

# Climate Change is Here: What can you do?

## Introduction to the Anchorage Climate Action Plan



# Changing Climate in Anchorage

## Climate change boosts risk of extreme wildfires

December 16, 2016



Jeff Richardson  
907-474-6264

University of Alaska Fairbanks scientists are presenting their work at the American Geophysical Union's fall meeting in San Francisco this week. Here are some highlights of their research, as shared at the world's largest Earth and space science meeting.

A newly published report concludes that climate change is boosting the risk of extreme wildfires.



HEAT: COPING WITH A WARMING WORLD

## Gulf Of Alaska Cod Are Disappearing. Blame 'The Blob'

July 31, 2018 - 10:24 AM ET  
Heard on All Things Considered

ANNIE FEIDT

FROM  ALASKA PUBLIC RADIO



Arctic

## Forget snowfall -- winter rain becoming new normal in Alaska and Arctic

Author: Yereth Rosen | Arctic Updated: May 31, 2016 Published January 28, 2014

Energy & Environment

## Tick, tick, tick: Alaska braces for invading parasites



EW E - In this updated file photo provided to the U.S. Centers for Disease Control and Prevention (CDC), a black-legged tick is shown on a green leaf.

Mat-Su

## Beetle damage skyrockets to nearly a million acres in Southcentral Alaska

Author: Zaz Hollander Updated: October 2 Published October 1



Spruce bark beetle-killed trees stand in the boreal forest along Knik-Goose Bay Road on June 5. (Loren Holmes / ADN)

Buy This Photo

# What is a Climate Action Plan?

A strategic roadmap for measuring and reducing greenhouse gas emissions and preparing for the impacts of climate change.

The **Municipality of Anchorage** collaborated with the **University of Alaska** to create the Anchorage Climate Action Plan that was passed by the Anchorage Assembly in May 2019.





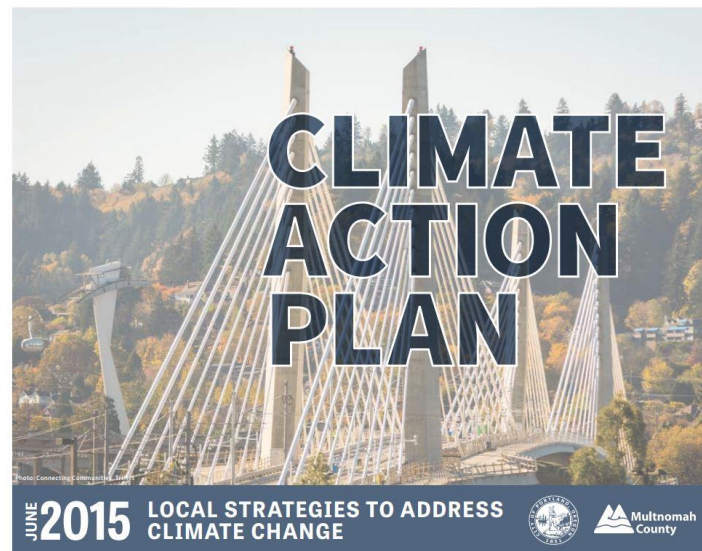
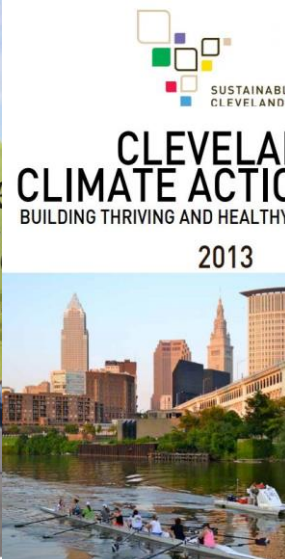
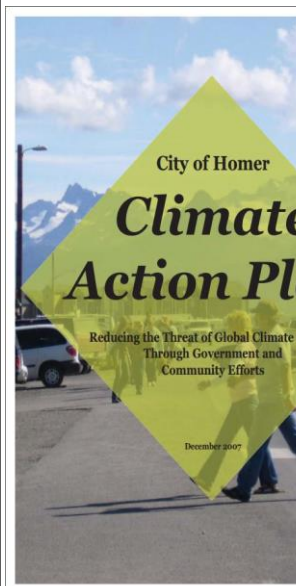
# Who has a Climate Action Plan?

9,100 cities representing ~800 M people are now committed to creating city-wide climate action plans

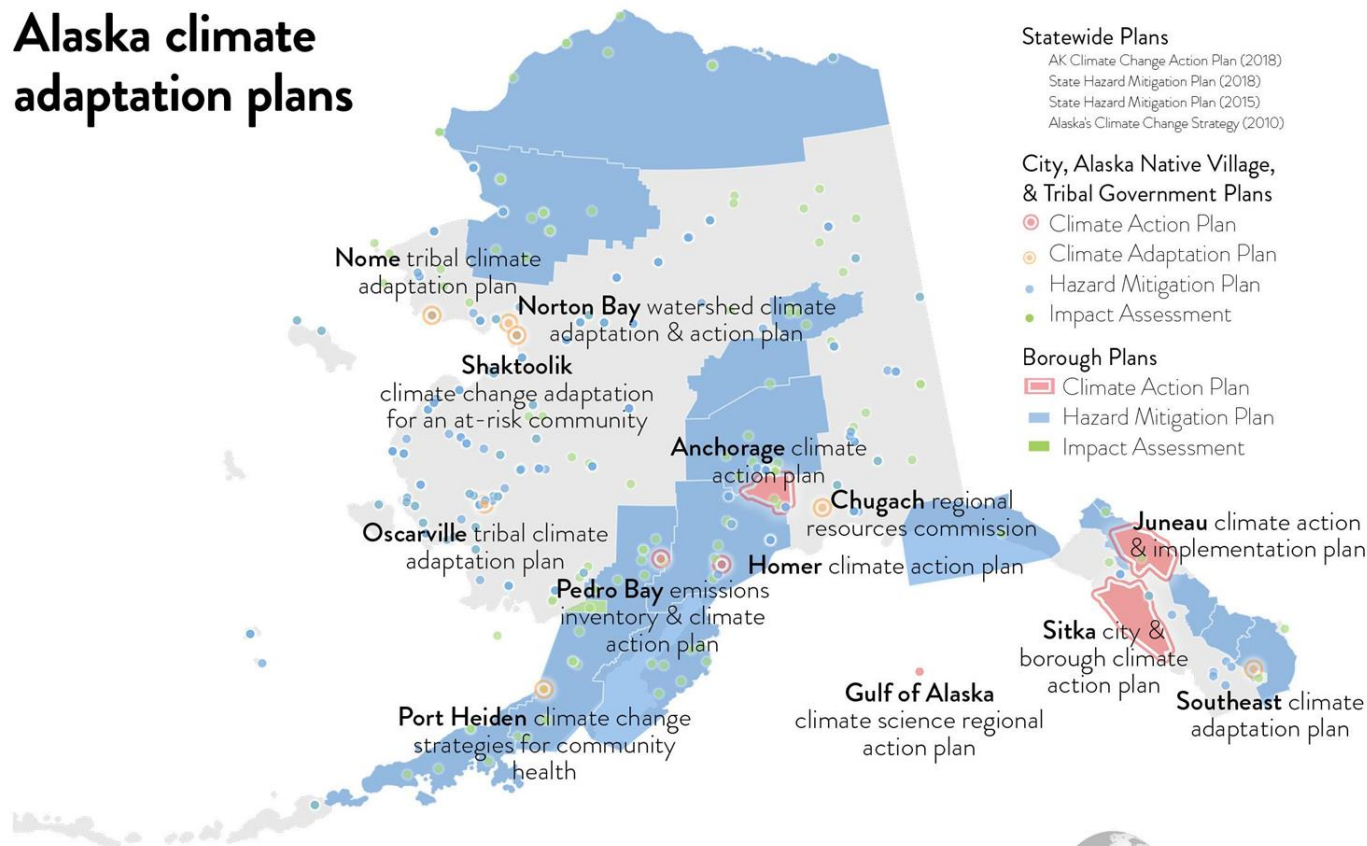
**WE ARE  
STILL IN**



**GLOBAL COVENANT  
of MAYORS for  
CLIMATE & ENERGY**



# Alaska climate adaptation plans



Credit: Kelsey Aho, Center for Alaska Policy Studies.

Data source:s DEECD; Meeker and Kettle, 2017

# Panelists

- **Mara Kimmel**, Anchorage Mayor's Office, Lead, Resilience + Welcoming Initiatives
- **Micah Hahn**, University of Alaska Anchorage, Institute for Circumpolar Health Studies
- **Shaina Kilcoyne**, Municipality of Anchorage, Energy and Sustainability Manager

# Anchorage: Transformation and Opportunity



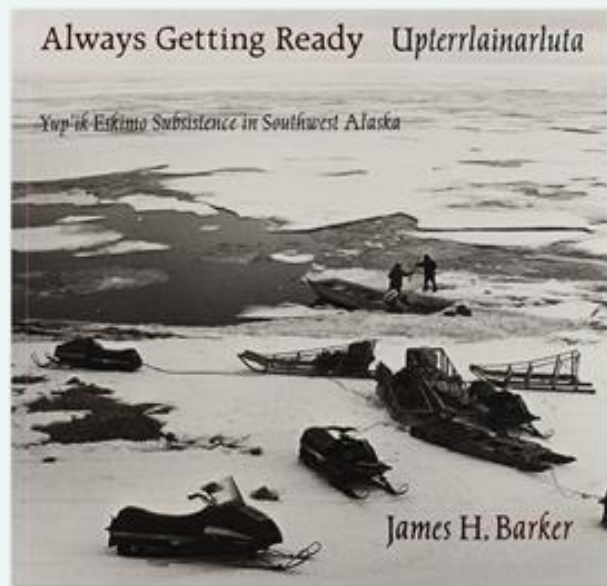
# Community Values and Vision

*Always Getting Ready\**

**SELF RELIANT**

**VIBRANT, VITAL CULTURES**

**CONNECTED with PLACE**



\* From Barker, *Upterrlainarluta - Always Getting Ready: Yup'ik Eskimo Subsistence in Southwest Alaska*.



# Resilience and Equity in Anchorage

*Ready, Inclusive, Connected*

The capacity of a community to survive and thrive through  
**acute shocks** and **chronic stresses**



Fires, floods, earthquakes,  
erosion, freeze-thaw cycles



Unemployment, inadequate  
housing, poverty, poor  
infrastructure and  
communication networks,  
social and economic  
exclusion



Map by Lucie Conoley, provided courtesy of the Anchorage Museum



## Welcoming Anchorage Roadmap

Our roadmap for an equitable, inclusive, diverse Anchorage

### Our Roadmap



Our **VISION** is that Anchorage is a globally competitive, culturally vibrant community where every resident feels a sense of belonging and has equal opportunity to access all the community offers.

Our efforts to create a more welcoming community are instilled with the following shared **VALUES**



Five pillars organize and drive our welcoming activities to the **VEHICLE** for change in our community.

**Civic Engagement**  
Anchorage residents are equally able to participate in civic life.



**Connected, Safe, & Healthy Communities**  
Anchorage is a safe community that is strong, resilient, and fosters a culture of non-violence. Anchorage promotes the health and welfare of all its residents including its most vulnerable.



**Education**  
Newcomers to Anchorage, along with longtime diverse community members, find cradle to career opportunities within a thriving education system.



**Economic Development & Entrepreneurship**  
We activate the full and diverse economic potential of Anchorage by removing all barriers and providing resources to achieve meaningful work and entrepreneurial opportunities for our diverse community members.



**Equitable Access**  
All Anchorage residents have equal access to governmental and community based services (by removing institutional, systemic barriers.)



## Resilient Anchorage Roadmap

A roadmap for success and innovation in a time of transformation

### Our Roadmap



Our **VISION** is that Anchorage has the capacity to **thrive** and **survive** through **acute shocks** and **chronic stresses**

Fires, floods, earthquakes, erosion, freeze-thaw cycles



Unemployment, inadequate housing, poverty, poor infrastructure and communication networks, social and economic exclusion

Our efforts to create a more resilient community are instilled with the following shared **VALUES**



Six pillars organize and drive our resilience strategy:



**Infrastructure**  
Infrastructure improves climate readiness, equity and wellbeing.



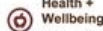
**Energy**  
Anchorage is the most energy efficient city in the country.



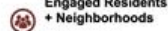
**Emergency Preparedness**  
Anchorage residents are prepared for emergencies.



**Economic Opportunity**  
Economic opportunities and entrepreneurship in emerging economies are accessible to all residents.



**Health + Wellbeing**  
Community health and wellness is a priority and protected.



**Engaged Residents + Neighborhoods**  
Community members are engaged and vital partners in creating a welcoming and resilient Anchorage.



# ANCHORAGE

## Climate Action Plan

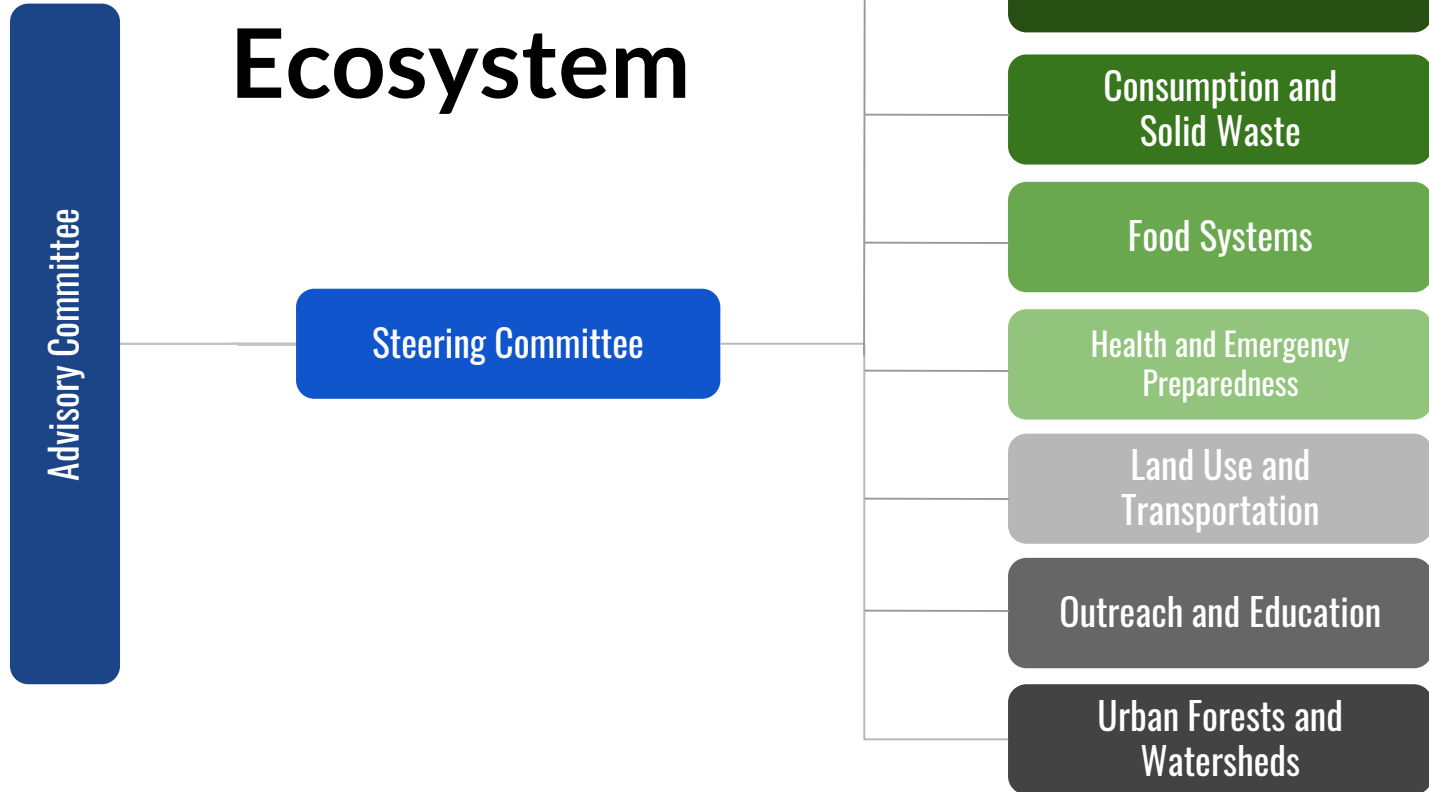


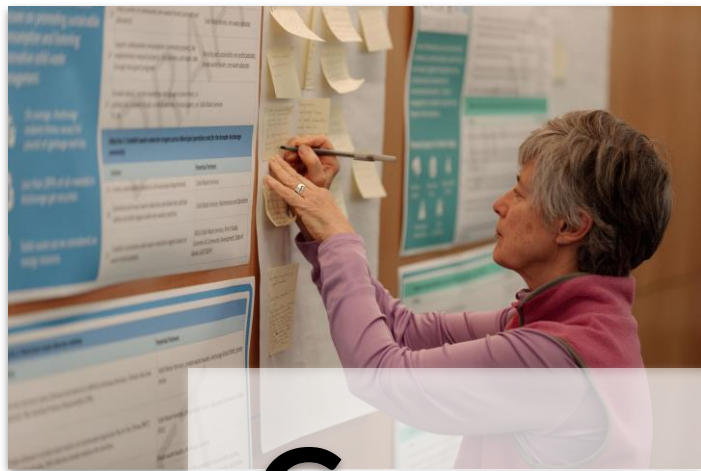
UNIVERSITY  
of ALASKA  
*Many Traditions One Alaska*

# HOW WAS THE CLIMATE ACTION PLAN DEVELOPED?

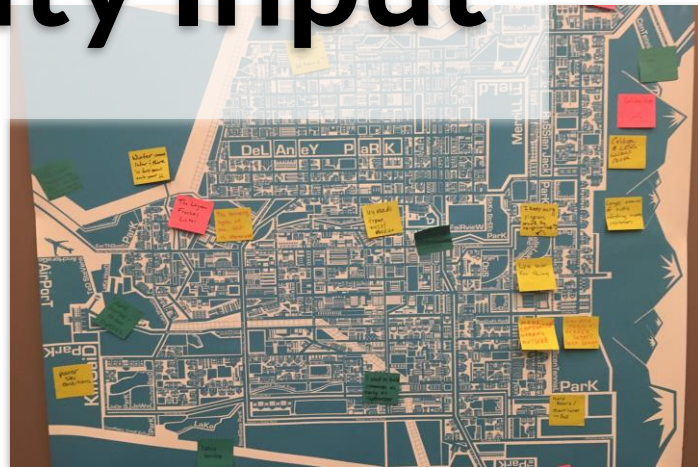


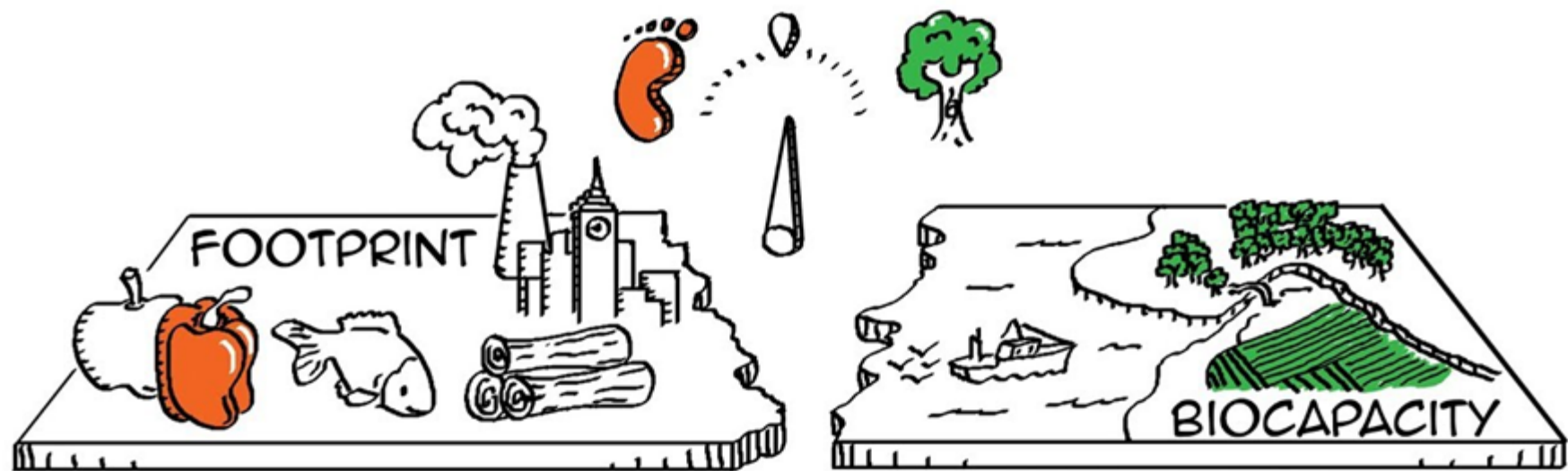
# CAP Ecosystem





# Community Input





# ECOLOGICAL FOOTPRINT

WHAT IS YOUR

# Ecological Footprint? beta

How many planets do we need if everybody lives like you?

When is your personal Overshoot Day?

TAKE THE



FIRST STEP

Earth Overshoot Day 2019 is July 29

[footprintcalculator.org](https://footprintcalculator.org)

FOOD

## How often do you eat animal-based products?

(beef, pork, chicken, fish, eggs, dairy products)

NEVER



VERY  
OFTEN

**Occasionally**

(really like veggies - occasional  
meat, eggs/dairy)

[ADD DETAILS TO IMPROVE ACCURACY](#)







## FOOD

### How often do you eat

beef or lamb?



pork?



poultry?



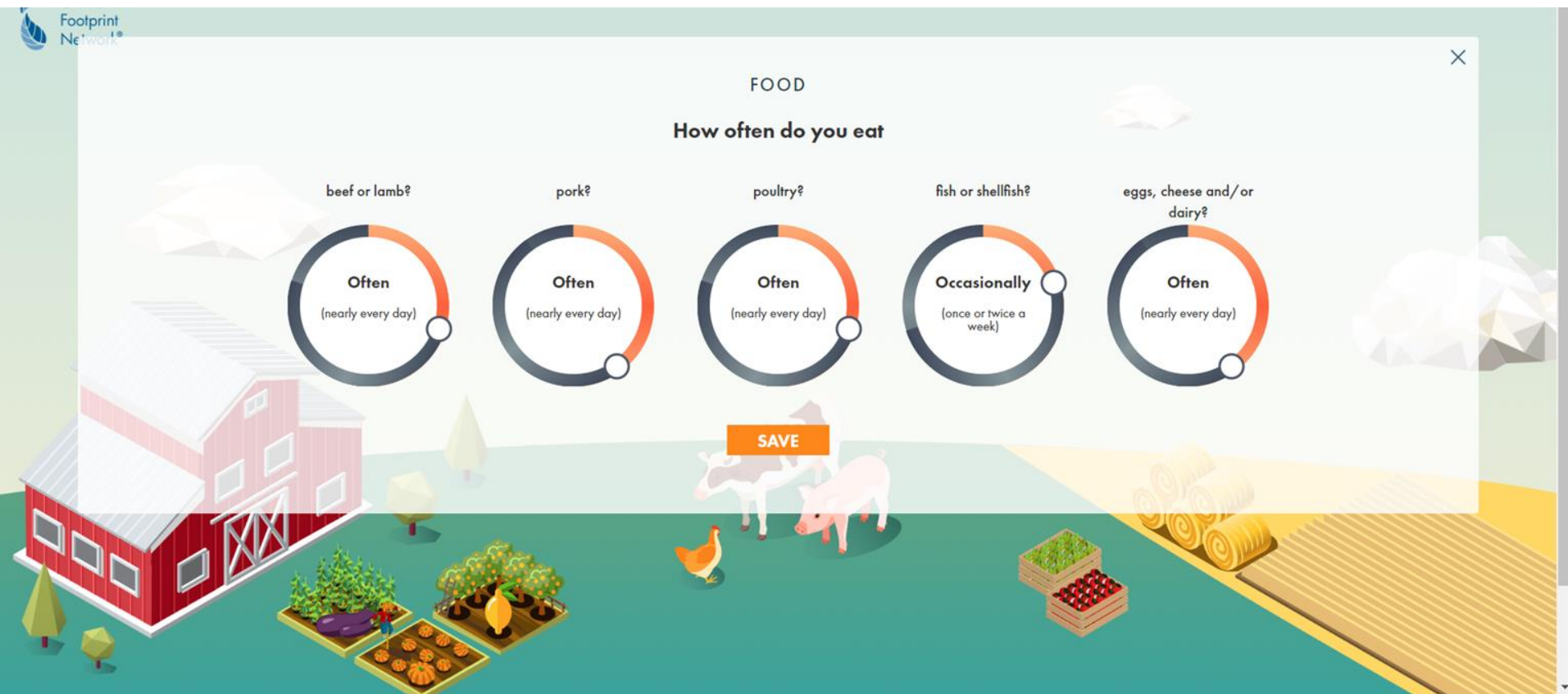
fish or shellfish?



eggs, cheese and/or dairy?



SAVE



If everyone lived like you, we would need

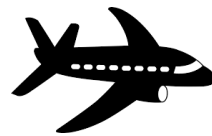
3.2 Earths 

[See Details](#)



# By Consumption Category





If everyone lived like you, we would need

3.2 Earths



See Details



If everyone lived like you, we would need

1.8 Earths



See Details





If everyone lived like you, we would need

3.2 Earths



See Details



If everyone lived like you, we would need

3.5 Earths

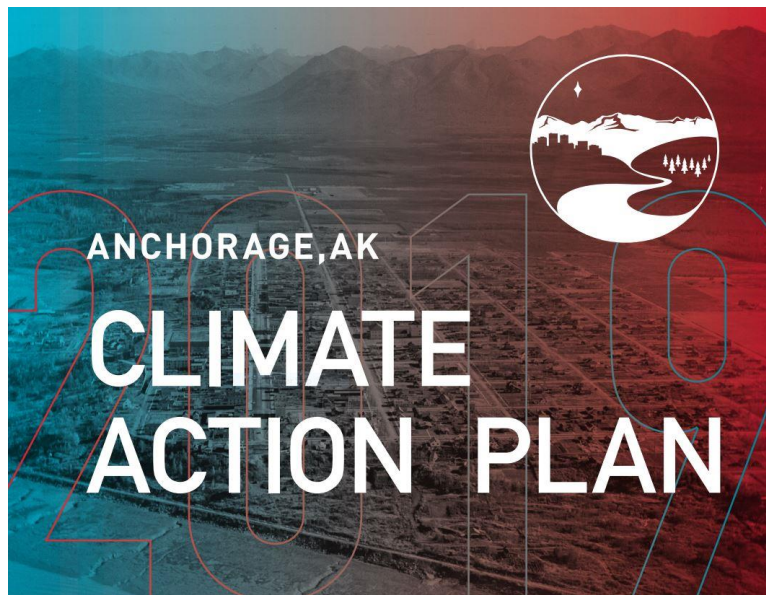


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# **Anchorage Climate Action Plan At a Glance**



## Municipality of Anchorage Climate Action Strategy

A Strategy for Good Stewardship, Good Management, and Effective Preparation for an Efficient and Self-Sufficient City

The Climate Action Plan launches us toward our key goals:

- Accelerate Our Economy**  
Reduce costs and increase jobs
- Steward Our Resources**  
Take care of the place we live
- Prepare Our City**  
Build a ready and resilient city
- Engage Our Residents**  
Involve all Anchorage residents in taking action

[www.muni.org/climateactionplan](http://www.muni.org/climateactionplan)

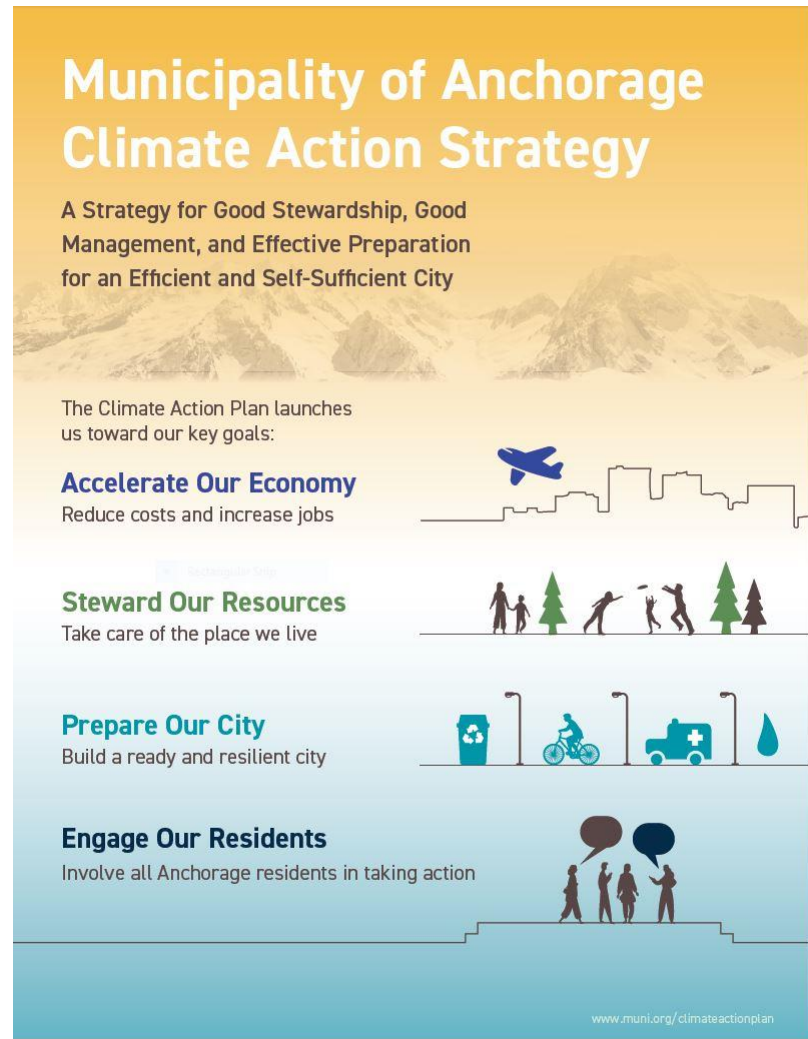


UNIVERSITY  
of ALASKA  
*Many Traditions One Alaska*

# Distilled from the Anchorage Climate Action Plan

Actions are:

- Near-term
- Municipal-led
- High priority
- High impact



# **BUILDINGS + ENERGY**

**GOAL:** Optimize energy use in MOA facilities to save energy and money and work with private residential and commercial building owners to support safe, healthy, and affordable buildings.

- Improve energy efficiency in Municipally owned buildings
- Increase opportunities for residents and businesses to implement clean energy technology
  - Strengthen building energy standards
  - Provide financing opportunities
  - Offer incentives
  - Reduce barriers

# BUILDINGS + ENERGY

**GOAL:** Optimize energy use in MOA facilities to save energy and money and work with private residential and commercial building owners to support safe, healthy, and affordable buildings.

- Solid Waste Services Admin  
Energy Retrofit
- Solar Panels on Egan Center and  
Fire Station 10
  - Anchorage Landfill in 2020!







# LAND USE + TRANSPORTATION

How do you commute? Share any successes or barriers in achieving a lower carbon transportation lifestyle.





# LAND USE + TRANSPORTATION

**GOAL:** Improve walkability and connect neighborhoods that employ mixed-use development and diverse transportation options.

- Housing infill and redevelopment to minimize car travel and increase community resilience
- Increase use of public transit and non-motorized transportation
- Electrifying vehicle fleets and promote energy efficient vehicles



Complete Streets: Spenard Corridor, Charles Boyle



# LAND USE + TRANSPORTATION

**GOAL:** Improve walkability and connect neighborhoods that employ mixed-use development and diverse transportation options.



- \$950,000 for charging infrastructure in the railbelt
- Regional EV Infrastructure Plan in development
- MOA is testing EVs

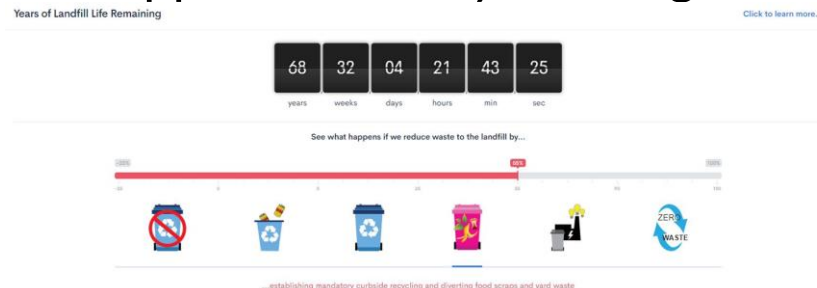
Anchorage's new electric charging station downtown



# CONSUMPTION + SOLID WASTE

**GOAL:** Develop an efficient and innovative solid waste management system that promotes sustainable consumption, recycling, and waste reduction.

- Increase recycling, composting, and other diversion of waste to increase the life of the landfill
- Capture more potential energy in collected refuse (e.g., organics digestion, mass burn, and landfill gas to energy expansion)
- Expand diversion opportunities by building a new Central Transfer Station







# HEALTH + EMERGENCY PREPAREDNESS

**GOAL:** Ensure preparedness and adaptability at household, neighborhood, and municipal levels to equitably improve health and safety.

- Improve household wildfire mitigation
- Identify and develop key secondary access routes for emergency response and evacuation in the Hillside, Girdwood, Eagle River/Chugiak
- Improve language access to all residents on climate change, natural hazards, and emergency preparedness



# FOOD SYSTEMS

GOAL: Support local, sustainable food systems.

- Support school and community gardens and other opportunities to expand community growing
- Encourage farmers markets to accept payment through food assistance programs
- Conduct a commercial organic waste collection pilot



Photo Credit: Michelle Fehribach





# URBAN FOREST + WATERSHEDS

**GOAL:** Support healthy ecosystems that increase recreational opportunities, clean air and water, and habitat for wildlife.

- Develop an urban forest management plan
- Create a stormwater utility
- Continue to support APU efforts to monitor Eklutna Watershed





# OUTREACH + EDUCATION

**GOAL:** Inform, engage, and empower Anchorage residents and leadership to find community-led climate solutions that support a sustainable future.

- Increase outreach methods for participation in planning and new programs
- Develop an online Anchorage climate action webpage and other outreach materials
- Encourage education about climate change, energy, and the development of career and technical education programs around clean energy jobs

# Climate Action Plan Implementation

**Mayor's Resilience Sub-Cabinet**



**Anchorage Climate Action Council**



# Climate Action Plan Monitoring



## Performance Indicators: Buildings

- Dollars saved
- Renewable energy generated
- Facilities retrofitted to increase efficiency
- Outdoor lighting converted to LEDs

# Climate Action Plan Monitoring



## Performance Indicators: Transportation

- Miles of bike and pedestrian infrastructure added
- Public transit ridership
- Electric vehicles in the Municipal fleet

# Climate Action Plan Monitoring



## Performance Indicators: Waste

- Waste converted to energy
- Materials composted
- Materials recycled
- Per capita waste reduction





Photo: Johanna Grasso

# What is your Climate Commitment?

[www.muni.org/ClimateActionPlan](http://www.muni.org/ClimateActionPlan)