reconstruction Reconstruct selected streets that are in very poor condition, as well as improve utilities, and rebuild curb ramps to meet ADA standards. The improvement at each project sites varies and may include a potential sewer Local Improvement District, storm drainage and water improvements. Improvements are proposed at the following streets: 4th St NE (R St to 4th Pl NE), 4th Pl NE, M St SE (25th St SE to 28th St SE), 28th St SE (M St SE to R St SE), O St SE, Pike St SE	103 Local Fund $1,400,000 460 Water Fund $265,000 461 Sewer Fund $80,000 462 Storm Fund $100,000		$1,845,000	$1,845,000	5%	SPRING 2019	0%	FALL 19	Kim Truong	Design is underway.	KPG	TBD
CP1812	SEWER PUMP STATION ELECTRICAL IMPROVEMENTS The purpose of this project is to update the electrical systems at sewer pump stations throughout the City to meet current electrical code, improve safety and increase the efficiency of maintenance.	$641,000 (Sewer)		$641,000	$641,000	0%	SPRING 2019	0%	SUMMER 19	Luis Barba	Consultant selection services for design underway.	TBD	TBD
MS1811	Auburn Airport Runway Extension - Property Aquisition Phase Acquire a portion of the King County Park & Ride as part of the Auburn Airport Runway Enhancement Project.		$27,800 (WSDOT Grant) $500,000 (Federal Grant) $27,800 (FAA Grant)	$555,600	$555,600	50%	SUMMER 2018	0%		Seth Wickstrom	Property appraisal underway.	Apprisal Grounp of the Northwest	N/A

Capital Project Status Report

Community Development And Public Works Department - Engineering General Services Division

Project Status: DESIGN

Project Number	Project Name & Description	Project Budget: Street/Utilities	Project Budget: Other	Total Budget	Total Estimated Costs	Design % Complete	Design Finish Date	Construction % Complete	Construction Finish Date	Project Manager	Status	Design Consultant	Contractor
CP1807	Water Meter Vaults and Lids Replacement Replace 8 large water meter vaults and 1 large water meter vault lid.	$1,300,000 (Water)		$1,300,000	$1,300,000	2%	WINTER 2018	0%	SUMMER 19	Seth Wickstrom	Preliminary project planning and design is underway.	N/A	TBD
CP1805	2019 Sewer Repair and Replacement This project will repair and/or replace portions of the sanitary sewer pipe system at 21 different sites throughout the City that have deteriorated and are in need of repair.	$1,800,000 (Sewer)		$1,800,000	$2,800,000	10%	SPRING 2019	0%	FALL 19	Kevin Thompson	Design is underway.	BHC, Inc. (partial)	TBD
MS1814	Game Farm Park Building Demolition The purpose of the project is to demolish an existing building located at 3224 V Street SE (on Game Farm Park Property). This property will become part of a dog park in the future.	$65,000 (Facilities Repair and Maintenance)		$65,000	$55,000	99%	SUMMER 2018	0%	FALL 18	Aleksey Koshman	Final bid documents being prepared.	Pacific Rim (Partial)	TBD
CP1811	2018 Arterial Crack Seal Project The purpose of the project is to crack seal arterial and collector streets throughout the City to prolong the life of the existing pavement.	$200,000 (105 Fund)		$200,000	$120,850	100%	SPRING 2018	0%	FALL 18	Aleksey Koshman	Bid Opening held on August 16, 2018. Award in process.	N/A	Doolittle (pending)

Capital Project Status Report

Community Development And Public Works Department - Engineering General Services Division

Project Status: DESIGN

Project Number	Project Name & Description	Project Budget: Street/Utilities	Project Budget: Other	Total Budget	Total Estimated Costs	Design % Complete	Design Finish Date	Construction % Complete	Construction Finish Date	Project Manager	Status	Design Consultant	Contractor
CP1814	Mini Traffic Circle - Elm Street SE and 22nd St SE This project will build a mini traffic circle at the intersection of Elm Street SE and 22nd Street SE.	$25,000 328 Fund (Capital Improvement Fund)		$25,000	$37,772	99%	SUMMER 2018	0%	FALL 18	Aleksey Koshman	Final bid documents being prepared.	N/A	TBD
CP1815	2018 Citywide ADA Sidewalk Project The project will repair and/or replace damaged sidewalk and upgrade or install curb ramps to meet ADA requirements. The project will also build new sidewalk segments to fill gaps in the pedestrian network.	$200,000 (328 Fund) $125,000 (CDBG Funds)		$325,000	$325,000	85%	SUMMER 2018	0%	SPRING 19	Aleksey Koshman	Design is underway.	N/A	TBD

AGENDA BILL APPROVAL FORM

Agenda Subject:
UW Livable City Update (Tate) (20 Minutes)

Date:
August 22, 2018

Department:
Community Development

Attachments:
Exhibit A - Livable Cities Matrix
Exhibit B - Alley Renderings

Budget Impact:
Current Budget: $0
Proposed Revision: $0
Revised Budget: $0

Administrative Recommendation:

Background Summary:

In early 2016, the University of Washington and the City of Auburn joined forces for the inaugural "Livable Cities" initiative. The City and UW assembled 15 separate Auburn focused projects that spanned all 3 quarters of the 2016/2017 academic year.

Under cover of this memo is a matrix that provides a general summary and status of actions that have been taken for each project since the conclusion of the initiative just over a year ago (Exhibit A). The matrix also identifies a lead department for each project. If Council would like to learn more about any one project, a future more detailed briefing can be scheduled.

The project that garnered a great deal of positive feedback is called "Little Alleyway, Big Activation." This project provided several ideas for transforming the alleyway between the historic post office (a.k.a. Auburn Arts and Culture Center) and the Auburn Avenue Theater. The designs prepared by the UW students received very favorable attention, which inspired City staff to begin working on ways to bring their ideas to life. However, because cost estimates for this project were in excess of $500,000 City staff started brainstorming approaches that could activate this public space but in a more cost effective manner.

In order to pave the way to activate this space, Finance took the lead on reaching out to the business owners that abut the alley in order to relocate garbage dumpsters out of the alley and into a consolidated trash enclosure. This was necessary because it would be difficult to activate the alley while still accommodating garbage truck access through the full stretch of the alley. Earlier this year a new trash enclosure was created just north of the alley in the parking lot located behind the Arts and Culture Center. Dumpsters have been removed and/or relocated to the trash enclosure, which now clears the alley of this potential conflict.

Parks and Community Development have convened a series of discussions focused on:

- Getting this space illuminated with string lighting
- Painting concrete to help add color
- Installing seating and a platform that could serve as a stage
- Affixing outdoor art to the exterior walls
- Adding vegetation to help soften some of the edges, and;
- Adding other features and decorations that create a space that's interesting, fun and safe

Exhibit B provides the renderings that were developed by the UW students. Parks and Community

Development believe that a variation of the ideas developed in this UW Livable City project can be implemented through a combination of internal and external funding sources that allow the project to proceed within existing City budget. We would like to schedule a more detailed presentation of this project in October as soon as the concept is solidified.

Reviewed by Council Committees:

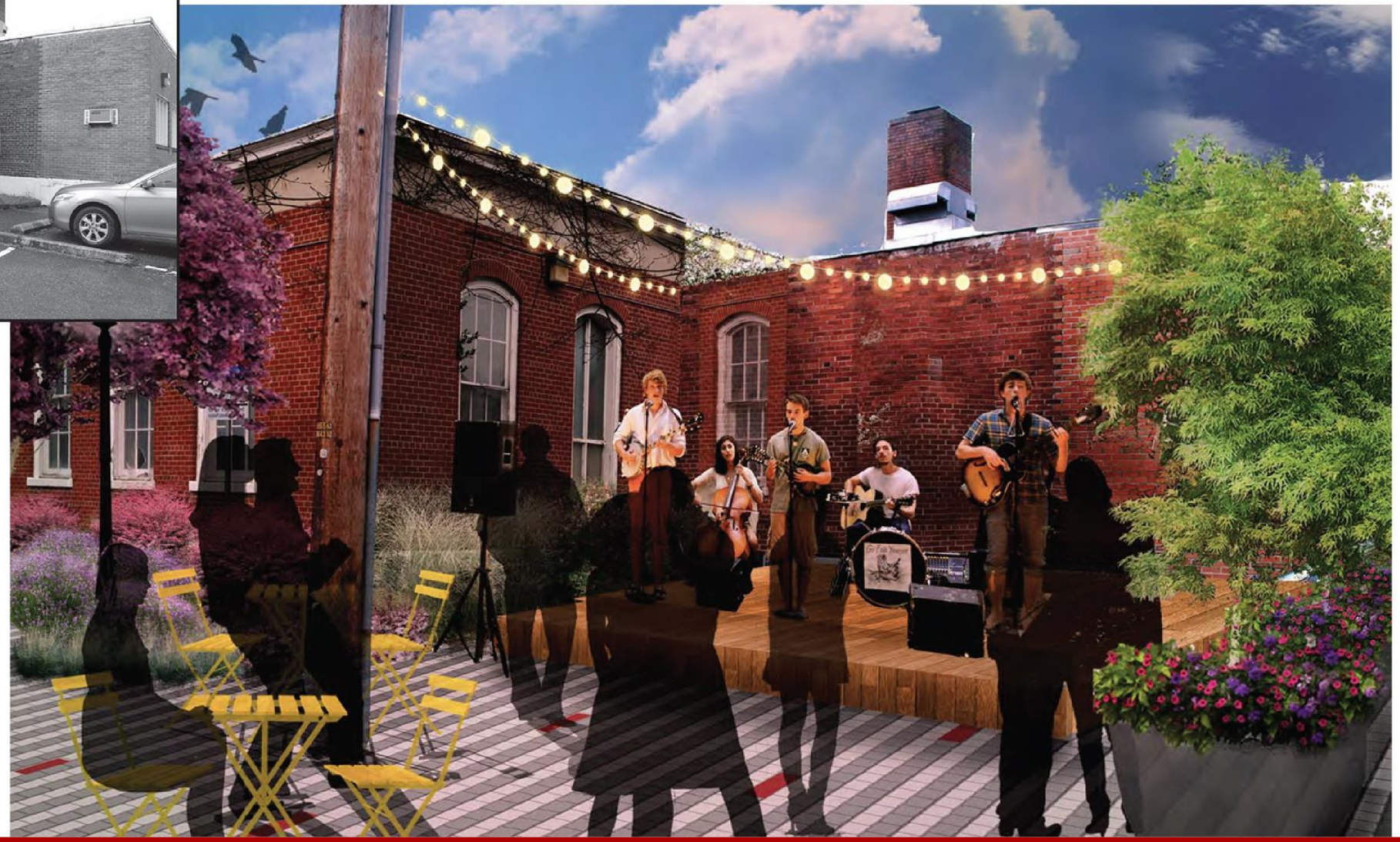
Councilmember:		Staff:	Tate
Meeting Date:	August 27, 2018	Item Number:	

Project Title	Lead Sponsor	Project Intent	Action Outcome	Action Description/Comment
Developing a Connectivity and Placemaking Element for the Comprehensive Plan	Community Development	Conduct research of community, other municipalities, and data that will inform the City as to policies, actions and investments that should be considered that help create a more connected community.	N/A	Pre-cursor data collection to next project
Comprehensive Plan Connectivity Element	Community Development	Utilizing the above information, start creating a template that could be used to create a new "element" (a.k.a. chapter) of the Comprehensive Plan.	In Queue	Requires staff resourcing and ability to schedule for Planning Commission
Marketing & Awareness of City Values	Community Development	City Council adopted 7 values in the Comprehensive Plan. Identify strategies for making the community more aware of these values and to incorporate values into the decision making processes of the City.	No Action Expected	This report provided very little substantive information or guidance.
Affordable Housing and Housing Conditions	Community Development	Building from the Housing Characteristics and Assessment adopted into the Comprehensive Plan, begin identifying tangible actionable items that are intended to preserve our existing housing stock.	Underway	Vacant property registration program implemented; enhancement of multifamily SAFER program.
Full Plates, Full Lives: Food Systems in a Growing Auburn	Community Development	The newly adopted Comprehensive Plan includes a number of healthy food initiatives as a means of linking land use policy with a healthier Auburn. Identify tangible actions that help implement these policies.	In Queue	Requires staff resourcing, ability to schedule for Planning Commission, and coordination with other agencies.
Placemaking Imagined by the Community	Community Development	Identify methods that help create stronger identity to the various neighborhoods in which people reside; primarily through the creation of spaces for congregation and branding of neighborhoods.	Underway	Community Development support for Alley project and creation of a stage, and enhancements to downtown plaza spaces (e.g. chess/checkers at Merrill, use of Plaza in conjunction with new development, the addition of B Street lighting)
Low Impact Development Cost Analysis	Public Works - Utilities	Create a greater understanding of the cost for the City to maintain low impact development storm facilities.	N/A	Purpose of report was to inform City; actionable outcomes were not anticipated.
Pet Waste and Water Quality	Public Works - Utilities	Identification of methods to characterize and remediate pet waste as a non-point source of water quality impact.	No Action Expected	This report provided very little substantive information or guidance.
Little Alleyway, Big Activation	Parks, Arts and Recreation	Transform a depressed alleyway into a vibrant and active public space.	Underway	Design and logistics have been initiated that will implement a variation of this plan.
The Buy Local Program	Administration - Economic Development	Create a buy local program that connects consumers with merchants and that connects wholesalers and manufacturers with retail outlets and assemblers.	Complete	Buy local website was launched in 2017 in conjunction with business license renewal web portal. Students initiated beta testing that led to valuable feedback from business community which shaped the outcome of the website that was launched.

Project Title	Lead Sponsor	Project Intent	Action Outcome	Action Description/Comment
How Prepared are Auburn Residents for an Emergency	Administration - Emergency Management	Develop methods that heighten resident awareness of risks in the community and actions they can take to be prepared.	Underway	Recommendations that have been implemented include greater engagement with children, facilitating community level preparedness, broadening the methods used for disseminating information, and enhancing the approaches taken to inform the least prepared populations.
Community Profiles and Resident Engagement in Neighborhoods	Administration - Neighborhoods	Conduct research of communities in Auburn that will better inform the city of resident perspectives, opportunities for stronger engagement, and ways to increase the efficacy of Auburn's Neighborhood Matching Grant program.	Complete	Information from the report informed changes to our Community Picnics and National Night Out programming, helping to break down barriers between staff and residents. Per report recommendations, the city changed our Community Matching Grant (formerly Neighborhood Matching Grant) program to be more inclusive of non-traditional communities and reduce barriers to applying. The city has increased its community grant outreach through social media presence and targeted distribution lists. We will continue working to reduce barriers and increase diversity of program applications.
Methods of Counting Auburn's Homeless Population	Administration - Human Services	Develop recommendations related to counting methodology of unsheltered individuals to better understand the scope of homelessness in Auburn.	No Action Expected	This report examined the annual Point In Time count of unsheltered individuals and developed recommendations to increase accuracy. Since the report was released, All Home (our county's PIT count lead) has implemented many changes to the count methodology, some of which mirror the recommendations included. Auburn will continue to support All Home in conducting the annual PIT count to try to gain an accurate picture of the scope of need in our community.
Mayor's Task Force on Homelessness Policy Initiative	Administration - Human Services	Analyze and evaluate the Mayor's Task Force on Homelessness and identify action items that can work towards mitigating homelessness in Auburn.	Underway	This report provided two sets of policy recommendations; one focused on community relations, and the other focused on affordable housing. Auburn continues to coordinate a monthly meeting of homelessness-focused service providers, and is bringing in regular trainings to increase capacity and develop connections between providers. The city, in partnership with providers, has opened additional, year-round shelter beds per the report's recommendations. Staff are involved in the Regional Affordable Housing Task Force and are working to support countywide efforts to increase development of and access to affordable housing for those experiencing homelessness.
Current Food Waste and Potential Food Rescue Program for the Auburn School District	Finance - Solid Waste + Auburn School District	In 2017, the City of Auburn partnered with the University of Washington, the King County Green Schools Program, and the Auburn School District (ASD) to complete lunch and kitchen waste audits at 15 Auburn schools. The purpose of the project was to determine recycling rates, and the extent to which items were being sorted correctly. Students from University of Washington's School of Public Health performed the waste audits, analyzed the data, and wrote a report.	Complete	The project found there was a significant amount of unopened and uneaten food left over after school lunches. Based on the project's recommendations, ASD created share tables and purchased temperature-controlled containers for unopened packaged food. In May 2018, the ASD Child Nutrition Services program received a King County Earth Heroes award from King County for their efforts.

The Vision…

This is an initial design for Auburn Arts Alley with custom-fabricated benches, artistically altered pavers with poetry from local artists, and activation at night with possible food trucks, movies projected from the Arts & Culture Center and so much more yet to be designed by a local artist collaborator to be determined.



The Vision…

The idea of having a low stage or raised platform around the rear of the Arts & Culture Center could provide a place for performances to take place and also a charming raised seating area the rest of the year.

AGENDA BILL APPROVAL FORM

Agenda Subject:
Matrix

Date:
August 22, 2018

Department:
Administration

Attachments:
Special Focus Areas Key Matrix

Budget Impact:
Current Budget: $0
Proposed Revision: $0
Revised Budget: $0

Administrative Recommendation:

Background Summary:

Reviewed by Council Committees:

Councilmember:

Staff:

Meeting Date: August 27, 2018

Item Number:

SPECIAL FOCUS AREAS

HEALTH & HUMAN SERVICES	FINANCE & ECONOMIC DEVELOPMENT	PUBLIC WORKS & COMMUNITY DEVELOPMENT	MUNICIPAL SERVICES
HUMAN SERVICES FUNDING PUBLIC WELLNESS DOMESTIC VIOLENCE SERVICES HOMELESSNESS SERVICES AFFORDABLE HOUSING COMMUNITY SERVICES HUMAN RESOURCES MEDICAL COMMUNITY RELATIONS	CITY BUDGET & AMENDMENTS RISK MANAGEMENT EQUIPMENT RENTAL FACILITIES CITY REAL PROPERTY LEGAL DEVELOPMENT INCENTIVES BUSINESS DEVELOPMENT ECONOMIC DEVELOPMENT STRATEGIES	UTILITIES ZONING, CODES & PERMITS INNOVATION & TECHNOLOGY TRANSPORTATION STREETS ENGINEERING CAPITAL PROJECTS SUSTAINABILITY ENVIRONMENTAL PROTECTION CULTURAL ARTS & PUBLIC ARTS PLANNING	POLICE SCORE JAIL DISTRICT COURT PARKS & RECREATION ANIMAL CONTROL SOLID WASTE EMERGENCY PLANNING AIRPORT AIRPORT BUSINESSES SISTER CITIES MULTIMEDIA
Councilmember Trout-Manuel, Chair Councilmember Wales, Vice Chair	Councilmember Holman, Chair Councilmember Brown, Vice Chair	Councilmember DaCorsi, Chair Deputy Mayor Baggett, Vice Chair	Councilmember Brown, Chair Councilmember Peloza, Vice Chair

2018 MEETING DATES	2018 MEETING DATES	2018 MEETING DATES	2018 MEETING DATES
January 22, 2018	February 12, 2018	February 26, 2018	January 8, 2018
March 26, 2018	April 9, 2018	April 23, 2018	March 12, 2018
May 29, 2018	June 11, 2018	June 25, 2018	May 14, 2018
July 23, 2018	August 13, 2018	August 27, 2018	July 9, 2018
September 24, 2018	October 8, 2018	October 22, 2018	September 10, 2018
November 26, 2018	December 10, 2018	December 24, 2018	November 13, 2018

Revised 01-08-2018

COUNCIL MATRIX

NO.	TOPIC	Chair	STAFF LEAD(S)	STUDY SESSION REVIEW DATE(S)	COUNCIL DISCUSSION SUMMARY	ACTION DATE
1	Capital Projects Update and Featured Capital Project Discussion	Chair DaCorsi Vice Chair Deputy Mayor Baggett	Director Gaub	10/22/2018		
2	Vacant Housing Discussion	Chair DaCorsi Vice Chair Deputy Mayor Baggett	Director Tate	10/22/2018		
3	Roads Ad Hoc committee Report	Chair DaCorsi Vice Chair Deputy Mayor Baggett		10/29/2018		
4	Affordable Housing Stock	Chair DaCorsi Vice Chair Deputy Mayor Baggett	Director Tate	TBD		
5	Community Court	Chair Brown Vice Chair Peloza	Director Martinson	9/10/2018		
6	Park Rules	Chair Brown Vice Chair Peloza	Director Faber	9/10/2018		
7	Behavioral Health Update	Chair Trout-Manuel Vice Chair Wales	Director Hinman	9/24/2018		
8	One Table Presentation	Chair Trout-Manuel Vice Chair Wales	Director Hinman	9/24/2018		
9	Cost of Service Study - Planning and Development Fees	Chair Holman Vice Chair Brown	Director Coleman	10/8/2018		
10	Annexations (islands and peninsulas)	Chair Holman Vice Chair Brown	City Attorney Gross	TBD		

Updated 08-20-2018