

Climate Change and You



Protecting our World



“Nearly half of what will be the built environment in 2030 doesn’t even exist yet, giving the current generation a vital opportunity to reshape future development.”

Planning for a New Era,
Journal of American Planning
Association, Fall 2006



Climate Change

Defining the Terms

Sustainability

“meeting the needs of the present without compromising the ability of future generations to meet their own needs.”

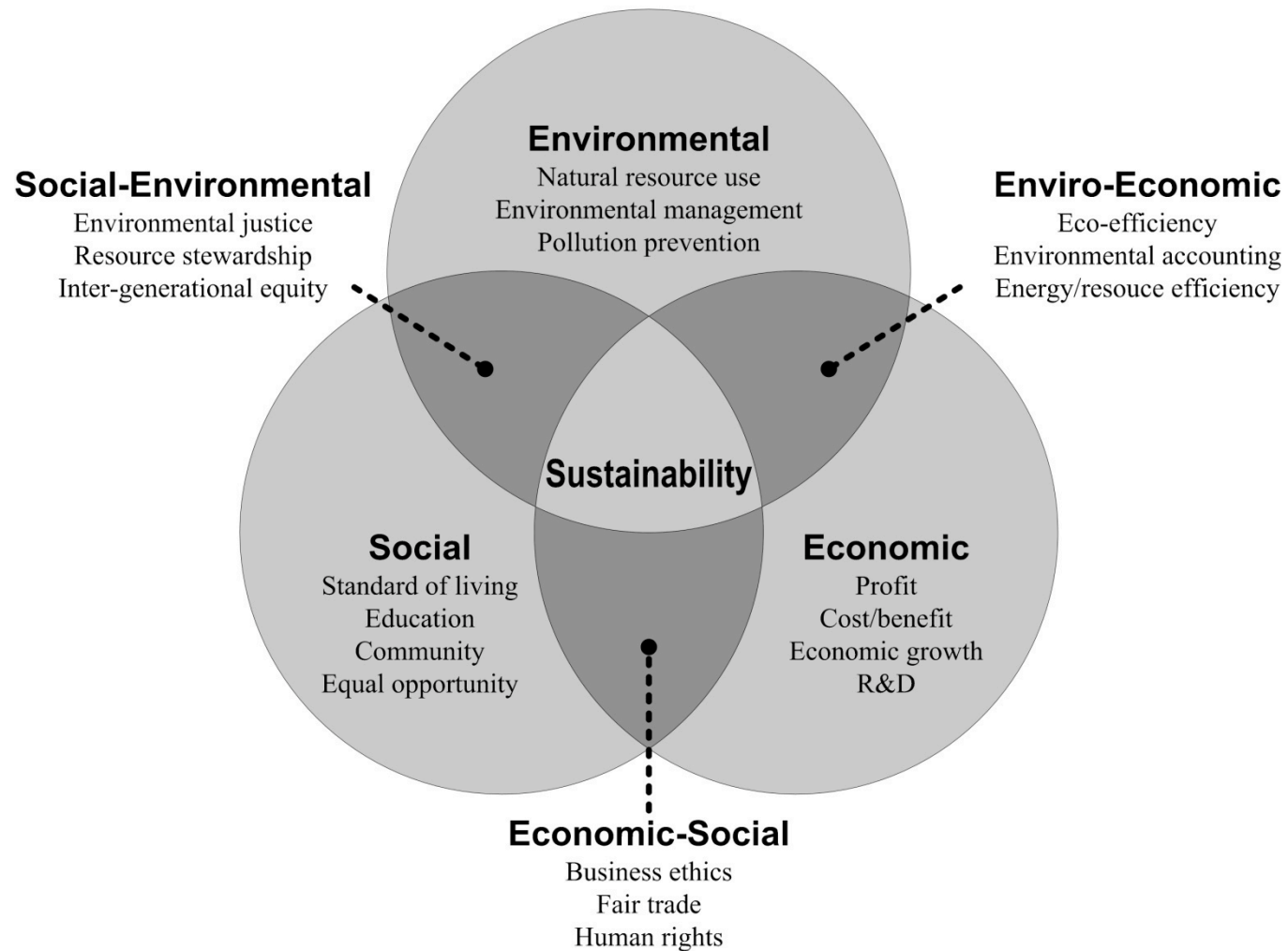
(Bruntland Report)

Climate Change

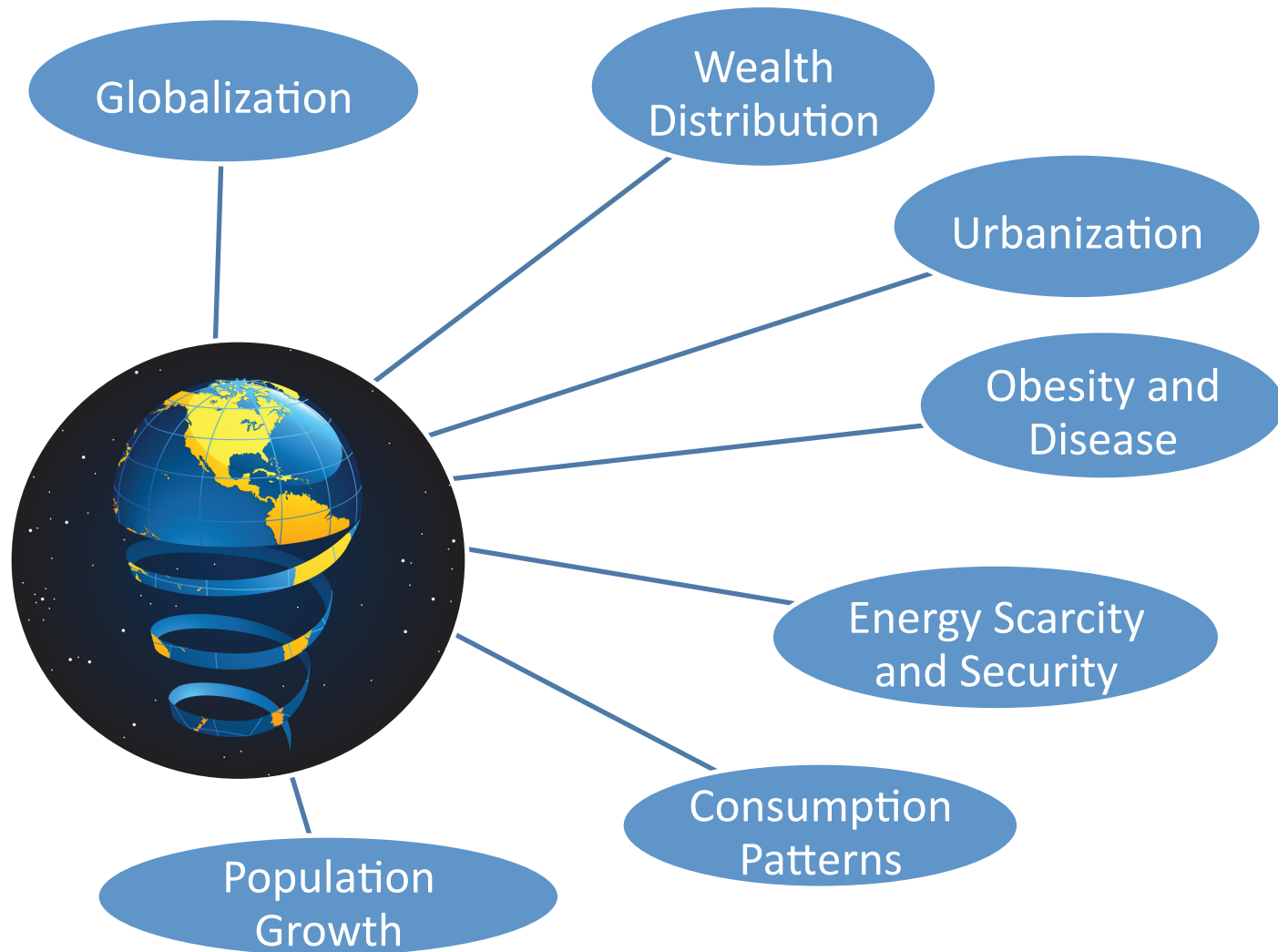
“a change in the state of the climate that can be identified by changes in the mean and/or variability of its properties and that persists for an extended period, typically decades or longer.”

(IPCC Glossary)

The Three Spheres of Sustainability

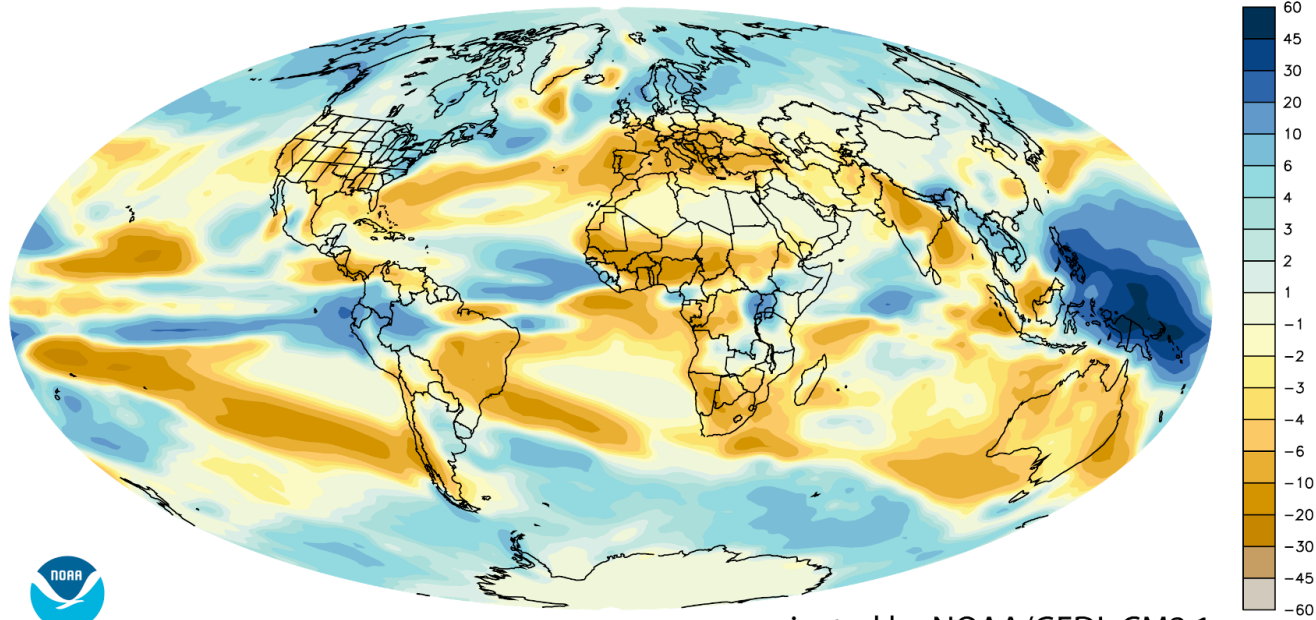


Why not business as usual?

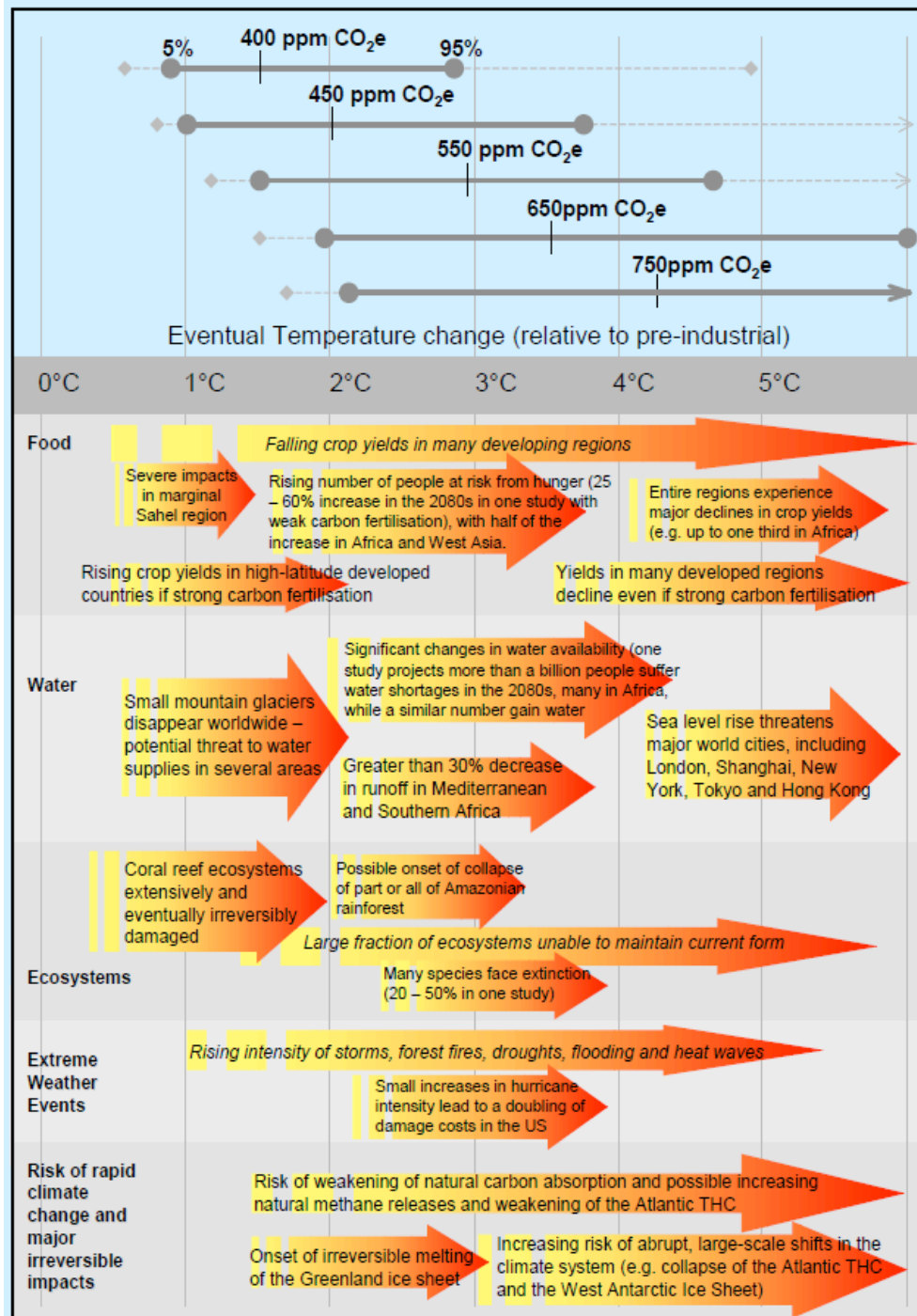


What are the effects of climate change?

CHANGE IN PRECIPITATION BY END OF 21st CENTURY
inches of liquid water per year



as projected by NOAA/GFDL CM2.1



Stern Review: The Economics of Climate Change. Executive Summary. HM Treasury, London. October 30, 2006.
http://www.hm-treasury.gov.uk/sternreview_index.htm

Greenhouse Gas Emissions Washington vs. National



Transportation

- 47% Washington
- 28% National



Electricity

- 20% Washington
- 34% National



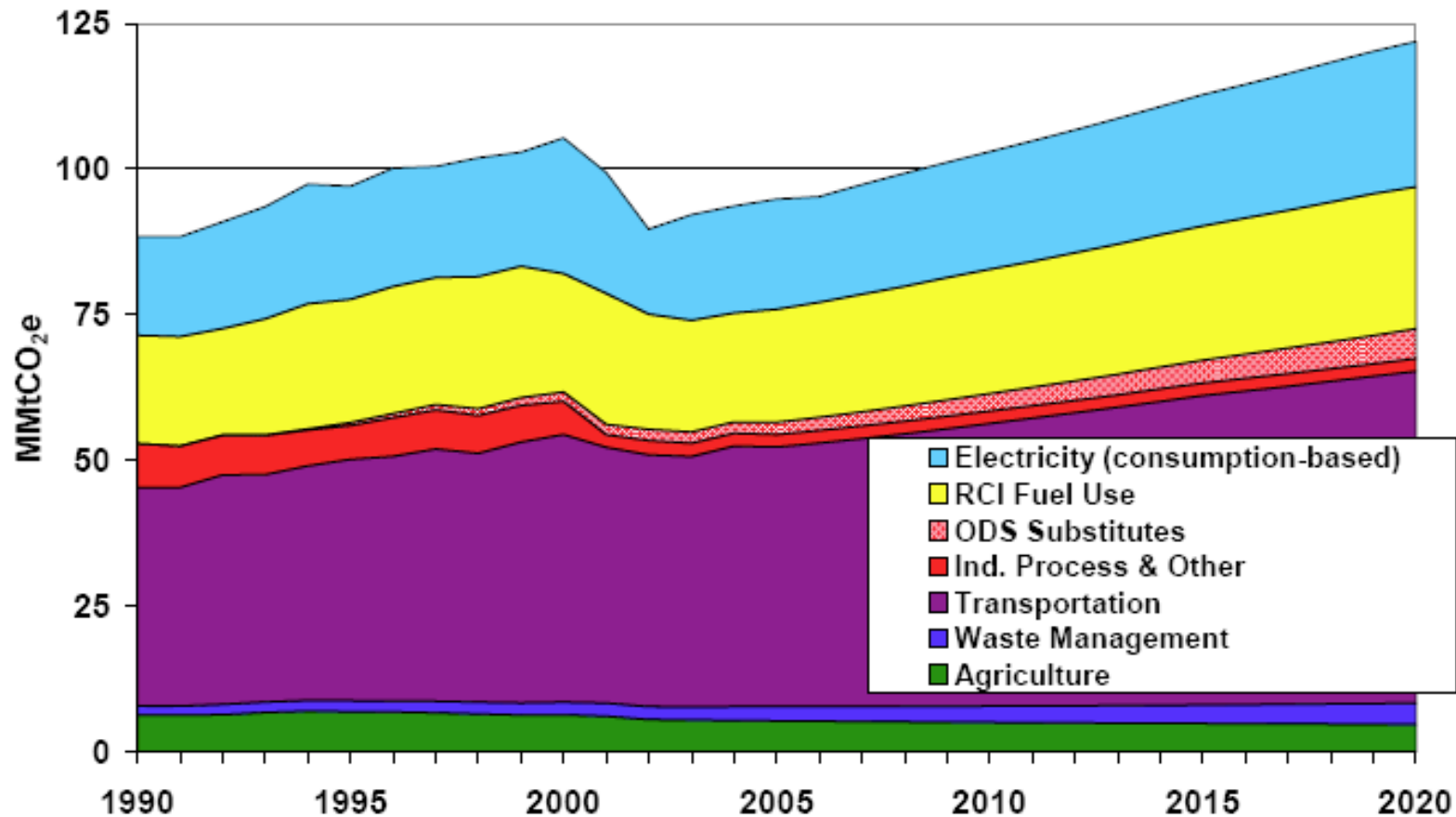
Residential/Commercial/Industrial (RCI)

- 20% Washington
- 20% National

Source: Washington State Greenhouse Gas Inventory and Reference Case Projections, 1990-2020, December 2007, Center for Climate Strategies for Washington Department of Ecology and Department of Community, Trade, and Economic Development

Washington Gross GHG Emissions by Sector,

1990-2020: Historical and Projected (Consumption-based)



Source: Washington State Greenhouse Gas Inventory and Reference Case Projections, 1990-2020, December 2007, Center for Climate Strategies for Washington Department of Ecology and Department of Community, Trade, and Economic Development

Using electronic polling to share information



What is your ideal breakfast?

9% 1. Coffee

21% 2. Bacon, eggs, toast, etc.

6% 3. Grapefruit

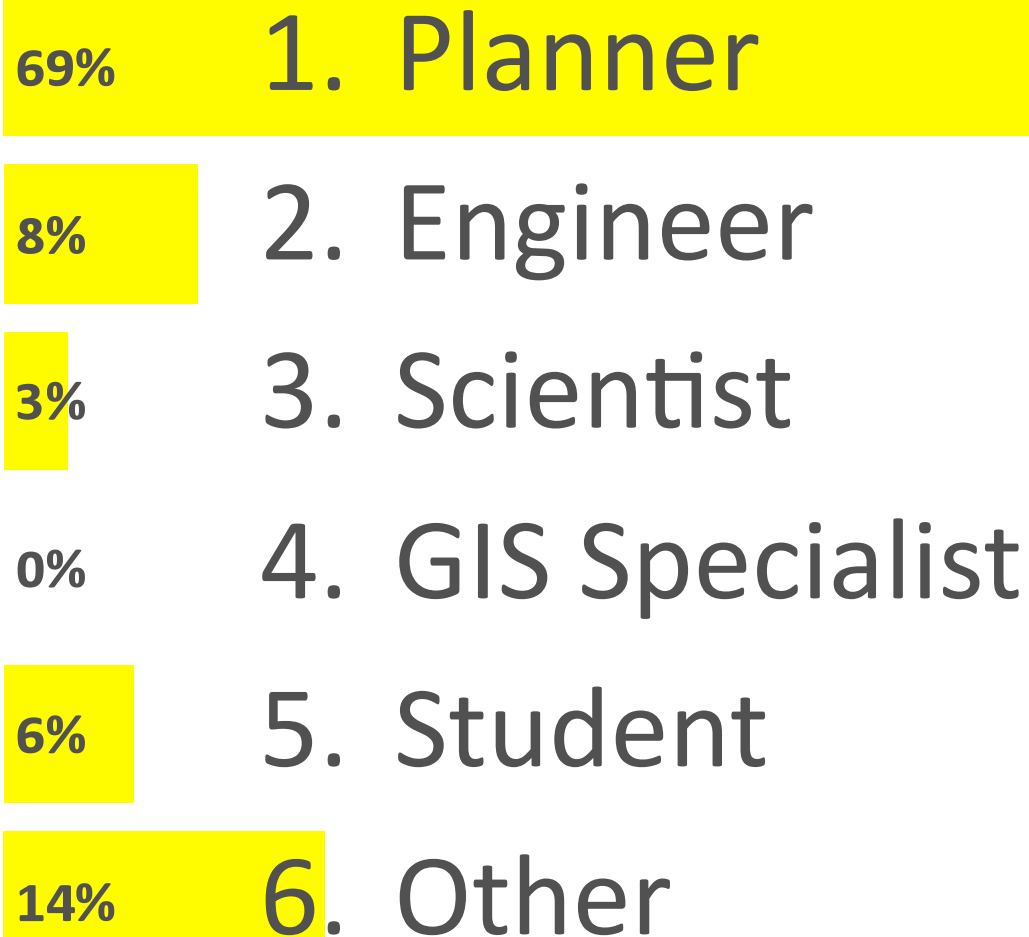
26% 4. Cereal

9% 5. Leftovers

24% 6. Any of the above

6% 7. Breakfast?

What is your profession?



How many years of professional planning experience do you have?

14% 1. < 2 years

28% 2. 2-5 years

8% 3. 6-10 years

14% 4. 11-15 years

36% 5. 16 + years

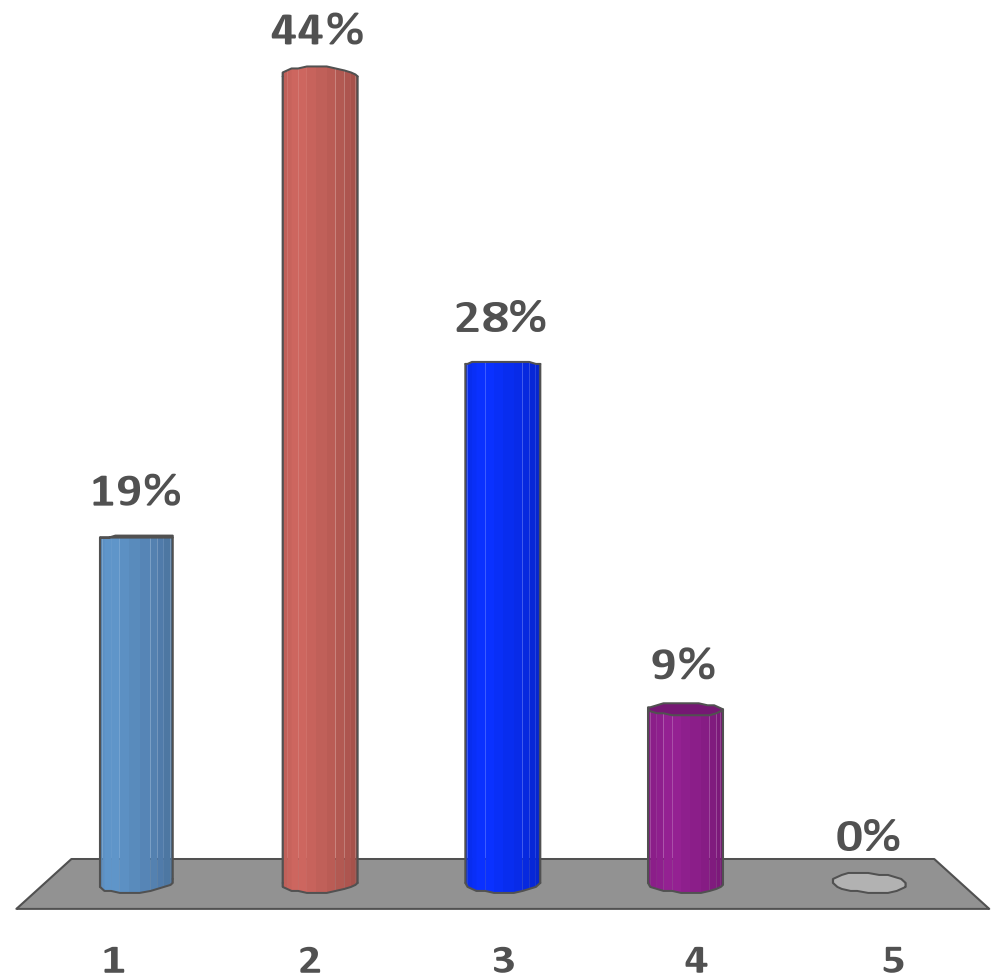
Who is your employer?

- | | |
|-----|--|
| 28% | 1. City Department |
| 11% | 2. County Department |
| 8% | 3. Regional, State or Federal Agency |
| 0% | 4. Developer/Land Owner |
| 39% | 5. Private Consulting Firm/Sole Proprietor |
| 3% | 6. Non-Profit Organization |
| 8% | 7. College/University |
| 3% | 8. Other |

Rank your knowledge of climate change.

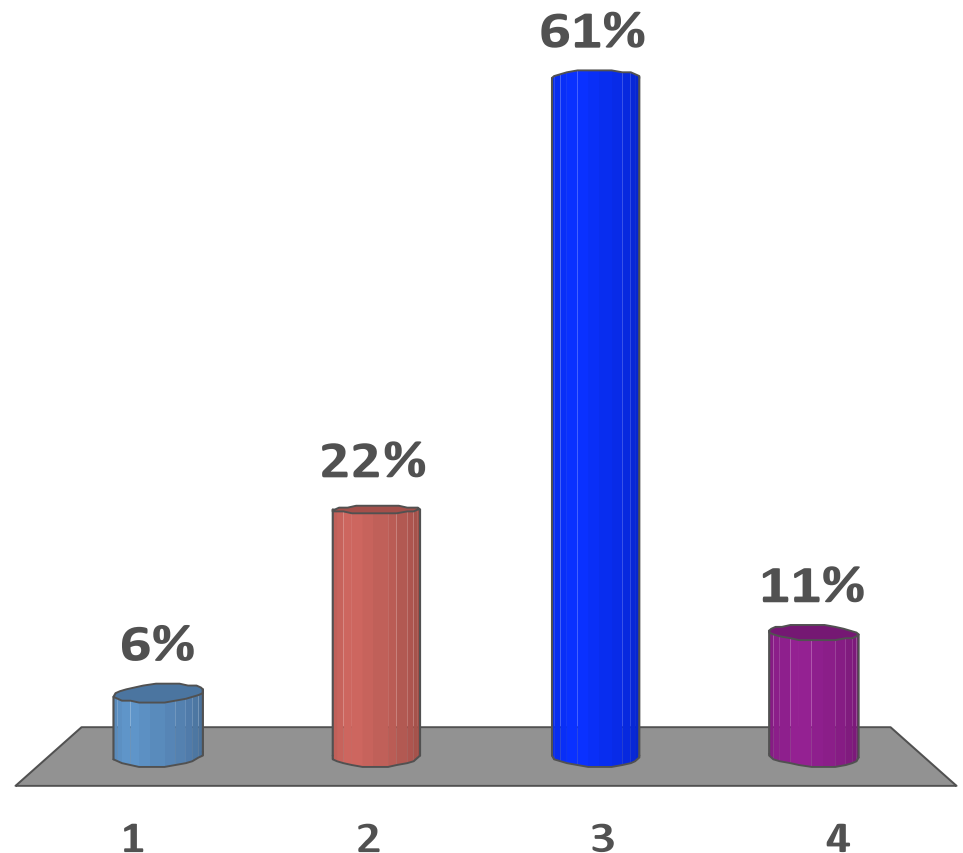
1. Very Good
2. Good
3. Moderate
4. Low
5. Very Low

Mean = 2.2813



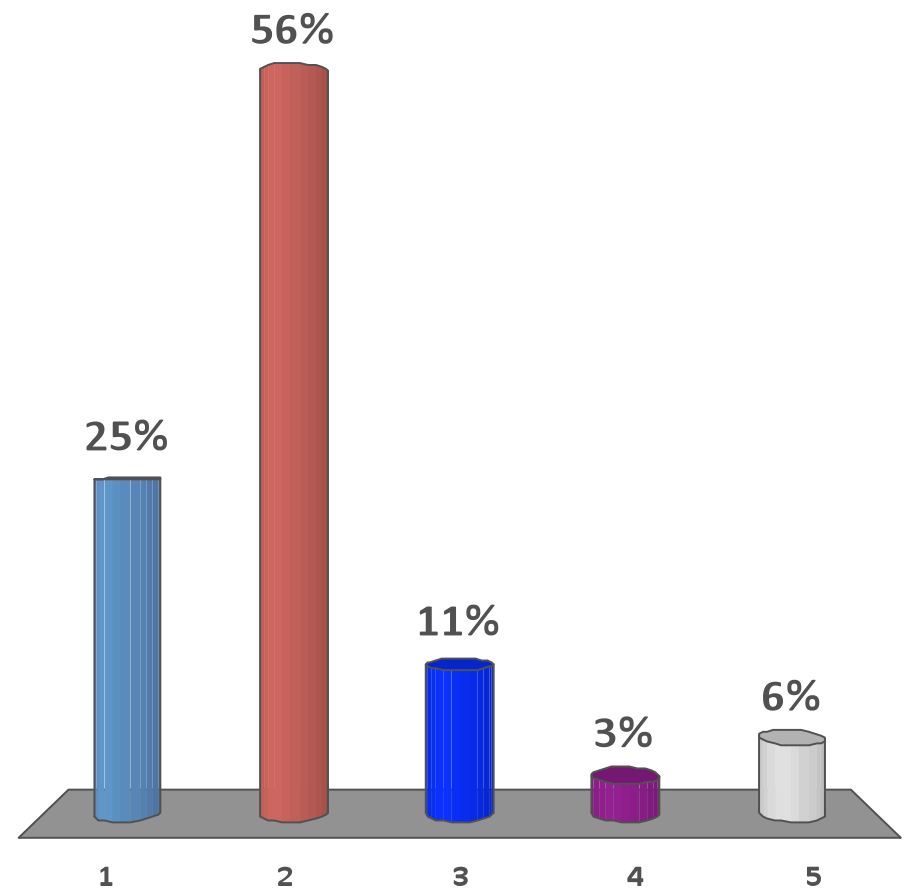
If Washington continues “business as usual”, the average yearly household costs related to climate change in 2020 would be:

1. \$875
- ✓ 2. \$1,250
3. \$3,025
4. \$4,250



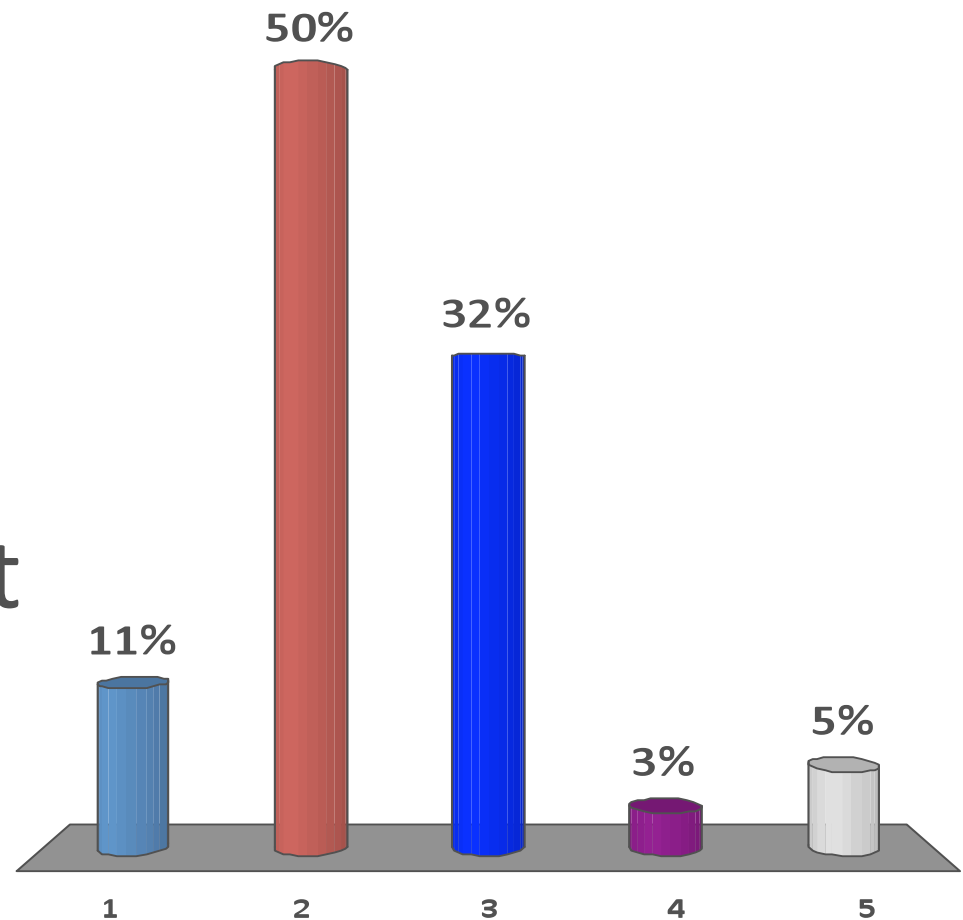
In Washington State, our goal is to reduce greenhouse gas emissions to _____ by 2020.

1. 50 % of 1990 levels
- ✓ 2. 1990 levels
3. 75% of 1990 levels
4. Another amount
5. Don't know



Washington has adopted broad statewide goals to reduce annual per capita vehicle miles travelled by ____% by 2050.

- 1. 10
- 2. 25
- ✓ 3. 50
- 4. Another amount
- 5. Don't know



Planning policies impact climate change.



Most Promising Actions to Reduce Greenhouse Gases – CAT Report



Energy Efficiency and Green
Buildings



Transportation



Beyond Waste



State Environmental Policy Act

Strategies to Reduce Mobile Emissions

Mobility Options

- Expanded & Enhanced Transit
- Rideshare/ Carpool
- Work Remotely (home or other)

Urban Land Use

- Compact Development
- Transit Oriented Development

Funding Criteria

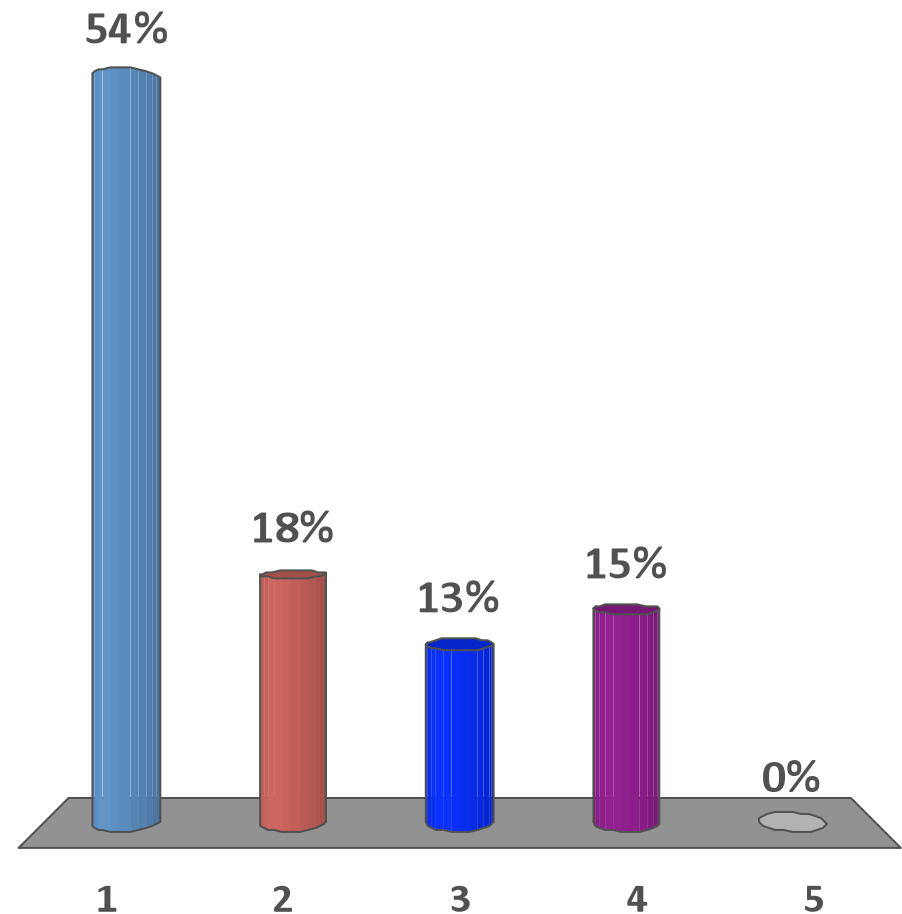
- Look at Greenhouse Gas (GHG) limits
- Vehicle Miles Traveled (VMT) reductions

Pricing

- To reduce GHG and VMT
- Raise Revenue
- Manage the system for better efficiency and reliability

My community is supportive of taking action to reduce the impacts of climate change.

1. Strongly Agree
2. Agree
3. Neutral/Don't Know
4. Disagree
5. Strongly Disagree



Choose the top three climate change actions that your jurisdiction is implementing.

- | | | |
|-----|----|---|
| 28% | 1. | Climate action plan |
| 26% | 2. | Carbon footprint evaluation |
| 33% | 3. | Public outreach / education |
| 36% | 4. | Green building program |
| 44% | 5. | Sustainability / energy element in comprehensive plan |
| 10% | 6. | Incentive programs |
| 44% | 7. | Non-motorized transportation options |
| 26% | 8. | Partnering with other agencies |
| 23% | 9. | Amending land use codes |

Planners today need to be leaders in affecting climate change – and you can be a leader.



What are the leaders doing in cities and counties that embrace climate change?

Green Buildings

Development
Regulation
Updates

SEPA Review

Solar Farm

Comprehensive
Plan Element

Sustainability
Element

Code Barriers
to Sustainable
Development

Climate Action
Plan

Environmental
Sustainability
Strategies

What are some of the resources available to help make sense of climate change in your community?



Department of Commerce
Innovation is in our nature.



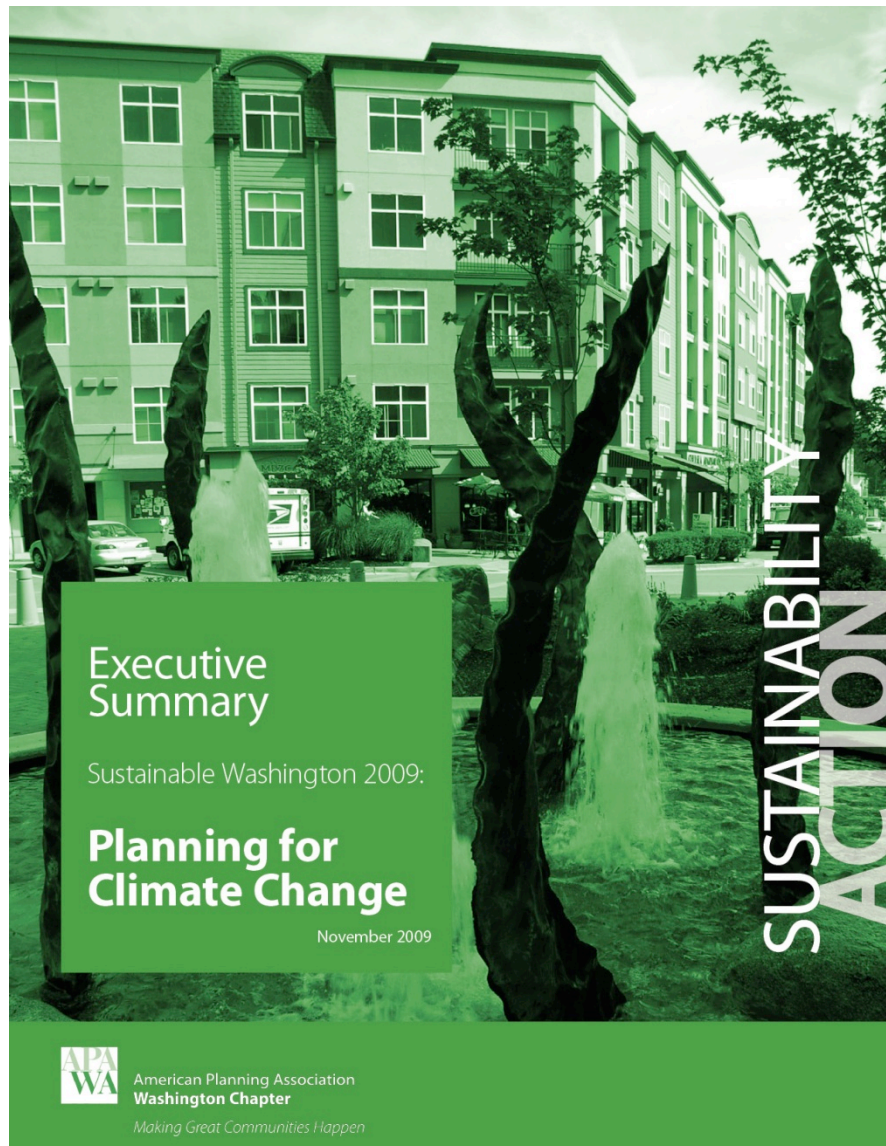
Puget Sound Regional Council



Municipal Research and Services Center of Washington
Working Together for Excellence in Local Government

“We recently learned that climate change will cut the winter snowpack in the Cascades by at least 20 percent. This will have a devastating impact not only on recreation, but also on our water supply, our agriculture industry, and our domestic fish populations. This news is another wake-up call, and one more reason that inaction is not an option. We as a nation and a state must address climate change today. Tomorrow is too late.” - Governor Chris Gregoire





- Web Based Report
- Executive Summary
- Survey of Planners
- Wiki of Stories
- Policy Sampler

Sustainable Washington 2009:
Planning for Climate Change

www.washington-apa.org/sustainable_washington

Chapter 1 Introduction

Chapter 2 The Climate Connections

Chapter 3 Actions Planners Can Take

Chapter 4 Washington's GMA and Climate Change

Chapter 5 Conclusions

The Harvest Celebration Farm Tour is a project of the Washington State University King County Extension, in partnership with King Conservation District and King County. The annual event promotes local farms by bringing thousands of urban dwellers to talk to farmers and walk their fields, enjoy family hay rides, run through corn mazes and eat produce fresh off the field.

<http://king.wsu.edu/foodandfarms/HarvestCelebration.html>



3.7.2 Develop farmland preservation ordinances.

Washington State is losing farmland, with 460,000 acres of farmland lost between 1997 and 2007 ([source](#)). Incorporate a 'no-net-loss' policy for important agricultural land into local comprehensive plans and specify programs and techniques for protection. Designate agricultural resource lands in local plans with consideration to local food security, including supplies for local food banks, schools and institutions. (Local Action)

3.7.8 Encourage Community Supported Agriculture (CSA)

Provide incentives for CSAs and other small to medium farms with local direct market opportunities to use organic and sustainability-oriented practices that conserve water, build soil structure, and store carbon. Facilitate development of [CSA farm networks](#), information provision, and technical assistance for market change. (Local Action)

3.7.9 Encourage local food sources.

Provide for community farming and farmers markets in local land use plans in order to reduce the fuel required to transport food products to market. (Local Action)

Washington APA

Principles to Address Climate Change

- Reduce Greenhouse Gas Emissions
- Integrate Issues
- Think Holistically
- Engage & Educate
- Plan & Act Strategically
- Create benchmarks
- Be Adaptive
- Be Leaders

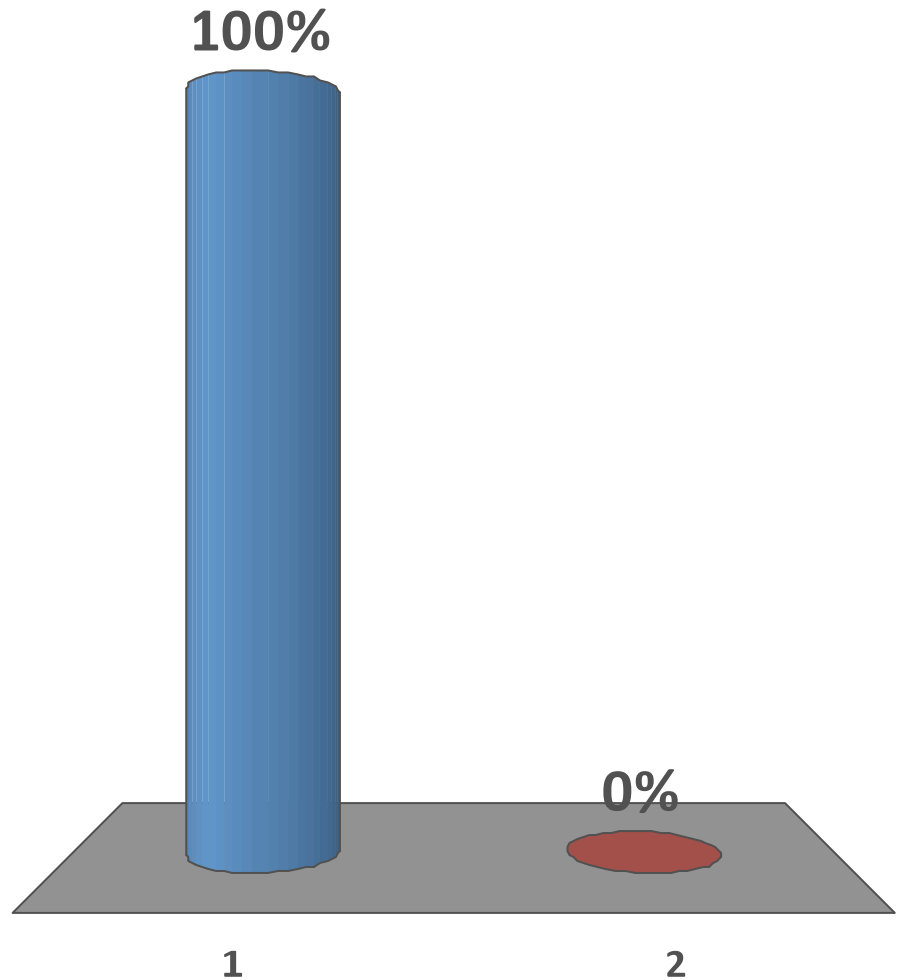
“The earlier effective action is taken, the less costly it will be.”

Stern Review: The Economics of Climate Change

Would training specifically addressing climate change practices be of interest to you?

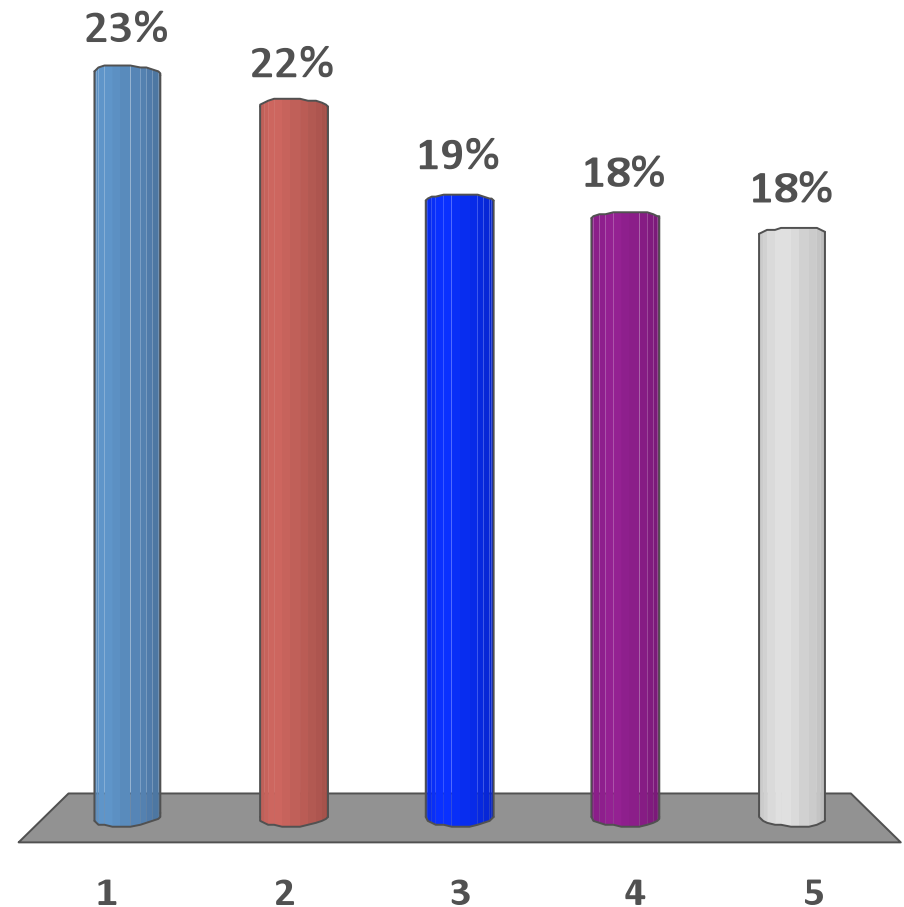
1. Yes

2. No



Please rank 1-5 the types of training you would prefer, 1 most preferred to 5, least preferred.

1. ½ Day Seminar
2. Full Day Seminar
3. Real Time Webinar
4. On Demand Webinar
5. Lunch Workshop



What aspect of real time polling did you like best?

- | | |
|-----|--|
| 19% | 1. Let me see what this group was thinking. |
| 3% | 2. Let me gauge my knowledge against others. |
| 5% | 3. It was fun. |
| 14% | 4. It kept me interested. |
| 3% | 5. Other aspect. |
| 54% | 6. All of the above. |
| 3% | 7. None of the above. |

Planners are making a positive impact
on climate change.

