
Whitefish Climate Action Plan Progress Report

— CAP Committee Update for
City Council, Dec. 4, 2017 —

CAP Committee Appointed January 2017



WHY make a Climate Action Plan?

- Council Resolution 16-64 established CAP Committee
 - Understand and prepare for projected change
 - Improve community resiliency
 - Reduce emissions, conserve energy, save dollar\$
- In June, Whitefish joined 382 other U.S. cities to support Paris Agreement
 - Cities are key to the climate change solution
 - Whitefish is self-empowered to make our own plan for our own needs
- Whitefish is on the cutting edge
 - Community partnerships
 - A leading example for other communities
 - Meeting resident and visitor expectations for a sustainable, progressive community

Climate change has big implications for Whitefish

- Hotter, drier summers in western Montana (MSU/UM Montana Climate Assessment, 2017)
 - Longer fire seasons
 - More extreme fire conditions
 - Average # of smoky days projected to double by 2050
- Less snow in low and mid elevations; more rain on snow weather events
- Water quality and quantity likely to diminish in municipal watersheds
- Our recreation and tourism economy is built upon clean air, clean water, great snow

... And it's smart business for the city

MOODY'S
INVESTORS SERVICE



"Local governments that face a higher risk of climate shocks are specifically asked by analysts during the rating process about their preparedness for such shocks and their activities in respect of adapting to climate trends."

"The interplay between an issuer's exposure to climate shocks and its resilience to this vulnerability is an increasingly important part of our credit analysis, and one that will take on even greater significance as climate change continues."

HOW: Crafting the Whitefish CAP

- CAP Committee includes community experts in various fields
 - Each committee member conducts their own research
- Public input during every step
 - Open house, public survey, community meetings
- Engagement of staff and council
 - Successful adoption is only possible with the help of every level of city government
 - Strategies must be feasible and city employees must be willing to implement

Greenhouse gas inventory

- Establishing baselines for our energy use and waste allows us to monitor improvement
- WWTP and ESC are big energy users

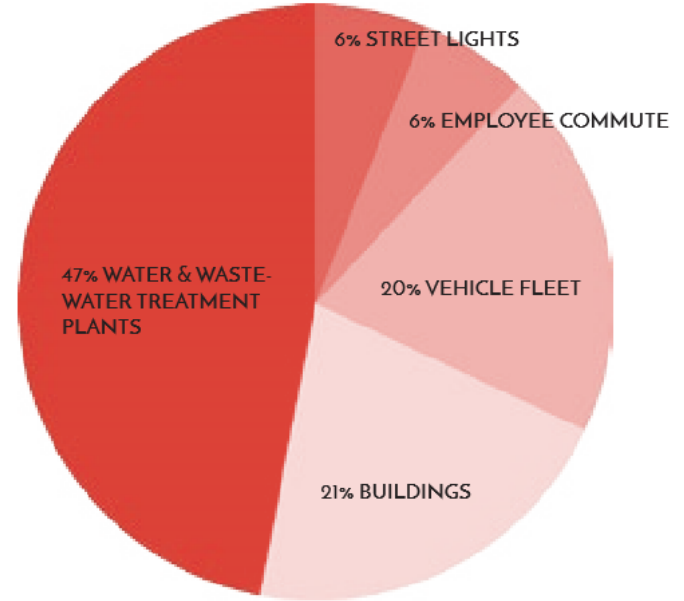
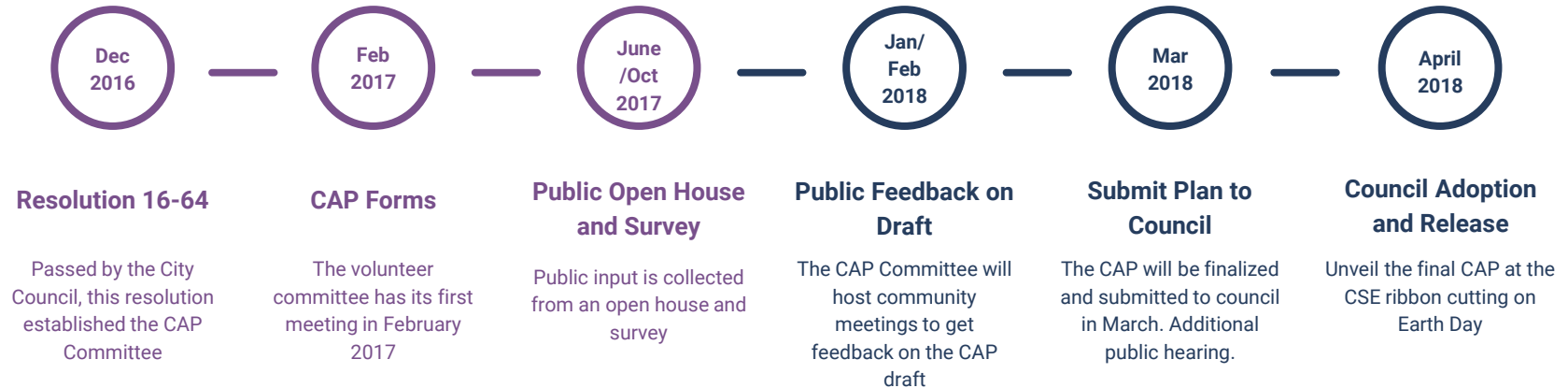


FIGURE 1. 2016 City of Whitefish Emissions by Sector

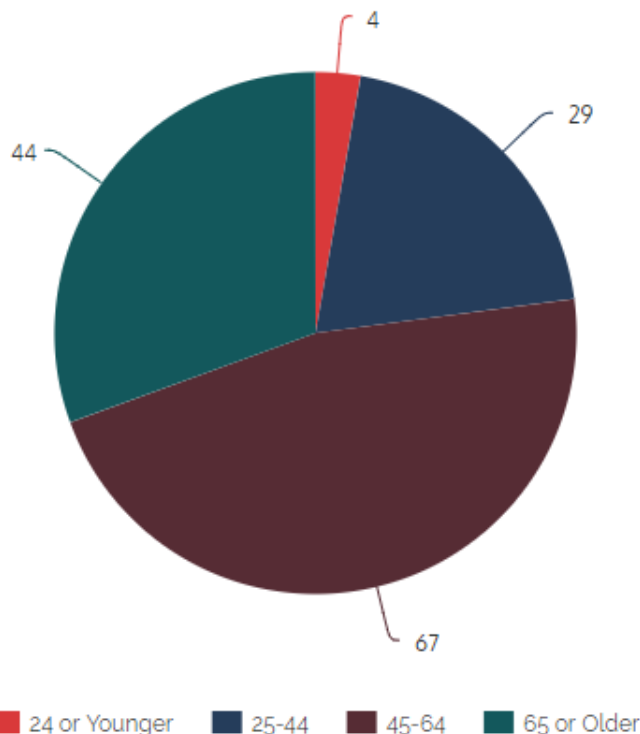
CAP Timeline



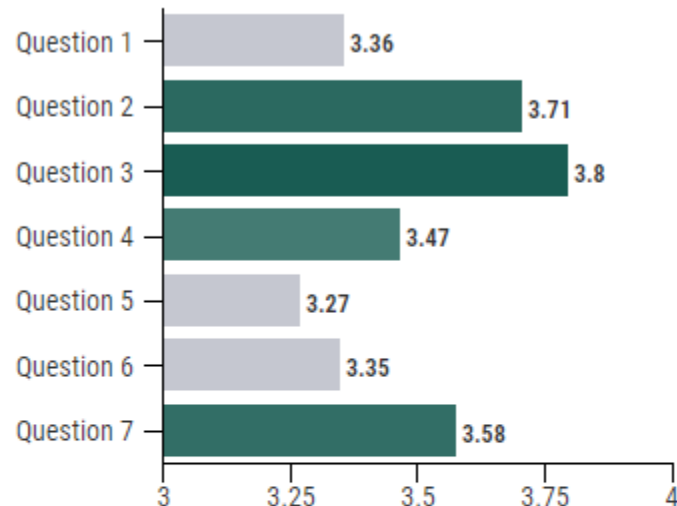
CAP Survey Results

● Respondent Demographics

The majority of the 144 respondents were over the age of 45 and reside within Whitefish



1. The City should prioritize greenhouse gas reductions.
2. The City should choose strategies based on their financial feasibility and subsequent saving.
3. The City should coordinate and partner with the Whitefish School District, local businesses, and other organizations.
4. The City should incorporate climate strategies into other citywide plans and initiatives where appropriate.
5. The City should increase its climate-related public outreach and engagement efforts.
6. The City should be a leader in addressing climate change in the community.
7. The City should strive to prepare for projected change and build resilience.



Average Response per Question

Survey responses varied from
1 - Disagree with Principle to 5 - Top Priority

WHAT does this plan cover?

- Primary focus on municipal operations
- Collaboration with Whitefish School District
- Ways the city can support community efforts
- Tips for family, neighborhood, business and community action
- Identify cost savings, economic impacts, public health benefits

Five Chapters + School District

BUILDINGS
AND ENERGY

WATER AND
WASTEWATER

TRANSPORTATION
AND LAND USE

FORESTS AND
WATERSHEDS

CONSUMPTION
AND WASTE



Envision 2050

Collaboration with Whitefish School District

- Hearing Whitefish stories and history
- What will Whitefish be like in 2050?
 - What will it look like?
 - How will we get around?
 - Where will our food/energy/water come from?
- What can the city do NOW to create the future we want?



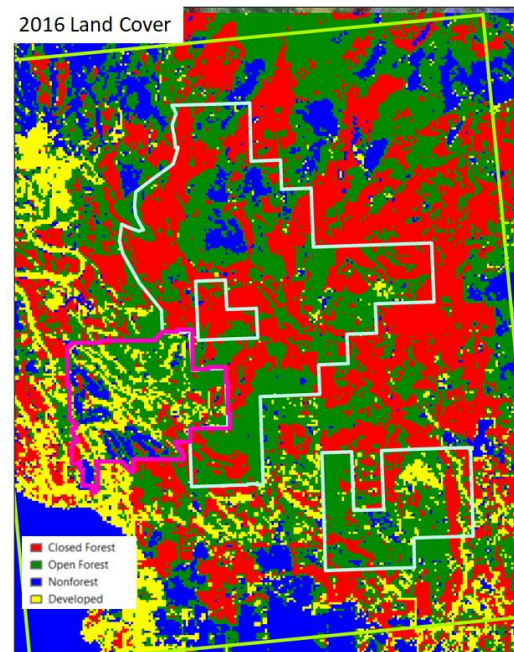
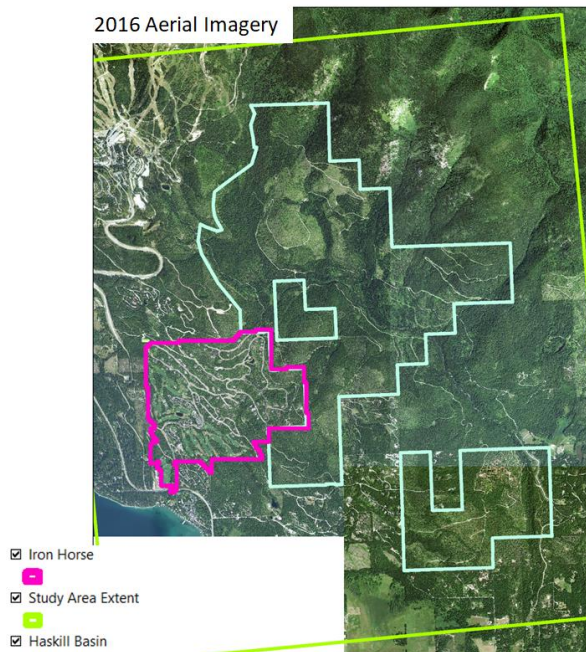
What does success look like? Partnerships are key

Four success stories built with partners:

- Flathead Electric Cooperative
- National Center for Appropriate Technology
- ICMA - International City/County Management Association
- U.S. Department of Energy
- National Renewable Energy Laboratory
- Montana Renewable Energy Association
- U.S. Forest Service, Stoltze and Trust for Public Lands
- MSU and Colorado State University
- City of Missoula and Climate Smart Missoula

Haskill project builds resilience to climate change

- Protection of water source in a natural “snow basket”
- USFS Whitefish Municipal Watershed Fuels Reduction
- Colorado State University is evaluating avoided loss of carbon



Energy efficiency successes and opportunities

- Retrofits at water treatment plant saved tens of thousands of dollars
- ESC Energy Audit identified many opportunities to save energy, reduce costs, quick ROI - provided free by NCAT
- Skilled commissioning of buildings saves money, improves workplace environment - we're learning that now at City Hall



Mark Heider, City Electrician

Micro Hydro Plant

- Procurement contract with FEC
- New 235 kW turbine and generator cost \$650,000
- Will pay for itself in 4 years instead of 5 years → Dec 2018
- Then we're in the gravy



SolSmart Designation

- Certification program developed by the International City/County Management Association and Dept of Energy
- Designation expected in 2018
- Technical assistance from NREL for wastewater treatment plant solar array
- Eliminates barriers, facilitates city resident who wish to to install solar



Key priorities and opportunities identified to date

- Become a fire-adapted community
- Improve water conservation > Ensure supply, avoid increased expenditure of energy and money
- Exploring solar array to offset energy requirements for new WWTP
- Need for better ongoing building management, retro-commissioning
- Electric vehicle charging stations with assistance of FEC and Tesla
- Streetlight upgrades to LED could save more than \$100K over 10 years
~ Warm LED option should be available within a year

Goals

- By 2025, reduce carbon emissions by 26-28% compared to 2005 (from Mayor's Proclamation supporting Paris Climate Agreement)
- City goal for 2050?

Implementation

- CAP will prioritize actions with best ROI, propose implementation schedule
- Recommend Council establish a standing citizen committee
- Implications for 2019 budget
 - Consider hiring a new position with dual duties: Facilities Manager/Sustainability Coordinator.
 - Add an electric vehicle to the public works fleet during normal replacement schedule to replace Ford Freestyle
 - Invest in energy- and cost-saving efficiencies at city facilities

Discussion and Questions