

Beyond Regulation

Working with Homeowners to Increase Canopy Cover

Jana Dilley

City of Seattle, Office of Sustainability & Environment

University of Washington, Schools of Forest Resources & Public Affairs

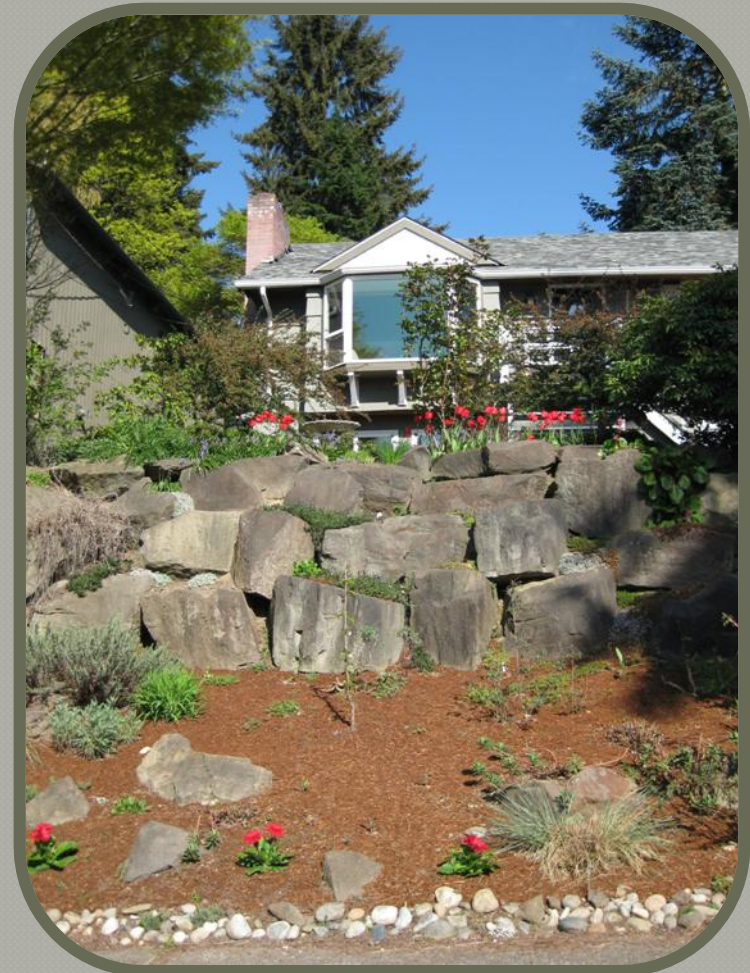
Partners in Community Forestry Conference

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Overview

- **Seattle: A Case Study**
- **Current Efforts**
- **Community Based Social Marketing**
- **Survey Research & Preliminary Results**
- **Changing Behavior**
- **Questions**



Why Single Family?

- ◉ Most property is privately owned
- ◉ Can't reach canopy cover goals without engaging single family homeowners
- ◉ Homeowners individually own a small percent of the land, but collectively own a large percent

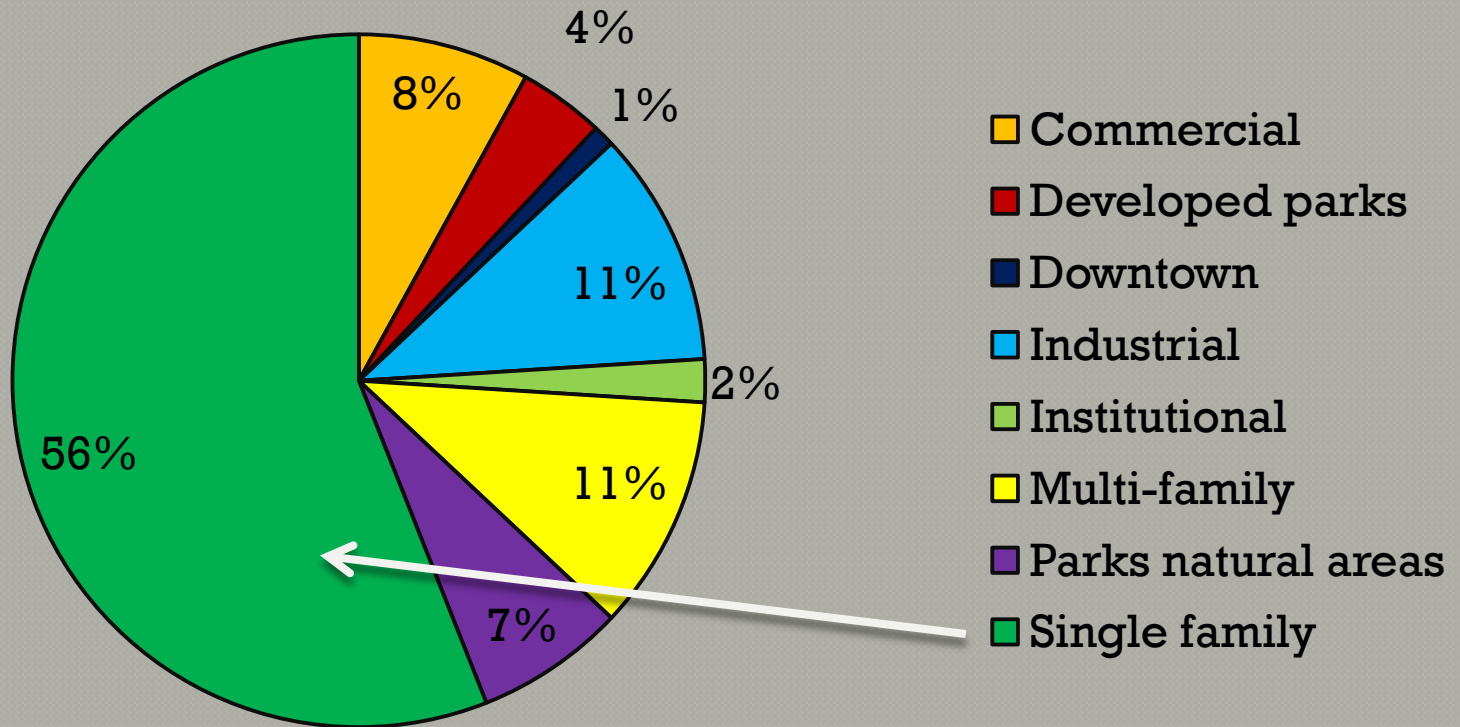
Seattle: A Case Study

- 1970s = 40% canopy cover; 23% today; goal = 30% by 2037
- Seattle's unique features:
 - Sunlight (or lack thereof)
 - Steep hills
 - Views



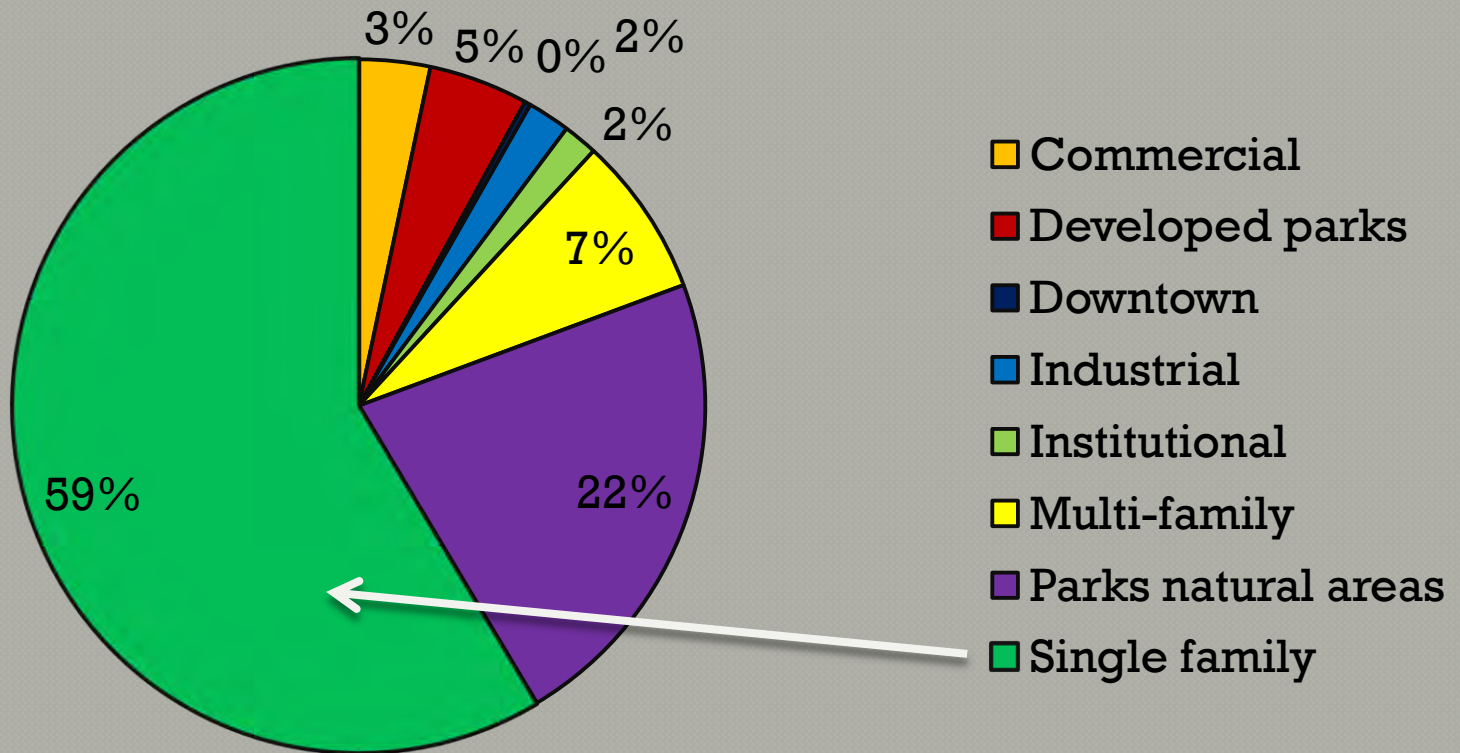
Seattle: A Case Study

PERCENT OF CITY IN LAND USE CATEGORY



Seattle: A Case Study

CONTRIBUTIONS TO CANOPY BY LAND USE



Seattle: A Case Study

Land Use Type	Current Canopy Cover	Canopy Goal	# Trees Needed
Commercial	9.7%	15%	33,000
Developed park	25.5%	25%	0
Downtown	4.7%	12%	8,000
Industrial	4.3%	10%	50,000
Institutional	19.4%	20%	600
Multi-family	17.1%	20%	23,000
Parks natural areas	80.4%	80%	0
Single family	24.7%	31%	140,000
Citywide	23%	30%	254,600

Current Efforts

- Traditional methods for increasing canopy cover:
 - Direct planting
 - Outreach
 - Regulations
 - Incentives
- Tendency to focus on regulation
- Studies suggest incentives may be more effective*



* Rand, D.G. et al. 2009. *Positive Interactions Promote Public Cooperation*. Science 325

Current Efforts

● Outreach Examples:

- Websites
- Brochures
- Newsletters
- Workshops
- Tables at community events

LOST

REWARD!

- Charming neighborhoods
- Clean streams
- Fresh clean air
- Chirping birds
- Reduced global warming

Greatly Missed 😊

Seattle reLeaf
keep the emerald city green

Tall tree with soft needles, textured bark. Last seen in neighborhood with other leafy companions.

The green of the Emerald City is fading. You can help reduce the loss of trees in your neighborhood. Keep your trees and take good care of them. Find tips on tree selection and care at Seattle.gov/trees or call (206) 615-1668.

Please Help!!!

City of Seattle

Seattle.gov/trees or (206) 615-1668

Current Efforts

● Incentive Examples:

- Tree giveaways
- Drainage utility incentives
- Recognition
- Flexibility in regulations



Community Based Social Marketing

- Consider ways homeowners behave with yard space
- Identify barriers and benefits to behaviors
- Create tools to change behavior



Community Based Social Marketing

TREE PLANTING MATRIX

	Tree planting	Gardening	Solar panels	Lawn / open space
Barriers	?	?	?	?
Benefits	?	?	?	?

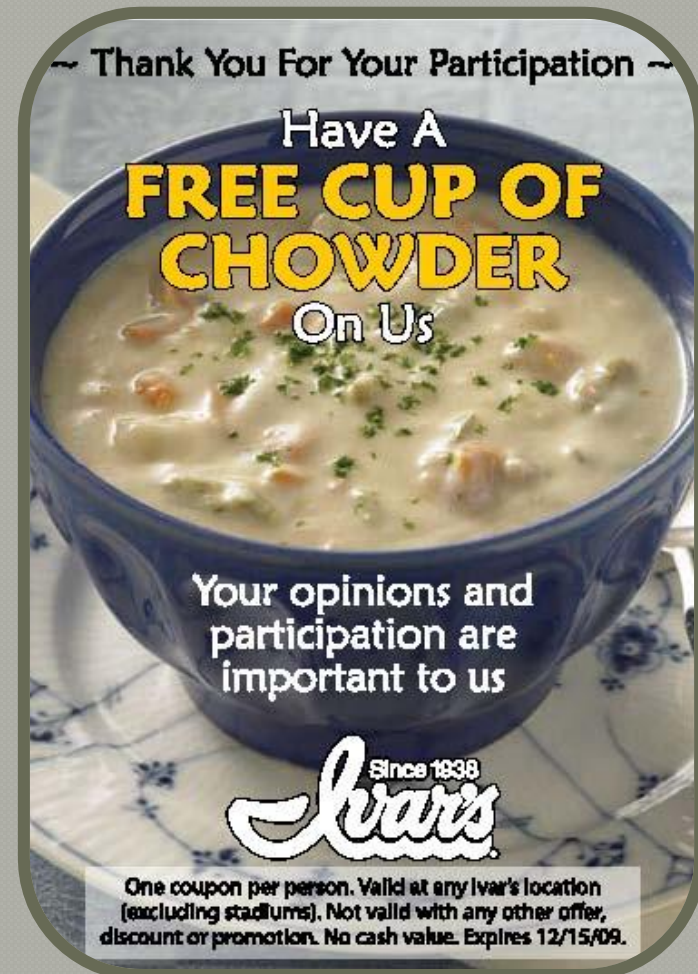
Community Based Social Marketing

TREE RETENTION MATRIX

	Tree retention	Views	Development / additions	Solar panels
Barriers	?	?	?	?
Benefits	?	?	?	?

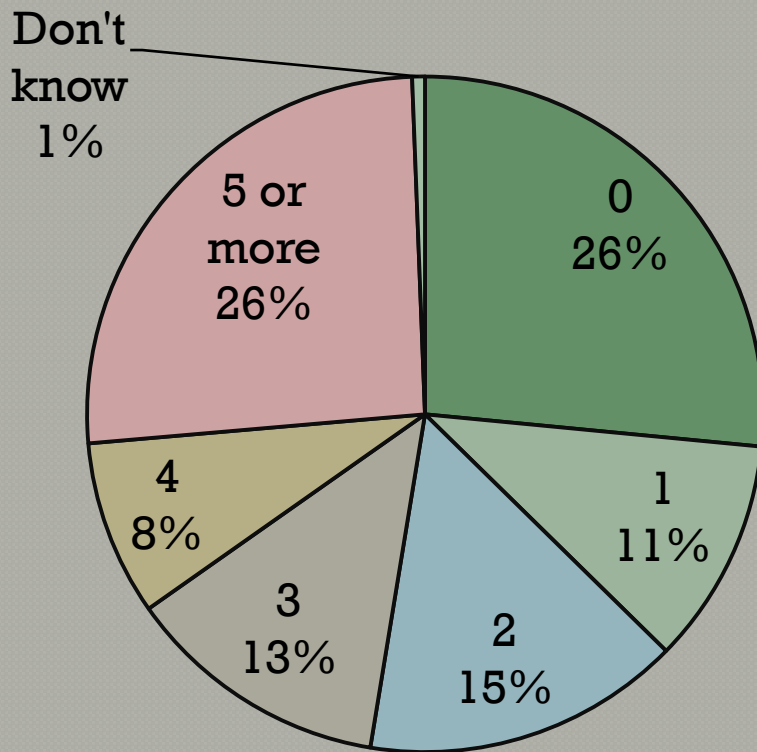
Survey Research

- Partnership between City of Seattle and University of WA
- Surveyed single family homeowners in Seattle
- Random selection of participants
- Over 700 returned surveys, a 30% response rate



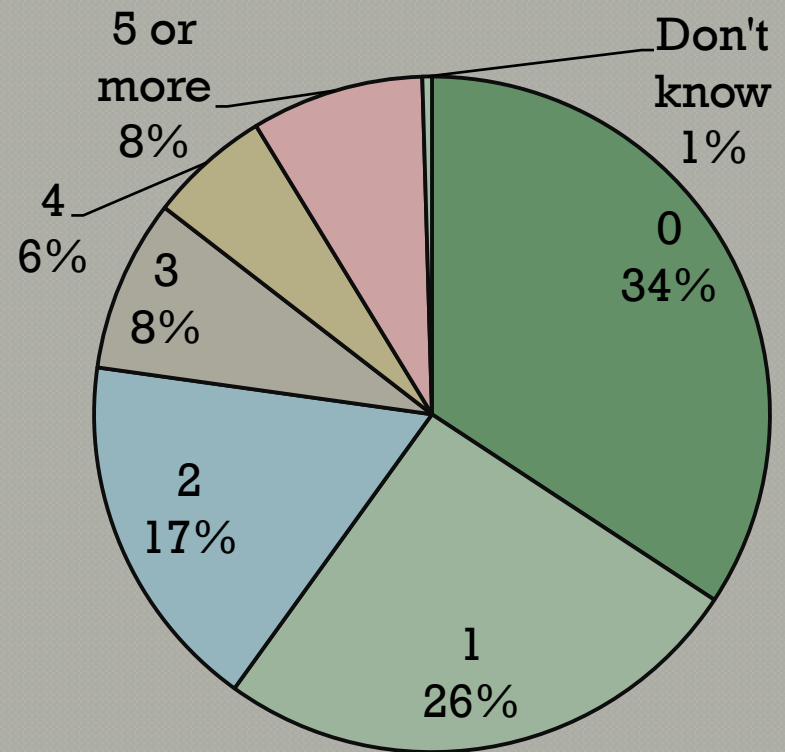
Preliminary Results

TREES PLANTED



Average = 2.4

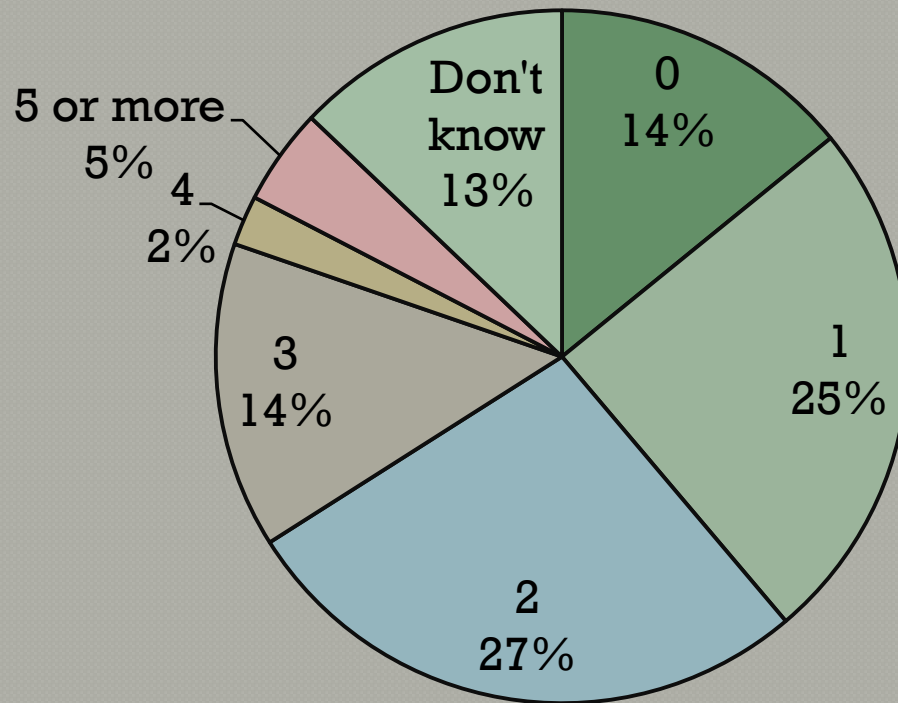
TREES REMOVED



Average = 1.7

Preliminary Results

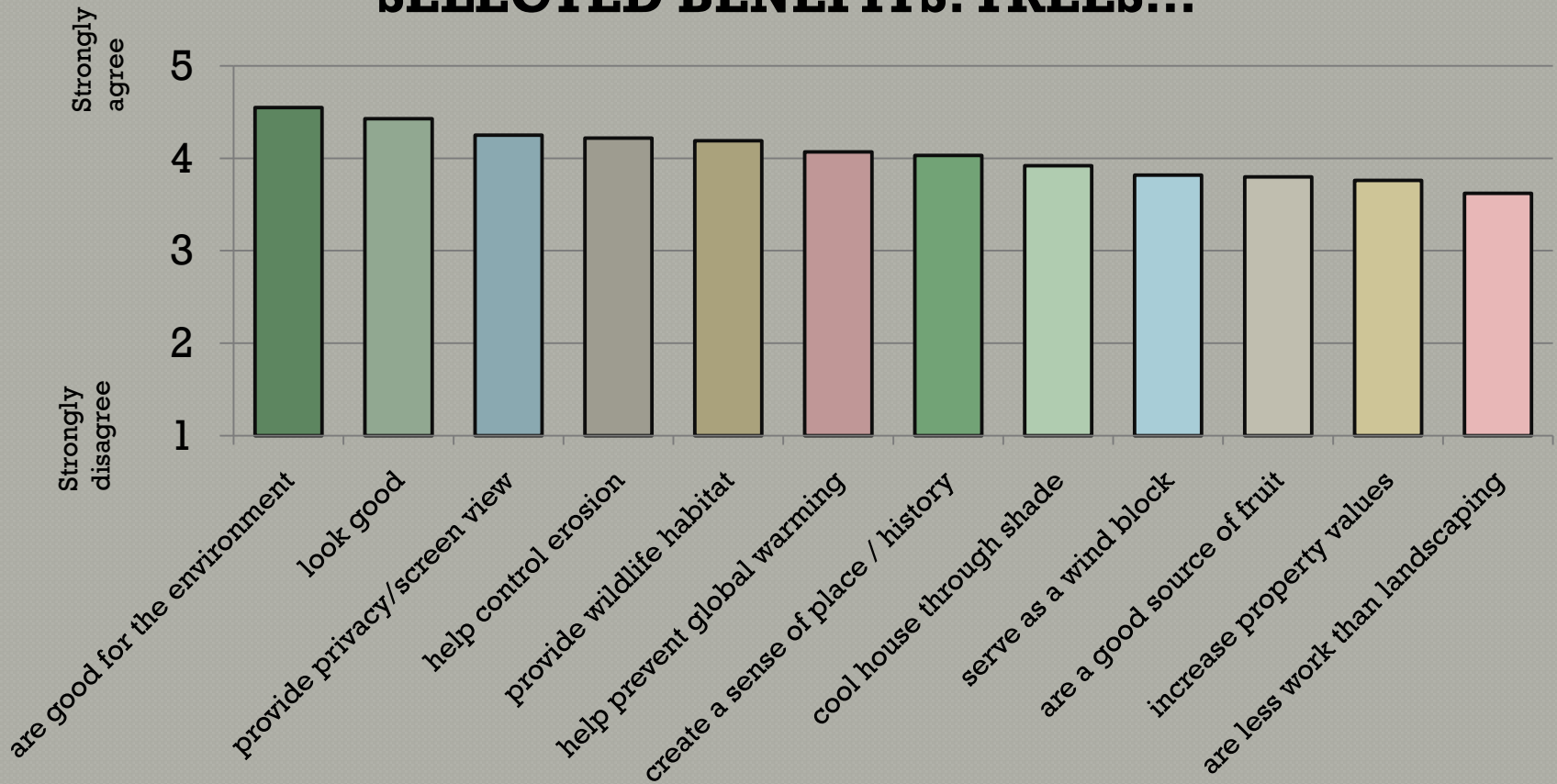
TREES LIKELY TO PLANT IN FUTURE



Average = 1.8

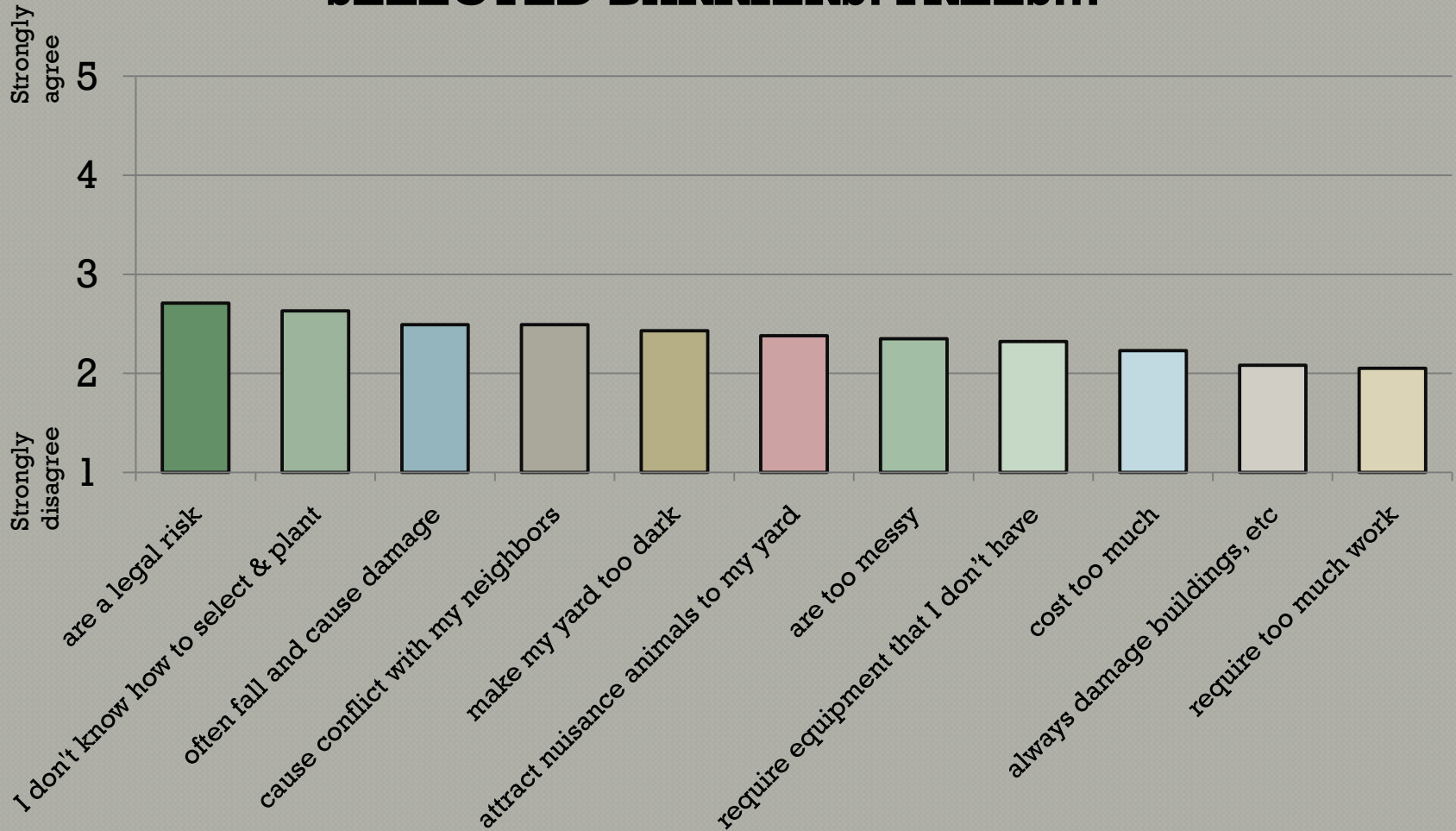
Preliminary Results

SELECTED BENEFITS: TREES...



Preliminary Results

SELECTED BARRIERS: TREES...



Preliminary Results

	Tree planting	Gardening	Solar panels	Lawn / Open Space
Barriers	(general disagreement with barriers)	(general disagreement with barriers)	Require structural upgrades Expensive	Require too much maintenance Use too much water
Benefits	Good for environment Increase property values Control erosion Provide privacy Cool house Wildlife habitat Create a sense of place/history	Looks good Grows food Good exercise	Saves money	Traditional Provides space for activities

Preliminary Results

	Tree retention	Views	Development	Solar panels
Barriers	(general disagreement with barriers)	Increase property taxes	Expensive Permitting Takes time Stressful	Require structural upgrades Expensive
Benefits	Good for environment Increase property values Control erosion Provide privacy Cool house Wildlife habitat Create a sense of place/history	Create a sense of peace / escape from the city Increase home value Are beautiful	Increases property values Improves layout / interior space / livability Updates home Makes home look better	Saves money

Preliminary Results

- ◎ **73% have planted a tree in their yard**
 - 58% small / ornamental
 - 19% fruit
 - 14% large evergreen
 - 9% large deciduous

- ◎ **79% are considering planting a tree in the future**
 - 65% small / ornamental
 - 41% fruit
 - 8% large evergreen
 - 7% large deciduous

Preliminary Results

- 89% have pruned a tree in their yard
 - 61% pruned trees themselves
 - 11% hired an uncertified person



Changing Behavior

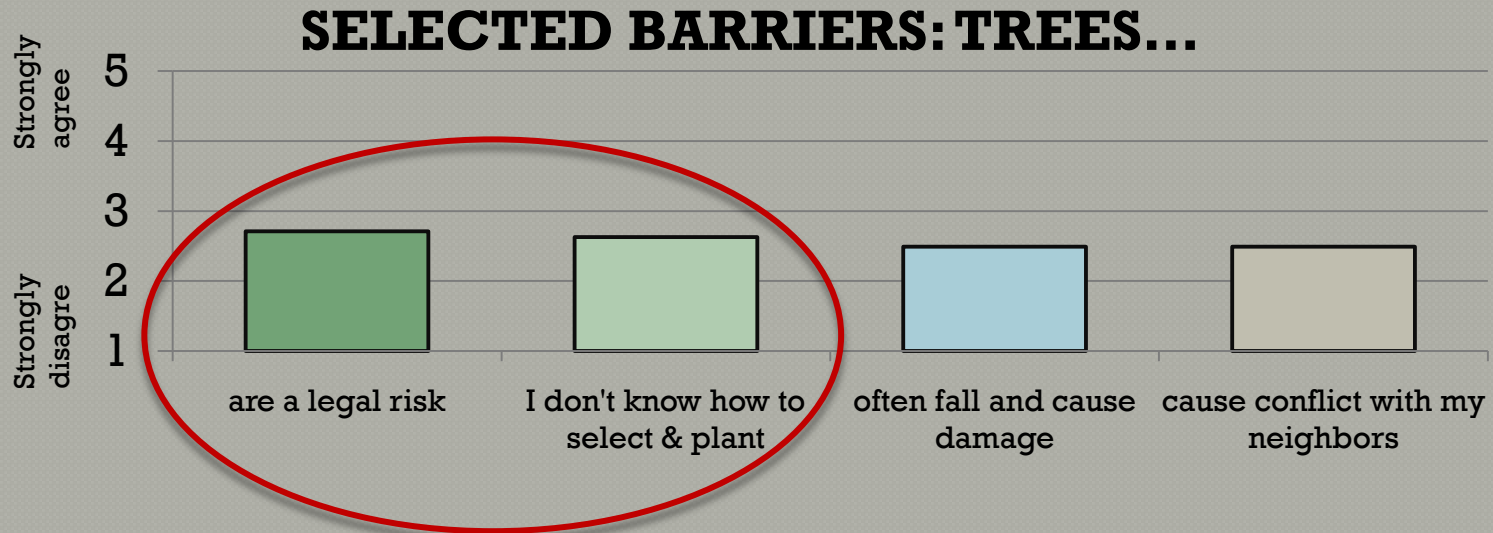
◉ Keep in mind:

- We surveyed homeowners, not renters
- Homeowners already know the value of trees
- Homeowners are planting, but they are planting small not large
- Impacts of climate change
 - 20% say they will be installing ac in upcoming years

Changing Behavior

Barrier Removal

- Clarify legal rights & responsibilities
- Providing help to select and plant trees



Changing Behavior

○ Incentives

- Tree Giveaways
 - “On a scale of 1-5, how likely would you be to plant a tree if it were free? (1=not likely, 3=unsure, 5=very likely)”
 - Average answer = 3.6
- Recognition / Awards
 - Targeted at single family homeowners
 - Regularly occurring & ongoing
- Others?

Changing Behavior

◉ Outreach

- Possible effective messages:
 - Lawns take a lot of work, trees don't
 - Trees create a sense of peace / escape from the city (even on cloudy days!)
 - Trees are a compliment to gardens and can also provide food
 - Other ideas?

Changing Behavior

⦿ Norms

- Looking at neighbors' canopy cover
- Comparing individual parcels to neighborhood and citywide averages



Changing Behavior

◉ Commitment

- Pledges to plant, water

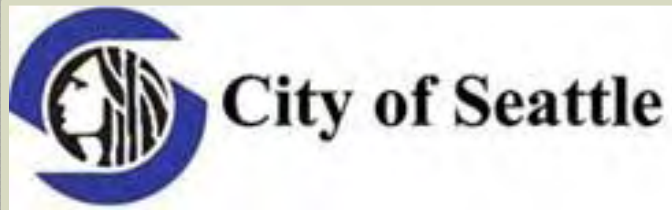
◉ Prompts

- Educational campaigns at correct planting, pruning, watering times

Conclusions

- ◉ To change behavior, we need to expand our toolkit beyond regulation
- ◉ Think creatively to help homeowners overcome barriers and realize benefits
 - Especially for large trees
- ◉ Further research needs to be done on how we best reach renters

Acknowledgements



Questions?