DRAFT Operating Protocols

Mission

The Green Ribbon Commission (GRC) will deliberate in six full GRC meetings and up to four auxiliary meetings in effort to reach consensus on a set of recommendations that fully integrate climate goals with economic prosperity and social equity goals leveraging the vital connections inherent in making Seattle an environmentally, economically, and socially sustainable place.

Protocols

In support of this charge, the GRC members commit to following these operating protocols:

A. Codes of Engagement

GRC members will follow the following guidelines to facilitate effective meetings where all members can be heard and feel respected.

- Contribute ideas and opinions as succinctly as possible, recognizing there are 28 members of the GRC.
- Indicate to the facilitator when they desire to make a comment and be acknowledged before speaking during full GRC discussions.
- Turn off cell phones.
- Limit side conversations to other GRC members and facilitators during meetings.

B. Roles and Responsibilities of GRC Members

GRC Members will:

- Participate regularly in meetings.
- Work diligently and as needed to complete recommendations by October
- Openly explore issues, committing to search for opportunities and creative solutions.
- Recognize the legitimacy of the concerns and goals of others.
- Enter into a dialogue that includes listening carefully, asking questions, and informing others. The atmosphere will be one of problem solving, rather than stating positions.
- Communicate between meetings as needed in effort to work toward solutions.

B. Roles and Responsibilities of the Office of Sustainability and Environment (OSE)

OSE will:

- Convene the meetings of the GRC.
- Provide meeting materials including agendas and prior meeting notes approximately one week in advance of meetings.
- Approve the agenda.
- Participate in the meeting as both representatives and support staff to the GRC.
- Maintain required records and make them available to the public as needed.
- Manage process for replacement of GRC members, if necessary.
- Serve as the primary spokesperson, in conjunction with the GRC Co-Chairs, representing the GRC with the media, outside parties, and the public.

C. Role of GRC Co-Chairs

The Chairs will:

- Begin meetings, handle standard meeting agenda items, and close meetings.
- Work with OSE and the Facilitator in creating the agenda for each GRC meeting.
- As needed, talk with individual GRC members in working toward solutions.

- Serve as the primary spokesperson, in conjunction with OSE, representing the GRC with the media, outside parties, and the public.

D. Roles and Responsibilities of Facilitator

The Facilitator will:

- Serve as an impartial individual who guides the process.
- Keep the GRC focused on the agreed-upon tasks.
- Ensure that all members have opportunities and time to speak in meetings.
- As needed, discuss issues and approaches with members between meetings in the attempt to help the group move forward with their process and tasks.
- Work with OSE and the Co-Chairs in developing agendas and preparing for each meeting.
- Prepare meeting summaries focused on action items and a brief record of the topics discussed, including key points. These draft summaries will be reviewed by the Co-Chairs and OSE for final consideration and approval by the GRC.

E. Internal Decision-Making:

The short time period and meeting time for the GRC makes it necessary at most meetings for GRC to initially approve recommendations and/or priorities considered during that meeting. These decisions will then be used to build the final recommendations document which is anticipated to be approved at the last GRC meeting.

- For all decisions, consensus of all GRC members is desired. Consensus is defined as agreement of all members, and will be the preferred method of determining GRC agreement on issues. Full consensus involves agreement of all members, described as:

  Consensus: The group will reach consensus on an issue when it agrees upon a single alternative and each participant can honestly say:
    o I believe that other participants understand my point of view.
    o I believe I understand other participants' points of view.
    o Whether or not I prefer this alternative, I support it because it was arrived at openly and fairly and it is the best decision for us at this time.
      (Adapted from a definition by Carl Moore, the Community Store)
- When consensus cannot be reached, decisions will be approved if supported by a majority of the representatives (or alternates) present.
- Meeting summaries and/or reports will capture agreements and differing perspectives. All reports/summaries will be reviewed, revised as needed, and accepted by the GRC.

F. Media, Outside Party, and Public Communications

- It is the intent that most media, outside party, or other public communications will be handled by the GRC Co-Chairs or by OSE. OSE and the Co-Chairs may request support from members in representing the GRC with the media or outside parties.
- If a GRC member is asked to respond to the media, outside party, or other public communications, members shall respond within the spirit of working toward agreement.

G. Amendment of Operating Procedures

These operating procedures may be amended by the members of the GRC at any meeting attended by a majority of members.

Draft Meeting Summary
Green Ribbon Commission Meeting #1
May 21, 2012
3:00 p.m. – 5:10 p.m.
Boards and Commissions, Room L280

3:00   Welcome & Introductions

Meeting Notes:

The Co-Chairs welcomed the Green Ribbon Commission (GRC) to its first meeting, and meeting participants (**see Attachment 1**) did a round robin of introductions.

3:20   Process Overview

Meeting Notes:

- Last October, the City directed the Office of Sustainability and Environment (OSE) to update the 2005 Climate Action Plan to be consistent with the City's new goal of achieving carbon neutrality by 2050.
- This process was launched last September when four Technical Advisory Groups (TAGs) were convened to make recommendations in the building energy, transportation, land use, and waste sectors. The TAGs explored potential actions and developed a suite of recommended strategies in each of the four sectors. These recommendations are the starting point for the GRC.
- The GRC will meet six times between May and October. GRC and TAG members are invited to attend four optional meetings to dive deeper into the specific sectors.
- The GRC has two tasks: to advise the Mayor on what 10–15 priority actions should be used to move toward the City's carbon neutral goal; and what pilot projects/proof of concept the City should complete in the next 1–3 years to prove strategies and test new models.
- There is no guarantee that all the GRC priorities will be included in the Climate Action Plan.
- The GRC will finalize the Operating Protocols at the next meeting.
- One GRC member expressed the desire for OSE leadership to continue playing an active role in GRC meetings when the facilitator is present.
- While the GRC is focused on climate issues, it is not entirely centered on carbon. Seattle will hopefully become a model city by creating stronger communities. GRC will need to address social equity, ease of transportation, prosperity, and creativity, so its task is not solely about the climate.
- One of the co-chairs noted that the GRC needs to be very ambitious and "err on the side of boldness." If Seattle will be the global leader—it needs bold, innovative thinking. The GRC should aim for home runs and triples rather than bunts. We need ideas that will really move the ball down the field.

3:30   Quiz Time

Meeting Notes:

GRC members participated in an instant polling exercise to test their sense of humor and knowledge of the task at hand.

3:40   Update on 2005 GRC Outcomes

Meeting Notes:
- The Mayor has asked the GRC to review the outcomes of the 2005 Green Ribbon Commission recommendations. What is the current status of the recommended actions? What has been accomplished? What challenges lie ahead?
- Climate change mitigation is an ongoing effort. The 2005 effort set the stage for Seattle to become a national model, but the work is not complete.
- The 2005 GRC set some goals which the City had limited ability to influence, such as developing and implementing a Road Pricing System, which have not been implemented.
- The 2005 effort had limited neighborhood outreach, but there will be a greater effort with the current GRC.
- One challenge that will need to be addressed is that climate change cannot be isolated to a specific jurisdiction. What is directly in the City's sphere of control?
- A concern was expressed about recommendation #1 from the 2005 GRC Recommendations handout, which is to "increase the supply of frequent reliable and convenient public transportation", given insufficient transportation budgets.
    o It was noted that these types of concerns will be addressed in depth at the four optional meetings, but that the hope is to think "big and bold."
- A GRC member noted that the 2005 GRC recommendations do not address cultural change/changing social mentality, which is essential and doable in a bad economy. This individual hopes the GRC will think outside of the 2005 categories.
    o It was noted that the 2005 effort was fettered by ground rules and achieving targeted numbers, which will not be the case in the current effort.
- A question was raised regarding whether Seattle is thinking about what it can do to be a national leader or if it is really thinking about what is politically feasible.
    o It was noted that GRC members are not running for office. The GRC needs to figure out what numerical figures it wants to reach and how those can be achieved.
    o The first GRC was limited to meeting the qualitative goals of the Kyoto Protocol. This GRC effort is more focused on doing what is right and identifying actions to improve Seattle, rather than meeting targets on greenhouse gas emissions.
- A GRC member suggested considering a mechanism for evaluating progress of the Climate Action Plan.
    o It was noted that a Community Greenhouse Gas Inventory is conducted every 3 years and will be conducted next in 2013 covering 2012 emissions. Presently road transportation accounts for approximately 40% of greenhouse gas emissions, airports for 20%, buildings for 20%, and industry for 20%. Industry is not a focus of this CAP because it is limited in the City's sphere of influence.

3:50   TAG Recommendations Overview

Meeting Notes:
OSE presented a PowerPoint providing an overview of the Technical Advisory Group recommendations.
- TAGs were convened to conduct preliminary thinking on short and long term goals and to make recommendations.
- OSE conducted direct outreach in communities through a variety of forums, such as brown bags.
- TAGs focused on:
    o Emissions more directly in the City's policy sphere in the building energy, transportation, land use and waste sectors
- The CAP will also include sections on:
    o Emissions related to our goods & services (i.e. emissions that happen at home)

- o   Adaptation to climate impacts
- Building Energy TAG Overview:
  - o   The right pricing, financing, and incentive structures will strengthen the implementation of all strategies.
  - o   Improve the efficiency of existing buildings.
  - o   Achieve deep energy efficiency in new buildings and renovations.
  - o   Capture and use waste heat and local alternative energy sources through district energy systems.
- Transportation TAG Overview:
  - o   One recommendation is vehicle fuels and technologies; however, this is not the only solution because Seattle will become very congested as population increases.
  - o   Planning and management
  - o   Bicycle, pedestrian, and transit infrastructure and services
  - o   Transportation demand management
  - o   Congestion pricing
  - o   Parking management
  - o   Funding is critical.
    - ▪   Reprioritize existing funding; expand and create new sources
    - ▪   Ideal are funding sources which generate revenue and inspire mode shifts
    - ▪   Sequence of strategies is critical
    - ▪   Equity issues need to be addressed in how funding strategies are implemented
- Land Use TAG Overview:
  - o   Reduce greenhouse gas emissions from transportation via policy and planning, zoning, parking, and incentives and outreach.
  - o   Implement walkshed-based planning geographies (Transit Communities)
  - o   Align planning and zoning to support Transit Communities.
    - ▪   Develop essential components of livability (e.g. schools, parks)
    - ▪   Increase diversity of housing types
    - ▪   Support businesses in transitional areas
    - ▪   Reform parking requirements
    - ▪   Mitigate effects of gentrification
- Waste TAG Overview:
  - o   This TAG was based on the Solid Waste Advisory Group
  - o   Achieve aggressive recycling rates
  - o   Reduce emissions from collections, processing, and disposal
  - o   Reduce waste generation

Questions/Comments:
- There was a request for OSE to provide a pie chart for energy emissions.
- **<u style="color:red">Action Item:</u> OSE will provide a breakdown by energy use to supplement the emissions data.**
- A GRC member noted that it is insufficient to merely reduce coal-powered energy use and transition to green energy; the amount of electricity used also needs to be reduced.
- There was a request to consider looking at other air pollution information associated with climate pollution, which would be helpful when considering public health issues.
- It is important to consider the supply and quality of water, as everything is interconnected.

4:20   GRC Evaluation Framework

Meeting Notes:
- OSE expressed an interest in hearing from GRC members on what actions they believe to be important and how the GRC should approach setting priorities.
- OSE reviewed the handout showing "potential actions" in the left hand column, "community objectives" in the middle column, and "GRC priorities" in the right hand column.

Comments:
- Seattle as a model
    - Who are we trying to impress? Some responses noted were: other cities that would look to Seattle as a model, news networks, and the next generation.
    - It is important to consider whether we are creating a model for cities like Seattle or a model for any city to use.
    - What is happening in other cities/states that GRC should expand on to build national momentum?
    - There is a desperate need for states and cities to show leadership. Seattle has a responsibility to be bold and show others what can be done.
- General Comments
    - There was a suggestion to include comments from the GRC in the Climate Action Plan. That way, the City will not just have made a plan; it will demonstrate that people at the table are taking responsibility to implement the plan and that the plan is already in motion.
    - Economic indicators need to be decoupled from environmental drivers, as our economy is not built from hurting the environment.
    - There needs to be a structure for having an "accountability partnership" between GRC members and elected officials so that both are held accountable for the recommendations that are made and implemented.
    - There should be an equal distribution of pilot projects among the sectors.
    - The GRC needs to change the conversation so that climate is about creating jobs and healthier, more sustainable communities. Climate is currently a partisan issue that has divided the country. If the GRC does so, it will have more traction.
    - There was a question as to where nature and beauty fit in this discussion.
    - This effort seems to be an initiative of the City. In order for the GRC's goals to be achieved, a partnership between public, private, and non-profit sectors will be necessary. The GRC might want to consider developing recommendations to connect these three groups.
    - While Seattle cannot be carbon neutral, our region can. The GRC needs a strategy for partnering with the state and connecting to federal and state engagements.
    - The GRC needs to challenge the limits of conventional political categories. It should think about City government as the voice of the people/community. Political boundaries are artificial, so the GRC should think on a regional scale (city and surrounding countryside) as much as possible.
    - The GRC exists because of the City Council. The GRC must give them recommendations on what they need to do.
    - There will ultimately need to be public accountability.
- In response to the handout, there were requests to:
    - Look at climate change strategies but also pair it with strategies from other areas (e.g. public health)
    - Address social infrastructure—education, retirees, etc.
    - Include the social capital piece of a health community (e.g. social networks)

- o Add a "community objective" on having a well-informed, engaged citizenry.
  - o The "potential actions" and bullets under "community objectives" should be put in layperson terms.
  - o Consider adding a level of strategies to the left of "potential actions" to help frame this effort.
  - o Add a step between "community objectives" and "GRC priorities" on metrics.
- One Co-Chair expressed hesitation about creating new steps/categories in addition to "potential actions," "community objectives," and "GRC priorities." The notion of a cultural shift could be added as a new box to "community objectives".
- OSE and the Co-Chairs expressed concern about timing, as the GRC will only have six meetings to complete the Mayor's mandate. It is important to think creatively, but if the effort becomes too all-encompassing, the GRC might not be able to produce recommendations by the last meeting.
- There is a need to have both hardware and software. We need to add software to the hardware of the GRC's proposed actions.
- It is essential to show people why to care about the technical data. The work of the GRC should be "on the front of the brownie box" to get buy-in from other people, rather than just "a side panel on the brownie box."
- The GRC effort is like an Apple computer. There is a lot of hardware necessary to put together the computer, but there is also a lot of work to convince someone to buy the laptop.
- The GRC's task is huge, but it also needs to be fun. We are building the Apple computer of the climate. "It's not altruistic; it's capitalistic in that sense."
- **Action Item: OSE to draft a poll to collect further feedback.**

4:40   GRC Outreach Brainstorm

Meeting Notes:

The Co-Chairs posed the question: *How would the GRC like to engage the public, key stakeholders, etc. moving forward?*

- It was noted that outreach can be done both as a group and by individual GRC members.
- The question was raised: Are we creating a product and marketing it to the public? Or do we want the public to help create the product? GRC may want to do both.
- One GRC member expressed the importance of crowdsourcing a problem. One doesn't solve a problem if too knowledgeable on the issue. Other GRC members weighed in on the subject.
  - o Crowdsourcing brings the best ideas to the surface, so the public needs to help create the product.
  - o Ben Packard offered to serve as the connection to businesses, which also need to be involved.
  - o It was noted that there are equity issues involved with crowdsourcing, so the GRC should also receive face-to-face input.
- It was noted that GRC should seek public input rather than public approval, but there was concern about the short timeframe for the GRC's work.
- GRC should consider getting feedback from companies, organizations, individuals, etc. that have already implemented actions coinciding with GRC recommendations.
- A GRC member expressed the need to proceed cautiously. Complexity theory states that complex problems are long-term and involve multiple stakeholders. Applied to the context of the GRC, this theory would discourage developing a fixed set of recommendations and encourage developing a suggested process on how the City should move forward.
- Seattle can demonstrate leadership through the process of how the community is engaged.

- Input should expand beyond Latino and African American communities to also include low income communities, communities of color, and women. This would require working with community-based organizations.
    - OSE noted that the City has public outreach and engagement liaisons, and there are 11 meetings scheduled with 9 language groups, Youth, and African Americans. OSE will report on these meetings.
- **Action Item:** **OSE to email the 11 meeting dates to GRC members so they can send out invites.**

5:00   Next Steps

Meeting Notes:
- The Building Energy optional meeting is June 6. Please contact Jill Simmons and Christie Baumel from OSE if you are interested in attending.
- The next GRC meeting is June 18.
- OSE will be sending out a survey of targeted questions to help clarify the path forward for the GRC.
- Note: All materials distributed to the GRC are public documents and can be shared. However, they are working products.
- **Action Item:** **OSE to email GRC members the meeting summary.**
- **Action Item:** **GRC members to email bios and a picture to OSE by May 25 to be added to the website.**

5:10   Adjourn

Attachment 1: Meeting Participants

Green Ribbon Commission Members			
Last	**First**	**Affiliation**	**Attended?**
Hayes ***Co-Chair**	Denis	President, Bullitt Foundation	✓
Koo ***Co-Chair**	Doris	Senior Advisor, Enterprise Community Partners	✓
Bagsby	Sean	Vice President, International Brotherhood of Electrical Workers, Local 46	☐
Carrasco	Jorge	Superintendent, Seattle City Light	✓
Duvernoy	Gene	President, Forterra	✓
Fleming	Dr. David	Director and Health Officer, Public Health – Seattle & King County	✓
Franz	Hilary	Executive Director, Futurewise	☐
Frumkin	Dr. Howard	Dean, University of Washington School of Public Health	✓
Geller	Brian	Executive Director, Seattle 2030 District	✓
Glaberson	Terri	Executive Director, CoolMom	✓
Golden	KC	Policy Director, Climate Solutions	✓
Gregory	Bert	CEO, Mithun	✓
Hahn	Peter	Director, Seattle Department of Transportation	✓
Johnson	Rob	Executive Director, Transportation Choices Coalition	✓
Kenworthy	Craig	Executive Director, Puget Sound Clean Air Agency	✓
Mann	Michael	President, Cyan Strategies	✓
Martin	Chris	President, CleanScapes	✓
Maryman	Brice	Landscape Architect, SvR Design Company	✓
Ortega	Estela	Executive Director, El Centro de la Raza	✓
Owen	Megan	Director of Market Development, McKinstry	✓
Packard	Ben	Vice President, Global Responsibility, Starbucks Coffee Company	✓
Ridihalgh	Kathleen Casey	Senior Organizing Manager, Sierra Club	✓
Rosario	Tania Maria	Political Director, Service Employees International Union, Local 6	☐
Simmons	Jill	Director, Office of Sustainability & Environment	✓
Sugimura	Diane	Director, Seattle Department of Planning & Development	✓
Taniguchi	Harold S.	Director, King County Department of Transportation	✓
Twill	Jason	Senior Project Manager, Sustainability, Vulcan	✓
Washienko	Kathy	National Advisory Board Executive Committee, Union of Concerned Scientists	✓

Project Team/Other Staff			
Last	**First**	**Affiliation**	**Attended?**
Baumel	Christie	Seattle Office of Sustainability & Environment	✓
Morgenstern	Tracy	Seattle Office of Sustainability & Environment	✓
Wysocki	Sara	Seattle Office of Sustainability & Environment	✓
Saviskas	Sarah	Triangle Associates	✓
Wheeler	Bob	Triangle Associates	☐

Guests			
Last	**First**	**Affiliation**	**Attended?**
Rogers	Dr. Joel	n/a	✓
Gelb	Steve	n/a	✓

Green Ribbon Commission
Meeting #2   Building Energy
June 18, 2012
3:00 p.m. – 5:30 p.m.
Seattle Municipal Tower, Room 4050

DRAFT AGENDA

Meeting Outcomes: To accept the GRC May 21st Meeting Summary, adopt GRC operating protocols, hear a status update on the GRC, and discuss recommendations for the Building Energy Sector.

Time	Agenda Item	Goal(s)	Materials
3:00 PM	**Welcome and Introductions** Co-Chairs	• Welcome and Agenda review • Names and Affiliations	
3:05 PM	**Administration** Co-Chairs	• Review Draft Operating Protocols and GRC Meeting Summary from May 21, 2012 o Any suggested additions, changes? o Acceptance of these materials?	• Draft Operating Protocols • May 21 Meeting Summary
3:10 PM	**GRC General Update** Jill Simmons	• Report on the current direction of the GRC o Mayor's charge o Barriers to achieving goals	• Revised GRC Scope
3:20 PM	**Presentation on Building Energy Sector** Christie Baumel	• Background on Emissions Sectors • Background on Building Energy and June 6th "Optional Meeting" discussion • Introduce Core Questions for GRC Consideration	• Building Energy Community Outcomes Matrix
3:40 PM	**Breakout Groups**	• GRC members self-select which group to participate in o Fostering Equity o Making the Business Case for Deep Energy Efficiency o Creating a Culture of Energy Efficiency • See handout for list of questions groups should consider	• Problem Statements and Key Questions
4:15 PM	**Breakout Group Presentations in Plenary**	• Plenary Reporting and Discussion • Decisions-Recommendations	
4:45 PM	**City of Seattle Leadership**	• GRC Discussion – "What action(s) should Seattle take to demonstrate leadership and build momentum?"	• Poster of TAG Sector Categories and Actions

Time	Agenda Item	Goal(s)	Materials
		• Dot exercise – top four actions where leadership is desired	• 4 green dots per person
5:25 PM	**Next Steps**	• Next Optional Meeting on Outreach & Engagement: June 27th, 8:00 – 10:00 am • Next GRC Meeting: July 12th, 3:00 – 5:30 p.m.	
5:30 PM	**Adjourn**		

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Draft Meeting Summary
Green Ribbon Commission Meeting #2
Building Energy
June 18, 2012
3:00 p.m. – 5:30 p.m.
Seattle Municipal Tower, Room 4050

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3:00   Welcome & Introductions

Meeting Notes:
The Co-Chair welcomed the Green Ribbon Commission (GRC) to the meeting and led a round of introductions from meeting participants (**see Attachment 1**).

3:05   Administration

Meeting Notes:
The GRC briefly reviewed the draft Operating Protocols and meeting summary and approved both documents.

3:10   GRC General Update

Meeting Notes:
- The Office of Sustainability and Environment (OSE) thanked the GRC members who filled out the survey on the proposed approach for the Commission.
- Based on the survey feedback, OSE revised the GRC approach, and copies of the revised Scope were distributed. The updated Scope notes three main focus areas for the GRC:
    1. Enhancing Community Outcomes through Climate Action
    2. Overcoming Systemic Barriers to Climate Action
    3. Demonstrating Leadership
- There was a suggestion to call this meeting "Great Buildings" instead of "Building Energy" since the GRC is hoping to expand its reach beyond climate issues by also creating stronger communities. The Co-Chair pointed out that conversation around "Great Buildings" might not be as meaningful as conversation around "Energy Efficient Buildings" since the phrase is more ambiguous. The GRC could use the notion of "Great Buildings" in its final recommendations to the Mayor.

3:20   Presentation on Building Energy Sector

Meeting Notes:
- OSE presented a PowerPoint outlining discussion from the June 6 auxiliary meeting.
- The majority of Greenhouse Gas Emissions from the 2008 Inventory resulted from transportation (62%).
- Seattle Building Emissions in 2008 were primarily natural gas. Of all building emissions, 39% were from commercial buildings, and 29% were from residential buildings.
    - This data uses Seattle City Light emissions before offsets.
- Most of the buildings that will exist in Seattle in 2050 have already been built, so it is important to consider emissions from existing as well as new buildings.
- Several assumptions were identified:
    - Seattle City Light electricity will remain carbon neutral
    - Electricity conservation remains an important strategy

- o Aggressive energy savings are assumed from the Technical Advisory Group (TAG) strategies, and cost-effectiveness will improve as strategies (and associate technologies) come to scale
- The two key ways to reduce emissions are to use less energy or to use cleaner energy.
- The Building Energy TAG identified four recommendation packages to make the economic case for deep building retrofits:
  - o **Pricing and Financing**—the right pricing and incentive structures and access to funding for efficiency measures will strengthen the implementation of all strategies
  - o **Efficient Operations**—improving the efficiency of existing buildings
  - o **Efficient Construction**—achieving deep energy efficiency in new buildings and renovations
  - o **Infrastructure for Low-Carbon Fuels**— planning infrastructure to support local, alternative energy sources, such as use of waste heat and other local energy sources through district energy systems
- With these recommendations, there is a potential for roughly 60% reduction in Greenhouse Gas Reductions in Seattle buildings.
- It was noted that policies are interactive and that the TAG recommendations largely function as a package. Therefore, an integrated approach is needed, where recommendations are carefully sequenced and staged.
- Key points and findings of TAG:
  - o Implementation requires additional research, analysis, planning, and piloting
  - o It is difficult for one local government acting alone to reach carbon neutrality
    - ▪ Market forces would better respond to a regional approach
    - ▪ Federal leadership and policy would greatly assist our efforts
    - ▪ Some innovative policies require state authority to implement
- Outcome of Optional Meeting:
  - o OSE reviewed a table outlining the TAG's recommended building energy actions and which community outcomes each action would help achieve. One could argue that all the actions could help achieve all the community outcomes; OSE highlighted the actions that most directly address the community outcome.
  - o One GRC member noted that this table addresses the question: "How does energy efficiency result in other co-benefits?" However, the following question should also be considered: "What else can be done alongside energy efficiency? What other policies could be welded with energy policies?"

3:40   Breakout Groups

Meeting Notes:
Green Ribbon Commission members broke into three groups: Making the Business Case for Deep Energy Efficiency, Fostering Equity, and Creating a Culture of Energy Efficiency. Each breakout group was guided by key questions outlined in the handouts. GRC members noted that pricing and financing should be a focus of breakout group discussions.

4:15   Breakout Group Presentations in Plenary

Meeting Notes:
The three breakout groups reported on their discussions and recommendations, and the full GRC provided additional input. OSE will develop draft recommendations based on this conversation and distribute it to the GRC.

TOPIC 1: Making the Business Case for Deep Energy Efficiency

- This breakout group defined deep energy efficiency as 25-50% better than the Seattle Energy Code.
- The group proposed that the GRC develop a recommendation for a pilot project with performance-based incentives. The pilot project should address the challenges and risks (actual and perceived) associated with deep energy efficiency.
- It proposed that mandates be a last resort—one can make the business case through other means. However, the City should move towards mandatory upgrades over the long term.
  - One GRC member expressed concern about the aversion to mandates. A huge majority of energy savings have come from mandates.
  - The eventual goal would be to marry incentives with mandates.
- It noted the need for more money or realigned money. Would this come through a property tax, a fee on utilities, or some other means? This subject will need to be addressed in greater depth by the GRC before developing recommendations.
- A major building retrofit program would produce a significant number of jobs, which is a selling point.

TOPIC 2: Fostering Equity

Question 1: What is needed to break down barriers to fostering greater equity?

- This breakout group defined equity in terms of race, income, education, and future potential.
- The group suggested that the topic should be called "Embedding Equity" rather than "Fostering Equity," since the latter sends the wrong message. Equity needs to be built into the process; the "lens of equity" will need to be put on every policy and will need to be considered constantly. If it is not built into the process, barriers to equity will be perpetuated.
- Workforce equity is an important consideration. The City should continue to invest in developing a workforce for this industry via education and job training (e.g. Community Power Works program).
- If energy efficiency is a "no brainer", the GRC needs to consider what the business case is in low-income communities and adapt so that it applies to these communities.

Question 2: What special considerations are needed to preserve and enhance housing affordability, and access to housing that meets the community's needs?

- If a barrier to fostering equity is the upfront cost to landlords, the City can work with Community Development Corporations (CDCs) to finance upgrades in low-income communities via low interest or no interest loans. It is important to ensure that costs are not passed onto the customers.
- Address the cost of energy bills via incentives, Seattle City Light programs, etc.
- Meter financing
- Property tax exemptions
- What is the value proposition for the small building owner?

Question 3: What demonstration projects related to the recommendations listed above could help test and refine ideas?

- Pilot projects should be used to help answer the question of whether to penalize users who use more energy as gauged by a person-per-square- foot threshold than a pre-established threshold.

Question 4: What actions are needed in other areas, or what is a different way of looking at the challenge of enhancing equity?

- Take advantage of the fact that equity issues are not sector-specific—they involve climate, economic, and health concerns. The GRC should consider place-based strategies.
  - The GRC should consider what is fair for a given individual. Lower energy bills across the board should not necessarily be the goal.

TOPIC 3: Creating a Culture of Energy Efficiency

Question 1: How are the strategies best messaged to communicate the outcomes or benefits that people care most about? What specific messages resonate best with the general public? With business owners?

- Emphasize saving money
- Emphasize Seattle pride and Seattle as a green leader
- Address the problem at three levels (environment, money, and comfort)
- Identify why energy efficiency matters in human terms (e.g. the health of someone like you is being impacted)
- Utilize practical messaging about "who we are" and culture (e.g. Pemco ads, Mac/PC)
- Utilize cool/hip social marketing that touches on values
- Address the consequences of inaction
- Address the disconnect between how people identify themselves and how they actually behave

Question 2: How do we actually demonstrate the benefits in ways that resonate?

- Point of sale data (e.g. score in Multiple Listing Service (MLS))
- Collective incentive (possibly via social media)
  - A neighborhood that reaches a certain level of energy efficiency could receive a reward (e.g. If your neighborhood wins a city-wide competition, you can earn bonus points and discounts at local stores.)
  - Leverage ties among community members and create competition between neighborhoods. Look to existing successful models like the CleanScapes' neighborhood waste reduction reward challenge.
  - Personal choices are private and anonymous, but cultural change is visible via Seattle neighborhoods. Encourage individuals to take action by their neighborhood, but not in an intrusive way.
- Provide information on which energy efficient actions to take (e.g. dollar benefits, comfort benefits, environmental benefits, etc.)
- Incentives and benefits need to accrue to both owners and renters. Need to better highlight the benefits, such as increased property value and brand value, to property owners.

Question 3: Who or what organizations or stakeholders would be most successful in leading the charge? What should the City's role be within this strategy—is the City the right entity to communicate this message or strategy?

- Schools
  - Inform kids, and they will bring the message home to their parents
  - Education should be diverse and consider multiple cultures and languages spoken in Seattle
- Faith Community
- AARP– An important sector of Seattle's population is those who are older, and this sector should be incorporated into the process.

Question 4: What is the tipping point at which we have sufficiently reached a culture of efficiency and can enact mandates with public support?

- The public starts making economic choices based on energy efficiency (e.g. home buyers are demanding efficiency)
- There is civic pride
- Lenders are considering utility costs
- The breakout group suggested that Seattle be less cautious about mandates, but very clear about why mandates are being enforced. It asked what indicators Austin looked to before utilizing mandates.

4:45　　　City of Seattle Leadership

Meeting Notes:
- There was not time to discuss this agenda topic. The GRC decided to extend the next meeting by 30 minutes to discuss this topic.
- The GRC will discuss what specific action(s) Seattle should take to demonstrate leadership and build momentum. Each GRC member will have the opportunity to give a two-minute pitch on their ideas and to vote on the top four TAG-recommended actions where leadership is desired via colored dots. The goal is to identify 5–8 big ideas that the GRC would like Seattle to show leadership on.
- **ACTION ITEM:** If GRC members have ideas on this topic, email 1-2 paragraphs to OSE by **July 2**. (These ideas should be "home runs" or "triples".)
- **ACTION ITEM:** OSE to email these paragraphs to the GRC in advance of meeting #3.

5:25　　　Next Steps

Meeting Notes:
- The Communications and Engagement optional meeting is June 27, 8:00–10:00 am, Seattle Municipal Tower Room 2750.
- The next GRC meeting is July 12, 3:00–6:00 pm, City Hall Bertha Knight Landes Room.

5:30　　　Adjourn

Attachment 1: Meeting Participants

Green Ribbon Commission Members			
Last	First	Affiliation	Attended?
Hayes ***Co-Chair**	Denis	President, Bullitt Foundation	✓
Koo ***Co-Chair**	Doris	Senior Advisor, Enterprise Community Partners	☐
Bagsby	Sean	Vice President, International Brotherhood of Electrical Workers, Local 46	✓
Carrasco	Jorge	Superintendent, Seattle City Light	✓
Duvernoy	Gene	President, Forterra	☐
Fleming	Dr. David	Director and Health Officer, Public Health – Seattle & King County	✓
Franz	Hilary	Executive Director, Futurewise	✓
Frumkin	Dr. Howard	Dean, University of Washington School of Public Health	✓
Geller	Brian	Executive Director, Seattle 2030 District	☐
Glaberson	Terri	Executive Director, CoolMom	✓
Golden	KC	Policy Director, Climate Solutions	✓
Gregory	Bert	CEO, Mithun	✓
Hahn	Peter	Director, Seattle Department of Transportation	☐
Johnson	Rob	Executive Director, Transportation Choices Coalition	✓
Kenworthy	Craig	Executive Director, Puget Sound Clean Air Agency	✓
Mann	Michael	President, Cyan Strategies	✓
Martin	Chris	President, CleanScapes	☐
Maryman	Brice	Landscape Architect, SvR Design Company	✓
Ortega	Estela	Executive Director, El Centro de la Raza	☐
Owen	Megan	Director of Market Development, McKinstry	✓
Packard	Ben	Vice President, Global Responsibility, Starbucks Coffee Company	☐
Ridihalgh	Kathleen Casey	Senior Organizing Manager, Sierra Club	✓
Rosario	Tania Maria	Political Director, Service Employees International Union, Local 6	☐
Simmons	Jill	Director, Office of Sustainability & Environment	✓
Sugimura	Diane	Director, Seattle Department of Planning & Development	✓
Taniguchi	Harold S.	Director, King County Department of Transportation	✓
Twill	Jason	Senior Project Manager, Sustainability, Vulcan	✓
Washienko	Kathy	National Advisory Board Executive Committee, Union of Concerned Scientists	✓

Project Team/Other Staff			
Last	First	Affiliation	Attended?
Baumel	Christie	Seattle Office of Sustainability & Environment	✓
Morgenstern	Tracy	Seattle Office of Sustainability & Environment	✓
Wysocki	Sara	Seattle Office of Sustainability & Environment	✓
Saviskas	Sarah	Triangle Associates	✓
Wheeler	Bob	Triangle Associates	✓

Green Ribbon Commission
Meeting #3 – Outreach & Engagement
July 12, 2012
3:00 p.m. – 6:00 p.m.
City Hall - Bertha Knight Landes Room

Time	Agenda Item	Discussion Overview	Materials
3:00 PM	**Welcome and Introductions** Co-Chairs	• Welcome and Agenda review • Names and Affiliations	
3:10 PM	**Administration** Co-Chairs	• Review and Acceptance of GRC Meeting Summary from June 18, 2012	• June 18 Meeting Summary

3:20 PM	**Building Energy Recommendations** Christie Baumel	• <u>Draft Sector Recommendations</u>
		    o Discussion and Tentative Agreement
		
		 • <u>Leadership Actions</u>
		 What actions should Seattle take to demonstrate leadership and build momentum?
		    o Dot voting on building energy actions
		    o Discussion of top actions, and GRC members are invited to make the case for specific actions
		    o Tentative Agreement on Priority Actions
			• Meeting Cover Memo
			 • Draft Building Energy Sector Recommendations and Leadership Actions

4:20 PM	**BREAK**		
4:30 PM	**Community Outreach Recommendations** Jill Simmons	• Overview of Climate Action Engagement • Discussion and Tentative Agreement on Draft Community Engagement Recommendations	• Meeting Cover Memo • Draft Engagement Recommendations • Climate Action Plan Outreach Summary and Targeted Stakeholders List
5:15 PM	**Climate Friendly Community Visualization Project** Tracy Morgenstern	• Project Overview • Walk-Through of Visuals • GRC Discussion & Feedback	
6:00 PM	**Adjourn**	• Next Optional Meeting on Adaptation: August 2, 3:00 – 5:00 p.m. • Next GRC Meeting: August 9, 3:00 – 6:00 p.m.	

MEMORANDUM

Date:	**7/5/2012**
To:	**Green Ribbon Commission Members**
From:	**Jill Simmons**
Subject:	**GRC Meeting #3 Overview**

Attached are the meeting materials for our next Green Ribbon Commission meeting on July 12th from 3:00-6:00 p.m. We have an extremely ambitious agenda, so I ask that you make every effort to read these materials in advance. It is especially important that you review the building energy leadership actions ahead of time as GRC members will be asked to vote on their top three priorities for City leadership as you walk in the door. These are the actions where City leadership is key to moving the building energy agenda forward rather than overall building energy action priorities. We will then discuss the voting results giving members an opportunity to advocate for their priorities. After the discussion, we may hold a re-vote. We will bring copies of the materials to the meeting, so there is no need to print this document in advance.

Green Ribbon Commission Meeting #3 will focus on two main topics:

BUILDING ENERGY:

- Draft Recommendations: We have developed draft building energy sector recommendations based on the conversation at the last Green Ribbon Commission meeting. We hope to reach tentative agreement on the draft recommendations.

- Leadership Actions: We have combined building energy action ideas from the Technical Advisory Group with other suggestions from Green Ribbon Commission members into a list of potential leadership actions. Through a combination of dot voting (everyone's favorite, I know) and discussion, we hope to reach tentative agreement on 3-5 areas of building energy actions that Seattle should aggressively pursue in the next three years to demonstrate leadership and build momentum.

COMMUNITY ENGAGEMENT:

- Community Engagement Overview: We'll provide a brief overview of the three areas of community engagement the City has been working on:
  - Outreach on the Climate Action Plan (calendar and stakeholder list included in meeting materials)
  - Building community support and momentum for climate action programs and policies
  - Inspiring residents and businesses to take climate action

- Draft Recommendations on Building a Community Support for Climate Action: Taking some lessons from the last Green Ribbon Commission meeting, we're maximizing the use of people's time by bringing draft recommendations to the meeting rather than using the time to develop something from scratch. We drafted these community engagement recommendations based on

a very good conversation at the Green Ribbon Commission's optional meeting on community engagement last week. We hope to reach tentative agreement on the draft recommendations.

- <u>Climate-Friendly City Visualization Project</u>: Building on one of the draft recommendations, we'd like the Green Ribbon Commission to take an in-depth look at the City's Climate-Friendly City Visualization Project, which aims to help residents and businesses *see* Seattle as a climate-friendly city and connect the dots between individual actions and the future community we want to be. We hope to get the members input on the project to inform its next phase of development.

Finally, I will be out of the office until Wednesday, July 11th so if you have any questions before that time, please contact Tracy Morgenstern (tracy.morgenstern@seattle.gov).

Building Energy Meeting Follow-Up

DRAFT BUILDING ENERGY SECTOR RECOMMENDATIONS

1. To build a culture of energy efficiency, building energy use needs to be visible. Making building energy use visible requires:
   a. Real-time, easy to understand information about energy use and building performance
   b. Building energy ratings that are easily accessible to the public

2. The economics of energy efficiency investments must be compelling for all. Packages of building energy strategies should make a compelling business case for energy efficiency, and should tailor approaches to different audiences (downtown commercial buildings versus "mom and pop" apartment buildings). Gaining broad-based support for deep energy efficiency means highlighting wins from outside "the choir," showing how those not likely to bat for climate and energy policy have benefited from taking advantage of programs. Reaching this audience with a compelling economic case should be a core outcome of energy efficiency policy development.

3. Although the primary strategy for deep energy efficiency should focus on making effective, persuasive economic case for it, mandates are an important piece of a strategy to achieve widespread adoption of deep energy efficiency in existing buildings. However, mandates should be developed in conjunction with or after other actions that spur voluntary action, including incentives, pricing and financing.

4. Equity must be embedded in building energy strategies from the beginning in the policy design and continually enhanced during implementation. Design and implementation should also include a process to evaluate how to maximize other community goals around environmental sustainability, economic prosperity and social equity. The process should facilitate thinking creatively to identify cross-sector win-win solutions help maximize community gains.

5. In general, energy efficiency programs and policies should transition toward outcome-based approaches, rather than programs based on modeled energy performance. Outcome-based approaches ensure projected energy savings are actually realized, increase the monetary value of energy savings, and create new business models for delivering the savings.

Which of the following actions should Seattle pursue in the three years to realize significant community and climate benefits and to build momentum for climate protection solutions?

Please note that the specific project in each action area still needs to be developed, and that in many cases there are a number of potential models Seattle could pursue. In selecting priority actions, Green Ribbon Commission members are not asked to recommend a specific implementation model, but instead to identify the three areas where they would like see a pilot project or other significant effort developed in the next three years.

1. Outcome-Based Energy Efficiency Incentive Pilot
   o Outcome-based utility incentive structures are based on the actual verified energy savings of an energy upgrade, rather than on the projected savings from individual measures. Because savings are actual and verified, utilities would not have to factor a discount (due to risk that the savings aren't realized) into the incentive funding level, as they currently do with incentives based on modeled savings. This structure of higher incentives and incentives that account for both physical investments and behavior conservation can help improve the ROI for deeper retrofits, and create new business models that enable investment in deep energy efficiency. [Note: the proposal that Denis Hayes shared is one example of outcome based incentives.]
   o Considerations: There is emerging interest in outcome-based standards for energy efficiency, but only a few isolated programs have piloted the approach. Appropriate program development has the potential to make a substantial impact on the return on investment (ROI) for energy efficiency investments.

2. District Energy Pilot
   o District energy infrastructure can provide a platform for using wasted heat and renewable energy, and efficiently move the resources around the system to where they are most needed at a given time. A near-term pilot project is being planning for First Hill encompassing the First Hill hospitals and Yesler Terrace as the primary base heat loads, and potentially expanding from there. And several other areas of Seattle, such as Capitol Hill, South Lake Union and the University District, have also shown promise as potential district energy pilot areas.
   o Considerations: District energy systems are common in the U.S. in single ownership campuses, like universities, because of the economies of scale they provide. Seattle is one of a few cities in the U.S. thinking strategically about how to launch new, modern district energy systems at a community scale.

3. Meter-Based Financing Pilot
   o Broad access to attractive financing can provide the up-front capital necessary for building upgrades and make energy efficiency investments very attractive when coupled with the right pricing and incentive structures. Meter-based financing links the repayment to the meter so payments stay with the current bill-payer and can be amortized over long periods of time. Longer amortizations can help finance deeper energy efficiency measures with larger up-front costs. Meter-based financing also helps overcome the challenge of the split incentive between landlords and tenants: landlords with authority to improve the building do not typically benefit from the lower bills or improved comfort, and so have little incentive to make the investment. Shifting payments to the bill payer (carefully structured so the extra payment is negated by the energy savings) could reduce that barrier.

- o Considerations: There is a growing body of research in the energy efficiency field citing access to attractive capital as a barrier to energy efficiency, and specifically citing meter-based financing as a potential solution. A handful of cities have established or are pursuing meter-based financing. Seattle City Light is limited to providing such financing to electrically-heated buildings. In the long-term, a fuel-neutral option would be preferred.

4. Rental Housing Property Tax Exemption
   - o A property tax exemption could be provided to building owners of rental properties if they invest in energy upgrades of their buildings. Providing a financial incentive to building owners would help overcome the barrier of a split incentive between landlords and tenants: the building owner is responsible for capital improvements to the building, but the tenants benefit from the energy savings.
   - o Considerations: The tax exemption idea is modeled on Washington State's multifamily property tax exemption, but has not been used for energy efficiency improvements in Washington or elsewhere in the United States. The split incentive is a well-studied barrier to energy efficiency in rental markets, and no community has found a good solution to the problem. This action would test an entirely new model that could be applied in other communities, but would require state legislation, which would need to be carefully crafted to enhance social equity and protect tenants.

5. Outcome-Based Energy Code Pilot
   - o Gradually transitioning from an energy code based on energy modeling to one tracking actual building performance helps provide assurance that codes are achieving their modeled objectives. It improves the reliability of and our learning related to building performance.
   - o Considerations: There is emerging interest in outcome-based standards for energy efficiency, but few programs have tried it to date. Code compliance and enforcement mechanisms could be challenging to work through. However a successful model may provide an example for others to learn from.

6. Point of Sale Home Energy Ratings
   - o A key to strengthening the market value of energy efficiency is embedding knowledge of it into decision-making. Requirements for home energy ratings at the point of sale help improve the prominence of energy performance in market valuations, and help homeowners make more informed decision about housing purchases.
   - o Considerations: Point of sale disclosure exists in a few cities, but is not widely adopted. The U.S. Department of Energy and many cities, including Seattle, have invested in research and pilots for voluntary home energy rating systems, but few have implemented a mandatory requirement.

7. Retro-Commissioning Program
   - o Seattle City Light is developing a pilot program to incentivize retro-commissioning, which is a process to assess the operational aspects of facilities management to maximize the performance of the systems in existing buildings. Scaling and identifying program offerings for buildings of all fuel types could generate widespread efficiency gains in our building stock.
   - o Considerations: Retro-Commissioning incentives are available from several utilities across the country, and have the potential for generating energy savings with low up-front costs.

8. Property Tax-Funded Incentives
   o Little is more attractive for the business case for energy efficiency than bringing more money to the table. Seattle City Light offers great incentives for energy savings, but there are limitations on how utility funding can be used. The City has found through its experience with Community Power Works that bringing more unrestricted money to the table—especially in the residential context—leads to deeper investments in energy efficiency. A levy on property taxes is one way to raise the non-utility, public funding for such a program.
   o <u>Considerations</u>: Seattle has piloted new incentives through its Community Power Works program, but has not identified sustained funding for the incentives. The City of Boulder has a carbon tax that has funded energy efficiency incentives in the community, and they have seen significant investment in building energy upgrades as a result.

9. Energy Code to Passive Heating and Cooling Standards
   o For new buildings, create an energy code that makes them so thermally stable that they no longer require an HVAC system. Building owners benefit from reduced capital costs upfront and long term and tenants from lower operating costs.

10. Retrofit Incentives to Passive Heating and Cooling Standards
    o For existing buildings, create an incentive of reduced property or business taxes to encourage deep retrofits to reach the point where no HVAC system is needed.

SEATTLE CLIMATE ACTION PLAN: BUILDING A CULTURE OF SUPPORT

Although Seattle has a long history of being progressive and environmentally-friendly community, building community-wide support for climate action continues to be a challenge for policymakers and environmental leaders.

Garnering support is a challenge in part because Seattle's climate protection goals must be achieved over time, the outcome of many discrete policies and programs that are often implemented as individual efforts. Real and perceived concerns related to the program or policies more immediate impacts dominate the community dialogue while the effort's contribution to long term climate protection goals is often lost.

Support is also a challenge because the community often sees Seattle's climate goals as in competition with its other community goals. But in fact, Seattle's climate goals are aligned with the city's overall goals of shared prosperity, social equity, and environmental sustainability, and there is a tremendous opportunity to link climate action with a healthy, just and prosperous future for all Seattle residents.

Identifying strategies that will connect individual actions to a broader vision and connecting climate protection goals to other community goals will help Seattle build a culture that supports climate action and helps to build a climate-friendly future.

DRAFT GRC Recommendations

Building Community Commitment

1. **Help people *see* the vision of the future**

   - Use a range of communication tools—including compelling visuals, graphics, video, and other new media—to create a narrative that helps the community make clear the connections between individual policies and the community's goals.

2. **Use case studies to illustrate the connection between community goals and climate action.**

   - Provide local examples through narratives and visuals to illustrate how climate actions when effectively integrated work together to further community goals.

Building Community Momentum

1. **Develop a network of community allies that help mobilize support for implementation of the Climate Action Plan**

   - Build an alliance of Climate Action Plan champions committed to helping the City develop actions and mobilize community networks to support implementation of the Plan. Champions should also commit to being early adopters of climate strategies.

2. **Embed affordability and equity into all aspects of policy and program design so that the story of climate action is also the story of enhancing equity.**

3. **Provide opportunities for the public to be involved in policy design and implementation.**

   - Use crowd-sourcing and other emerging technology tools to provide ways for the general public to participate in designing climate policies and implementation actions. The public can help bring new ideas to sticky problems, identify unintended consequences of actions, and highlight barriers to implementation.

CAP Public Process – Activities Completed

Fall 2011	Q1 2012	Q2 2012
Stakeholders Futurewise Brownbag – *Local Economic Development Focus* – December 14 Great City Brownbag Seattle Chamber Presentation Technical Advisory Groups **Underserved Communities** Ethnic Media story placed – *Why Climate Change Matters* Transform Seattle Community Meeting – December 6 **General Public** Ongoing Survey responses	**Stakeholders** Futurewise Brownbag – *TOD – January 26* Technical Advisory Groups Seattle Rotary/Environment Committee St. Andrews Green Committee Presentation Technical Advisory Groups Mayor's Environmental Quarterly **Underserved Communities** Ethnic Media story placed – *Lunar New Year/Environmental Changes for the Better* Ethnic Media Story – *Call for Climate Action Projects* **General Public** Ongoing Survey responses Ballard District Council Northwest District Council	**Stakeholders** One on ones with environmental leaders Full Council briefing on TAG recommendations Green Ribbon Commission Freight Advisory Board BOMA **Underserved Communities** Individual Ethnic community meetings (with POELs) (13 individual meetings total) **General Public** SW District Council Central Area District Council Delridge District Council SE District Council Othello Neighborhood Association CAP web page updated with draft strategies May 3 public meeting with DPD

CAP Public Process – Activities Planned

Q3 2012	Q4 2012
Stakeholders Green Ribbon Commission Targeted Stakeholder Outreach **Underserved Communities** Individual Ethnic community meetings (with POELs) (13 individual meetings total) Ethnic Media Story – *Using Visuals and asking same questions as in the POEL meetings* **General Public** Soliciting comments (via web, blog, e-newsletter) on draft strategies	**Stakeholders** Targeted Stakeholder Outreach – follow up calls/emails to announce the release of the CAP **Underserved Communities** Ethnic Media Story – *Using infographics and consumption messaging* **General Public** Transportation Choices Summit CAP Launch Event – Town Hall Great City Brownbag Community workshops with final visuals Public Comment Period

December 2012 - Public comment through end of the year

January 2013 - Full council presentation Jan 29

Climate Action Plan Targeted Stakeholders

Constituencies	Liaison Groups
Under-represented Communities	• Faith based organizations (Church Council of Greater Seattle, Idriss Mosque, Earth Ministry) • Ethnic Media • Seattle Housing Authority • Puget Sound Sage
Business Community	• Seattle Chamber of Commerce • Downtown Seattle Association • 2030 District • BIAs/Neighborhood Chambers • BOMA • Port of Seattle • Boeing
Environmental Community	• Climate Solutions • Green Seattle Partnership • People for Puget Sound • Puget Sound Clean Air Agency • WA Toxics Coalition • Sierra Club • Futurewise • Sustainable Seattle • SCALLOPS Network
Planning/Urban Design	• Great City • AIA • Seattle Planning Commission • Living Seattle • ULI
Transportation	• Transportation Choices • Cascade Bicycle Club • Feet First • Commute Seattle (part of the DSA) • Seattle Bicycle Advisory Board • Seattle Pedestrian Advisory Board • Freight Advisory Board • Puget Sound Clean Cities Coalition • Puget Sound Regional Council • King County Metro • Sound Transit
Energy Efficiency Community	• Emerald Cities partners • Green Building Task Force Members • Community Powers Works partners • NW Energy Efficiency Council
General Public	• District/Community Councils • Neighborhood media/blogs • DON's Community Organizations list • Seattle Youth Commission • Seniors (work with MO of Senior Citizens)

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Draft Meeting Summary
Green Ribbon Commission Meeting #2
Building Energy
June 18, 2012
3:00 p.m. – 5:30 p.m.
Seattle Municipal Tower, Room 4050

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3:00   Welcome & Introductions

Meeting Notes:
The Co-Chair welcomed the Green Ribbon Commission (GRC) to the meeting and led a round of introductions from meeting participants (**see Attachment 1**).

3:05   Administration

Meeting Notes:
The GRC briefly reviewed the draft Operating Protocols and meeting summary and approved both documents.

3:10   GRC General Update

Meeting Notes:
- The Office of Sustainability and Environment (OSE) thanked the GRC members who filled out the survey on the proposed approach for the Commission.
- Based on the survey feedback, OSE revised the GRC approach, and copies of the revised Scope were distributed. The updated Scope notes three main focus areas for the GRC:
    1. Enhancing Community Outcomes through Climate Action
    2. Overcoming Systemic Barriers to Climate Action
    3. Demonstrating Leadership
- There was a suggestion to call this meeting "Great Buildings" instead of "Building Energy" since the GRC is hoping to expand its reach beyond climate issues by also creating stronger communities. The Co-Chair pointed out that conversation around "Great Buildings" might not be as meaningful as conversation around "Energy Efficient Buildings" since the phrase is more ambiguous. The GRC could use the notion of "Great Buildings" in its final recommendations to the Mayor.

3:20   Presentation on Building Energy Sector

Meeting Notes:
- OSE presented a PowerPoint outlining discussion from the June 6 auxiliary meeting.
- The majority of Greenhouse Gas Emissions from the 2008 Inventory resulted from transportation (62%).
- Seattle Building Emissions in 2008 were primarily natural gas. Of all building emissions, 39% were from commercial buildings, and 29% were from residential buildings.
    o This data uses Seattle City Light emissions before offsets.
- Most of the buildings that will exist in Seattle in 2050 have already been built, so it is important to consider emissions from existing as well as new buildings.
- Several assumptions were identified:
    o Seattle City Light electricity will remain carbon neutral
    o Electricity conservation remains an important strategy

- - - o Aggressive energy savings are assumed from the Technical Advisory Group (TAG) strategies, and cost-effectiveness will improve as strategies (and associate technologies) come to scale
- The two key ways to reduce emissions are to use less energy or to use cleaner energy.
- The Building Energy TAG identified four recommendation packages to make the economic case for deep building retrofits:
  - o **Pricing and Financing**—the right pricing and incentive structures and access to funding for efficiency measures will strengthen the implementation of all strategies
  - o **Efficient Operations**—improving the efficiency of existing buildings
  - o **Efficient Construction**—achieving deep energy efficiency in new buildings and renovations
  - o **Infrastructure for Low-Carbon Fuels**— planning infrastructure to support local, alternative energy sources, such as use of waste heat and other local energy sources through district energy systems
- With these recommendations, there is a potential for roughly 60% reduction in Greenhouse Gas Reductions in Seattle buildings.
- It was noted that policies are interactive and that the TAG recommendations largely function as a package. Therefore, an integrated approach is needed, where recommendations are carefully sequenced and staged.
- Key points and findings of TAG:
  - o Implementation requires additional research, analysis, planning, and piloting
  - o It is difficult for one local government acting alone to reach carbon neutrality
    - ▪ Market forces would better respond to a regional approach
    - ▪ Federal leadership and policy would greatly assist our efforts
    - ▪ Some innovative policies require state authority to implement
- Outcome of Optional Meeting:
  - o OSE reviewed a table outlining the TAG's recommended building energy actions and which community outcomes each action would help achieve. One could argue that all the actions could help achieve all the community outcomes; OSE highlighted the actions that most directly address the community outcome.
  - o One GRC member noted that this table addresses the question: "How does energy efficiency result in other co-benefits?" However, the following question should also be considered: "What else can be done alongside energy efficiency? What other policies could be welded with energy policies?"

3:40   Breakout Groups

Meeting Notes:
Green Ribbon Commission members broke into three groups: Making the Business Case for Deep Energy Efficiency, Fostering Equity, and Creating a Culture of Energy Efficiency. Each breakout group was guided by key questions outlined in the handouts. GRC members noted that pricing and financing should be a focus of breakout group discussions.

4:15   Breakout Group Presentations in Plenary

Meeting Notes:
The three breakout groups reported on their discussions and recommendations, and the full GRC provided additional input. OSE will develop draft recommendations based on this conversation and distribute it to the GRC.

TOPIC 1: Making the Business Case for Deep Energy Efficiency

- This breakout group defined deep energy efficiency as 25-50% better than the Seattle Energy Code.
- The group proposed that the GRC develop a recommendation for a pilot project with performance-based incentives. The pilot project should address the challenges and risks (actual and perceived) associated with deep energy efficiency.
- It proposed that mandates be a last resort—one can make the business case through other means. However, the City should move towards mandatory upgrades over the long term.
  - One GRC member expressed concern about the aversion to mandates. A huge majority of energy savings have come from mandates.
  - The eventual goal would be to marry incentives with mandates.
- It noted the need for more money or realigned money. Would this come through a property tax, a fee on utilities, or some other means? This subject will need to be addressed in greater depth by the GRC before developing recommendations.
- A major building retrofit program would produce a significant number of jobs, which is a selling point.

TOPIC 2: Fostering Equity

Question 1: What is needed to break down barriers to fostering greater equity?

- This breakout group defined equity in terms of race, income, education, and future potential.
- The group suggested that the topic should be called "Embedding Equity" rather than "Fostering Equity," since the latter sends the wrong message. Equity needs to be built into the process; the "lens of equity" will need to be put on every policy and will need to be considered constantly. If it is not built into the process, barriers to equity will be perpetuated.
- Workforce equity is an important consideration. The City should continue to invest in developing a workforce for this industry via education and job training (e.g. Community Power Works program).
- If energy efficiency is a "no brainer", the GRC needs to consider what the business case is in low-income communities and adapt so that it applies to these communities.

Question 2: What special considerations are needed to preserve and enhance housing affordability, and access to housing that meets the community's needs?

- If a barrier to fostering equity is the upfront cost to landlords, the City can work with Community Development Corporations (CDCs) to finance upgrades in low-income communities via low interest or no interest loans. It is important to ensure that costs are not passed onto the customers.
- Address the cost of energy bills via incentives, Seattle City Light programs, etc.
- Meter financing
- Property tax exemptions
- What is the value proposition for the small building owner?

Question 3: What demonstration projects related to the recommendations listed above could help test and refine ideas?

- Pilot projects should be used to help answer the question of whether to penalize users who use more energy as gauged by a person-per-square- foot threshold than a pre-established threshold.

Question 4: What actions are needed in other areas, or what is a different way of looking at the challenge of enhancing equity?

- Take advantage of the fact that equity issues are not sector-specific—they involve climate, economic, and health concerns. The GRC should consider place-based strategies.
    - The GRC should consider what is fair for a given individual. Lower energy bills across the board should not necessarily be the goal.

TOPIC 3: Creating a Culture of Energy Efficiency

Question 1: How are the strategies best messaged to communicate the outcomes or benefits that people care most about? What specific messages resonate best with the general public? With business owners?

- Emphasize saving money
- Emphasize Seattle pride and Seattle as a green leader
- Address the problem at three levels (environment, money, and comfort)
- Identify why energy efficiency matters in human terms (e.g. the health of someone like you is being impacted)
- Utilize practical messaging about "who we are" and culture (e.g. Pemco ads, Mac/PC)
- Utilize cool/hip social marketing that touches on values
- Address the consequences of inaction
- Address the disconnect between how people identify themselves and how they actually behave

Question 2: How do we actually demonstrate the benefits in ways that resonate?

- Point of sale data (e.g. score in Multiple Listing Service (MLS))
- Collective incentive (possibly via social media)
    - A neighborhood that reaches a certain level of energy efficiency could receive a reward (e.g. If your neighborhood wins a city-wide competition, you can earn bonus points and discounts at local stores.)
    - Leverage ties among community members and create competition between neighborhoods. Look to existing successful models like the CleanScapes' neighborhood waste reduction reward challenge.
    - Personal choices are private and anonymous, but cultural change is visible via Seattle neighborhoods. Encourage individuals to take action by their neighborhood, but not in an intrusive way.
- Provide information on which energy efficient actions to take (e.g. dollar benefits, comfort benefits, environmental benefits, etc.)
- Incentives and benefits need to accrue to both owners and renters. Need to better highlight the benefits, such as increased property value and brand value, to property owners.

Question 3: Who or what organizations or stakeholders would be most successful in leading the charge? What should the City's role be within this strategy—is the City the right entity to communicate this message or strategy?

- Schools
    - Inform kids, and they will bring the message home to their parents
    - Education should be diverse and consider multiple cultures and languages spoken in Seattle
- Faith Community
- AARP– An important sector of Seattle's population is those who are older, and this sector should be incorporated into the process.

Question 4: What is the tipping point at which we have sufficiently reached a culture of efficiency and can enact mandates with public support?

- The public starts making economic choices based on energy efficiency (e.g. home buyers are demanding efficiency)
- There is civic pride
- Lenders are considering utility costs
- The breakout group suggested that Seattle be less cautious about mandates, but very clear about why mandates are being enforced. It asked what indicators Austin looked to before utilizing mandates.

4:45   City of Seattle Leadership

Meeting Notes:

- There was not time to discuss this agenda topic. The GRC decided to extend the next meeting by 30 minutes to discuss this topic.
- The GRC will discuss what specific action(s) Seattle should take to demonstrate leadership and build momentum. Each GRC member will have the opportunity to give a two-minute pitch on their ideas and to vote on the top four TAG-recommended actions where leadership is desired via colored dots. The goal is to identify 5–8 big ideas that the GRC would like Seattle to show leadership on.
- **ACTION ITEM:** If GRC members have ideas on this topic, email 1-2 paragraphs to OSE by **July 2**. (These ideas should be "home runs" or "triples".)
- **ACTION ITEM:** OSE to email these paragraphs to the GRC in advance of meeting #3.

5:25   Next Steps

Meeting Notes:

- The Communications and Engagement optional meeting is June 27, 8:00–10:00 am, Seattle Municipal Tower Room 2750.
- The next GRC meeting is July 12, 3:00–6:00 pm, City Hall Bertha Knight Landes Room.

5:30   Adjourn

Attachment 1: Meeting Participants

		Green Ribbon Commission Members	
Last	**First**	**Affiliation**	**Attended?**
Hayes ***Co-Chair**	Denis	President, Bullitt Foundation	✓
Koo ***Co-Chair**	Doris	Senior Advisor, Enterprise Community Partners	☐
Bagsby	Sean	Vice President, International Brotherhood of Electrical Workers, Local 46	✓
Carrasco	Jorge	Superintendent, Seattle City Light	✓
Duvernoy	Gene	President, Forterra	☐
Fleming	Dr. David	Director and Health Officer, Public Health – Seattle & King County	✓
Franz	Hilary	Executive Director, Futurewise	✓
Frumkin	Dr. Howard	Dean, University of Washington School of Public Health	✓
Geller	Brian	Executive Director, Seattle 2030 District	☐
Glaberson	Terri	Executive Director, CoolMom	✓
Golden	KC	Policy Director, Climate Solutions	✓
Gregory	Bert	CEO, Mithun	✓
Hahn	Peter	Director, Seattle Department of Transportation	☐
Johnson	Rob	Executive Director, Transportation Choices Coalition	✓
Kenworthy	Craig	Executive Director, Puget Sound Clean Air Agency	✓
Mann	Michael	President, Cyan Strategies	✓
Martin	Chris	President, CleanScapes	☐
Maryman	Brice	Landscape Architect, SvR Design Company	✓
Ortega	Estela	Executive Director, El Centro de la Raza	☐
Owen	Megan	Director of Market Development, McKinstry	✓
Packard	Ben	Vice President, Global Responsibility, Starbucks Coffee Company	☐
Ridihalgh	Kathleen Casey	Senior Organizing Manager, Sierra Club	✓
Rosario	Tania Maria	Political Director, Service Employees International Union, Local 6	☐
Simmons	Jill	Director, Office of Sustainability & Environment	✓
Sugimura	Diane	Director, Seattle Department of Planning & Development	✓
Taniguchi	Harold S.	Director, King County Department of Transportation	✓
Twill	Jason	Senior Project Manager, Sustainability, Vulcan	✓
Washienko	Kathy	National Advisory Board Executive Committee, Union of Concerned Scientists	✓

		Project Team/Other Staff	
Last	**First**	**Affiliation**	**Attended?**
Baumel	Christie	Seattle Office of Sustainability & Environment	✓
Morgenstern	Tracy	Seattle Office of Sustainability & Environment	✓
Wysocki	Sara	Seattle Office of Sustainability & Environment	✓
Saviskas	Sarah	Triangle Associates	✓
Wheeler	Bob	Triangle Associates	✓

Green Ribbon Commission
Meeting #4   Adaptation & Transportation/Land Use
August 9, 2012
3:00 p.m. – 5:30 p.m.
Seattle Municipal Tower, Room 4050

AGENDA

Time	Agenda Item	Goal(s)	Materials
3:00 PM	**Welcome and Introductions** Co-Chairs	• Welcome and Agenda review • Names and Affiliations	

3:10 PM	**Administration** Co-Chairs	• GRC Meeting Summary from July 12, 2012
		   o Suggested additions, changes
		   o Acceptance of these materials
			• July 12th Meeting Summary

3:15 PM	**GRC General Updates** Jill Simmons	• Process update	
3:30 PM	**Adapting to Climate Impacts** Tracy Morgenstern Paul Fleming Ron Tressler	• Impacts overview • Recommendations discussion	• Impacts Overview • Draft Adaptation Recommendations • Community Outcomes Matrix
4:00 PM	**Break**		
4:15 PM	**Adapting to Climate Impacts**	• Discussion continued	
5:00 PM	**Transportation & Land Use** Tracy Morgenstern	• Presentation on Transportation & Land Use Sector emissions • Overview of Preliminary Draft CAP Actions • Draft GRC sector recommendations -initial discussion to inform auxiliary meeting	• Draft GRC Recommendations • Transportation & Land Use Preliminary Draft CAP actions

5:30 PM	**Look Ahead & Adjourn**	• August 16, 9:30-11:30
		    Transportation & Land Use
		    Recommendations Discussion (Optional)
		 • August 27, 10:00-12:00
		    Building Energy Recommendations
		    Discussion (Optional)
		 • September 13, 3:00-6:00
		    Full GRC Meeting #5
		 • Late September, TBD
		    Community Engagement
		    Recommendations Discussion (Optional)
		 • October 9, 3:00-6:00 p.m.
		    Full GRC Meeting #6
		 • October 25, 3:00-6:00 p.m. **(NEW)**
		    Full GRC Meeting #7	

Summary of Projected Impacts for Seattle and Puget Sound Region

	Projected Changes		Potential Impacts on Seattle
	Near-Term Changes (thru 2050)	**Long-Term Changes (thru 2100)**	
Temperature	➢ Average annual temperature projected to increase within range of 1.6^{o}F to 5.2^{o}F by 2040s. ➢ Average annual temperature projected to increase at the rate of approximately a 0.5^{o}F increase per decade through mid-century ➢ Average summer temperature projected to increase 1.5^{o}F to 7.9^{o}F by the 2040s. ➢ Climate variability will continue to be an important influence on PNW temperature in any given year or decade.	➢ Average annual temperature projected to increase within range of 2.8^{o}F to 9.7^{o}F by 2080s. ➢ Average summer temperature projected to increase 2.6^{o}F to 12.5^{o}F by 2080s.	➢ Increased building energy demands, mostly for cooling, as summer temperatures increase. ➢ Intense heat waves to adversely affect human health. ➢ Urban trees more susceptible to insects. ➢ Some tree and other plant species may no longer survive in Seattle. ➢ Increases in tree mortality due to invasive species; changes in species distribution and composition due to temperature changes. ➢ Increase in water temperatures and increasing ocean acidification to endanger marine/aquatic ecosystems and facilitate expansion of disease. ➢ Increase in stream temperatures significant enough to exceed critical thresholds for fish survival. ➢ Beach closures as more susceptible to disease and algae growth.
Precipitation	➢ More precipitation to fall as rain rather than snow at mid and low elevations, contributing to a projected statewide reduction in average spring snowpack of about 28% by the 2020s and 40% by the 2040s. ➢ Average annual change in precipitation likely to be small (+1% to +2%) but wetter winters and drier summers likely. ➢ Streamflows likely to be higher in autumn, winter and early spring, and lower in late spring and summer, especially in rivers fed by snowmelt.	➢ Projected decrease in average snowpack of about 60% by the 2080s. ➢ Projected increase in average annual precipitation of +4%; wetter winters and drier summers likely. ➢ Streamflows likely to be higher in autumn, winter and early spring, and lower in late spring and summer, especially in rivers fed by snowmelt.	➢ Increased flooding, leading to property damage, roadway damage, beach erosion, and bluff landslides. ➢ Changes in precipitation patterns may stress storm water infrastructure designed according to historic patterns. ➢ Reduced summer and fall stream flow will stress fish life cycles, making salmon recovery in Seattle streams more difficult.
Sea Level	➢ Chronic Sea Level Rise: Estimates for the increase in base sea level range up to 9" by the 2030s and up to 19" by the 2050s. ➢ Episodic Sea Level Rise: In addition to base sea level rise, storm surges and high tides will increase sea level during these events. The highest observed water level was 38" above base sea level.	➢ Chronic Sea Level Rise: Estimates for the increase in base sea level range up to 56" by 2100. ➢ Episodic Sea Level Rise: Planning estimates for episodic sea level rise remain the same in 2100: 38 inches.	➢ Approx. 700-1000 acres of dry land at risk of being inundated by water. ➢ Significant lost of estuarine beach in Seattle by 2100. ➢ Downtown waterfront may be impacted by episodic flooding during extreme tidal events. ➢ Piers on water side of seawall likely to impacted by sea level rise and flooding. ➢ Low-land industrial area flooding and consequent economic losses and potential release of pollution.

Some Unknowns	➢ How will local air quality be affected by rising temperatures and decreased summer precipitation?
	➢ How will climate change impacts elsewhere affect migration to Seattle? (e.g. movement of people that resulted from Hurricane Katrina)
	➢ How will global impacts on agriculture and fishing affect food supplies and networks in Seattle?
	➢ How will global and national impacts on disease transmission affect public health in Seattle?

References:

- Washington Climate Change Impacts Assessment, Climate Impacts Group, 2009.
- Climate Change 2007 – Impacts, Adaptation and Vulnerability, IPCC Working Group II, 2007.
- A Comprehensive Assessment of the Impacts of Climate Change on the State of Washington, HB 1303 Interim Report 2007.
- Preparing for the Impacts of Climate Change in Washington, PAWG 2007
- Sea Level Rise and Coastal Habitats in the Pacific Northwest, National Wildlife Federation, 2007.
- Sea Level Rise in the Coastal Waters of Washington State, Mote et al., 2008.
- Climate Change and its Effects on Puget Sound, CIG 2005.
- Climate Change 101: Understanding and Responding to Global Climate Change, Pew Center on Global Climate Change, 2009.
- National Research Council. 2012. Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future. Washington, DC: The National Academies Press.

Green Ribbon Commission

Evaluation Framework Approach – Climate Impacts (7.25.12)

Prepared by the Climate Impacts Group, University of Washington, for the Office of Sustainability

The following tables align projected climate change impacts with City of Seattle community outcomes. The impacts summarized below have not been specifically analyzed for the City of Seattle and should therefore be considered illustrative of the range of impacts that could affect the City's ability to meet community outcome metrics.

Community Outcomes / Climate Impacts	Shared Prosperity: Our economy offers… • Local, family–wage jobs • A growing, diverse business base that supports innovation • A place where freight and goods move efficiently • Small business opportunities • Reduced energy costs and increased energy security	Vibrant Communities: Our neighborhoods include… • Desired destinations within a walk (libraries, parks, transit, schools, healthy food, shops etc) • A diversity of housing types • Plenty of safe & easy ways to get around • Open space and healthy natural areas • Access to healthy food	Health & Community: People are… • More physically active • Benefitting from improved air and water quality • Engaged, connected to each other, and giving back • Protected from the effects of disasters • Wasting less time and money stuck in traffic	Social Equity: People have… • Opportunities to engage fully in the community • Access to job training and employment • Housing choices for families of all income levels • A reduced burden from transportation costs on lower income populations	Sustainable Environment: Natural systems are… • Preserved & enhanced • Helping to meet infrastructure needs • Enhancing the livability of our built environment • Managed to meet the needs of future generations
Increasing Temperature					
Higher average summer temperature	(-) Could increase demand for summer cooling, raising summer utility bills for households and businesses *(implications for Seattle City Light revenue not considered here)* (-) Could increase demand summer water, raising summer utility bills for households and businesses *(implications for Seattle Public Utilities revenue not considered here)*	(+) May encourage more walking to destinations in summer, except during extreme heat events *(see below)*	(+) May encourage more outdoor activity, except during extreme heat events *(see below)* (-) May reduce summer air, water quality *(see below)* (-) May increase human exposure to degraded water quality *(see below)* and water hazards (e.g., drowning) as more people choose to recreate in water		(+) Could stimulate productivity of some natural systems, preserving and enhancing the ecosystems services they provide (-) Could encourage the spread of invasive species, pests, and disease in natural systems, reducing ecosystem benefits (-) Wetlands hydrology may be affected by increasing summer temperatures; impact may be exacerbated by projected decreases in

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					summer precipitation and streamflows
Higher average winter temperature	(+) Could decrease demand for winter heating, reducing winter utility bills for families and businesses	(+) Could encourage more walking to destinations in winter (benefit could be tempered by more winter precipitation, *see below*)	(+) May encourage more outdoor activity in winter		
More extreme heat events	(-) Could increase demand for summer cooling, raising summer utility bills for households and businesses (-) Could affect transportation infrastructure (e.g., pavement softening, problems with expansion joints on bridges, slow order for trains), impacting the movement of goods and freight (-) Could put energy transmission infrastructure at risk of overheating, requiring intervention to keep cool (-) Could result in power losses where heat-induced	(-) Could discourage walking to destinations during duration of heat event (more driving) (-) May increase the risk of fire in open spaces and natural areas	(-) Could discourage outdoor activities during duration of heat event (more driving) (-) Increased heat stress could disproportionately impact vulnerable populations, including urban poor, non-native English speakers, children, and the elderly	(-) Increased heat stress could disproportionately impact vulnerable populations, including urban poor, non-native English speakers, children, and the elderly	(-) Could cause heat stress in some species, making them more vulnerable to disturbance from pests and disease (-) May increase the risk of fire in natural areas

Climate Impacts \ Community Outcomes	Shared Prosperity: Our economy offers… • Local, family–wage jobs • A growing, diverse business base that supports innovation • A place where freight and goods move efficiently • Small business opportunities • Reduced energy costs and increased energy security	Vibrant Communities: Our neighborhoods include… • Desired destinations within a walk (libraries, parks, transit, schools, healthy food, shops etc) • A diversity of housing types • Plenty of safe & easy ways to get around • Open space and healthy natural areas • Access to healthy food	Health & Community: People are… • More physically active • Benefitting from improved air and water quality • Engaged, connected to each other, and giving back • Protected from the effects of disasters • Wasting less time and money stuck in traffic	Social Equity: People have… • Opportunities to engage fully in the community • Access to job training and employment • Housing choices for families of all income levels • A reduced burden from transportation costs on lower income populations	Sustainable Environment: Natural systems are… • Preserved & enhanced • Helping to meet infrastructure needs • Enhancing the livability of our built environment • Managed to meet the needs of future generations
	sagging of powerlines causes lines to break (e.g., due to interference from trees)				
Increased summer drought stress on urban landscaping and the natural environment	(-) Could increase summer water demand for irrigation, increasing water bills for households and businesses.	(-) May affect the health of landscaping in open space and natural areas (-) May require more irrigation to maintain health of managed open spaces and natural areas			(-) Could make natural systems more vulnerable to disturbance from pests, disease, and/or fire (-) May require more irrigation to maintain health of managed parts of natural systems
Reduced summer air quality (e.g., more ground-level ozone)		(-) May affect vegetation and ecosystems sensitive to increased ozone levels	(-) May increase health risks for sensitive populations (e.g., people with asthma, cardiac conditions) (-) May make it more difficult (and more costly) to meet urban air quality standards	(-) Health risks associated with poor urban air quality may have a disproportional impact on the urban poor	(-) Could affect vegetation and ecosystems sensitive to increased ozone levels
Reduced summer water quality (e.g. changes in water temperature, dissolved oxygen, nutrients, fecal coliform, etc.)	(-) Could affect ability to meet temperature and other water quality standards required by point-source discharge permits	(-) May reduce access to and use of natural areas (e.g., for swimming, fishing) due to potential health hazards (-) May increase costs associated with controlling	(-) Human exposure to water quality-related health risks could increase as warmer temperatures lead to more water-based recreation		(+/-) May lead to increased stress aquatic species, especially from increasing water temperature; impacts will depend on species and life history stage (some may benefit)

Climate Impacts \ Community Outcomes	Shared Prosperity: Our economy offers… • Local, family–wage jobs • A growing, diverse business base that supports innovation • A place where freight and goods move efficiently • Small business opportunities • Reduced energy costs and increased energy security	Vibrant Communities: Our neighborhoods include… • Desired destinations within a walk (libraries, parks, transit, schools, healthy food, shops etc) • A diversity of housing types • Plenty of safe & easy ways to get around • Open space and healthy natural areas • Access to healthy food	Health & Community: People are… • More physically active • Benefitting from improved air and water quality • Engaged, connected to each other, and giving back • Protected from the effects of disasters • Wasting less time and money stuck in traffic	Social Equity: People have… • Opportunities to engage fully in the community • Access to job training and employment • Housing choices for families of all income levels • A reduced burden from transportation costs on lower income populations	Sustainable Environment: Natural systems are… • Preserved & enhanced • Helping to meet infrastructure needs • Enhancing the livability of our built environment • Managed to meet the needs of future generations
		water quality problems (e.g., reducing non-point source/nutrient runoff, alum treatments)	(-) May affect ability to meet water quality standards, especially for temperature, dissolved oxygen, fecal coliform		(-) May reduce access to and use of natural systems (e.g., beaches, shellfish harvesting, fishing) due to potential health hazards

Climate Impacts / Community Outcomes	Shared Prosperity: Our economy offers… • Local, family–wage jobs • A growing, diverse business base that supports innovation • A place where freight and goods move efficiently • Small business opportunities • Reduced energy costs and increased energy security	Vibrant Communities: Our neighborhoods include… • Desired destinations within a walk (libraries, parks, transit, schools, healthy food, shops etc) • A diversity of housing types • Plenty of safe & easy ways to get around • Open space and healthy natural areas • Access to healthy food	Health & Community: People are… • More physically active • Benefitting from improved air and water quality • Engaged, connected to each other, and giving back • Protected from the effects of disasters • Wasting less time and money stuck in traffic	Social Equity: People have… • Opportunities to engage fully in the community • Access to job training and employment • Housing choices for families of all income levels • A reduced burden from transportation costs on lower income populations	Sustainable Environment: Natural systems are… • Preserved & enhanced • Helping to meet infrastructure needs • Enhancing the livability of our built environment • Managed to meet the needs of future generations
Changes in Precipitation					
Increasing winter precipitation	(+) Could result in increased winter hydropower generation, when local demand in highest *(implications for Seattle City Light revenue not considered here)*	(-) Could discourage more walking to destinations in winter, especially if precipitation is heavier	(-) Could discourage urban outdoor activities winter (impact on snow sports could also be affected, depending on elevation) (-) Use of mass transit could be affected by weather-related delays		
Decreasing summer precipitation	(-) When combined with warmer temperatures, could increase summer water demand, leading to higher summer water bills for households and businesses *(implications for Seattle Public Utilities revenue not considered here)*		(+) Could encourage outdoor activities during summer, although impact is likely to be minimal given already low summer precip amounts		
More extreme winter precipitation	(-) Could produce more localized flooding, impacting movement of freights and goods through low-lying areas (-) Could increase stress on stormwater management	(-) Could discourage more walking to destinations during duration of precip event (more driving)	(-) Could discourage outdoor activities during duration of precip event (more driving) (-) Localized flooding of roads could increase time spent in traffic as	(-) Road closures due to localized flooding could reduce access to mass transit and employment opportunities	(-) Can lead to more landslides, erosion, flooding, and damage to habitat in natural systems (-) Can increase sediment loading in rivers and streams, affecting water

Climate Impacts \ Community Outcomes	Shared Prosperity: Our economy offers… • Local, family–wage jobs • A growing, diverse business base that supports innovation • A place where freight and goods move efficiently • Small business opportunities • Reduced energy costs and increased energy security	Vibrant Communities: Our neighborhoods include… • Desired destinations within a walk (libraries, parks, transit, schools, healthy food, shops etc) • A diversity of housing types • Plenty of safe & easy ways to get around • Open space and healthy natural areas • Access to healthy food	Health & Community: People are… • More physically active • Benefitting from improved air and water quality • Engaged, connected to each other, and giving back • Protected from the effects of disasters • Wasting less time and money stuck in traffic	Social Equity: People have… • Opportunities to engage fully in the community • Access to job training and employment • Housing choices for families of all income levels • A reduced burden from transportation costs on lower income populations	Sustainable Environment: Natural systems are… • Preserved & enhanced • Helping to meet infrastructure needs • Enhancing the livability of our built environment • Managed to meet the needs of future generations
	infrastructure, potentially requiring more costly and/or alternate approaches to managing stormwater		people find alternate routes; mass transit delays also more likely (-) Localized flooding could affect the safety and wellbeing of people in affected areas (e.g., flash floods; people driving through flooded areas) (-) May affect water quality by increasing non-point source pollution runoff and potential for combined sewer overflows		quality and stream conditions for salmonids
Reduced water quality *(e.g., sediment loading, fecal coliform, heavy metals and other pollutants)*	(-) Could affect ability to meet water quality standards required by point-source discharge permits	(-) May reduce access to and use of natural areas (e.g., for fishing) due to potential health hazards (-) May increase costs associated with controlling water quality problems (e.g., reducing non-point source/nutrient runoff)	(-) May affect ability to meet water quality standards (e.g., for suspended solids, fecal coliform)		(-) May affect the viability of species and ecosystems exposed to contaminants from non-point source runoff and other sources (-) May reduce access to and use of natural systems (e.g., beaches, shellfish harvesting, fishing) due to potential health hazards

Community Outcomes ⟍ Climate Impacts	Shared Prosperity: Our economy offers… • Local, family–wage jobs • A growing, diverse business base that supports innovation • A place where freight and goods move efficiently • Small business opportunities • Reduced energy costs and increased energy security	Vibrant Communities: Our neighborhoods include… • Desired destinations within a walk (libraries, parks, transit, schools, healthy food, shops etc) • A diversity of housing types • Plenty of safe & easy ways to get around • Open space and healthy natural areas • Access to healthy food	Health & Community: People are… • More physically active • Benefitting from improved air and water quality • Engaged, connected to each other, and giving back • Protected from the effects of disasters • Wasting less time and money stuck in traffic	Social Equity: People have… • Opportunities to engage fully in the community • Access to job training and employment • Housing choices for families of all income levels • A reduced burden from transportation costs on lower income populations	Sustainable Environment: Natural systems are… • Preserved & enhanced • Helping to meet infrastructure needs • Enhancing the livability of our built environment • Managed to meet the needs of future generations
Changes in Hydrology: *High Flows*					
Increased risk of river flooding *(more pronounced in watershed affected by shifts from snow to more rain and declining snowpack)*	(-) Could produce more regional flooding, impacting movement of freight and goods through low-lying areas (-) Could increase the risk of damage to physical infrastructure (transportation, utilities, communications, etc.) in or near the current 100 year flood zone (-) Could directly impact businesses via more frequent or more severe river flooding and damage to physical infrastructure, which can interrupt commerce and create financial stress (-) May put energy transmission infrastructure at risk of damage from flooding	(+/-) Could affect local (e.g., county-wide) food production and sales of that produce in urban areas by flooding farm land; the direction of the impact (i.e., positive or negative) will depend on how long land is forced out of production, if new sediments deposited in the flooded area are clean (allowing quicker return to production), and if adequate substitutes are available in local markets.	(-) Could more frequently and/or more severely impact households and businesses in or near the current and future 100 year flood zone, leading to financial and emotional stress (-) Could increase time spent in traffic as people find ways around flooded routes; mass transit delays also more likely	(-) Access to mass transit and employment opportunities could be reduced if roads are affected by flooding; impact is more significant for those dependent on mass transit	(-/+) Could damage riparian habitat restoration projects, although flooding could also create new habitat (-) May damage salmon nests ("redds") by flood-induced movement of large rocks along streambeds and riverbeds ("scouring")

Climate Impacts \ Community Outcomes	Shared Prosperity: Our economy offers… • Local, family–wage jobs • A growing, diverse business base that supports innovation • A place where freight and goods move efficiently • Small business opportunities • Reduced energy costs and increased energy security	Vibrant Communities: Our neighborhoods include… • Desired destinations within a walk (libraries, parks, transit, schools, healthy food, shops etc) • A diversity of housing types • Plenty of safe & easy ways to get around • Open space and healthy natural areas • Access to healthy food	Health & Community: People are… • More physically active • Benefitting from improved air and water quality • Engaged, connected to each other, and giving back • Protected from the effects of disasters • Wasting less time and money stuck in traffic	Social Equity: People have… • Opportunities to engage fully in the community • Access to job training and employment • Housing choices for families of all income levels • A reduced burden from transportation costs on lower income populations	Sustainable Environment: Natural systems are… • Preserved & enhanced • Helping to meet infrastructure needs • Enhancing the livability of our built environment • Managed to meet the needs of future generations
Increased risk of erosion in rivers and streams	(-) Can increase vulnerability to flooding if erosion occurs near infrastructure (-) Can increase maintenance costs and cause more closures and delays for repair if erosion occurs near transportation infrastructure (e.g., roads and bridges); closures and delays could impacts movement of freight and goods		(-) Can increase the amount of suspended solids in rivers and streams, potentially affecting ability to meet water quality standards for suspended solids (-) Can increase vulnerability to flooding if erosion occurs near infrastructure		(-) Can increase the amount of suspended solids in rivers and streams, which can increase physiological stress on salmon by impacting their physiology, behavior, and habitat (impacts will differ based on life stage)
Changes in Hydrology: *Low Flows*					
Lower summer streamflows and lengthening of the summer low-flow period *(more pronounced in basins affected by declining snowpack)*	(-) Could result in reduced summer hydropower generation, when opportunities to sell surplus to CA are greatest	(-) May affect health of species in natural areas by reducing flows into natural areas (-) May affect wetlands hydrology by decreasing summer streamflows, especially when combined with projected increases in summer temperature	(-) May contribute to reduced water quality and affect ability to meet water quality standards (e.g., for temperature, dissolved oxygen, fecal coliform), especially when combined with projected increases in summer temperature		(-) May increase physiological stress on salmon (-) May make it more difficult to maintain adequate instream flows for aquatic species (-) May affect hydrology of riparian wetlands by decreasing hydrologic connectivity to streams

Climate Impacts \\ Community Outcomes	Shared Prosperity: Our economy offers… • Local, family–wage jobs • A growing, diverse business base that supports innovation • A place where freight and goods move efficiently • Small business opportunities • Reduced energy costs and increased energy security	Vibrant Communities: Our neighborhoods include… • Desired destinations within a walk (libraries, parks, transit, schools, healthy food, shops etc) • A diversity of housing types • Plenty of safe & easy ways to get around • Open space and healthy natural areas • Access to healthy food	Health & Community: People are… • More physically active • Benefitting from improved air and water quality • Engaged, connected to each other, and giving back • Protected from the effects of disasters • Wasting less time and money stuck in traffic	Social Equity: People have… • Opportunities to engage fully in the community • Access to job training and employment • Housing choices for families of all income levels • A reduced burden from transportation costs on lower income populations	Sustainable Environment: Natural systems are… • Preserved & enhanced • Helping to meet infrastructure needs • Enhancing the livability of our built environment • Managed to meet the needs of future generations
Reduced water quality *(e.g. via changes in water temperature, dissolved oxygen, nutrients, fecal coliform, etc.)*	(-) Could affect ability to meet water quality standards required by point-source discharge permits	(-) May reduce access to and use of natural areas (e.g., for swimming, fishing) due to potential health hazards (-) May increase costs associated with controlling water quality problems (e.g., reducing non-point source/nutrient runoff, alum treatments)	(-) Human exposure to water quality-related health risks could increase as warmer temperatures lead to more water-based recreation (-) May affect ability to meet water quality standards affected by combination of flow volume and temperature		(-) May affect access to and use of natural systems (e.g., beaches, shellfish harvesting, fishing) due to potential health hazards or need to protect sensitive species

Climate Impacts / Community Outcomes	Shared Prosperity: Our economy offers… • Local, family–wage jobs • A growing, diverse business base that supports innovation • A place where freight and goods move efficiently • Small business opportunities • Reduced energy costs and increased energy security	Vibrant Communities: Our neighborhoods include… • Desired destinations within a walk (libraries, parks, transit, schools, healthy food, shops etc) • A diversity of housing types • Plenty of safe & easy ways to get around • Open space and healthy natural areas • Access to healthy food	Health & Community: People are… • More physically active • Benefitting from improved air and water quality • Engaged, connected to each other, and giving back • Protected from the effects of disasters • Wasting less time and money stuck in traffic	Social Equity: People have… • Opportunities to engage fully in the community • Access to job training and employment • Housing choices for families of all income levels • A reduced burden from transportation costs on lower income populations	Sustainable Environment: Natural systems are… • Preserved & enhanced • Helping to meet infrastructure needs • Enhancing the livability of our built environment • Managed to meet the needs of future generations
Sea Level Rise					
More frequent periodic or permanent inundation of low-lying areas *(amplified in coastal areas subject to river flooding as well)*	(-) May increase damage to transportation infrastructure, impacting movement of freight and goods (-) Could lead to more business interruptions in areas affected by more frequent inundation (-) May put energy transmission infrastructure at risk of damage from flooding	(-) Could lead to more damaged infrastructure in areas located in or near inundation zones (-) Could temporarily or permanently affect access to open spaces and natural areas within inundation zones	(-) Could lead to more damaged infrastructure in areas located in or near inundation zones (-) Increase in periodic inundation of roads could increase time spent in traffic as people find alternate routes; mass transit delays also more likely	(-) Access to mass transit and employment opportunities could be reduced if roads are affected by inundation; impact is more significant for those dependent on mass transit (-) Could reduce viability of, and access to, traditional plants, animals, and medicines by tribes	(-) Can lead to more landslides, erosion, flooding, and damage to habitat in natural systems (+/-) May lead to shifts in coastal habitat types (-) Could temporarily or permanently affect access to natural systems
Saltwater intrusion into (and corrosion of) stormwater collection system	(-) Can cause costly damage to stormwater infrastructure (-) Can make it more difficult for stormwater to drain by affecting pressure gradients, requiring pump stations or more costly infrastructure (depending on location)				

Community Outcomes / Climate Impacts	Shared Prosperity: Our economy offers… • Local, family–wage jobs • A growing, diverse business base that supports innovation • A place where freight and goods move efficiently • Small business opportunities • Reduced energy costs and increased energy security	Vibrant Communities: Our neighborhoods include… • Desired destinations within a walk (libraries, parks, transit, schools, healthy food, shops etc) • A diversity of housing types • Plenty of safe & easy ways to get around • Open space and healthy natural areas • Access to healthy food	Health & Community: People are… • More physically active • Benefitting from improved air and water quality • Engaged, connected to each other, and giving back • Protected from the effects of disasters • Wasting less time and money stuck in traffic	Social Equity: People have… • Opportunities to engage fully in the community • Access to job training and employment • Housing choices for families of all income levels • A reduced burden from transportation costs on lower income populations	Sustainable Environment: Natural systems are… • Preserved & enhanced • Helping to meet infrastructure needs • Enhancing the livability of our built environment • Managed to meet the needs of future generations
Coastal and nearshore habitat loss and gain *(varies by location and opportunity for shoreward migration)*		(-) Viability of, and access to, coastal food resources could be affected		(-) Could reduce viability of, and access to, traditional plants, animals, and medicines by tribes	
Increased storm surge	(-) Can cause costly damage to coastal infrastructure and impact movement of freight and goods when transportation infrastructure is damaged.	(-) Could temporarily or permanently damage open spaces and natural areas in coastal areas, affecting public use of those spaces and ecosystem benefits	(-) Could increase property and infrastructure damage, resulting in increased financial and emotional stress for coastal residents	(-) Access to mass transit and employment opportunities could be reduced if roads are affected by inundation; impact is more significant for those dependent on mass transit	(-) Could temporarily or permanently damage natural systems in coastal areas, affecting public use of those areas and ecosystem benefits (-) Could damage coastal restoration projects, affecting the efficacy of the project
Increased coastal erosion	(-) Can increase vulnerability to coastal flooding, sea level rise, and storm surge if erosion occurs near infrastructure	(-) Could temporarily or permanently damage open spaces and natural areas in coastal areas, affecting public use of those spaces and ecosystem benefits	(-) Can increase vulnerability to flooding, sea level rise, and storm surge if erosion occurs near infrastructure	(-) Can increase vulnerability of transportation infrastructure to flooding, sea level rise, and storm surge (and with that access to employment in affected areas)	(-) Could temporarily or permanently damage natural systems in coastal areas, affecting public use of those areas and ecosystem benefits (-) Could damage coastal restoration projects, affecting the efficacy of the project (+) Could promote natural beach building and habitat

Community Outcomes / Climate Impacts	Shared Prosperity: Our economy offers…	Vibrant Communities: Our neighborhoods include…	Health & Community: People are…	Social Equity: People have…	Sustainable Environment: Natural systems are…
	• Local, family–wage jobs • A growing, diverse business base that supports innovation • A place where freight and goods move efficiently • Small business opportunities • Reduced energy costs and increased energy security	• Desired destinations within a walk (libraries, parks, transit, schools, healthy food, shops etc) • A diversity of housing types • Plenty of safe & easy ways to get around • Open space and healthy natural areas • Access to healthy food	• More physically active • Benefitting from improved air and water quality • Engaged, connected to each other, and giving back • Protected from the effects of disasters • Wasting less time and money stuck in traffic	• Opportunities to engage fully in the community • Access to job training and employment • Housing choices for families of all income levels • A reduced burden from transportation costs on lower income populations	• Preserved & enhanced • Helping to meet infrastructure needs • Enhancing the livability of our built environment • Managed to meet the needs of future generations
					development if eroded sediments as re-deposited in nearby areas

Green Ribbon Commission
Draft Climate Change Adaptation Recommendations

<u>Context</u>

While concerted efforts to reduce climate pollution are critical, historic emissions have and will continue to impact the global climate. Additionally, the lack of progress on future global emissions means that additional climate change which will exacerbate the impacts communities are already experiencing. Therefore, it is critical that Seattle is preparing for the impacts of a changing climate.

Adaptation planning is a complex challenge. The science of projecting impacts is evolving and complicated by the uncertainty of future global emissions reduction efforts.   The result is a planning environment where past experience is not predictive of future conditions. The systems and plans put in place to enhance resilience to climate impacts must be frequently re-evaluated based on best available science. Adaptation planning can be informed by and is best executed in coordination with other relevant planning efforts designed to foster the city's resilience such as earthquake preparedness, emergency response, and public health.

The City of Seattle has been working on climate change adaptation planning for a number of years, most notably the leadership efforts of Seattle Public Utilities and Seattle City Light. However, the City does not have a comprehensive Climate Change Adaptation Plan, which is the City hopes to do in 2013. These recommendations are intended as short-term (1-5 year) recommendations and guiding principles to enhance the City's preparedness.

<u>Adaptation Planning</u>

City infrastructure, operations, services, and regulatory functions are vulnerable to the impacts of climate change including precipitation, temperature, and sea level rise changes. While we already experience and have strategies for responding to the effects of flooding, heat events, and king tides, the frequency and intensity of these events—and the resulting impacts—are expected to increase.

An integrated and interdisciplinary planning approach is needed to maximize the efficacy of planning efforts and to maximize co-benefits such as fostering healthy communities, natural systems, social equity, and shared prosperity. While significant adaptation assessment and planning efforts have been underway in the City utilities, a citywide comprehensive strategy is needed.

> ➢ In addition to working to reduce greenhouse gas emissions, it is imperative that the City focus on climate change adaption to enhance the resilience of City infrastructure and services to the changing climate. The City should conduct a citywide assessment of the impacts of temperature, precipitation, and sea level rise on City infrastructure, operations, and services, and develop a strategy to enhance community resilience to changing climate conditions.

Green Stormwater Infrastructure

Green stormwater infrastructure (GSI) prevents pollution and habitat destruction by mimicking the way natural water systems slow, cleanse and infiltrate stormwater. In developed areas, GSI also preserves the finite capacity of our existing "gray" (pipe and pump) stormwater facilities and manages increasing amounts of rainwater with a reduced reliance on the construction and operation of greenhouse gas intensive built infrastructure.

GSI can be sited and designed in ways that advance multiple urban sustainability goals simultaneously, including: urban water quality, walkability and pedestrian safety, tree canopy recovery, neighborhood greenway development, and open space development. GSI is viewed as a useful adaptation strategy for urban drainage as it enhances flexibility in managing the uncertainty of future precipitations changes caused by climate change.

➢ The City should adopt a citywide green stormwater infrastructure policy that defines GSI as the preferred stormwater management toolset and affirms the goal of maximizing the use of GSI to the extent feasible.

Regional Approach to Adaptation
Many aspects of responding to climate change impacts are best addressed at a regional scale as natural systems and built infrastructure do not stop at jurisdictional boundaries. Preparing for impacts, such as sea level rise (e.g. shoreline management, built infrastructure solutions, and flood management) can best be managed in collaboration with the County and neighboring cities to create a coordinated approach that enhances preparedness, to increase the cost effectiveness of solutions, and mitigate incentives to relocate.

➢ The City should collaborate with regional partners in addressing the impacts of sea level rise, including evaluating the full range of projected impacts based on best available science and preparing a worst case scenario response strategy.

Health & Wellbeing
Anticipated climate change impacts to human health and wellbeing include increased heat stress, respiratory diseases, and vector-borne diseases. Our most vulnerable populations, including lower income, recent immigrant, and older residents, are at greater risk of these health impacts and often have fewer resources to respond. As our population ages and income inequities become even more pronounced, fostering the resilience of our more vulnerable residents and supporting their recovery after extreme events becomes increasingly critical.

➢ Supporting vulnerable populations should be a priority of the City's adaptation strategy.

Core Recommendations

Recommendations that serve as the backbone of the transportation and land use strategies.

1. Funding is the most significant challenge we face in meeting our transportation needs. It is imperative that the City <u>develop and maintain local funding sources,</u> including renewing the Bridging the Gap (BTG) levy, and prioritizing new revenues for multimodal transportation including transit, cycling, and walking infrastructure and maintenance.

2. Over 100,000 new residents and jobs are anticipated over the next 20 years. To enhance Seattle's livability, <u>attract new residents and jobs to nodes</u> well served by transit and non-motorized transportation options, and plan land use to provide more services that meet their daily needs within a convenient walk.

3. <u>Expand transit infrastructure and service,</u> a critical foundational strategy for meeting our land use and climate goals. While transit entails high capital costs, it is an investment worth making because it enables the City to achieve its land use goal of concentrating growth, while helping to reduce vehicle emissions.

4. The City, County, PSRC, and State should more strongly focus land use and transportation planning and funding decisions to <u>achieve adopted climate goals</u>.

Guiding Recommendations

Recommendations intended to guide how transportation and land use strategies are implemented.

1. In order to address the effects that gentrification can have on neighborhoods, the City should adopt policies to <u>assist existing residents and businesses to remain and thrive</u> in areas targeted for transit oriented development.

2. To meet social equity and mobility goals, the transportation options that people need to get around should be in place as <u>new pricing strategies</u> are implemented, and revenue from new pricing strategies should be used to enhance travel options.

Draft Leadership Actions
Actions that are essential to advancing the city's climate goals yet are also significant lifts to implement.

FUNDING
- **Renew the Bridging the Gap levy** and prioritize new revenues to multimodal transportation including investments in transit, pedestrian and cycling improvements and maintenance
- Advocate for legislation to secure local or transit agency authority to levy a motor vehicle excise tax (**MVET) with variable rates** based on the GHG emissions intensity of vehicles, with the revenues to be used for transit and other transportation choices. Implement an MVET at the City, County or regional level.
- Create a city **development authority*** or similar mechanism to form public private partnerships and use district-based funding mechanisms (e.g. **tax increment financing***, tax abatement, simplified local improvement districts) to promote and shape transit communities while supporting existing residents and businesses
- Work with regional partners including PSRC to advocate for state and federal legislative authorization and regional implementation of **variable congestion pricing*** on all limited access highways and potentially also on major arterials in Central Puget Sound. Legislation should provide regional authority to set rates and objectives and to dedicate revenues to multimodal transportation including transit, bicycle, and pedestrian operations, maintenance and improvement projects.
- Levy a **tax on off-street parking***, to replace the current commercial parking tax authority. Include tiers in the new tax structure to account for climate impacts based on factors such as the transit accessibility and density of the area

POLICY
- Provide for the retention and creation of **affordable commercial space and family-sized housing** in transit communities through zoning requirements and joint development projects*

INFRASTRUCTURE
- Develop a comprehensive, connected network of on-street **separated bicycle facilities** in the Center City and Urban Villages.
- By 2050, provide fast, frequent and reliable transit to those who live, work and play in Seattle by implementing the Seattle Transit Master Plan's vision for **high capacity transit**.

VEHICLE FUELS & TECHNOLOGY
- Substantially increase the number of bus route miles planned for conversion to **Electric Trolley Bus**.

* Actions require legislative changes to implement

Quick Start Actions

Actions that can be done within the next 1-3 years to pilot new ideas, test new approaches, and build support for leadership actions.

Corridor Plan:

The City has various modal and land use plans that are complementary. However, a more comprehensive and integrated corridor approach would allow more effective planning helping to identify corridor-specific priorities and location-specific opportunities, as well as daylight barriers to maximizing transportation outcomes.

➢ Develop and implement a comprehensive land use and multimodal plan in a high priority transit and bicycle corridor with the goal of shifting more trips to travel modes that generate fewer, or no, greenhouse gases.

Center City Separated Bicycle Track:

Increasing bicycle use through the Center City is an essential step to manage future travel demand and also encourage more people to commute to work. The Bicycle Master Plan update is underway and will identify the preferred route.

➢ Build a separated bicycle track in the Center City.

Right-of-Way Reallocation:

Underutilized portions of the right-of-way can be converted to public uses to enhance public spaces and encourage pedestrian use of the space. A successful example of such a project includes the Westlake Center plaza, which is the staging area for the start of the Streetcar Line.

➢ Reallocate an excess portion of the public right-of-way in a selected area from general traffic use to a public/pedestrian space such as a plaza or parklet.

Wayfinding Application:

The popularity of the mobile information application, One Bus Away, highlights the value of real time travel information. A comprehensive application that provides travel information for walking, cycling, and transit would encourage travel by the full range of non-auto modes.

➢ Launch an open source competition to develop mobile information application(s) for real-time multi-modal access, mobility and wayfinding information to increase use of transit, biking and walking.

Safe Routes Projects:

The Safe Routes to School program is an effective means of encouraging students to walk or bike to school. By enhancing the safety of the route more students are choosing a healthy alternative to being driven to school.

➢ Build on the Safe Routes to Schools program by implementing Safe Routes projects to improve pedestrian connections to transit and neighborhood business districts.

Funding
Funding multi-modal transportation infrastructure, service, and maintenance.

Context:
The biggest challenge to realizing our transportation goals is funding. We know what to do to improve mobility while reducing VMT; however, we need to increase our capacity to fund actions. It is important to note that:
- Base transportation funding is down more than 20% since the Bridging the Gap (BTG) levy was approved. The reductions are due to a combination of inflation, caps on tax increases that are lower than inflation, and stagnant tax receipts due to reduced driving and the economic downturn.
- BTG filled only part of our transportation needs. The City remains unable to fund most improvement projects identified in city-wide modal master plans or address all deferred maintenance.
- If BTG is not renewed, or a new funding source is not implemented to provide revenue in 2016 and beyond, SDOT could lose about one-third of its funding – severely impacting its ability to operate, maintain and improve transportation and support the implementation of the Climate Action Plan.

Draft Recommendations:
All are priority Leadership and Legislative Actions
- Renew the Bridging the Gap levy and prioritize revenues to multimodal transportation including investments in transit, pedestrian and cycling improvements and maintenance.
- Advocate for legislation to secure local or transit agency authority to levy an motor vehicle excise tax (MVET) with variable rates based on the GHG emissions intensity of vehicles and implement an MVET with funding dedicated to transit and other transportation choices.
- Advocate for legislative authority and create a city development authority that would partner with the private sector and use district-based funding mechanisms (e.g. tax increment financing, tax abatement, local improvement districts) to promote and shape transit communities.
- Work with regional partners including PSRC to advocate for legislative authorization and regional implementation of variable congestion pricing on all limited access highways and potentially also on major arterials in Central Puget Sound. Legislation should provide regional authority to set rates and objectives and to dedicate revenues to multimodal transportation including transit, bicycle, and pedestrian projects.

Policy & Planning

Aligning land use and transportation strategies and investments to support communities where people can walk, bike, or take transit to accomplish many of their daily activities.

Context:
Policies and legislation that guide public and private land development have long-term impacts on how people travel. Meeting the growing demand for conveniently located homes and businesses in walkable neighborhoods can significantly reduce the number of miles Seattleites drive, shrinking the City's carbon footprint while giving people more housing choices and better access to their daily needs.

Draft Recommendations:
- Provide for the retention and creation of affordable commercial space and family-sized housing in transit communities through zoning requirements and joint development projects.
- Continue to transition from policies that assume auto access and travel to policies that actively promote diverse travel options.
- Support development of shops, services, recreation, and open space within the City's Urban Villages and transit communities.
- Provide incentives to encourage local businesses to support and leverage the benefits of bicycle and pedestrian access.
- Increase the diversity of housing types in single and multi-family areas.
- Increase flexibility in neighborhood commercial zones to preserve and promote business and job opportunities.
- Expand the use GIS tools to implement an enhanced walkshed approach to build on the current Urban Center/Urban Village strategy to focus City resources and foster next generation transit communities.
- Integrate land use and mobility planning in a high priority multimodal corridors.

> **Pilot Project**:
> Develop and implement a complete land use and multimodal mobility plan in a high priority transit and bicycle corridor.

Planning Processes

Integrating climate goals into planning and funding processes.

Draft Recommendations:
- Update the Comprehensive Plan to better align with climate goals and foster clear linkages between goals, policies and related implementation plans.
- Develop a City prioritization tool to ensure consideration of GHG emissions reduction when updating transportation and land use plans, policies, and implementation.
- Develop a Freight Master Plan with goals to improve the efficiency and reduce the GHG emissions impact of goods movement.

Transportation Infrastructure & Service

Building transit, pedestrian, and bicycling infrastructure and improving service to expand the range of effective transportation options.

Context: Streets and sidewalks provide pathways to get us from here to there but we can also use them as opportunities for making community connections, supporting active lifestyles and contributing to vibrant neighborhoods. We're prioritizing transit, building more sidewalks, making more space available for bicycles and creating hubs where people can connect between modes. By offering more travel choices we also reduce auto use and lessen congestion for freight and goods delivery. In doing so, we can build a transportation system that supports safe, healthy, and prosperous communities, creates a dependable, connected and equitable network and promotes place-making.

Draft Recommendations:

Transit
- Implement the four High Capacity Transit (HCT) Corridors identified in the Transit Master Plan by 2030 and as ridership increases, provide High Capacity Transit on all priority corridors by 2050.
- Add transit service to high demand routes and upgrade service on other routes to expand the Frequent Service Network.
- Implement capital improvements to Priority Bus Corridors identified in the Transit Master Plan.

Walking
- Enhance sidewalks, crossings and public places in Urban Centers and Urban Villages in accordance with the priorities established in the Pedestrian Master Plan.
- Widen sidewalks and improve crossings of arterial streets to connect Urban Centers and Urban Villages.
- Building on the Safe Routes to School program, implement Safe Routes projects to improve pedestrian connections to transit and business districts.

Pilot Project
Reallocate an excess portion of the public right-of-way in a selected area from general traffic use to a public/pedestrian space such as a plaza or parklet.

Cycling
- Develop a comprehensive, connected network of on-street **separated bicycle facilities** in the Center City and Urban Villages.
- Develop a citywide network of neighborhood greenways on traffic calmed residential streets.
- Expand quality on-street bike racks and facilitate provision of secure off-street bike parking.
- Implement intersection safety and priority treatments on primary bicycle corridors.

Leadership Action:
Develop on-street separated bicycle facilities within the Center City with connections to and through Urban Villages.

Pilot Project:
Implement a bike sharing program in Center City and adjacent neighborhoods.

Transportation Demand Management (TDM)

Improving the efficiency of the transportation system by impacting how, when and where people travel.

Context:

By expanding education and incentive programs, Transportation Demand Management actions will reach new markets and leverage the investments made in transit, cycling, and walking to maximize the effectiveness of those investments.

Draft Recommendations:

- Work with TMA's and community groups to develop, market, and negotiate bulk purchase of a universal transit pass for residents of new multi-unit buildings.
- Encourage and support vehicle sharing and ridesharing.
- Require provision of cash or transportation benefits in lieu of parking subsidies for all establishments with 100 or more employees that offer such subsidies.
- Provide customized trip planning information directly to individuals through employers, property managers, etc.

Pilot Projects:

Wayfinding App - Launch an open source competition to develop mobile information application(s) for real-time multi-modal access, mobility and wayfinding information.

Fleet Sharing – Support a major institutional or corporate fleet sharing pilot project sharing fleet vehicles outside of business hours or contracting with a car sharing service for business mobility.

Parking

Leveraging parking management to improve access, maintain availability to support businesses, and encourage use of non-auto modes.

Context:

The most important use of on-street and public off-street parking in downtown and commercial districts is for short-term customer access to businesses and services. Poorly managed parking can make it hard for customers to get to businesses and can cause employees and other long-term parkers to make auto trips and use parking spaces that could better be used for customers.

Draft Recommendations:

- Price on-street parking in areas where free on-street parking is typically congested with rates. adjusted to maintain parking availability; dedicate revenue to access and streetscape improvements.
- Continue to establish parking maximums in transit communities while protecting adjacent areas from spillover impacts.
- Continue to improve customer parking information (e.g. expand E-park, enhance web user interfaces, and require consistent parking rate signage).

Legislative Action:

Advocate for state legislative authority to levy a tax on off-street parking which can be tiered to account for climate impacts based on factors such as the transit accessibility and density of the area.

Congestion Pricing & Other Auto User Fees

Using pricing strategies to increase revenues and encourage walking, biking, and riding transit.

Context:

Region-wide congestion pricing and other auto user fees can reduce traffic and emissions, and may generate substantial revenue to fund other strategies. Variable pricing of all limited-access highways and major arterials in the region is the highest impact and most cost-effective strategy for reducing transportation sector emissions and generating revenues to support other transportation modes.

Draft Recommendations:

- Work with regional partners including PSRC to advocate for legislative authorization and regional implementation of variable congestion pricing on all limited access highways and potentially also on major arterials in Central Puget Sound. Legislation should provide regional authority to set rates and objectives and to dedicate revenues to multimodal transportation including transit, bicycle, and pedestrian projects. (Also a key funding strategy.)
- Evaluate and advocate for legislative authorization of pricing mechanisms that also provide revenue to sustainable transportation options (e.g. impact fees, higher license fees for 2nd and 3rd vehicles, street utility fees, vehicle pollution taxes, etc.).
- Provide information on the benefits of pricing strategies to meet city economic, social, and environmental goals.

Legislative Action:

Advocate for state legislative authority to enable tolling of state highways and to provide a regional entity with authority to set toll rates and to permit expenditure of revenues on mulitimodal transportation improvements and TDM strategies with revenues distributed to local jurisdictions.

Vehicle Fuels & Technology

Fostering a low carbon transportation system by supporting development and adoption of next generation biofuels and increasing the electrification of the transportation system.

Context:

Transitioning to clean vehicle fuels and technologies has much potential to reduce emissions from transportation. However, these strategies do not have the significant co-benefits of the other strategies in terms of improved transportation choices. Although state and federal governments regulate vehicle fuels and economy, the City may play an important role by advocating for standards, encouraging adoption, and acting as an early adopter as new options come to market.

Draft Recommendations:

- Substantially increase the number of bus route miles planned for conversion to Electric Trolley Bus.
- Provide public support for private electric vehicle adoption.
- Support development and adoption of next generation bio-fuels.

Leadership Action:

Substantially increase the number of bus route miles planned for conversion to Electric Trolley Bus.

Draft Meeting Summary
Green Ribbon Commission Meeting #3
Outreach & Engagement
July 12, 2012
3:00 p.m. – 6:00 p.m.
Seattle City Hall, Bertha Knight Landes Room

3:00   Welcome & Introductions

Meeting Notes:
The Director of the Office of Sustainability and Environment (OSE) welcomed the Green Ribbon Commission (GRC) to the meeting and led a round of introductions from meeting participants (**see Attachment 1**).

3:10   Administration

Meeting Notes:
The GRC briefly reviewed the draft June 18 meeting summary and approved it by consensus.

3:20   Building Energy Recommendations

Meeting Notes:
- OSE noted that, moving forward, it plans to provide draft recommendations in advance of the GRC meetings, as it will be easier to discuss drafted recommendations instead of both developing recommendations and discussing them at meetings.
- The GRC discussed the five building energy sector recommendations drafted by OSE. There was some confusion about these recommendations, since they were broad and not addressed to a specific audience. It was clarified that once the GRC determines if these are the best themes to highlight, the GRC can add detail on specific building energy recommendations at the end of this process as part of the final recommendations.
- In order to add detail on building energy recommendations, the GRC will need to identify a limited number of actions (based on the Technical Advisory Group (TAG) recommendations) that Seattle should take in the next 1–3 years to demonstrate leadership, build momentum locally, and have a big impact nationally. GRC members individually voted on their top three building energy actions when they arrived at the meeting. Based on this vote, the GRC will be able to add "meat" to the final building energy recommendations.

Building Energy Recommendations Discussion
- Overall, GRC members agreed with the five draft recommendations, as posed by OSE. However, GRC members noted that the recommendations should continue to be reworked. Suggested revisions included addressing:
    o The need to develop a cultural vision;
    o The benefits of these recommendations, especially related to added jobs;
    o Building support from people in the community via a social marketing scheme so that people value green buildings. Building human support is as important as building buildings;
    o Reducing carbon-intense energy sources;
    o What equity looks like in terms of policy design; and
    o The phrase "build a culture of energy efficiency," which is hard to define.

- The recommendations could be put into a hierarchy, as some actions will help accomplish other actions (e.g. culture change must come first). How do we decide which actions should rise to the top?
    - It is hard to get a sense of each action's proportion. There needs to be a way of evaluating each action based on its size and scope.
- Transparency with the public is essential if the public are to become active supporters of the actions.
- A few GRC members expressed concern about recommendation #5, which focuses on outcome-based approaches to building energy improvements. One participant felt the prescriptive-based approach has been successful and should not be so easily discounted. Another participant recommended a hybrid approach—including prescriptive and performance-based elements, with outcomes being tracked for compliance.

Leadership Actions Discussion

- The outcome of the vote on leadership actions was as follows (top three actions in bold):
    1. **Outcome-Based Energy Efficiency Incentive Pilot (15 votes)**
    2. **Meter-Based Financing Pilot (9 votes)**
    3. **Property Tax-Funded Incentives (8 votes)**
    4. Rental Housing Property Tax Exemption (6 votes)
    5. Aggressive Adoption of Smart Meters (6 votes)
    6. Outcome-Based Energy Code Pilot (5 votes)
    7. Retro-Commissioning Program (5 votes)
    8. Energy Code to Passive Heating and Cooling Standards (2 votes)
    9. Point of Sale Home Energy Ratings (1 vote)
    10. District Energy Pilot (0 votes)
- It is essential that these concepts be more clearly defined (either in the title or description). GRC members were confused, so the public will also be confused.
    - It was noted that "outcome-based" actions refer to actual savings, which is a shift from assumed/designed savings.
- It was suggested that buildings be required to publish their data—this would be easy to do.
- It is important to coordinate with other efforts that dovetail with what the GRC is proposing. For example, the City of Seattle just completed its 5-year strategic plan, which discusses Smart Meters. (It was clarified that Smart Meters were not excluded from the strategic plan, but implementation will begin in 2015.)
- Incentives can help complete a lot of building energy work. One suggestion was to add another layer of incentives for reducing carbon. There was a question about the best way to fund additional incentives and if funding should come from a property- tax or another source. A pilot program may be required.
- Look at obtaining capital to address energy actions for existing buildings.
- A subgroup will further discuss the recommendations and refine the leadership actions.

4:30   Community Outreach Recommendations

Meeting Notes:
OSE is conducting outreach to let people know that it is developing the Climate Action Plan (CAP) and to provide the opportunity for comment. OSE is engaging the community in three ways.

1. **Community Engagement through Underserved Communities**
   - Public Outreach and Engagement Liaisons (POEL) have been conducting outreach in underserved communities on behalf of OSE, and 13 individual meetings will be held since it is often hard to reach this population through "town hall" style meetings. POELs have been pretty successful at reaching this population so far.
   - OSE is also releasing stories about our vision through Ethnic Media.
2. **Community Engagement through the General Public**
   - Outreach was conducted at District Council meetings
   - Brown bag sessions will be conducted.
   - OSE will solicit comments via the web, blog, e-newsletter, etc. on the draft strategies.
   - Additional outreach efforts were noted in the meeting materials.
3. **Community Engagement through Stakeholders/Thought Leaders**
   - Brown bag sessions were conducted.
   - Targeted outreach is being conducted via phone calls/emails.
   - Additional outreach efforts were noted in the meeting materials.

OSE reviewed its recommendations on how to build a culture of support for the Climate Action Plan, which included:

1. **Building Community Commitment to the CAP Vision and Outcome**
   What is needed to build a culture of support? This is needed for widespread implementation of the CAP.
   a) Help people *see* the vision of the future.
   b) Use case studies to illustrate the connection between community goals and climate action.
2. **Building Community Momentum and Commitment to Passing Policy**
   a) Develop a network of community allies that help mobilize support for implementation of the CAP.
   b) Embed affordability and equity into all aspects of policy and program design so that the story of climate action is also the story of enhancing equity.
   c) Provide opportunities for the public to be involved in policy design and implementation.

Green Ribbon Commission members provided comment on these proposed recommendations. It was noted that these recommendations should be refined based on the discussion.

Climate Action Plan
- One GRC member noted that the group should develop the underlying narrative behind the CAP before developing the specifics. Are we crafting a story that is compelling?
- These recommendations feel too "top-down." The language "build a culture of support" implies that we are trying to sell something. The values of the CAP must be woven into our culture instead of asking people to support the CAP.

Funding
- Is there money to implement these recommendations? In the abstract, these recommendations are good, but can they be executed? To compete in the current environment, strategies need to be matched with available money. OSE should consider joining forces with existing efforts and utilizing existing messages to save money.
  o OSE liked the idea of forming partnerships, as the government might not be the best messenger.

<u>Vision</u>
- One barrier to overcome is that people do not always see the big picture. For example, one might focus on the fact they are losing parking rather than the broad goal resulting from it. People think climate change is in conflict with their other values. It will be important to connect the smaller pieces to the broader vision.
- It is hard to get people excited about carbon neutrality. Our goal should remain driven by carbon neutrality, but when we talk to the public, we need to broaden what we're selling. For example, people will see more immediate benefits to their local community from health than they will from carbon neutrality.
  - To get people to change their behavior, the narrative needs to be personal and show how individuals will be impacted.
  - The challenge is to connect the climate (which many are tired of hearing about) to different ideas (jobs, health, etc.) in a powerful way.
- One GRC member felt an important question to answer is how humans handle excess. What is the compelling reason for humans to limit excess? We should figure out how to make using things "less sexy."
- One GRC member suggested looking at PlaNYC, an effort released by New York City's Mayor Bloomberg in 2007 to prepare the city for population growth, strengthen the economy, combat climate change, and enhance the quality of life for residents. The plan identifies three significant challenges and how the community will benefit from addressing these challenges. Seattle must answer the question: What are we going to do for Seattle residents?
- It was noted that through the CAP, we are selling a product, but we are having trouble figuring out what we are selling. The GRC must figure out what "product" we are selling.

<u>Timing</u>
- One GRC member asked if the timeline for these recommendations is limited or ongoing.

<u>Community/Public Engagement</u>
- Concern was expressed about hearing from the community early in this process. Engaging the community in the development of the CAP will result in buy-in. One GRC member expressed that crowd-sourcing should not take place after the GRC's work is complete so that the GRC does not have to redo its work.
  - It was noted that some data from community members has already been collected and that the intent is to get early buy-in from stakeholders. Many community members have also been looking at the Visualization Project sketches for an alternative future.
- There was a suggestion to use texting, Facebook, and Twitter as ways for the community to provide input.
- The best way to communicate to parents is through schools. One GRC member suggested working with schools, through a program like Shrinking Bigfoot, to get the message out.
- It is important to answer the following questions:
  - Who are your vocal non-supporters, and what can we do to make the non-supporters into supporters? What is driving them, and what can you learn from this?
  - Who are your quiet supporters (the ones that do not usually participate)? How can we get them to participate?
- Another GRC member recommended using a social marketing approach. Since there are many sub-communities in Seattle, there should be more research conducted on where these sub-communities are, what their concerns are, and how to address them.
- One Co-Chair noted that the GRC members were selected to be a representative pool of the community, which is significant. The Committee should not spend too much time worrying about how to sway those opposed to the CAP because they will fail. The GRC should focus on

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who will be allies so that support from the community is strong enough to overcome the opposition.

5:15	**Climate-Friendly Community Visualization Project**

Meeting Notes:
- OSE introduced two members of the Visualization Project team.
- The Visualization Project attempts to illustrate synergies and tangible outcomes of the Climate Action Plan.
- Images of a climate-friendly community have been utilized by POELs at ethnic community meetings and have been well received.
- OSE is working to refine the narrative to be as engaging as possible.
- OSE reviewed a PowerPoint presentation and handout outlining the project's current narrative for "building a livable future." The GRC discussed whether the narrative is a compelling story and if the right values are being addressed. Comments included:
  - General
    - The phrase "secure our energy future" is confusing. There was a suggestion to focus on "energy resiliency and independence" instead.
    - Change the last slide from "climate-friendly city" to "healthy city". "Climate" should not be referenced in this narrative, as it is ambiguous.
    - The narrative is missing language on having quality education and good schools.
  - Have More Time for Family and Friends
    - One GRC member noted that having more time would enable people to engage in new activities rather than just spend that time at home.
  - Save Money for the Things That Matter
    - The narrative is missing language on stable, secure, well-paying jobs. Seattle will be poised to be a city in which you can get a good job.
    - Include "career creation" rather than "job creation", since living-wage careers apply to both single individuals and families.
    - The word "save" is overused and is unquantifiable; consider rephrasing this statement to "spend less".
  - Improve our Health and Wellbeing
    - Connect air pollution from cars to health by referencing asthma and respiratory disease rates.
    - Consider adding that wholesome, local food would be available.
    - Building good social connections is a great indicator for health.
    - Consider qualitative data, such as the amount of time spent in the car versus time spent walking or biking.
- There was not time to discuss the rest of the value statements.
- OSE was hoping there would be time for GRC members to prioritize the narratives based on which are the most compelling stories, since the narrative is currently too broad. A handful of GRC members provided hand-written feedback on prioritization since there was not enough time to discuss this.
- OSE will schedule a meeting with the project team for those that would like to discuss this project further.

5:30	**Adjourn**

Meeting Notes:
- The Climate Change Adaptation optional meeting on August 2 was cancelled.
- The next GRC meeting is August 9, 3:00–6:00 pm, Seattle Municipal Tower, Room 4050.

Attachment 1: Meeting Participants

Green Ribbon Commission Members			
Last	**First**	**Affiliation**	**Attended?**
Hayes ***Co-Chair**	Denis	President, Bullitt Foundation	✓
Koo ***Co-Chair**	Doris	Senior Advisor, Enterprise Community Partners	✓
Bagsby	Sean	Vice President, International Brotherhood of Electrical Workers, Local 46	✓
Carrasco	Jorge	Superintendent, Seattle City Light	☐
Duvernoy	Gene	President, Forterra	☐
Fleming	Dr. David	Director and Health Officer, Public Health – Seattle & King County	✓
Franz	Hilary	Executive Director, Futurewise	☐
Frumkin	Dr. Howard	Dean, University of Washington School of Public Health	✓
Geller	Brian	Executive Director, Seattle 2030 District	✓
Glaberson	Terri	Executive Director, CoolMom	✓
Golden	KC	Policy Director, Climate Solutions	✓
Gregory	Bert	CEO, Mithun	☐
Hahn	Peter	Director, Seattle Department of Transportation	☐
Johnson	Rob	Executive Director, Transportation Choices Coalition	✓
Kenworthy	Craig	Executive Director, Puget Sound Clean Air Agency	✓
Mann	Michael	President, Cyan Strategies	✓
Martin	Chris	President, CleanScapes	☐
Maryman	Brice	Landscape Architect, SvR Design Company	☐
Ortega	Estela	Executive Director, El Centro de la Raza	☐
Owen	Megan	Director of Market Development, McKinstry	✓
Packard	Ben	Vice President, Global Responsibility, Starbucks Coffee Company	✓
Ridihalgh	Kathleen Casey	Senior Organizing Manager, Sierra Club	✓
Rosario	Tania Maria	Political Director, Service Employees International Union, Local 6	☐
Simmons	Jill	Director, Office of Sustainability & Environment	✓
Sugimura	Diane	Director, Seattle Department of Planning & Development	✓
Taniguchi	Harold S.	Director, King County Department of Transportation	✓
Twill	Jason	Senior Project Manager, Sustainability, Vulcan	✓
Washienko	Kathy	National Advisory Board Executive Committee, Union of Concerned Scientists	✓

Project Team/Other Staff			
Last	**First**	**Affiliation**	**Attended?**
Baumel	Christie	Seattle Office of Sustainability & Environment	✓
Morgenstern	Tracy	Seattle Office of Sustainability & Environment	✓
Wysocki	Sara	Seattle Office of Sustainability & Environment	✓
Saviskas	Sarah	Triangle Associates	✓
Wheeler	Bob	Triangle Associates	☐

September 7, 2012

Green Ribbon Commission Members,

Attached are the materials for our meeting next Thursday. We will provide printed copies at the meeting.

As usual we have a packed agenda, where we plan to finalize our transportation and building energy recommendations. For each of the sectors, the meeting packet includes the proposed recommendations, which were developed by GRC members at the optional meetings, and a list of additional actions that would likely be included in the Climate Action Plan. In addition, the Mayor will be joining us at 5:00 p.m., where he's hoping to hear about our work and emerging recommendations. In particular, the Mayor hopes to discuss the following four questions:

- What are your best ideas for reducing energy use in existing buildings?
- What are your best ideas that the City can implement to meet transportation funding needs?
- How can your recommended climate strategies be leveraged to grow Seattle jobs?
- How can your recommended climate strategies forward Seattle's equity goals?

In your materials, you will also see a summary of the waste reduction strategies that will likely be included in the Climate Action Plan. We will briefly discuss our work in the waste sector, but because Seattle Public Utilities just completed a robust process to develop strategies as part of its Solid Waste Management Plan, we do not plan to develop separate Green Ribbon Commission recommendations for the waste sector, but waste will be a part of our conversation around general climate action recommendations and funding needs. Please contact me if you have concerns with that approach.

Finally, we have settled on a date for the presentation of the Green Ribbon Commission's recommendations to the Mayor and Council. We'll provide more details next Thursday, but we are currently planning an event from **3:30-5:30 p.m. on Monday, December 10th** at the Bullitt Foundation's hot-off-the-presses Living Building.

Enjoy the sunny weekend, and see you next week.

Green Ribbon Commission
Meeting #5: Transportation/Land Use & Building Energy
September 13, 2012
3:00 p.m. – 5:30 p.m.
Seattle Municipal Tower, Room 4050

AGENDA

Time	Agenda Item	Goal(s)	Materials
3:00 PM	**Welcome** Co-Chairs	• Welcome and Agenda review	
3:05 PM	**Administration** Co-Chairs	• GRC Meeting Summary from August 9, 2012 ○ Suggested additions, changes ○ Acceptance of these materials	• August 9th Meeting Summary
3:10 PM	**Waste Sector** Jill Simmons Christie Baumel	• Waste sector update	• Waste Sector Summary
3:15 PM	**Transportation & Land Use** KC Golden Tracy Morgenstern	• Recommendations discussion, revision, and adoption	• Small Group Proposed GRC Transportation & Land Use Recommendations • Additional CAP Action Matrix
4:15 PM	**Break**		
4:30 PM	**Building Energy** Megan Owen Christie Baumel	• Recommendations discussion, revision, and adoption	• Small Group Proposed GRC Building Energy Recommendations • Additional CAP Action Matrix
5:00 PM	**Mayor McGinn**	• Opportunity for the Mayor to hear emerging recommendations	
5:25 PM	**Look Ahead & Adjourn**	• September 17, 1:00 – 3:00 (Optional) Community Engagement Recommendations Discussion • October 4, 11:00 – 1:00 (Optional – please RSVP) Adaptation Recommendations Development • October 9, 3:00-6:00 p.m. Full GRC Meeting #6 • October 24, 2:00-5:00 p.m. **(NEW)** Full GRC Meeting #7	

Mayor's questions for the GRC:
- What are your best ideas for reducing energy use in existing buildings?
- What are your best ideas that the City can implement to meet transportation funding needs?
- How can your recommended climate strategies be leveraged to grow Seattle jobs?
- How can your recommended climate strategies forward Seattle's equity goals?

Proposed GRC Transportation & Land Use Recommendations
by Strategy Category

Recommendation Organization

<u>Core</u>: Recommendations that serve as the backbone of the transportation and land use strategies.

<u>Leadership</u>: Actions that are essential to advancing the city's climate goals yet are also significant lifts to implement.

<u>Quick Start</u>: Actions that can be done within the next 1-3 years to pilot new ideas, test new approaches, and build support for leadership actions.

<u>Guiding</u>: Recommendations intended to guide <u>how</u> transportation and land use strategies are implemented.

Overarching Core:

1) Land use and transportation planning must continue transitioning from policies that prioritize automobile access and travel to policies that actively promote diverse travel options. To support Seattle as a thriving climate friendly/low carbon community of livable and walkable neighborhoods with quality and convenient recreation and services, our transportation and land use system needs to **continue to evolve to be more efficient as well as more effective in meeting mobility, safety, and access needs with a reduced reliance on cars.**

Funding

<u>Core</u>

1) Funding is the most significant challenge we face in meeting our transportation needs. Over the next few years already inadequate funding levels at the County and City will sharply decline if new or renewed funding sources are not put in place. The result will be significant reductions in existing service levels. At the same time, we have a bold vision for a future where transit, pedestrian, and bicycle infrastructure and services meet the majority of our passenger transportation needs which will require substantial new investment. It is imperative that the City and region:

   a) continue to **increase the efficiency and equity** of transportation investments and develop funding sources to **sustain existing service levels**, and

   b) **identify and prioritize funding to meet the bold vision** of a city crisscrossed with efficient, effective, accessible and well-maintained transit, bicycling, and pedestrian infrastructure and services.

<u>Leadership</u>

2) **Renew the Bridging the Gap levy** and prioritize revenues to multimodal transportation strategies including investments in transit, pedestrian and cycling improvements and system maintenance.

3) Create a city **development authority*** or similar mechanism to form public private partnerships and use district-based funding mechanisms (e.g. **tax increment financing***, tax abatement, simplified local improvement districts) to promote and shape transit communities while supporting existing residents and businesses.

4) Assess a **multimodal transportation impact fee*** on new development based on estimated Vehicle Trip Generation (VTG), as a project mitigation for infill development/TOD projects. Invest fee revenue in multimodal transportation improvements that fully mitigate impacts.

5) Advocate for legislation to secure local or transit agency authority to levy a motor vehicle excise tax (**MVET) with variable rates*** based on the GHG emissions intensity of vehicles. Use revenues for enhanced transit service, speed and reliability improvements or to benefit other transportation choices. Implement an MVET at the City, County or regional level.

6) Work with regional partners including PSRC to advocate for state and federal legislative authorization and regional implementation of **variable congestion pricing*** on all limited access highways and potentially also on major arterials in Central Puget Sound. Legislation should allow the regional authority to set rates and objectives and to dedicate revenues to multimodal transportation including transit, bicycle, and pedestrian operations, maintenance and improvement projects.

7) Levy a **tax on off-street parking***, to supplement the current commercial parking tax authority. Include tiers in the new tax structure to account for climate impacts based on factors such as the transit accessibility and density of the area.

*Actions require legislative changes to implement.

Quick Start

Congestion pricing is an effective means of impacting travel behavior and has substantial revenue generating potential. The City of Seattle has the legal authority to implement congestion pricing on city roadways. Building support for implementing this pricing strategy is challenging and proven examples of effective implementation of local roadway pricing in the U.S. are limited suggesting the need for a pilot scale project.

> ➤ Implement **congestion pricing on a limited access city roadway** to test the effectiveness and build support for expanding congestion pricing.

Policy & Planning

Core

1. Over 100,000 new residents and jobs are anticipated over the next 20 years. To enhance Seattle's livability, **attract new residents and jobs to nodes** well served by transit and non-motorized transportation options, and implement land use strategies which provide more services that meet residents' daily needs within a convenient walk.

2. Consideration of climate goals should be well integrated into local and state agency planning efforts. The City, County, PSRC, and State should more strongly **focus land use and transportation planning and funding decisions to achieve adopted climate goals.**

3. The efficient movement of freight and goods is vital to our local economy. Seattle is a growing port city and as we continue to grow and work to reduce the auto-dependence of passenger transportation, we need to **support the efficient movement of freight and goods**.

4. Unhealthy air quality, lack of physical activity, and unbalanced diets have serious health consequences which reduce longevity and quality of life and result in billions of dollars in health care

costs. How we plan our land use and transportation system can play a significant role in reducing these consequences. **Consider health outcomes in transportation and land use planning** including promoting walking and bicycling, reducing air pollution, and fostering access to healthy food.

Leadership
5. Provide for the retention and creation of **affordable commercial space and family-sized housing** in transit communities through inclusionary zoning*, expanded density and height bonuses, tax exemptions etc. and joint development projects*

*Requires legislative action.

Quick Start
Right-of-Way Reallocation:
Portions of the right-of-way can be converted to public uses to enhance public spaces and encourage pedestrian use of the space. A successful example of such a project includes the McGraw Square plaza, which serves as a waiting area for the Streetcar Line.
➢ **Create a Public Space Management Strategy** to creatively activate the public right-of-way to enliven public spaces, support vibrant streets and neighborhoods and promote economic activity.
➢ **Reallocate a portion of the public right-of-way** in a selected area from general traffic use to a public/pedestrian space such as a plaza or parklet.

Corridor Plan:
The City has various modal and land use plans that are complementary. However, a more comprehensive and integrated corridor approach would allow more effective land use and transportation planning integration and help identify corridor-specific priorities and location-specific opportunities, as well as daylight barriers to maximizing transportation outcomes.
➢ Develop and implement a **comprehensive land use and multimodal plan in a high priority transit and bicycle corridor** with the goal of shifting more trips to travel modes that generate fewer, or no, greenhouse gases.

Infrastructure

Core
1. Building and transportation infrastructure work together as a system shaping where people live and how they get around. We can maximize their impact through well integrated planning. **Integrate building and transportation infrastructure planning** to maximize the impact of both types of infrastructure on achieving our climate and community goals.
2. Enhancing mobility, access and safety through a range of transportation choices is key to reducing auto dependence. Transit is a critical foundational strategy for meeting our land use and transportation goals and supports the viability of walking and bicycling for many trips. **Expand transit, pedestrian, and bicycle infrastructure and service** consistent with the modal plan priorities**.**

3. Develop a comprehensive, connected network of **separated bicycle facilities** in the Center City and Urban Villages.
4. Provide fast, frequent and reliable transit to those who live, work and play in Seattle by implementing the Seattle Transit Master Plan's vision for **high capacity transit**.
5. Enhance **sidewalks, crossings and public places** in Urban Centers and Urban Villages.
6. When designing and constructing infrastructure, employ **green construction practices** including green stormwater infrastructure and low carbon materials.

Quick Start

Center City Separated Bicycle Lane:

Increasing bicycle use through the Center City is an essential step to manage future travel demand and also encourage more people to commute to work via alternate modes. The Bicycle Master Plan update is underway and will identify preferred routes for cycle track and other separated bicycle facilities.

➤ **Build a separated bicycle lane in the Center City**.

Transportation Demand Management

Leadership

Provide incentives, marketing, and imaginative facility enhancements to **make transit, walking, and biking more fun and appealing** by creating enriching experiences rather than thinking only in terms of basic infrastructure and service (e.g. fun station stops, music, interactive features such as musical stairs and touch screens, etc).

Quick Start

Travel Information:

The popularity of the mobile information application, One Bus Away, highlights the value of real time travel information

➤ Increase the number of real-time dynamic signage to share up-to-the minute estimates on bus arrivals.

Safe Routes Projects:

The Safe Routes to School program is an effective means of encouraging students to walk or bike to school. By enhancing the safety of the route more students are choosing a healthy alternative to being driven to school.

➤ Build on the Safe Routes to Schools program by implementing **Safe Routes projects** to improve pedestrian connections to transit and neighborhood business districts.

Parking

<u>Leadership</u>

1) **Expand parking policies** to incorporate goals beyond customer access. Consider policies that would allow spending of new revenue to support improvements that further neighborhood livability as well as transit, bicycle, and pedestrian infrastructure and services.

<u>Quick Start</u>

Expanding parking policies to meet goals beyond business access requires leadership and local stakeholder support. Allocating a portion of additional revenue generated from increased parking rates or expanded hours and investing them in local improvements can help build business support and further land use and transportation goals.

➢ Collaborating with area stakeholders, develop a **parking benefit district*** or a similar model in an area with high demand for on-street parking; dedicating a portion of new revenues** to enhance the streetscape and access by walking, bicycling, and transit within the district.

*Requires legislative action.

**The use of revenues from on-street parking fees are limited and regulated by both the Washington Administrative Code and the Seattle Municipal Code. Revenue from on-street parking for purposes other than regulating on-street parking would require legislative changes and approval from both the State and the City to change the parking revenue from a fee to a tax.

Vehicle Fuels & Technologies

<u>Leadership</u>

1. Develop and implement strategies to **help make electric vehicles a viable option for all residents** by reducing barriers including access to charging infrastructure for households without off-street parking and affordability.
2. Double the number of bus route miles planned for conversion to **electric bus**.
3. King County Metro operates 622 diesel-electric buses that are up to 30% more fuel efficient and have saved over 2M gallons of fuel since 2007. Metro will **upgrade the entire 1,500 bus fleet** with hybrid or electric buses by 2018.

<u>Quick Start</u>

➢ Electric trolley buses are remarkably energy-efficient mode of public transport, serving 20% of King County Metro riders on 14 routes with just 10% of Metro's fleet. Replace the entire trolleybus fleet with newer, more energy efficient technology including the ability to run for a time on stored power after the bus disconnects from the overhead wire system.
➢ Pilot test an all-electric battery powered bus.
➢ Expand the City's electric vehicle (EV) fleet.
➢ Support private adoption of EVs through codes, streamlined permitting to facilitate installation of charging stations, and by assessing and planning for demand, access, and utility impacts.

Guiding Recommendations

Recommendations intended to guide how transportation and land use strategies are implemented.

1. Integrate health considerations including air and noise pollution and walkability into land use and transportation planning.

2. In order to make transit-oriented communities work for the range of Seattle household types, consider the needs of families and an aging population in land use and transportation planning to effectively support a growing and diverse population and expand the use of non-auto modes by all residents.

3. Investing in transit communities can improve the physical environment and function of these areas but also increase the cost of living and doing business thereby displacing existing residents and businesses. To address the negative effects that gentrification can have on neighborhoods, adopt policies to assist existing residents and businesses to remain and thrive in areas targeted for transit oriented development.

4. To meet social equity and mobility goals, design pricing strategies to mitigate direct impacts on lower income residents (e.g. discounts). Additionally, expand the transportation options that people need to get around as new pricing strategies are implemented, investing revenue from new pricing strategies to enhance travel options.

Additional Transportation & Land Use CAP Actions

Additional TAG Recommendations Anticipated to be Included as CAP Actions

Policy & Planning	- Advocate for state legislative reforms to incorporate GHG reduction goals in the **Growth Management Act** - Support development of **shops, services, recreation, and open space** within the City's Urban Villages and transit communities. - Allow and facilitate permitting for a **greater diversity of housing types** (e.g. duplex, tri-plex, courtyard cottages etc.) in single and multi-family areas (e.g. provide FAR and height bonuses for three or more bedroom units). **Increase flexibility in neighborhood commercial zones** to preserve and promote business and job opportunities (e.g. provide height bonuses to allow leasable ground floor commercial spaces). **Expand the use of GIS tools** to implement an enhanced walkshed approach to build on the current Urban Center/Urban Village strategy to focus City resources and foster next generation transit communities. **Update the Comprehensive Plan to better align with climate goals** and foster clear linkages between goals, policies and related implementation plans. **Develop a City prioritization tool** to ensure consideration of GHG emissions reduction when updating transportation and land use plans, policies, and implementation. - Develop a **Freight Master Plan** with goals to improve the efficiency and reduce the GHG emissions impact of goods movement. - Provide small targeted investments for retailers to **transition auto-oriented space to other purposes** that support business access and uses (e.g. bicycle corrals, café seating etc.)
Infrastructure & Services	**Transit** **Add transit service** to high demand routes and upgrade service on other routes to expand the Frequent Service Network. - Implement capital improvements to **Priority Bus Corridors** identified in the Transit Master Plan. **Walking** **Widen sidewalks and improve crossings** of arterial streets to connect Urban Centers and Villages. **Cycling** - Develop a citywide network of **neighborhood greenways** on traffic calmed residential streets. - Expand quality on-street **bike racks** and facilitate provision of secure **off-street bike parking**. - Implement **intersection safety and priority treatments on primary bicycle corridors**. - Implement a **bike sharing** program in Center city and adjacent neighborhoods.

Transportation Demand Management	• Work with TMA's and community groups to develop, market, and negotiate bulk purchase of a **universal transit pass for residents of new multi-unit buildings.** • Encourage and support **vehicle sharing and ridesharing**. • Require provision of **cash or transportation benefits in lieu of parking subsidies** for all establishments with 100 or more employees that offer such subsidies. • Provide **customized trip planning information** directly to individuals through employers, property managers, etc.
Parking Management	• Continue to establish **parking maximums** in transit communities while protecting adjacent areas from spillover impacts. • Continue to improve customer **parking information** (e.g. expand E-park, enhance web user interfaces, and require consistent parking rate signage). • Design parking to **provide access to businesses without interrupting building frontage** on walkable retail streets, and **build shared parking structures** that accommodate demand from multiple sites.
Congestion Pricing & Other Auto User Fees	• Evaluate and advocate for legislative authorization of **pricing mechanisms** that also provide revenue to sustainable transportation options (e.g. impact fees, higher license fees for 2nd and 3rd vehicles, street utility fees, vehicle pollution taxes, etc.). • Provide information on the **benefits of pricing strategies** to meet city economic, social, and environmental goals.

Proposed GRC Building Energy Recommendations by Strategy Category

Recommendation Organization

Core: _Recommendations that serve as the backbone of the building energy strategies._

Leadership: Actions that are essential to advancing the city's climate goals yet are also significant lifts to implement.

Quick Start Actions: Actions that can be done within the next 1-3 years to pilot new ideas, test new approaches, and build support for leadership actions.

Guiding: Recommendations that guide how building energy strategies are implemented.

Pricing and Financing

Context: The recommendations in this report strive to strike a balance between the call for deep energy reductions and the practical reality that retrofit decisions are often made based on cost-effectiveness. The right energy pricing and efficiency incentive structures to make a strong business case are key to widespread uptake of energy efficiency and carbon reduction activities. In fact, some strategies, while important, only become cost effective if such pricing and incentive programs are implemented. Added to these are financing tools that allow owners with various motivations and barriers to access up-front capital to undertake efficiency upgrades.

Core:

1. All of the recommendations will have some level of success individually, but finding the right package of pricing, financing, and incentives are key to making the energy efficiency upgrades more obvious economic wins. The **economics of energy efficiency investments must be compelling, and compelling for all**. With such diversity in our building stock and ownership structures, there is no "one-size-fits-all" solution.

Leadership:

1. **Outcome-Based Incentives**: Outcome-based incentives are utility incentive structures based on the actual energy savings of an energy upgrade, rather than the projected savings of individual measures. This model has could allow higher incentive payments because there is no risk (and therefore no discount applied to the incentive level) that the energy savings may not be realized. Pilot and, if successful, establish outcome-based incentive structure at Seattle City Light. Also investigate what incentive levels and structures best promote deep energy retrofits and move toward establishing those systems.

2. **Innovative Financing Options**: Ensure broad access to financing with alternative repayment structures by exploring meter-based financing programs and, potentially, PACE (Property Assessed Clean Energy*****) financing or a similar model. These tools are attractive for a number of reasons, such as:
    - For business, they provide financing that allows them to side-step the capital budgeting process, and they can be characterized as an operating expense instead of a debt.
    - For residents, linking long-term repayment to a meter instead of an occupant so that repayment can be amortized over longer periods of time despite changes in ownership/tenants.
3. **Public Funding for Additional Incentives:** Recognizing that Seattle's mild climate and inexpensive energy create a challenge to realizing near-term paybacks for energy efficiency measures, the City should identify new sources of incentive funding to encourage deeper energy retrofits. A property tax levy is one option to generate funding for this effort, with climate protection and energy conservation results providing long-term community benefits. Public funding through a tax levy has the benefit of being fuel source neutral (utility incentives are fuel-specific), and invests the funding back into the community's building stock. The benefits to the public include improved communities, local job creation, improved energy performance, and reduced carbon emissions.
4. **Rental Housing Energy Efficiency Property Tax Exemption*:** Establish a property tax exemption program for existing rental housing for owners who undertake energy retrofits. In situations where the tenant pays utility bills, there is little financial incentive for a landlord/building owner to undergo an energy retrofit. This program would provide a financial incentive for landlords/building owners to take action.

Quick Start:

1. **Outcome-Based Incentives**: Seattle City Light should coordinate with other utilities to pilot a performance-based utility incentive program that would pay incentive dollars over time as actual energy savings are verified, rather than paying an up-front incentive based on the projected savings of individual measures.
2. **Innovative Financing Options**: Launch a working group of downtown property owners and managers to work through the options for and define the most attractive financing tool(s) for downtown commercial buildings and identify those which promote deepest energy efficiency investments. Develop a legislative strategy to enable use of the preferred option(s) if state legislation is required.
3. **Public Funding for Additional Incentives**: Define the elements of an incentive program that a bond initiative would support. Link the message of public funding to tax exemption programs and rebates to make it clear that the public is collectively investing in their own building stock.
4. **Rental Housing Energy Efficiency Property Tax Exemption*:** Establish a property tax exemption program for existing rental housing owners who undertake significant energy retrofits.

Efficient Operations

Context: The majority of the buildings we will see in Seattle in 2050 have already been built. Making deep efficiency gains in our existing building stock is imperative to meeting the City's carbon neutrality goals. Seattle has a long history as a leader of incenting conservation through Seattle City Light and the Seattle energy code encourages significant energy efficiency for existing buildings undergoing a major renovation. But the City has much less experience and few programs or tools to reaching existing buildings outside those contexts (Community Power Works and the City's Energy Benchmarking requirements are exceptions).

While the recommendations for existing buildings (found both in this section and in the Pricing and Financing section) recognize a role for mandates to create widespread action, they place a stronger emphasis on information-building and incentive programs. There are interactions between individual recommendations that enable and strengthen each other. Their implementation should be staged to reflect the interactions, maximize synergies, and avoid unintended consequences. A key to doing so is to focus first on the Pricing and Financing strategies above and the incentives within this section to enable the financial capacity for voluntary action before expanding requirements.

Core:

1. To make gains in energy efficiency, **energy use must be visible**. This requires real-time, easy to understand information about energy use, and building energy ratings that are easily accessible to the public.
2. Even with a strong economic case driving voluntary action, **there is a role for mandates** in the City's strategy. After providing ample opportunity and incentives for voluntary action, all buildings in the City should be mandated to take cost-effective action to improve their efficiency.

Leadership:

1. **Benchmarking, Disclosure, and Rating:** Establish programs to increase the visibility and awareness of energy performance in our buildings. The right program design varies by building type.
   - For large multifamily and commercial buildings, expand the existing Benchmarking and Reporting program to make benchmarked information more publicly available. This program should follow incentive and assistance programs to improve building performance and promote voluntary disclosure.
   - For single family homes, establish a requirement for disclosing a home energy use or rating at the point of sale.
2. **Energy Efficiency Standard:** Even with attractive incentives and near-term paybacks, many buildings will continue to operate without doing even the most cost effective energy efficiency upgrades. . Requirements for basic energy efficiency can ensure widespread improvements to our entire

building stock.   A standard can be strategically implemented to ensure required improvements are cost-effective, and can ramp up over time to come into effect after tools and incentives are available to assist building owners. The right overall Building Energy strategy should define a clear and easy path for voluntary compliance before requirements are introduced.

- Expand inspections and enforcement for code compliance.
- Require large multifamily and commercial building owners to improve the energy performance of buildings at established intervals (e.g. once per decade). Examples include a mandatory building "tune-up" (retro-commissioning), or a change-out of the most inefficient lighting systems.
- Require cost-effective home energy upgrades for single family homes at the point of sale. This should be a longer-term strategy, to be enacted only after information, financing tools, and incentive programs for voluntary action and assistance are in place.

3. **City Leadership:** The City should show leadership in its municipal buildings. City buildings can serve as role models, test cases, and case studies for new policies.

Quick Start:

1. **Retro-Commissioning Incentives**: Seattle City Light is currently developing a retro-commissioning pilot program, which will provide an audit to help building managers identify and implement operational and maintenance improvements. If pilot results are positive, identify resources to scale and expand the program.
2. **Retro-Commissioning City Buildings**: Develop a strategy for retro-commissioning City facilities as part of the Resource Conservation Management Plan under development.
3. **Long-term Program for Key Elements of Community Power Works:**   A three-year pilot is underway to establish and test community retrofit assistance programs. Build on the lessons from this pilot to establish a long-term program providing assistance, financing as other tools to help achieve building retrofits.
4. **Rapid Deployment of Smart Meters:** Support the rapid deployment of advanced metering infrastructure to better support residents with energy management. Smart meters help educate users by providing them with real-time information about their energy use and the impacts of conserving.
5. **Benchmarking, Disclosure, and Rating:** Define and test core program elements for a home energy rating requirement at the point of sale. For example, a near-term pilot could explore how a program would use home inspectors, appraisers, home energy assessors and/or previous utility bills in evaluating home energy performance.

Efficient Construction

Context: The strategic point at which a City can most easily influence energy use in buildings is through the regulations placed on new construction and major renovations, and Seattle has a strong history of

doing so through its energy code and green building incentives. The energy code will continue to be at the core of the City's effort to reduce energy use and carbon emissions in new development.   The State of Washington is already planning to incrementally increase the efficiency of the state energy code, and the City should continue to achieve an even higher bar with its own energy code. Until such a point where energy codes achieve deep – even carbon neutral – standards, incentive programs can encourge new construction to voluntarily achieve those standards.

Leadership:

1. **Outcome-Based Energy Code:** Move toward an outcome-based approach to managing energy code compliance to ensure buildings are attaining their modeled performance. Ultimately the energy code should include a combination of prescriptive elements, performance requirements, and outcome-tracking.
2. **Energy Upgrades with Substantial Alterations:** A substantial alteration is a building code term for a major change to a building or its use. Examples include replacing the interior after a major fire, or restoring a vacant building. A remodel reaching the "substantial alterations" threshold must typically bring certain life safety elements of the building up to the current code.   Such extensive remodeling typically occurs once every 30 – 50 years in a building's life, and provides a rare opportunity to economically upgrade a building's energy performance. The City should require that the energy performance of buildings already undergoing improvements of this magnitude must approach the energy performance that we require of new construction.

Quick Start:

1. **Outcome-Based Energy Code:** Evaluate the findings of the existing outcome-based code pilot between the Preservation Green Lab and the City and develop a strategy for building upon the pilot.

Infrastructure for Low-Carbon Fuels

Context: Energy efficiency can only take us so far: carbon neutrality requires the city to further adopt low- or no-carbon energy sources. Seattle is fortunate to benefit from carbon neutral electricity through Seattle City Light, but would benefit from additional approaches for buildings using fossil fuels. On-site renewable energy systems and district energy systems are part of the solution. District energy systems provide a platform for utilizing waste heat and renewable energy sources, and moving these resources around in a system to where and when they are most needed. Given the high cost of infrastructure, the load requirements needed to make district energy cost-effective, and that we are blessed with carbon neutral electricity, district energy is not a universal solution, but does have a valuable role in targeted locations.

<u>Core:</u>

1. Creating a diversity of **low-to-no carbon energy sources** should be a priority for the city. Hydronic heating infrastructure and connected network of district energy systems can bring versatility to the city's low-carbon energy resources.   On-site renewable energy systems help supplement the City's carbon neutral electricity, create diversity in supply, and contribute to the market growth of renewable energy systems.

<u>Leadership:</u>

1. **Waste Heat Recovery:** Develop district energy systems and incentive programs to capture and utilize waste heat (e.g. from industrial operations, data centers, or sewage lines). In the longer-term, and where appropriate, mandate waste heat recovery. This not only makes use of a waste product, but in some cases can reduce other energy being channeled to providing cooling to manage the excess heat.
2. **Right-of-Way Use for Alternative Energy:** Where appropriate, allow the public right-of-way to be used for alternative energy, such as solar panel encroachment into the right-of-way, and inserting ground source heat wells to provide heating and cooling to nearby buildings. This alternate siting of ground source heating can provide benefits to the construction schedules and budgets for new construction because construction will not need to cease on the building site while the wells are being installed.

<u>Quick Start:</u>

1. **District Energy Pilot**: The City is currently undertaking a study to test the feasibility of developing a district energy system with a private utility partner. If results of the feasibility analysis are positive, support development of the system while ensuring its commitment to low-carbon fuel sources.
2. **Low Carbon Energy Master Plan:** Successfully establishing low-carbon energy infrastructure requires a long-term strategy and careful coordination. The City should develop a master plan to guide the establishment of low-carbon energy systems in the City. The plan should identify priority locations, should specify priority energy sources, include policies on utility coordination, and identify associated land use impacts or other policies, requirements, and incentives.
3. **Carbon Neutral Electricity:** Maintain SCL commitment to meet load growth with conservation and renewables, as well as to providing zero net emission electricity.

Guiding Recommendations
Recommendations intended to guide how building energy strategies are implemented.

1. A **broader view of policy design** options can help to **promote additional community values**. For example, expanding some incentive programs beyond a focus on energy to also consider green

building and equity goals more holistically can help Seattle achieve greater energy and water conservation, healthier indoor environmental quality, more use of recycled materials, and improved housing and business affordability. The City should explore options for capturing broader environmental, health, and affordability goals into the implementation of the recommendations.

2. The recommendations should be implemented to recognize and **maximize the shared prosperity** of Seattle residents and businesses. Investments in energy efficiency support local job growth, keep utility bills low, and improve the quality of our community's building stock.

Additional TAG Recommendations Anticipated to be Included as CAP Actions
(Not Included in GRC Recommendations)

Pricing & Financing	• **Energy Price Structuring**: Establish energy pricing structures in our utilities that incentivize conservation and help improve the customer's cost-effectiveness of deeper efficiency improvements. Examples to explore could include rate design, commodity costs, and connection pricing for conservation.
Efficient Construction	• **Energy Code Improvements**: Continually increase energy efficiency standards, and require an energy monitoring interface for all. • **Incentive Zoning**: Incentivize deep energy efficiency in construction through density bonuses (via floor-area ratio) for green building practices including energy efficiency. Balance this incentive with other objectives (e.g. affordable housing). • **Fee-Bates**: Permit review fees can be structured to incentivize deep green and energy efficient buildings (although legislative authorization would be required in Washington State). The City should study how such a program may be effective in Seattle and take further steps to implement a program if the study suggests a beneficial outcome.
Infrastructure for Low-Carbon Fuels	• **Coordinated Planning for Synergistic Land Uses**: Integrate land use and infrastructure planning to maximize opportunities for heat exchange, such as through synergistic land uses, and optimizing infrastructure.

RECYCLING AND COMPOSTING

Achieve a Municipal Solid Waste (MSW) recycling rate to 70% by 2022 and maintain this rate through 2050.

Seattle is a nationally recognized leader in recycling and composting, and currently diverts 53.7 percent of all MSW generated. This rate, achieved through the City's numerous innovative policies and programs, is among the highest in the country and already generates significant environmental benefits, including avoided greenhouse gas (GHG) emissions.

The City is already on a path toward greater waste diversion through recycling and composting. In its 2011 Solid Waste Management Plan (SWMP) Revision, the City laid out a plan to achieve 70 percent diversion by 2022 through new recycling and composting programs, increased enforcement, additional material disposal bans, and enhanced outreach and education. By implementing the recommendations of the 2011 SWMP and taking additional actions, the City can reduce GHG emissions from its waste management activities, and substantially increase the amount of avoided emissions achieved through recycling and composting.

MUNICIPAL SOLID WASTE RECYCLING AND COMPOSTING

Achieve a MSW recycling rate of 60% by 2015 and 70% by 2022 by implementing new MSW recycling and composting programs and material disposal bans, increasing enforcement, and enhancing outreach and education to residents and businesses.

CONSTRUCTION AND DEMOLITION RECYCLING

Achieve a construction and demolition (C&D) recycling rate of 70% by 2020 by phasing in C&D material disposal bans, and coordinating with local industry to develop a processing facility certification program.

FOOD WASTE LANDFILL DIVERSION

Maximize diversion of food waste from the landfill and promote composting of food scraps by increasing technical assistance to expand and improve the use of compostable food service products, and increasing enforcement of food packaging and food scrap composting requirements.

LOCAL RECYCLING MARKETS AND MARKET DEVELOPMENT

Expand local recycling markets by aligning market development efforts with disposal bans and focusing on potentially recyclable materials with persistently low recycling rates.

COLLECTION, PROCESSING, AND DISPOSAL

Reduce emissions from waste management activities, including collection, processing, and transportation, and from landfill disposal.

GHG emissions from MSW management and disposal arise from three different sources: in-city collection, processing and transfer; long-distance transport; and from methane released from a landfill. Although the City has already made great strides in reducing emissions from these sources, even more can be done in the coming years.

Across all waste management activities, the City can monitor and adapt programs and management practices to incorporate new technologies and markets as they become available.

COLLECTION AND PROCESSING
Identify, test, and adopt practices that maximize efficiency in collection, processing, and transfer operations.

DISPOSAL AND LANDFILL MANAGEMENT
Explore opportunities to reduce methane emissions from landfills, and consider the City's ability to influence methane capture rates through contracting.

TECHNOLOGY AND MARKET INNOVATION
Monitor and adapt programs and management practices to incorporate new technologies and markets as they become available.

SOURCE REDUCTION AND PRODUCT STEWARDSHIP

Reduce total waste generation through source reduction, and encourage product stewardship and producer responsibility programs.

The City can reduce GHG emissions within its geographic boundaries and globally by reducing total generation of waste through source reduction, also known as waste prevention. Source reduction is achieved through actions that encourage extension of product life, such as repair, refurbishment, and reuse; product design and manufacturing practices that reduce the amount of material used; more efficient use of consumable products; and less consumption of materials overall.

Source reduction reduces GHG emissions from collection, processing, and disposal, and also results in avoided emissions from manufacturing. Avoided emissions due to source reduction are often larger than any other waste management option, including recycling and composting.

Source reduction can be challenging to implement, as the City has less direct control over the quantity of waste generated than over how it is managed once it is generated. Nonetheless, there are many ways the City can influence waste generation and encourage source reduction through setting policies, implementing programs, influencing pricing, supporting product stewardship, and educating and engaging residents and businesses.

MSW SOURCE REDUCTION

Reduce total MSW generation by expanding investment in existing waste prevention programs and establish new programs that facilitate source reduction by households and businesses.

C&D SOURCE REDUCTION

Facilitate source reduction of C&D waste through support of new and expanded programs promoting salvage, deconstruction, and reuse.

PRODUCT STEWARDSHIP AND PRODUCER RESPONSIBILITY

Collaborate with local, state, and regional partners to encourage and support product stewardship and producer responsibility programs, and pursue local regulation for select products, where appropriate, when state and regional action is not forthcoming.

SOURCE REDUCTION IN CITY OPERATIONS AND PURCHASING

Use the City's purchasing power to support source reduction, product stewardship, reuse, cradle-to-cradle manufacturing, and recycled-content production; and employ source reduction strategies in City operations.

Draft Meeting Summary
Green Ribbon Commission Meeting #4
Adaptation & Transportation/Land Use
August 9, 2012
3:00 p.m. – 5:30 p.m.
Seattle Municipal Tower, Room 4050

3:00   Welcome & Introductions

Meeting Notes:
Bob Wheeler, Triangle Associates, welcomed the Green Ribbon Commission (GRC) to the meeting and led a round of introductions from meeting participants (**see Attachment 1**).

3:10   Administration

Meeting Notes:
The GRC briefly reviewed the draft July 12 meeting summary and approved it by consensus.

3:15   GRC General Updates

Meeting Notes:
- Jill Simmons, Director of the Office of Sustainability & Environment (OSE), thanked Committee members for taking the time to talk with her about what has and has not worked for the GRC.
- OSE reviewed the purpose of the GRC, which is to:
  - Advise the Mayor and City Council on ways to advance Seattle's climate goals while also making our community a more environmentally sustainable, economically prosperous, and socially just place; and
  - Identify priority actions that will be important for achieving goals and demonstrating leadership in the near and long term.
- OSE developed a structure for GRC recommendations. The GRC will develop the following types of recommendations:
  - **Overarching Recommendations**
    - Call to Action
    - Maximizing Community Values
    - Engaging the Community
    - Enhancing Social Equity
  - **Sector Specific Recommendations**
    - Building Energy
    - Transportation and Land Use
    - Adaptation
  - **Core Recommendations:** Recommendations that are essential to the successful implementation of climate action strategies (e.g. transportation funding, as we are currently in a transportation funding crisis).
  - **Guiding Recommendations:** Recommendations that guide how climate action strategies are implemented (e.g. maximizing social equity in implementation).
  - **Leadership Actions:** Actions that are essential to advancing the City's climate goals, but will not happen in the near-term since implementing them requires a significant lift.
  - **Quick Start Actions:** 1–3 year actions to pilot new ideas, test new approaches, and build support for leadership actions.

- OSE will continue developing the first draft of recommendations, which will be reviewed at each optional meeting before being brought to the full GRC.
- The draft Climate Action Plan will hopefully be released by mid-November.
- One GRC member noted that starting meetings at 2:30 pm would be more ideal than ending at 6:00 pm.

3:30	**Adapting to Climate Impacts**

Presentation Notes:
- OSE reviewed its PowerPoint on adapting to climate impacts.
- Projected climate change impacts include temperature and precipitation increases, and sea level rise (SLR). Sea level rise includes both chronic SLR (change in baseline sea level) and episodic SLR (additional SLR from storm surges, extreme high tides, etc.).
- These impacts are not new; what will be different is their frequency and intensity. Seattle has strategies in place for addressing these impacts, but it will be important to figure out when to deploy them and how to be strategic in addressing them.
- Adaptation Planning is important since past experiences are not necessarily predictive of future conditions, which will depend on a variety of factors.
- Our vulnerability is determined by both adaptive capacity (how much a system can respond to change, e.g. a bridge) and the potential impact of climate change (exposure and sensitivity).
- Paul Fleming, Seattle Public Utilities (SPU), talked about SPU's Climate Program.
    - SPU is the regional water provider and deals with waste management. Climate change will disrupt the water cycle, so SPU is trying to figure out how the region will be affected.
    - The climate program focuses on water supply, urban drainage/wastewater, and sea level rise and aims to:
        - Enhance our knowledge
        - Establish collaborative partnerships
        - Influence our operating environment
        - Engage the science
        - Assess impacts
        - Inform decision-making
        - Develop adaptation options
        - Enhance system resiliency
        - Reduce our contribution
    - SPU is collaborating with the University of Washington and other states on researching snowpack, forest fires, precipitation, and water quality/turbidity.
- Ron Tressler, Seattle City Light (SCL) talked about how SCL will adapt to climate change.
    - Considerations for SCL include:
        - How climate change affect hydroelectricity generation, which supplies 90% of SCL electricity.
        - How water temperatures and stream flows impact fisheries and dam operations.
        - How sea level rise affect SCL infrastructure—towers, underground vaults.
        - Will electricity demand increase because of heat events?
        - How SCL's ability to remain carbon neutral will be impacted.
    - Climate change will potentially impact power generation, power delivery, infrastructure, and environmental protection.
- The City is planning for adaptation by providing more resources and information to staff (planning tools, guidance documents, etc.), having a comprehensive website, analyzing project-specific sea level rise, etc.

Comments:
- SPU mentioned water supply several times in the presentation, implying there will be a lack of snow pack. It was noted that the GRC should consider developing a recommendation on addressing a lack of water in addition to the one addressing a surplus of precipitation.
- It was noted that SPU's projections utilized standard population growth models and did not take into account any additional people drawn to Seattle due to climate change elsewhere that may make Seattle a more desirable location to live in comparison.
- What single most important thing can the GRC do or recommend?
  - Adaptation has been a tough nut to crack. The GRC should take a comprehensive approach to risk management that includes adaptation.

Overall Discussion:
GRC members discussed how to revise the draft climate change adaptation recommendations. Overall, GRC members liked the posed recommendations but indicated that important elements were missing. It was noted that the recommendations need to have a broader framework, address both specific and more generalized actions, and timing. OSE will incorporate this feedback into the recommendations, and there will likely be an optional meeting on adaptation given the breadth of comments heard.

Generalized Actions
- The recommendations posed by OSE fall under this category and focus on 1-5 year action steps.
- Green Stormwater Infrastructure is basically City policy now—the recommendation should address implementation.

Specific Actions
- There needs to be more specific actions that explain why it is important for the City to do them, otherwise the recommendations will just be fluff.
- OSE expressed that the science on adaptation is uncertain, so OSE is not as far along in its thinking about adaptation. Therefore, the GRC may not be able to have actions that are as specific as for the other areas.

Timing
- Expand the time period by incorporating long-term actions.
  - Incorporate long-term trends, such as population growth.
- Acknowledge that further planning needs to be done in the future.
- The timing of when to make investments is crucial. Given rising sea levels, the City needs to decide fairly soon if it will build levees or move to higher ground because it will take years (or decades) to implement.

Broader Framework
- Who are we telling to adopt this adaptation plan?
- Consider other actors that should be involved in adaptation.
  - Identify individual sectors where adaptation is most important.
  - Add forests, food supply, emergency preparedness, and economic activities like shellfish.
  - There may not be time for the GRC to address all these actions as a group, but it could develop an outline for future planning.
- Further address cross-agency implementation, maintenance, operations, etc. and how these elements become de facto.

- Address regional impacts of climate change because the choices that Seattle makes in the urban core affects people in other regions.
- Address equity issues.
- Identify co-benefits. What elements of climate change adaptation also have benefits today to help advance other actions (e.g. green stormwater infrastructure is positive on climate change and increasing desirability and livability of communities)? This could help remedy the fact that current investments in adaptation would have long-term benefits.
- One GRC member noted that the group should only address the issues that the City has influence over and should therefore think about how it will prioritize the recommendations.
  - The co-chair noted that a lack of authority should not hinder the GRC. This is a time to be bold and not too humble.
- The recommendations should acknowledge today's budgetary reality and speak to why they should still be prioritized.
  - One GRC member advocated for incorporating climate change into existing policies to make it easier for policy makers.
- The GRC needs to address and be vocal on design guidelines and development standards.
- Share tools with private developers, residents, and businesses to help plan for adaptation. The current recommendations are too city-infrastructure focused.
- Many people do not know the difference between mitigation and adaptation. One GRC member suggested that the GRC could reclaim "wins" by calling mitigation wins adaptation wins.
- Barriers get formed based on jurisdiction and property lines. GRC needs to identify the actions that are easy to address within the jurisdiction of the City and what partnerships are needed to accomplish those actions.
- It is important to say, "Here are the systems you rely on, here is how they will be stressed with climate change, and here is what we suggest doing to make sure the system still functions."
- Address what infrastructure changes the community needs to invest in to better prepare Seattle for adaptation (e.g. light rail).

5:00 Transportation & Land Use

Presentation Notes:
- OSE presented a PowerPoint with the intention of having a brief discussion afterwards and a more in-depth discussion at the transportation optional meeting.
- The majority of overall carbon emissions come from transportation (62%), specifically road transportation (cars, light trucks, freight trucks, and buses).
- OSE noted the assumption that behavior change in transportation is most likely at the passenger level rather than at the commercial level. To accomplish behavior change, different strategies will be necessary. However, the GRC commented that the City might be able to address commercial freight transportation.
  - One GRC member referred to the graph on 2008 road transportation emissions and noted that it would be a mistake for the City not to address freight since commercial trucks are such a high percentage of transportation emissions.
  - It was also noted that under "Cars & Light Trucks", a significant number of light trucks are likely commercial.
- City Council adopted preliminary transportation targets, which include both Vehicle Miles Traveled (VMT) and Greenhouse Gas (GHG) emissions. However, OSE noted that it may not be appropriate to continue using these targets for freight throughout the planning process because the focus should be on emissions rather than on miles traveled.

- Transportation and land use are interdependent—how we design communities influences how people get around, and transportation choices help shape where people, jobs, and services locate.
- The City's goal is to concentrate future growth in a limited number of urban centers and villages and to make transit, pedestrian, and biking improvements to make the streets safer, friendlier, and healthier for all travelers. The challenge is how to pay for this.
- Base funding for *Bridging the Gap* has declined more than 20% over the last 5 years due to a loss of tax funding and general funding. If *Bridging the Gap* is not renewed or if a new funding source is not implemented to provide revenue in 2016 and beyond, about a third of the City's transportation funding could be lost.
- The Land Use and Transportation Technical Advisory Groups (TAGs) met to brainstorm, review strategy, and develop priority action recommendations. Recommendation areas included:
  - Transit, Pedestrian, Bicycle Facilities & Service
  - Transportation Demand Management
  - Pricing & User Fees
  - Planning & Roadway Management
  - Cleaner Vehicles & Fuels
  - Land Use Policy
  - Zoning
  - Incentives
  - Parking Pricing & Management
- Funding is essential to realize the TAG's vision for transportation. Most funding strategies require state legislative changes, but with community support, the recommendations can get funded.
- Implementing the TAG's recommendations will require a massive shift—much more funding would be needed; rail, transit, and cycle tracks would crisscross; neighborhoods around frequent transit would be transformed; and advances in vehicles and fuels would be realized.
- Figure E-2 in the PowerPoint demonstrated that if all the TAG's recommended transportation and land use strategies are implemented, the City will, over time, get closer to realizing its GHG emission goal.
- It was noted that it is hard to predict what technologies will be developed in the future to reduce greenhouse gas emissions per mile.
- The GRC then reviewed the draft recommendations to inform discussion at the auxiliary meeting.

Discussion:
- There was a request for the final recommendations to provide a link between broad policy recommendations (e.g. having bike lanes) and measurable targets that will result in the broad greenhouse gas goals.
- Under "vehicle fuels and technology", the recommendation calls for buses converting to electric, but buses only accounted for 3% of road transportation emissions in the pie chart. The GRC needs to emphasize passenger vehicles and zero emission vehicles.
- There was a request to look at how to connect different strategies (e.g. link the removal of parking passes to paying for bus passes for residents for the first two years).
- The TAG group addressed the embedded energy cost in different modes. Should the City move beyond "complete streets" to prioritize certain modes over other modes?
- It was noted that it costs approximately $60–80 million to maintain the existing system.
- It was noted that unless the transportation funding "nut" is solved, the GRC will not make any progress. GRC should find comparable models in other cities, such as San Francisco, who charges approximately $8.50 to ride the BART from the airport to downtown, versus Seattle, which charges $2.50.

- There was a request to further address funding at the next meeting. What is the breakdown of additional transportation funds needed?

5:30   Looking Ahead & Adjourn

Meeting Notes:
- August 16, 9:30-11:30, Transportation & Land Use Recommendations Discussion (Optional)
- August 27, 10:00-12:00, Building Energy Recommendations Discussion (Optional)
- **Full GRC Meeting #5, September 13, 3:00-6:00, Seattle Municipal Tower, Room 4050**
- Late September, TBD, Community Engagement Recommendations Discussion (Optional)
- **Full GRC Meeting #6, October 9, 3:00-6:00 p.m.**
- **Full GRC Meeting #7, week of October 22, date TBD, 3:00-6:00 p.m. (NEW)**

Attachment 1: Meeting Participants

		Green Ribbon Commission Members	
Last	**First**	**Affiliation**	**Attended?**
Hayes ***Co-Chair**	Denis	President, Bullitt Foundation	✓
Koo ***Co-Chair**	Doris	Senior Advisor, Enterprise Community Partners	✓
Bagsby	Sean	Vice President, International Brotherhood of Electrical Workers, Local 46	☐
Carrasco	Jorge	Superintendent, Seattle City Light	✓
Duvernoy	Gene	President, Forterra	☐
Fleming	Dr. David	Director and Health Officer, Public Health – Seattle & King County	✓
Franz	Hilary	Executive Director, Futurewise	✓
Frumkin	Dr. Howard	Dean, University of Washington School of Public Health	✓
Geller	Brian	Executive Director, Seattle 2030 District	☐
Glaberson	Terri	Executive Director, CoolMom	✓
Golden	KC	Policy Director, Climate Solutions	☐
Gregory	Bert	CEO, Mithun	✓
Hahn	Peter	Director, Seattle Department of Transportation	✓
Johnson	Rob	Executive Director, Transportation Choices Coalition	✓
Kenworthy	Craig	Executive Director, Puget Sound Clean Air Agency	✓
Mann	Michael	President, Cyan Strategies	✓
Martin	Chris	President, CleanScapes	✓
Maryman	Brice	Landscape Architect, SvR Design Company	✓
Ortega	Estela	Executive Director, El Centro de la Raza	☐
Owen	Megan	Director of Market Development, McKinstry	✓
Packard	Ben	Vice President, Global Responsibility, Starbucks Coffee Company	✓
Ridihalgh	Kathleen Casey	Senior Organizing Manager, Sierra Club	☐
Rosario	Tania Maria	Political Director, Service Employees International Union, Local 6	☐
Simmons	Jill	Director, Office of Sustainability & Environment	✓
Sugimura	Diane	Director, Seattle Department of Planning & Development	☐
Taniguchi	Harold S.	Director, King County Department of Transportation	✓
Twill	Jason	Senior Project Manager, Sustainability, Vulcan	☐
Washienko	Kathy	National Advisory Board Executive Committee, Union of Concerned Scientists	✓

		Project Team/Other Staff	
Last	**First**	**Affiliation**	**Attended?**
Baumel	Christie	Seattle Office of Sustainability & Environment	✓
Morgenstern	Tracy	Seattle Office of Sustainability & Environment	✓
Wysocki	Sara	Seattle Office of Sustainability & Environment	✓
Saviskas	Sarah	Triangle Associates	✓
Wheeler	Bob	Triangle Associates	✓

October 4, 2012

Green Ribbon Commission Members,

Attached are the materials for our meeting next week. It's a relatively small packet, and our limited meeting time will be much more productive if you're able to read them in advance. As usual, we will have printed copies for you at the meeting.

A couple of quick notes about the agenda:

- **Funding Recommendations.** We'll be providing an overview of the Commission's funding recommendations in the transportation and building energy sectors. In addition, we've asked Alan Durning, executive director of Sightline Institute, to talk with the Commission about a carbon tax proposal that is gaining traction in Washington state. The Technical Advisory Groups did not look closely at the concept of carbon taxes, but we think it is an interesting idea that is worth consideration by the Green Ribbon Commission. There is a short summary of carbon taxes in the meeting materials, including links to much more detailed information and opinion pieces in the New York Times and Washington Post.

- **Community Engagement Recommendations.** We had a very productive working group meeting to refine these recommendations several weeks ago, and the work group members will be bringing the recommendations back to the Full Commission for final consideration.

- **Overarching Climate Action Recommendations.** We've included a draft of overarching recommendations that provide guiding direction to the entire Climate Action Plan, not one specific emission sector. The draft includes recommendations on being bold, enhancing equity, maximizing community outcomes, using systems thinking to design solutions, and building community commitment to climate action. We will introduce these recommendations on Tuesday and spend more time to fully consider them at the meeting on the 24th.

In addition to materials supporting the above agenda items, we've included two other documents. The first is a **draft letter from the Green Ribbon Commission** to Councilmember Burgess in support of climate action investments in the Mayor's proposed 2013-2014 budgets that support the Commission's emerging recommendations. The City Council will be deliberating and adopting on the 2013-2014 budget before our recommendations are complete.

The second item is a **draft motion to adopt the Green Ribbon Commission recommendations** at the conclusion of our process at the end of October. We wanted folks to have an opportunity to review and reflect on it with sufficient time to make changes.

See you next week.

Jill.

Green Ribbon Commission
Meeting #6: Funding & Building Community Support

October 9, 2012
3:00 p.m. – 5:30 p.m.
Seattle Municipal Tower, Room 4050

AGENDA

Time	Agenda Item	Goal(s)	Materials
3:00 PM	**Welcome** Co-Chairs	• Welcome and Agenda review	

3:05 PM	**Administration & New Business**
	Co-Chairs
	Jill Simmons
		• GRC Meeting Summary from August 9, 2012
		  o Suggested additions, changes
		  o Acceptance of these materials
		• Review and discussion of draft motion for GRC adoption of the complete recommendations
		• Review and discussion of draft letter to City Council supporting items in the proposed budget that implement the GRC's emerging recommendations
			• September 13th Meeting Summary
			• Draft motion Adopting Recommendations
			• Draft Budget Letter

3:25 PM	**Funding Recommendations & Carbon Tax Proposal** Jill Simmons Alan Durning, Sightline	• CAP funding challenge and recommendations overview and discussion • Carbon tax proposal overview and recommendation consideration and potential adoption	• Carbon Tax Fact Sheet
4:20 PM	**Break**		
4:30 PM	**Building Community Support** Craig Kenworthy Jill Simmons	• Recommendations discussion, revision, and adoption	• Draft Building Community Support Recommendations
5:10 PM	**Overarching Recommendations** Jill Simmons	• Overview of overarching recommendations	• Draft Overarching Recommendations

5:25 PM	**Look Ahead & Adjourn**
	Jill Simmons
		• October 18, 3:30 – 4:30 p.m. **NEW**
		  Optional meeting on congestion pricing strategy recommendation
		• October 24, 2:00-5:00 p.m.
		  Full GRC Meeting #7	

DRAFT Green Ribbon Commission Motion
to Adopt Recommendations

The Green Ribbon Commission approves the October 24, 2012 GRC Recommendations, with the following changes agreed upon at the 10/24/12 GRC meeting:
- ➢
- ➢
- ➢

After substantial study and debate, the GRC has reached an enthusiastic consensus around these recommendations and we strongly support their inclusion in the 2013 City of Seattle Climate Action Plan. Approval of these recommendations is solely an expression of support from the individual GRC members and does not constitute an endorsement by the organizations with which members are affiliated.

City of Seattle
Green Ribbon Commission on Climate Protection

Commissioners

Denis Hayes, Co-Chair

Doris Koo, Co-Chair

Sean Bagsby

Jorge Carrasco

Gene Duvernoy

Dr. David Fleming

Hilary Franz

Dr. Howard Frumkin

Brian Geller

Terri Glaberson

KC Golden

Bert Gregory

Peter Hahn

Rob Johnson

Craig Kenworthy

Michael Mann

Chris Martin

Brice Maryman

Estela Ortega

Megan Owen

Ben Packard

Kathleen Casey
   Ridihalgh

Jill Simmons

Diane Sugimura

Harold S. Taniguchi

Jason Twill

Kathy Washienko

October 10, 2012

Seattle City Councilmember Tim Burgess, Chair, Budget Committee
Seattle City Council
PO Box 34025
Seattle, WA 98124-4025

RE: Commissioner Support for Climate Action Funding in the 2013-2014 City Budget

Dear Councilmember Burgess,

The Seattle Green Ribbon Commission on Climate Protection is developing recommendations to reduce Seattle's contribution to global warming and prepare for the impacts of the changing climate. We look forward to delivering our final recommendations to the Mayor and City Council in early December.   Though our work is not yet completed, we were very pleased to see items in the Mayor's proposed 2013-2014 budget implementing several of our emerging recommendations.

We therefore offer our enthusiastic support for the proposed investments in transportation, building energy, and green infrastructure.   These budget items help to implement key Commission recommendations and are important steps forward on the path to achieving the Carbon Neutral goal established by the City Council.   We strongly encourage your support of these items in the Mayor's proposed 2013 – 2014 budget:

- The Commission's transportation recommendations, including high capacity transit, pedestrian, bicycling, and freight infrastructure, are supported by the following proposed budget items:
    - ✓ $2 million for a corridor analysis of a high-capacity transit line from downtown to the University District, via Eastlake**.**
    - ✓ $850,000 for a corridor analysis of a bus rapid transit line on Madison Street**,** starting at Colman dock downtown.
    - ✓ $500,000 for a study of a pedestrian, bike, and transit crossing of the ship canal**.**
    - ✓ A $2.5 million Transit Master Plan Reserve fund to help pay for the next phase of design work on priority corridors.
    - ✓ $350,000 to create a Center City mobility plan
    - ✓ $1,256,000 for neighborhood Greenways and Safe Routes to Schools projects
    - ✓ A Freight Master Plan to support freight mobility
    - ✓ $500,000 to support infrastructure investments including those that will improve mobility and access in business improvement areas with paid parking

- The Commission's building energy recommendations are supported by the following budget items:
  - ✓ An additional $331,000 to support City's ground breaking multi-family energy benchmarking program
  - ✓ Funding to catalyze   investment in district energy in the high potential neighborhoods of First Hill and South Lake Union.
- The Commission's recommendations to enhance the city's resilience to climate impacts are supported by the following budget items:
  - ✓ $500,000 for the Green Seattle Partnership which is maintaining and restoring Seattle's urban forest
  - ✓ Green stormwater infrastructure investments to enhance stormwater management capacity through low carbon, green infrastructure

Thank you for the opportunity to express our support for these important investments that begin to implement several of the Green Ribbon Commission's emerging recommendations and are vital to Seattle's low-carbon future that supports environmental, social, and economic prosperity. We look forward to delivering the Commission's full recommendations to the City Council and Mayor in early December. Please contact either of the Commission Co-Chairs or Jill Simmons with questions.

Sincerely,

Denis Hayes, Co-Chair   Doris Koo, Co-Chair
Seattle Green Ribbon Commission   Seattle Green Ribbon Commission

Cc: Seattle City Council
           Mayor Mike McGinn
           Jill Simmons, Office of Sustainability & Environment
           Peter Hahn, Department of Transportation
           Christopher Williams, Seattle Parks & Recreation

Carbon Tax Fact Sheet

How Does a Carbon Tax Work?
A carbon tax would levy a charge on the CO2 emissions from fossil fuels purchased for combustion in the state, as well as on the carbon content of electricity imported from other states. In Washington, a carbon tax of $30 per ton of CO2 would net an estimated $2.3 billion each year. The proceeds could be used to reduce taxes on families and businesses, or to provide funding for transportation, clean energy technology, or even public education.

What Other Jurisdictions Have a Carbon Tax and What Have Been the Results?
Washington's next door neighbor, British Columbia, is home to the world's most complete and effective carbon tax. BC's policy is structured as a "revenue neutral" tax swap that taxes carbon in order to reduce personal and corporate income taxes. Since B.C.'s carbon tax was introduced in 2008, the province has reduced greenhouse gases, beating Canadian emissions in virtually every sector – including natural gas, diesel, motor gasoline, and coal –even while the province is outpacing the rest of Canada in GDP growth.

Starting on January 1, California will also begin applying a price on carbon emissions when it begins its cap-and-trade program. A range of other jurisdictions – from Boulder, Colorado to European countries have some form for carbon pricing on the books. The most recent entrant to the carbon tax club, Australia, rolled out a nationwide tax on July 1, 2012.

Why Should Washington Move to a Carbon Tax?
It reduces greenhouse gas emissions. A tax rate of $30/ton is big enough to modestly curtail fossil fuel consumption by state residents. More importantly, it is likely to yield sizeable benefits by affecting large-scale investment decisions. For example, a single utility like Puget Sound Energy that imports coal-fired electricity into Washington could reduce statewide emissions by perhaps as much as 10 percent simply by factoring a carbon tax into its long-term energy supply planning.

It benefits our economy. Why tax good things when you can tax bad things, like emissions? Substituting a carbon tax for some of our current taxes — on property, on businesses, and on workers — should be a no-brainer and, in fact, the idea has support from economists across the political spectrum.

Solutions for Cascadia

A carbon tax could support economic competitiveness and boost job growth by replacing some elements in Washington's existing tax regime that penalize business revenue and property ownership.

Alternatively, we could invest carbon tax revenue in state priorities that lack adequate funding, such as transportation or education or even clean energy development.

How Would a Carbon Tax Impact State Residents?
A tax of $30 per ton would translate into some price increases: about 30 cents per gallon of gasoline and diesel, about 3 cents per kilowatt-hour of electricity from coal, and about half that for power from natural gas. Energy from hydropower, solar, and wind would pay nothing.

Naturally, higher prices on carbon-intensive fossil fuels will encourage residents to switch to cleaner sources of energy. That's a smart move for the state's economy given that Washington produces no oil, gas, or coal and in a typical year exports roughly $16 billion to import fossil fuels from elsewhere.

A Washington carbon tax could avoid regressive impacts on low-income families by rebating a portion of the revenue directly to state residents, just as BC does. For example, the currently unfunded Working Families Tax Rebate could directly mitigate impacts on low income families, while modest property tax reductions could ease the transition for the middle class.

Why a carbon tax instead of other carbon pricing mechanisms like cap and trade?
Carbon taxes and cap-and-trade programs are fundamentally similar: both put a price on carbon pollution. Either policy can be well designed or poorly designed, but both begin the transition toward a clean energy economy.

Right now, the political climate seems to favor carbon taxes. The Washington legislature considered a cap-and-trade proposal in 2009, but declined to advance the bill out of committee. Congress nearly passed a cap-and-trade measure the same year, but the policy stalled in the Senate. In 2012, however, a surprisingly diverse range advocates and analysts are making the case for carbon taxes.

More resources:

Yoram Bauman and Shi-Ling Hsu, "The Most Sensible Tax of All," New York Times, July 4, 2012, link.

Eric de Place and Yoram Bauman, "Washington, Oregon Should Take Cue from B.C.'s Carbon Tax," Vancouver Sun, July 9, 2012, link.

Brad Plumer, "How Would a Carbon Tax Work? Let's Ask British Columbia," Washington Post Wonkblog, September 19, 2012, link.

Sustainable Prosperity, "British Columbia's Carbon Tax Shift: The First Four Years," University of Ottawa, June 2012, link.

British Columbia, "Making Progress on B.C.'s Climate Action Plan," 2012, link.

BUILDING SUPPORT FOR CLIMATE ACTION
Proposed GRC Recommendations

The actions necessary to move Seattle toward a low-carbon future that is healthy, safe and prosperous require deep and sustained commitment by all of us—residents, businesses, local government. Seattle has a long history of environmental stewardship that positions us well to move forward on an ambitious agenda to reduce our contribution to global warming and adapt to anticipated impacts within our region. However, public discourse on climate issues has seriously eroded over the last few years resulting in little support for policy makers to act. Therefore, we need to **leverage Seattle's history and build the community commitment necessary to support the policies that will help Seattle become a world leader in climate-action.**

FIRST STEP:
Building support can be challenging because climate change goals are sometimes seen as competing with other community goals, and often times get drowned out by events that seem more immediate in our minds. But in fact, Seattle's climate goals are very well aligned with the goals of shared prosperity, social equity, and environmental sustainability. Furthermore, there is a tremendous opportunity to link climate action with a healthy, just and prosperous future for all Seattle residents. However, in order to articulate those connections effectively, we need to **understand what is most important to Seattle residents and businesses and how climate policies may align with and support the values expressed by the community**.

> Quick Start Actions
> **Conduct local message and values testing** to identify what is most important to Seattle residents and businesses, what climate narrative is most compelling, and what communications methods will be most successful.
>
> **Building on the research, meet people where they are with a compelling narrative that is connected to what they care about.**
>
> **Use the narrative consistently and frequently in elected official and City department communications.** Emphasize that our decisions on this issue are among the most important we will make as a community. In other words, addressing this issue is not an extra duty but a core duty which directly aligns with voter aspirations. Also, make connections between the impacts we are experiencing and climate change.
>
> **Build a regional network of organizations and individuals committed to using the same proven narrative and messages when talking about climate action.**

WITH THAT FIRST STEP IN HAND, WE CAN MOVE AHEAD IN PARALLEL WITH THE FOLLOWING:

A. Seattle's climate protection goals must be achieved over time, as the outcome of many discrete policies and programs that are implemented as individual efforts. The community dialogue over these policies often focuses solely on immediate impacts while the effort's contribution to our long-term climate protection goals is lost. In addition, policy discussions can feel abstract and disconnected from people's daily lives leading them to disengage from the policy discussion. **Therefore we need to help people see the future through images that make clear the connections between the impact of our individual decisions and actions on a daily basis and policies that would encourage a more sustainable, healthy lifestyle for Seattle residents in the in the short- and long-term.**

<u>Quick Start Actions</u>
Develop images, info-graphics, and videos to illustrate the outcomes of implementing the Climate Action Plan and the alternative potential future if we do not move forward with the recommendations.

Connect climate change to projected local impacts that people relate well to such as the potential impact of rising seas on Seafair activities, declining snowpack impact on skiing in December, storm water quality/ocean acidification impact on Salmon and job/economic loss impact of this etc.

Explore how new media strategies, such as Facebook, Twitter, and video game technology can tell the compelling story of climate action.

B. Seattle's residents are a vast resource of bright ideas that could bring fresh thinking to long-standing challenges, help identify unintended consequences of actions, and highlight barriers to implementation. **Provide opportunities for the community to be involved in policy and program design and implementation.**

<u>Quick Start Action</u>
Use crowd-sourcing tools and other emerging technologies to provide opportunities for the general public to participate in designing climate policies and actions.

Host bright ideas contest to tap into the community's creativity to solve a pressing policy or program design challenge**.**

Partner with the University of Washington to provide opportunities for students and faculty to apply their knowledge to policy, planning, and technical challenges**.**

C. Thanks to several decades of focus on creating livable communities, Seattle already has many examples of climate strategies in action. Telling these stories through case studies can powerfully demonstrate the tangible outcomes from real world implementation of the Climate Action Plan. **Provide local examples of on-the-ground implementation of climate actions** that illustrate how climate actions – when effectively integrated – work together to further community goals.

<u>Quick Start Actions</u>
Develop **neighborhood profile case studies** detailing the on-the-ground impact of climate action policies, programs and investments in specific neighborhoods.

Develop "strategies in action" profiles that highlight the outcomes of individual climate action strategies, such as the City's parking demand management and energy benchmarking programs.

D. Widespread support for climate actions should be cultivated through local leaders serving as champions for action. Leaders should represent a broad cross section of interests and be recognizable to the public and role models to youth. **Create an alliance of unusual champions to serve as the new faces of climate change who are committed to helping the City implement the Climate Action Plan and to being early adopters of climate strategies.**

Activate a network of leaders from a wide range of backgrounds (artists, athletes, teachers, chefs, writers, entertainers, business leaders etc.) and communities to advise and assist the City in implementing the Climate Action Plan, make climate action commitments, and serve as allies in the community.

Identify new and unexpected messengers, including youth, to spread the word about the benefits of climate action.

E. Support for bold actions on the community scale often is built by encouraging action at the individual level. Community organizations are trusted messengers for calls to action, and have the energy and desire to work with their networks to help residents and businesses reduce their impact on the climate. **Through modest investments in training, funding and project support, the City can help significantly enhance community organization's climate action efforts.**

Quick Start Actions
Create an ongoing program to **support community-initiated climate action projects** (e.g. neighborhood barter fairs, programs that support new bicycle riders, etc).

Work with an existing **school-focused community organization** (e.g. Washington Green Schools) on a project that increases student engagement in climate action.

Create or build on an existing **social media tool** to provide a venue for people and organizations to share the actions they have taken and offer assistance to others.

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Green Ribbon Commission
DRAFT **Overarching Recommendations**

</div>

Be bold.

Climate change is a global challenge of sobering magnitude and urgency. While this challenge can feel daunting, Seattle more than most cities is well prepared to rise to the challenge. We have the passion, the leadership, and the creative spirit to develop innovative solutions to difficult problems. Our passion and decades of commitment to environmental stewardship can be seen in, among other things, our leading recycling rates, enviable success with water and energy conservation, and carbon neutral electricity.

Seattle is also a center for innovation that attracts companies committed to creative problem solving and technology-driven solutions. As a thriving center of innovation, Seattle is the ideal place to prove new ideas and scale up technologies to have local and national impact.

> ➢ Embracing its legacy of environmental leadership, Seattle should **be bold in pursuing solutions to climate change, taking risks to test out new policies and technologies.**

> ➢ Embracing its spirit of innovation, **Seattle should be the national proving ground for important advancements in climate action,** even if the local reductions in greenhouse gas emissions are limited because of our comparatively clean energy.

Embed equity in every solution.

No city can be a leader on climate change without advancing social and racial equity. The benefits of climate action must be widely shared in the community. To ensure strategies promote shared prosperity, it is essential that race and social equity goals are fully embedded in climate action design and implementation. No solution should require that the City's climate goals or equity goals be advanced at the expense of the other. All residents should have the opportunity to participate in the planning for and take advantage of the benefits of climate action. Enhancing housing affordability, improving access to a range of transportation choices, reducing the cost of energy efficiency upgrades and bills, increasing job training and opportunities for all are outcomes that can be realized if we consider equity as fundamental to the design of climate strategies.

> ➢ **Embed affordability and equity into all aspects of policy and program design** so that the story of climate action is also one of enhancing equity.

Combat climate change by creating a great place to live.

Too often the conversation about climate action has focused narrowly on reducing greenhouse gases or pitted the environment against our economy. Yet a comprehensive look at the benefits of climate action in building energy, transportation, waste and climate preparedness show that the community benefits can be much greater that the number of metric tons of CO2 reduced, and in fact also can provide economic opportunity, promote social equity, and create great neighborhoods. For example, reducing vehicle trips by providing transportation choices reduces air pollution and improves health outcomes;

reducing energy use through building upgrades creates economic opportunity and reduces energy costs; and creating complete neighborhoods improves connectedness and enhances our sense of community.

> To avoid missed opportunities, **climate strategies should never be designed as purely emission reduction efforts** but instead should also **be crafted to build a vibrant, prosperous and equitable city.**

Use Systems Thinking to Design Solutions.
Often the most effective and innovative solutions to reduce greenhouse gas emissions can be found at the nexus of multiple problems. Land use, transportation and the built environment operate as a complex and interdependent system.   By taking an integrated approach across disciples we can better understand the challenges and design more effective climate action strategies that achieve multiple community goals.

> When designing climate actions, **take a coordinated and integrative approach** that crosses disciplines and recognizes the interactions between complex urban systems.

Build Support for Climate Action.
The actions necessary to move Seattle toward a climate-friendly future that is healthy, safe and prosperous require deep and sustained commitment by the community. Seattle has a long history of environmental stewardship which positions us well to move forward on an ambitious agenda to reduce our contribution to global warming and adapt to anticipated impacts within our region. However, public discourse on climate issues has seriously eroded over the last few years resulting in little support for policy makers to act. Climate change presented in the broader context of the values of Seattle residents needs to become a widely discussed topic that inspires and engages the community.

> Conduct research to better understand residents' values to **develop a compelling narrative that captures the imagination** and is used consistently and broadly by our civic leaders and a new cadre of spokespeople.

Planning is important but implementation is critical.
When released in 2013, the Seattle Climate Action Plan will lay out a bold path forward to becoming a carbon neutral city, outlining the policies, strategies and actions that are necessary for realizing this vision. In addition, the City has a number of sector-specific plans that spell out additional actions and important project-level detail. These plans include transportation modal plans, utility resource and conservation plans, land use and neighborhood plans, and sustainable building plans. The Seattle Climate Action Plan, together with the sector-specific plans, create a state-of-the art road map (or bike path) for creating a low carbon city. However, the City's ambitious goals and impressive plans are only as good as their implementation.

> **Provide the necessary leadership and funding to fully implement the strategies and actions outline in the Climate Action Plan and the related sector plans**.

Draft Meeting Summary
Green Ribbon Commission Meeting #5
Transportation/Land Use & Building Energy
September 13, 2012
3:00 p.m. – 5:30 p.m.
Seattle Municipal Tower, Room 4050

3:00	Welcome & Introductions

Meeting Notes:

Denis Hayes, Co-Chair, welcomed the Green Ribbon Commission (GRC) to the meeting. See **Attachment 1** for a list of meeting participants.

3:05	Administration

Meeting Notes:

The GRC briefly reviewed the draft August 9 meeting summary and approved it by consensus.

3:10	Waste Sector

Meeting Notes:

- Jill Simmons recommended that because Seattle Public Utilities just completed a robust process to develop the Solid Waste Management Plan (SWMP), involving a community advisory panel and public comment, the GRC not develop recommendations for waste. Jill noted that the CAP will incorporate relevant recommendations from the SWMP
- Feel free to contact Jill Simmons or Christie Baumel with any questions or concerns about this approach.

3:15	Transportation and Land Use

Meeting Notes:

The original transportation and land use recommendations were vetted through the optional meeting on August 16 and were then revised by OSE based on meeting feedback. Recommendations are broken down by recommendation type (core, leadership, quick start, and guiding) and by theme (funding, policy and planning, infrastructure, transportation demand management, parking, and vehicle fuels and technologies). Also provided were the Technical Advisory Group (TAG) recommendations that did not rise to the top of the list, but that are likely to be included in the CAP.

Comments:

Overall

Report in General

It was suggested that the following be discussed in the report introduction, rather than embedded in the transportation recommendations:

- Make sure the recommendations convey the sense that Seattle is on the cutting edge with climate change. Seattle could be a population magnet.
- How can these recommendations strongly encourage leadership? How do we ensure accountability among elected officials?
  - It is most critical to have strong wording and specificity around the fact that we are in a funding crisis and for the Quick Start actions.
  - GRC should further discuss long-term accountability structures so this effort does not wane after the current administration.

Transportation

- Many issues are interconnected with the success of the transportation recommendations (e.g. Seattle waterfront).
  - o There was a suggestion to add Venn diagrams or graphs to the recommendations to acknowledge these overlaps without needing to go into the details.
  - o Interagency coordination provides an added level of complexity to implementing transportation recommendations. Waterfront is an excellent example.
- Taxes are lower on parking structures and lots than they are on buildings because such facilities have lower assessed values. Therefore, consider shifting to land value based taxes.
- Consider reprioritizing various transportation modes (pedestrian, bicycle, transit, single occupancy vehicles, etc.) in the same way we prioritize green buildings (LEED Certification levels).
- There should somewhere be a core recommendation on Green Stormwater, as it helps protect Puget Sound and has an overall effect on climate change issues.
- It was suggested that the Urban Growth Boundary is a fundamental mechanism for effecting transportation needs and modes as well as a means for changing the landscape of Seattle development.

Transportation Overarching Core Recommendation

- Focus more on highlighting land use—e.g. improve walkability of neighborhoods, create "complete" neighborhoods.
- Add health and equity to bolded section.
- Include adaptation.

Funding

- Concern was expressed about recommendation #4 on page 2, which called for assessing a multimodal transportation impact fee.
  - o "Impact fee" is a loaded term, so the recommendation will have to be carefully worded.
  - o The GRC decided to remove #4 as it could discourage development
    - ▪ It was noted that the City will need a lot of assistance in implementing #7 because there is a lot of pushback on this idea in neighborhoods (especially where parking is tight).
- What is covered in the Bridging the Gap levy? (A sheet was made available, and there was a brief explanation of some of the details from this funding source and what it can include.) It was recommended that language related to this funding source be broadened to cover more types of transportation projects, and there needs to be an overarching statement referencing the other levies that are not mentioned.
- Several concerns were expressed about the Quick Start action on implementing congestion pricing. Some expressed that it seemed too broad, and other expressed that it was too much like a "nibble" rather than a "bite."
  - o Consider Cordon Area Pricing versus specific road congestion pricing because there are recent examples of traffic patterns shifting and having an impact due to tolling on one road.
  - o With congestion or cordon pricing, we have to demonstrate to people that these actions are benefitting them.
  - o It was noted that this is one of the only funding actions that does not require legislative action and, it is also bold.
  - o This action will be further considered in a small group, as more data is necessary before finalizing the recommendation.

Parking

- It was noted that the Quick Start action on developing a parking benefit district is the only Quick Start action that requires legislative action before it can be instituted. Through discussion, the GRC understood this but still agreed to keep it as an action though not as a quick start.

Infrastructure

- On page 4, #3 should also mention greenways.

Policy and Planning

- For the Quick Start recommendations, consider having transit/mode prioritization become an adopted City policy, like it is in San Francisco.
- On page 3, change the word "Consider" to "Include" in #4.
- Consider articulating that these policies will result in air quality improvement.

Vehicle Fuels and Technologies

- In #1, change "by reducing barriers" to "including reducing barriers."
- Add a recommendation on having fast charging stations available. A question was also raised on how can the City facilitate adding charging stations around the perimeter of the City?
- Encourage people to make changes, but it is important to include how doing so will be beneficial.
  - What are examples of other benefits? One is being able to go in the HOV lane.
- There is a desire for Seattle to be a leader in electric transportation in the nation. It is easier to achieve this in Seattle given its topography.

4:30   Building Energy

Meeting Notes:
A representative from the August 27 optional meeting reviewed the building energy Quick Start actions to identify any points GRC members could not live with. The building energy recommendations were initially drafted after the first optional meeting, discussed at the full GRC meeting on July 12, and revised at the second optional meeting, so they should be nearly complete.

Recommendations are again broken down by recommendation type (core, leadership, quick start, and guiding) and by theme (pricing and financing, efficient operations, efficient construction, and infrastructure for low-carbon fuels). Also included are Technical Advisory Group (TAG) recommendations that are not included in GRC recommendations, but that are likely to be included in the CAP (in the table).

Comments:
Overall

- University of Washington (UW) and Seattle University should be involved. There is strong interest from UW, UW's research would be helpful, and colleges will be important allies.

Efficient Operations

- Consider adding real time meters on commercial buildings to the Quick Start actions.

Efficient Construction

- Revise the Quick Start action (page 5) to include work that still needs to be done on the Living Building ordinance. Include provisions for solar access as part of this recommendation.

Infrastructure for Low-Carbon Fuels
- This section should acknowledge district energy systems that are already in place (e.g. UW, Seattle Center, etc.)
    - One GRC member felt that if we do this, it is important to note that we are not causing additional air quality problems related to district energy systems.
- There needs to be more coordination between what city codes require individual buildings to do for energy conservation and the opportunities presented by district energy systems.
- In leadership action #2 under Infrastructure for Low-Carbon Energy, expand the phase "right-of-way" to allow all public space to be used for infrastructure.
- Regarding the recommendation on Carbon Neutral Electricity, while Seattle City Light has been doing a lot in this area, we should:
    - Acknowledge that "zero net emission electricity" is a big goal.
    - Not limit aspiration for what we can be doing by limiting the City to "zero" net emissions.
    - Address where in the City to invest leadership, accountability, and a sense of responsibility for pushing these actions forward more quickly than our recommendations suggest.

5:00   Mayor McGinn

Meeting Notes:

Jill Simmons introduced Mayor McGinn and City Councilmember Mike O'Brien, noting that the purpose of the Mayor's visit was to check-in with the Green Ribbon Commission and allow GRC members to update the Mayor on the direction of the GRC. GRC members did a round of introductions.

Brief Summary of the Mayor's Remarks:
- The whole City should strive to achieve deeper energy reductions because Seattle will lead and change the national conversation on climate.
- The recession pushed some topic areas into the background, but it is time to update the Climate Action Plan and reinvigorate the conversation.
- How do we take the work from the GRC to our constituencies and the general public in a way that lays the groundwork for real change?

Comments:
- The conversation has to be at the regional level.
- Several GRC members noted that it is essential to use the right language/lexicon in outreach on the Climate Action Plan and to have a consistent approach for how it is discussed in the Seattle Times, TV, speeches, etc.
    - The current language will not resonate with the public. It does not suggest that Seattle will be a better place to raise a family. We have to talk in a way that demonstrates we care about people and their concerns. Scientific, technical language must be changed to language that the public connects with.
    - If we do this, we will demonstrate real movement. However, if we don't use the right language, this effort will fail. It is worth the small investment required to achieve this lexicon.
    - It is also important to consider how to tell the story (e.g., What is your choice of transportation mode? How can you reduce energy? These are connected to fuel choices (for example, natural gas versus foreign oil).
- For us to have traction, we have to have a narrow focus and repetitive rhetoric.

- One of the challenges has been that there are many climate issues to address, which makes it hard to have traction. Seattle will need to help prioritize climate actions in communities; we cannot do everything we want to do. The City must work with City leaders and the public on these issues and make the connections between investments and community outcomes.
- With the right kind of campaign, we can inspire a willingness to take bold action. Seattle's political leaders need to be bold —if they are not in Seattle, it will not happen anywhere else in the country.
  - It was then noted that any campaign would have to use the right language, not business language.
- How can climate reenter the political dialogue in Seattle in this election cycle? It will be important to address "denialism," realities, our success with climate solutions, and the possibility of heading in the wrong direction because of people without Seattle's interest in mind (i.e. coal trains).

Closing Remarks by the Mayor:
- Every decision the Mayor makes is informed by climate change, public health and safety, environmental justice, etc.
- The City needs to consider its rollout strategy for the Climate Action Plan. What is the best medium by which to deliver the message? If the plan is released all at once at a big event, the media will highlight the most controversial elements of the plan rather than provide a complete picture. It might make more sense to release key strategies in the plan over time via a YouTube video or some other creative approach.

5:25	**Looking Ahead & Adjourn**

Meeting Notes:
- Optional Community Engagement Recommendations Discussion, September 17, 1:00-3:00 pm
- Optional Adaptation Recommendations Development, October 4, 11:00-1:00 (**Please RSVP**)
- **Full GRC Meeting #6, October 9, 3:00-6:00 p.m.**
- **Full GRC Meeting #7, October 24, 2:00-5:00 p.m. (NEW)**
- Roundtable with Mayor McGinn, Councilmember O'Brien, and Bill McKibben (environmental author and activist, currently on tour for his "Do the Math" campaign, which talks about the future of "the climate crisis"), **November 7** .
- Presentation of recommendations to the Mayor and Council, **December 10, 3:30-5:30 p.m.**

Attachment 1: Meeting Participants

Green Ribbon Commission Members			
Last	**First**	**Affiliation**	**Attended?**
Hayes ***Co-Chair**	Denis	President, Bullitt Foundation	✓
Koo ***Co-Chair**	Doris	Senior Advisor, Enterprise Community Partners	☐
Bagsby	Sean	Vice President, International Brotherhood of Electrical Workers, Local 46	☐
Carrasco	Jorge	Superintendent, Seattle City Light	☐
Duvernoy	Gene	President, Forterra	✓
Fleming	Dr. David	Director and Health Officer, Public Health – Seattle & King County	✓ (representative)
Franz	Hilary	Executive Director, Futurewise	☐
Frumkin	Dr. Howard	Dean, University of Washington School of Public Health	☐
Geller	Brian	Executive Director, Seattle 2030 District	✓
Glaberson	Terri	Executive Director, CoolMom	✓
Golden	KC	Policy Director, Climate Solutions	✓
Gregory	Bert	CEO, Mithun	✓
Hahn	Peter	Director, Seattle Department of Transportation	✓
Johnson	Rob	Executive Director, Transportation Choices Coalition	✓
Kenworthy	Craig	Executive Director, Puget Sound Clean Air Agency	✓
Mann	Michael	President, Cyan Strategies	✓
Martin	Chris	President, CleanScapes	☐
Maryman	Brice	Landscape Architect, SvR Design Company	✓
Ortega	Estela	Executive Director, El Centro de la Raza	✓
Owen	Megan	Director of Market Development, McKinstry	✓
Packard	Ben	Vice President, Global Responsibility, Starbucks Coffee Company	✓
Ridihalgh	Kathleen Casey	Senior Organizing Manager, Sierra Club	✓
Rosario	Tania Maria	Political Director, Service Employees International Union, Local 6	☐
Simmons	Jill	Director, Office of Sustainability & Environment	✓
Sugimura	Diane	Director, Seattle Department of Planning & Development	✓
Taniguchi	Harold S.	Director, King County Department of Transportation	✓
Twill	Jason	Senior Project Manager, Sustainability, Vulcan	✓
Washienko	Kathy	National Advisory Board Executive Committee, Union of Concerned Scientists	✓

Project Team/Other Staff			
Last	**First**	**Affiliation**	**Attended?**
Baumel	Christie	Seattle Office of Sustainability & Environment	✓
Morgenstern	Tracy	Seattle Office of Sustainability & Environment	✓
Wysocki	Sara	Seattle Office of Sustainability & Environment	✓
Saviskas	Sarah	Triangle Associates	✓
Wheeler	Bob	Triangle Associates	✓

Green Ribbon Commission
Meeting #7: Final Meeting Agenda
October 24, 2012
2:00 p.m. – 4:45 p.m.
Seattle Municipal Tower, Room 4050

Time	Agenda Item	Goal(s)	Materials
2:00 PM	**Welcome** Co-Chairs	• Welcome and Agenda review	
2:10 PM	**Administration** Co-Chairs	• GRC Meeting Summary from October 9, 2012 o Suggested additions, changes o Acceptance of these materials	• October 9 Draft Meeting Summary
2:15 PM	**Adaptation Recommendations** David Fleming Tracy Morgenstern	• Recommendations discussion, revision, and adoption	• Draft Adaptation Recommendations
2:45 PM	**Review Recommendations Package** Jill Simmons	• Final opportunity to discuss the recommendations	All Recommendations: Overarching, Transportation/Land Use, Building Energy, Building Support for Climate Action
3:30 PM	**Break**		
3:45 PM	**Recommendations Adoption** Co-Chairs	• Adoption of GRC recommendations *After substantial study and debate, the Green Ribbon Commission has reached an enthusiastic consensus on a set of climate action recommendations. We strongly support their inclusion in the 2013 City of Seattle Climate Action Plan. Approval of these recommendations is solely an expression of support from the individual Commission members and does not constitute an endorsement by the organizations with which members are affiliated.*	
4:00 PM	**CAP Indicators** Tracy Morgenstern	• Provide feedback on Climate Action Plan indicators	
4:20 PM	**Roll Out & Ongoing Engagement** Jill Simmons	• Discuss plans for GRC recommendations report & draft Climate Action Plan release • Discuss GRC engagement in release activities and with ongoing implementation	
4:45 PM	**Look Ahead & Adjourn** Co-Chairs Jill Simmons	• Bill McKibbon Roundtable Discussion 11/7 12:00 – 1:30 p.m., Mayor's Office **Please RSVP – annette.frahm@seattle.gov** • GRC Recommendation Release – Reception with Mayor & Council 12/10 3:30 – 5:30 p.m., Bullitt Foundation	

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While concerted efforts to reduce climate pollution are critical, historic emissions will disrupt the global climate for many years. Additionally, the lack of progress on reducing future global emissions means that additional climate change will exacerbate the impacts communities are already experiencing. Projected changes in Pacific Northwest precipitation, temperature, and sea level will affect health, property, and the economy.

Seattle already experiences, and therefore has strategies for responding to, the types of impacts we expect with climate change, such flooding, heat events, and extreme high tides. However, climate change will shift the frequency, intensity, and timing of these events. In many cases, what we now consider an extreme event will become a more normal event. Absent effective preparation, the impacts and costs associated with these events will increase. Therefore, **in addition to working to reduce greenhouse gas emissions, it is imperative that the City assess and prepare for the impacts of climate change**.

Adaptation planning is a complex challenge. The science of projecting impacts is evolving and complicated by the uncertainty of future global emissions reduction efforts. The result is a planning environment where past experience is not predictive of future conditions. The systems and plans put in place to enhance resilience to climate impacts must be frequently re-evaluated based on best available science. Adaptation planning can be informed by and is best executed in coordination with other related planning efforts designed to foster the city's resilience such as earthquake preparedness, emergency response, and public health.

These recommendations are intended to help guide City planning to enhance Seattle's resilience to the impacts of a changing climate.

Overarching Core Recommendation

The City should monitor projected climate impacts to better understand the projected changes in precipitation, temperature, and sea level and the resulting impacts on our environment, economy, and community. However, our future under a changing climate is uncertain. Projections are impacted by the amount of greenhouse gas (GHG) reductions achieved over time and advances in the science of monitoring and modeling future impacts. Therefore, the City should design flexibility into our urban systems to foster the necessary adaptive capacity to meet an uncertain future.

Many of these systems are not adequate to meet our current needs (e.g. public health services are inadequate compared to the scale of today's needs). As climate conditions change pressures on these systems will increase.

> ➢ <u>Enhance the capacity and flexibility of our urban systems</u> to better meet current needs and build our ability to be resilient to the impacts of climate change.

Comprehensive Adaptation Assessment & Planning

The City of Seattle has been working on climate change adaptation planning for a number of years; most notable are the leadership efforts of Seattle Public Utilities and Seattle City Light. However, the City does not have a comprehensive Climate Change Adaptation Strategy. As a first step, the City should develop a comprehensive adaptation strategy that employs an integrated and interdisciplinary approach which maximizes co-benefits such as fostering healthy communities, natural systems, social equity, and shared prosperity.

Quick Start Action

➢ <u>Conduct a citywide assessment</u> of the impacts of temperature, precipitation, and sea level rise on City infrastructure, operations, facilities and services, and on human impacts such as health and social services, with special attention to vulnerable communities. <u>Develop a comprehensive strategy to enhance resilience</u> to changing climate conditions that builds on work already completed and underway.

> *The balance of our recommendations provides more detail and suggests priorities for the City's adaptation planning efforts. The elements outlined below reflect our recommendation that the City focus on those actions where the City government has the greatest potential influence either directly through its operational role, or indirectly through its leadership, outreach or engagement role.*

Utility Systems

The City's utility systems are highly weather dependent. Our water supply and the majority of our electricity supply rely on precipitation in the form of rain and snow. Our drainage system which manages stormwater runoff is highly sensitive to changes in the volume of runoff from precipitation. Changes in the amount and timing of precipitation and runoff and the frequency, duration, and intensity of storms have the potential to significantly impact these systems.

A. Enhance the Resilience of Seattle's Electricity System.

Reducing demand for weather dependent hydro-electricity and increasing the efficiency of system operations will increase the ability of the system to meet the needs of a growing population and our obligations for natural resource stewardship under changing climate conditions.

Quick Start Actions

➢ Use applied <u>research and modeling</u> to evaluate climate change impacts on City Light's electricity resources and future energy demands beyond the 20-year planning horizon currently used in the Integrated Resource Plan.

➢ Collaborate with external partners such as the University of Washington Climate Impacts Group, Oregon Climate Change Research Institute, National Energy Labs, the National Park Service, and the Skagit Climate Science Consortium on <u>state-of-the-art climate research</u> to better understand the impacts of climate change on operations of City Light hydroelectric projects, including impacts on generating facilities and salmon survival.

A number of strategies that reduce building energy emissions are also adaptation strategies, specifically:

➢ Maximize the City's conservation programs to <u>promote cost-effective energy efficiency</u> measures that will help meet much of the city's future electricity needs, reduce the need for new energy sources as Seattle grows, and reduce energy costs to residents and businesses.

➢ Implement Advanced Metering to begin the transition to a "smart grid." Smart Grid technology will increase our ability to meet increasing customer demand, detect system overloads that could be caused by heat events or other issues, and reroute power, thus preventing or minimizing outages and improving system reliability. Advanced metering will also facilitate the integration of distributed electricity generation (e.g. solar) and storage.

B. Enhance the resilience of Seattle's Water Supply System.

By better understanding the impacts of future climate conditions on the city's water supply system such as changes to snowpack levels and the timing of runoff, Seattle can develop management strategies for meeting customer needs under future conditions.

Quick Start Actions

➢ Work with federal and academic research groups to generate the next generation of climate data downscaled to the watersheds supplying the city's water. Use this information to update the water supply impacts assessment and explore impacts on the intensity of forest fires, turbidity, the timing of fall rains, and precipitation within the city.
➢ Continue to invest in water conservation programs reducing regional per capita water use.
➢ Continue to lead the Water Utility Climate Alliance, a group of ten large urban water utilities providing leadership in assessing and adapting to the potential effects of climate change through collaborative action.

C. Enhance the Resilience of the Drainage System.

Green stormwater infrastructure (GSI) enhances flexibility of the drainage system in managing the uncertainty of future precipitations changes caused by climate change. GSI also helps prevent pollution and support wildlife habitat by mimicking the way natural water systems slow, clean and infiltrate stormwater. In developed areas, GSI augments the finite capacity of our existing "gray" (pipe and pump) stormwater facilities and manages increasing amounts of rainwater with a reduced reliance on the construction and operation of greenhouse gas intensive built infrastructure. GSI can be sited and designed in ways that advance multiple urban sustainability goals simultaneously, including: urban water quality, walkability and pedestrian safety, tree canopy recovery, neighborhood greenway development, and open space development.

Quick Start Action

➢ Adopt a green stormwater infrastructure policy and develop an implementation plan that recognizes the climate adaptation benefits of assets like green stormwater infrastructure (GSI), which includes designed and informal systems including the urban forest. The policy should affirm GSI as the preferred stormwater management tool, and develop strategic pathways for multi-agency implementation including expanded asset management programs, operations and maintenance programs and funding support.

Natural Systems

D. Protect and Enhance Natural Systems.

Seattle's natural systems including our urban forest and creeks could be impacted by the changes in our climate. Fish in our urban and rural watersheds are at risk from changes in temperatures and flows. Trees and other vegetation are at risk from emerging disease and insect pests and may be weakened by changes in growing conditions which further increases their susceptibility to pests. These natural systems support wildlife and enhance the livability of developed urban areas. The health of these systems also is important in a changing climate as they help keep our city cooler by mitigatng the heat island effect and reducing stormwater runoff both of which will be exacerbated by climate change.

Quick Start Actions

> ➢ Use <u>thermal imaging</u> to identify areas that are likely to be more heavily impacted by heat events and use data to inform development of urban forest and tree planting priorities and programs.
> ➢ Keep on pace to restore all 2500 acres of forested parkland by 2025 through the <u>Green Seattle Partnership</u>.
> ➢ Implement projects in several urban creeks that <u>connect floodplains, increase stormwater storage capacity and improve culverts to minimize flooding and improve habitat</u>.

Land Use & the Built Environment

E. Evaluate and Prepare for Sea Level Rise Impacts on Shorelines

An increase in sea level rise is anticipated to inundate low-lying areas and increase storm surge resulting in infrastructure and property damage, as well as loss of nearshore habitat. While the timing of these impacts is uncertain, we should begin to consider the implications for our land use planning and shoreline protection measures. We have strategies and regulations in place now to manage development and maximize the habitat value of shorelines; however, future conditions may require a reevaluation of these strategies as sea levels rise in order to protect habitat and property or possibly to retreat from the impacted area.

Preparing for climate change in general will require both local and regional-scale actions given that climate change impacts, and the natural systems and infrastructure affected by climate change, cross jurisdictional boundaries. Preparing for sea level rise (e.g. through shoreline management, built infrastructure solutions, and flood management) can best be managed by working in collaboration with the State, County and neighboring cities to create a coordinated approach that enhances preparedness and increases the cost effectiveness of solutions.

Quick Start Action

> ➢ <u>Evaluate the impacts of sea level rise on shoreline</u> development and habitat and consider implications for shoreline management strategies.
> ➢ <u>Collaborate with regional partners in addressing the impacts of sea level rise</u>, including evaluating the full range of projected impacts based on best available science and preparing a worst case scenario response strategy.

F. Enhance the Resilience of the Transportation System.

Our transportation system is fundamental to the health of the city. It is through this system that we travel to our jobs, school, shops and parks; that goods move to and through the City; and that emergency vehicles respond in times of crisis. The transportation system was built to withstand local weather and climate based on past data for this region. Increased temperatures, storms, and flooding

resulting from climate change could result in delays, disruptions, and damage to transportation infrastructure. For example, many Seattle bridges are over 60 years old and have experienced some shifting and settling. When combined with more frequent and prolonged periods of high temperature, the thermal expansion joints can become a structural issue that requires additional maintenance costs.

Quick Start Action

> Assess climate change impacts on transportation infrastructure and operations and identify critical transportation needs for emergency response, goods and service movement, and community access. Evaluate the risk and sensitivity to impacts (temperatures impacting bridge expansion joints, sea level rise impacts on roadway flooding, etc.), and create a processes for monitoring and mitigating this exposure. Adopt strategies for enhancing the resilience of the system under future conditions, including needed retrofits of current infrastructure and design considerations for future projects.

G. Foster Sustainable Building.

Buildings need to meet not only current conditions, but also perform well over time in a range of climate conditions, such as greater temperature extremes. Buildings that use advanced green building standards can be more resilient, relying less on centralized mechanical systems and more on decentralized passive and self-generated heating, cooling and water systems. The vast majority of existing and planned buildings are under private ownership, highlighting the importance of codes and incentives in enhancing the city's resilience.

The City should consider future climate conditions when designing buildings and identify current or future opportunities to include elements such as onsite stormwater management, distributed power generation, and passive solar that will foster the ability of the built environment to function and enhance our resilience under future conditions

Quick Start Actions

> Consistent with the Sustainable Buildings & Sites policy, pilot an advanced green building standard, such as the Living Building Challenge, on a City facility to understand the feasibility of such an approach on a larger scale, to assess its appropriateness for resilient design, and to promote similar levels of green building in the private market.
> Building on the High Performance Building Code which is incorporating sustainability elements into the building code effective in 2013, review development codes and incentives and identify barriers and potential opportunities to encourage private development to become more resilient.

Community Preparedness

H. Support Public Health.

Anticipated climate change impacts to human health and wellbeing include increased heat stress, respiratory diseases, vector-borne diseases, floods, and storms which stress not only our physical health but our mental health as well. Our public health system, nationally and locally, is not adequate to meet current public health needs and will be further stressed under future climate conditions.

Our most vulnerable populations, including lower income, recent immigrant, older and very young residents, are at greater risk of these health impacts and often have fewer resources to respond. As our population ages and income inequities become even more pronounced, fostering the resilience of our more vulnerable residents and supporting their recovery after extreme events becomes increasingly critical.

Quick Start Action

- ➤ **Assess the public health impacts of climate change** on residents including the disproportionate impacts on the most vulnerable residents and make support of vulnerable populations a priority in climate adaptation planning and strategy implementation.

I. Emergency Preparedness

The City coordinates internal resources and partners with other agencies, support organizations, and the community to prepare for, respond to, and recover from disasters. The Seattle Disaster Readiness and Response Plan is the city's primary guiding document for these efforts. Climate change will exacerbate several impacts considered including heat, flooding, storms, and disease. The City has assessed disaster management plans to ensure that the likely impacts of climate change are addressed.

Quick Start Action

- ➤ Continue to assess climate change impacts and factor projections into City emergency preparedness planning, including future updates to the Seattle Disaster Readiness and Response Plan.

J. Consider Climate Impacts in Food Systems Planning

The crops, livestock, and fisheries that supply our food as well as the global food distribution system could be significantly impacted by changes in temperature, amount of carbon dioxide (CO_2), and the frequency and intensity of extreme weather including floods and drought. While the 2012 drought in the US and Europe represents one year of data, such conditions are expected to become more common in the coming decades. Impacts on food supply affect price creating issues of access to affordable healthy food particularly for lower income residents. The City is developing its first food systems plan. The first goal of the plan is that: All Seattle residents should have enough to eat and access to affordable, local, healthy, sustainable, and culturally appropriate food. To meet this goal, the impacts of climate change should be considered.

Quick Start Action:
- ➤ Consider the impacts of climate change on access to healthy, affordable food including in future updates to the Seattle Food Action Plan.

Guiding Recommendations for Adaptation

Guiding recommendations are intended to guide how adaption strategies are implemented*.*

A. <u>Maximize Co-Benefits</u>. Pursue No/low regrets and "win-win" strategies that address current issues in addition to anticipated climate change impacts.
B. <u>Use Best Available Science</u>. Ground the City's adaptation planning in best-available scientific understanding of climate change risks, impacts, vulnerabilities, and adaptation strategies to help ensure that adaptation efforts are effective, and building in flexibility to accommodate evolving scientific understanding of climate impacts. .
C. <u>Adaptation Should Be Equitable</u>. Proactively address disproportionate climate impacts on disadvantaged populations (race and social justice) and do not take actions that compromise the ability of future generations to adapt to a changing climate (intergenerational equity).
D. <u>Mainstream Adaptation</u>. Integrate climate adaptation into existing and future City policies, planning, practices, and programs.
E. <u>Start with Existing Climate-Related Risks</u>. Climate change is projected to exacerbate many of the existing stresses associated with present-day climate variability and extremes. Strategies that reduce these present-day risks provide a good starting point for reducing long-term climate change risks and maximizing opportunities.
F. <u>Incorporate Flexibility</u>. Adaptation policies and infrastructure design should be flexible and incorporate adaptive management strategies so they can be adjusted in response to updated projections, changing risks, and other needs.
G. <u>Increase Technical Capacity</u>. Increase the City's technical capacity for adapting to climate change by promoting access to training, decision support tools, and expertise that help staff better understand climate, climate impacts, risks, and adaptation.

Overarching Green Ribbon Commission Recommendations

Be bold.

Climate change is a global challenge of sobering magnitude and urgency. Inaction has profound implications for future generations who be living with the consequences of our choices. While this challenge can feel daunting, Seattle more than most cities is well prepared to rise to the challenge. We have the passion, the leadership, and the creative spirit to develop innovative solutions to difficult problems.   Seattle's ingenuity and decades of commitment to environmental stewardship can be seen in, among other things, our leading recycling rates, enviable success with water and energy conservation, and carbon neutral electricity.

Seattle is also a center for innovation that attracts companies committed to creative problem solving and technology-driven solutions. As a thriving center of innovation, Seattle is the ideal place to prove new ideas and scale up technologies to have local and national impact. As a prosperous city with these advantages, Seattle has the opportunity and responsibility to be bold and take risks in charting a path forward that will contribute to a growing body of experience that informs climate actions across the nation and the world.

> ➢ Embracing its legacy of environmental leadership, Seattle should **be bold in pursuing solutions to climate change, taking risks to test new policies and technologies.**

> ➢ Embracing its spirit of innovation**, Seattle should be the national proving ground for important advancements in climate action,** even if the local reductions in greenhouse gas emissions are limited because of our comparatively clean energy.

Create a great place to live by taking climate action.

Too often the conversation about climate action has focused narrowly on reducing greenhouse gases or pitted the environment against our economy. Yet a comprehensive look at the benefits of climate action in building energy, transportation, waste and climate preparedness show that the community benefits can be much greater that the number of metric tons of carbon dioxide reduced, and in fact also can provide economic opportunity, promote social equity, and create great neighborhoods. For example, reducing vehicle trips by providing transportation choices reduces air pollution and improves health outcomes; reducing energy use through building upgrades creates economic opportunity and reduces energy costs; and creating complete neighborhoods improves connectedness and enhances our sense of community.

> ➢ **Climate strategies should be designed not only as emission reduction efforts but also be crafted to build a vibrant, prosperous and equitable city.**

Embed equity in every solution.

No city can be a leader on climate change without advancing social and racial equity. The benefits of climate action must be widely shared in the community. To ensure strategies promote shared prosperity, it is essential that race and social equity goals are fully embedded in climate action design and implementation. No solution should require that the City's climate goals or equity goals be

advanced at the expense of the other. All residents should have the opportunity to participate in the planning for and take advantage of the benefits of climate action. Enhancing housing affordability, improving access to a range of transportation choices, reducing the cost of energy efficiency upgrades and bills, increasing job training and opportunities for all are outcomes that can be realized if we consider equity as fundamental to the design of climate strategies.

> **Embed affordability and equity into all aspects of policy and program design** so that the story of climate action is also one of enhancing equity.

Use Systems Thinking to Design Solutions.

Often the most effective and innovative solutions to reduce greenhouse gas emissions can be found at the nexus of multiple problems. Land use, transportation and the built environment operate as a complex and interdependent system.   By taking an integrated approach across disciples we can better understand the challenges and design more effective climate action strategies that achieve multiple community goals.

> When designing climate actions, **take a coordinated and integrative approach** that crosses disciplines and recognizes the interactions between complex urban systems.

Build Support for Climate Action.

The actions necessary to move Seattle toward a climate-friendly future that is healthy, safe and prosperous require deep and sustained commitment by the community. Seattle has a long history of environmental stewardship which positions us well to move forward on an ambitious agenda to reduce our contribution to global warming and adapt to anticipated impacts within our region. However, public discourse on climate issues has seriously eroded over the last few years resulting in little support for policy makers to act. Climate change presented in the broader context of the values of Seattle residents needs to become a widely discussed topic that inspires and engages the community.

> Conduct research to better understand residents' values to **develop a compelling narrative that captures the imagination** and is used consistently and broadly by our civic leaders and a new cadre of spokespeople.

Planning is important but implementation is critical.

When released in 2013, the Seattle Climate Action Plan will lay out a bold path forward to becoming a carbon neutral city, outlining the policies, strategies and actions that are necessary for realizing this vision. In addition, the City has a number of sector-specific plans that spell out additional actions and important project-level detail. These plans include transportation modal plans, utility resource and conservation plans, land use and neighborhood plans, and sustainable building plans. The Seattle Climate Action Plan, together with the sector-specific plans, create a state-of-the art road map (or bike path) for creating a low carbon city. However, the City's ambitious goals and impressive plans are only as good as their implementation.

 While the City can make progress on implementation with existing resources and by realizing increasing efficiencies, the plans cannot be fully implemented without additional investment by the public and private sectors. There are a range of funding options including property taxes, user fees, pollution fees,

and innovative public/private partnerships. Elected officials should evaluate the pros and cons of the various funding options, including the equity impacts, and move forward the best options to meet the plan goals.

> ➢ Provide the necessary leadership and funding to **fully implement the strategies and actions** outlined in the Climate Action Plan and the related sector plans.
> ➢ **Funding strategies that generate revenue and also work to impact behavior** and investment such as pricing strategies should be given priority, but equity impacts must be mitigated.

<u>Put a price on climate pollution</u>.

Five years of a carbon tax in British Columbia has demonstrated that an economy can thrive with a price on climate pollution; emissions have fallen while the province has outperformed the rest of Canada in economic growth. California, too, has taken the lead on carbon pricing by creating create a cap-and-trade program that ramps up next year. Washington should follow the lead of our neighbors by putting a price on climate pollution, which will incentivize emissions reductions, generate revenue to support climate action, and support the transition to a clean energy economy.

> ➢ Encourage the State to evaluate what carbon pricing mechanism (carbon tax, cap-and-trade program, or other) will work best in Washington, including how to mitigate the regressive impacts of the selected pricing mechanism.
> ➢ Actively work to **build community support for carbon pricing** in Washington State.

Overarching Core:

1) Seattle offers a high quality of life in a stunning natural setting powered by clean electricity. Residents have many mobility options and don't need to travel as far to meet their daily needs. By focusing on creating complete communities the City should be a magnet for new residents and jobs, attracting a significant share of the region's growth, and thereby helping to reduce per person climate impacts in the region. **The City should attract a significant portion of the region's growth to reduce the per person climate impact of the region**.

2) Washington's petroleum consumption drained nearly $15 billion out of the state economy in 2011 alone-more than $2,000 per person. Money spent on cars and gasoline creates less than half as many local jobs as money spent on other goods and services. This is not sustainable for our economic or environmental health. **Seattle should be a leader in reducing reliance on oil and transitioning our transportation system to clean, low-carbon solutions that are good for our economy**.

3) Historically, land use and transportation planning have assumed the car is our primary means of getting around. A fundamental shift in our land use and transportation system is necessary to reduce our reliance on auto travel. Our transportation and land use system must:
   a. support a thriving community of diverse, **livable and walkable neighborhoods centered on transit** with quality and convenient recreation and services.

4) Over the next few years already inadequate funding levels at the County and City will sharply decline if new or renewed funding sources are not put in place. The result will be significant reductions in existing service levels. At the same time, we have a bold vision for a future where transit service and pedestrian, and bicycle infrastructure meet the majority of our passenger transportation needs. Such a future will require substantial new investment. It is imperative that the City and region:
   a. continue to **increase the efficiency and equity** of transportation investments and develop funding sources to **sustain existing service levels**, and
   b. **identify and prioritize funding to meet the bold vision** of a city crisscrossed with efficient, effective, accessible and well-maintained transit, bicycling, and pedestrian infrastructure and services.

Funding

<u>Leadership</u>

1) **Renew and extend the duration of the Bridging the Gap levy** and prioritize revenues to multimodal transportation strategies including investments in transit, pedestrian and cycling improvements and system maintenance.

2) Create a city **development authority*** or similar mechanism to form public private partnerships and use district-based funding mechanisms (e.g. **tax increment financing***, tax abatement, simplified local improvement districts) to promote and shape transit communities while supporting existing residents and businesses.

3) Secure local or transit agency authority to levy a motor vehicle excise tax (**MVET) with variable rates*** based on the GHG emissions intensity of vehicles. Use revenues for enhanced transit service,

speed and reliability improvements or to benefit other transportation choices. Implement an MVET at the City, County or regional level.

4) Work with regional partners including PSRC to advocate for state and federal legislative authorization and regional implementation of **variable congestion pricing*** on all limited access highways and potentially also on major arterials in Central Puget Sound. Legislation should allow the regional authority to set rates and objectives and to dedicate revenues to multimodal transportation including transit, bicycle, and pedestrian operations, maintenance and improvement projects.

5) Levy a **tax on off-street parking***, to supplement the current commercial parking tax authority.

*Actions require legislative changes to implement.

Quick Start

Congestion pricing is an effective means of impacting travel behavior and has substantial revenue generating potential. The City of Seattle has the legal authority to implement congestion pricing on city roadways. Building support for implementing this pricing strategy is challenging and proven examples of effective implementation of local roadway pricing in the U.S. are limited suggesting the need for a pilot scale project.

> ➢ *A quick start action may be added based on the results of the discussion at the optional congestion pricing meeting on the 18th. We will report out the results of that meeting.*

Policy & Planning

Land use and transportation policies and planning are highly interdependent elements of a climate-friendly future in Seattle. People living in compact, complete neighborhoods enable transit to effectively and efficiently meet their travel needs. Conversely, providing robust transportation options attracts residents to these neighborhoods.

Core

1. Recognizing that specific corridors will have different priorities (identified in the Transit, Bicycle, and Pedestrian Master Plans) and there is a need to accommodate freight movement, as a general rule, the City should prioritize transit, walking and biking over auto travel.

2. More than 100,000 new residents and jobs are anticipated over the next 20 years. To enhance Seattle's livability, **attract new residents and jobs to nodes** well served by transit and non-motorized transportation options, and implement land use strategies which provide more services that meet residents' daily needs within a convenient walk.

3. Consideration of climate goals should be well integrated into local and state agency planning efforts. The City, County, PSRC, and State should more strongly **focus land use and transportation planning and funding decisions to achieve adopted climate goals.**

4. The efficient movement of freight and goods is vital to our local economy. Seattle is a growing port city and as we continue to grow and work to reduce the auto-dependence of passenger transportation, we need to **support the efficient movement of freight and goods**.

5. Unhealthy air quality, lack of physical activity, and unbalanced diets have serious health consequences that reduce longevity and quality of life and result in billions of dollars in health care costs. How we plan our land use and transportation system can play a significant role in reducing these consequences. **Consider health outcomes in transportation and land use planning** including promoting walking and bicycling, reducing air pollution, and fostering access to healthy food.

Leadership

6. Provide for the retention and creation of **affordable commercial space and family-sized housing** in transit communities through inclusionary zoning*, expanded density and height bonuses, tax exemptions and joint development projects*

*Requires legislative action.

Quick Start

Prioritization Tool:

➢ Develop a **prioritization tool** to ensure consideration of GHG emissions impacts and potential reductions when updating and implementing transportation and land use plans and policies. The tool should include criteria for evaluating and balancing modal priorities in various corridors to meet mobility goals.

Freight Master Plan:

➢ Develop a **Freight Master Plan** incorporating goals to improve the efficiency and reduce the GHG emissions impact of goods movement.

Right-of-Way Reallocation:

Portions of the right-of-way can be converted to public uses to enhance public spaces and encourage pedestrian use of the space. A successful example of such a project includes the McGraw Square plaza, which serves as a waiting area for the Streetcar Line.

➢ **Create a Public Space Management Strategy** to creatively activate the public right-of-way to enliven public spaces, support vibrant streets and neighborhoods and promote economic activity.

➢ **Reallocate a portion of the public right-of-way** in a selected area from general traffic use to a public/pedestrian space such as a plaza or parklet.

Corridor Plan:

The City has myriad modal and land use plans that are complementary. However, corridor approach would allow more effective land use and transportation planning integration and help identify corridor-specific priorities and location-specific opportunities, as well as daylight barriers to maximizing transportation outcomes.

➢ Develop and implement a **comprehensive land use and multimodal plan in a high priority transit and bicycle corridor** with the goal of shifting more trips to travel modes that generate fewer, or no, greenhouse gases.

Infrastructure

Core

1. Building and transportation infrastructure work together as a system shaping where people live and how they get around. We can maximize the impact of this system through well integrated planning. **Integrate building and transportation infrastructure planning** to maximize the impact of both types of infrastructure on achieving our climate and community goals.
2. Enhancing mobility, access and safety through a range of transportation choices is key to reducing auto dependence. Transit is a critical foundational strategy for meeting our land use and transportation goals and supports the viability of walking and bicycling for many trips. **Expand transit, pedestrian, and bicycle infrastructure and service** consistent with the modal plan priorities**.**

Leadership

3. Develop a comprehensive, connected network of **separated bicycle facilities** in the Center City and Urban Villages.
4. Develop a citywide network of **neighborhood greenways** on traffic calmed residential streets.
5. Provide fast, frequent and reliable transit to those who live, work and play in Seattle by implementing the Seattle Transit Master Plan's vision for **high capacity transit**.
6. Enhance **sidewalks, crossings and public places** in Urban Centers and Urban Villages*.*
7. When designing and constructing infrastructure, employ **green construction practices** including green stormwater infrastructure and low carbon materials.

Quick Start

Center City Separated Bicycle Lane:

Increasing bicycle use through the Center City is an essential step to manage future travel demand and also encourage more people to commute to work via alternate modes. The Bicycle Master Plan update is underway and will identify preferred routes for cycle track and other separated bicycle facilities.

➢ **Build a separated bicycle lane in the Center City**.

Transportation Demand Management

Leadership

Provide incentives, marketing, and imaginative facility enhancements to **make transit, walking, and biking more fun and appealing** by creating enriching experiences rather than thinking only in terms of basic infrastructure and service (e.g. fun station stops, music, interactive features such as musical stairs and touch screens, etc).

<u>Quick Start</u>

Travel Information:

The popularity of the mobile information application, One Bus Away, highlights the value of real time travel information

➢ Increase the number of **real-time dynamic signage** to share up-to-the minute estimates on bus arrivals.

<u>Safe Routes Projects:</u>

The Safe Routes to School program is an effective means of encouraging students to walk or bike to school, which helps students choose a healthy alternative to being driven to school.

➢ Build on the Safe Routes to Schools program by implementing **Safe Routes projects** to improve pedestrian connections to transit and neighborhood business districts.

Parking

<u>Leadership</u>

1. **Expand parking policies** to incorporate goals beyond customer access. Consider policies that would allow spending of new revenue to support improvements that further neighborhood livability as well as transit, bicycle, and pedestrian infrastructure and services.
2. Expanding parking policies to meet goals beyond business access requires local community support. Investing a portion of additional revenue generated from increased parking rates or expanded hours in local improvements can help build business support and further land use and transportation goals. Collaborating with area stakeholders, develop a **parking benefit district*** or a similar model in an area with high demand for on-street parking; dedicating a portion of new revenues* to enhance the streetscape and access by walking, bicycling, and transit within the district.

<u>Quick Start</u>

➢ Create a new grant program **to support mobility** projects in business districts with paid parking.

*Requires legislative action.

Vehicle Fuels & Technologies

While the recommended actions for land use planning and transit, bicycling and walking facilities and services will reduce the need auto travel, cars will remain a part of our transportation portfolio. In addition, the number of transit vehicles and trips on our roads will grow. Therefore, it is important that we reduce the climate impacts of the remaining cars and transit operations by making them more efficient.

<u>Core</u>

1. Seattle's carbon neutral electricity supplied by more than 92% hydro-electric sources positions us well to transition fossil fuel based transport to climate-friendly electricity. Seattle should be a leader in supporting the transition from fossil fuels to electricity-based transportation.

<u>Leadership</u>

1. Develop and implement strategies to **help make electric vehicles a viable and desired option for all residents** by reducing barriers including access to charging infrastructure for households without off-street parking.
2. Pursue grant funding and partners to **develop a network of fast charging stations** that will allow vehicles to charge in under 30-minutes increasing vehicle range, expanding opportunities for charging, and providing commercial opportunities to business owners.
3. Double the number of bus route miles planned for conversion to **electric bus**.
4. King County Metro operates more than 600 diesel-electric buses that are up to 30% more fuel efficient and have saved over 2 million gallons of fuel since 2007. **Upgrade Metro's entire 1,500 bus fleet** with hybrid or electric buses by 2018.

<u>Quick Start</u>

➢ Electric trolley buses are remarkably energy-efficient mode of public transport, serving 20% of King County Metro riders on 14 routes. Replace the entire trolleybus fleet with newer, more energy efficient technology.
➢ Pilot test an all-electric battery powered bus.
➢ Expand the City's electric vehicle (EV) fleet.
➢ Support private adoption of EVs through codes, streamlined permitting to facilitate installation of charging stations, and by assessing and planning for demand, access, and utility impacts.

Guiding Recommendations for Transportation and Land Use

Recommendations intended to guide how transportation and land use strategies are implemented.

1. In order to make transit-oriented communities work for the range of Seattle household types, consider the needs of families and an aging population in land use and transportation planning to effectively support a growing and diverse population and expand the use of non-auto modes by all residents.

2. Investing in transit communities can improve the physical environment and function of these areas but also increase the cost of living and doing business thereby displacing existing residents and businesses. To address the negative effects that gentrification can have on neighborhoods, adopt policies to assist existing residents and businesses to remain and thrive in areas targeted for transit oriented development.

3. To meet social equity and mobility goals, design pricing strategies to mitigate direct impacts on lower income residents (e.g. discounts). Additionally, expand the transportation options that people need to get around as new pricing strategies are implemented, investing revenue from new pricing strategies to enhance travel options.

Building Energy Recommendations

Recommendation Organization

Core: Recommendations that serve as the backbone of the building energy strategies.

Leadership: Actions that are essential to advancing the city's climate goals yet are also significant lifts to implement.

Quick Start Actions: Actions that can be done within the next 1-3 years to pilot new ideas, test new approaches, and build support for leadership actions.

Guiding: Recommendations that guide how building energy strategies are implemented.

Pricing and Financing

The recommendations in this report strive to strike a balance between the call for deep energy reductions and the practical reality that retrofit decisions are often made based on cost-effectiveness. Energy pricing and efficiency incentive structures that make a strong business case are key to widespread uptake of energy efficiency. In fact, some important strategies only become cost effective if pricing, incentive, and financing programs are also implemented.

Core:

1. All of the recommendations will have some level of success individually, but finding the right package of pricing, financing, and incentives is key to making the energy efficiency upgrades more obvious economic wins. The **economics of energy efficiency investments must be compelling, and compelling for all**. With such diversity in our building stock and ownership structures, there is no "one-size-fits-all" solution.

Leadership:

1. **Outcome-Based Incentives**: Outcome-based incentives are utility incentive structures based on the actual energy savings of an energy upgrade rather than the projected savings of individual measures. This model has could allow higher incentive payments because there is no risk that the energy savings may not be realized (and therefore no need to discount the incentive level). Pilot (and if successful establish) outcome-based incentive structure at Seattle City Light. Also investigate what incentive levels and structures most effectively promote deep energy retrofits and move toward establishing those systems.
2. **Innovative Financing Options**: Ensure broad access to financing with alternative repayment structures by exploring meter-based financing programs and, potentially, PACE (Property Assessed Clean Energy) financing or a similar model. These tools are attractive for a number of reasons, such as:
    - For business, they provide financing that allows them to side-step the capital budgeting process, and they can be characterized as an operating expense instead of a debt.

- For residents, linking long-term repayment to a meter instead of an occupant so that repayment can be amortized over longer periods of time despite changes in ownership/tenants.

3. **Public Funding for Additional Energy Efficiency Incentives:** Seattle's mild climate and inexpensive energy create a challenge to realizing near-term paybacks for energy efficiency measures. The City should identify new sources of funding for incentives to encourage deeper energy retrofits. Because climate protection and energy conservation results providing long-term community benefits a property tax levy is one option to generate incentive funding. Public funding through a tax levy has the benefit of being fuel source neutral (utility incentives are fuel-specific), which means the incentives have considerably more flexibility to promote deep energy efficiency than utility incentives that have restrictions. In addition, the levy resources would be invested back into the building stock, preserving assets and potentially increasing property values. The benefits to the public include improved communities, local job creation, improved energy performance, and reduced carbon emissions.

4. **Rental Housing Energy Efficiency Property Tax Exemption:** Establish a property tax exemption program for existing rental housing for owners who undertake energy retrofits. In situations where the tenant pays utility bills, there is little financial incentive for a landlord/building owner to undergo an energy retrofit. This program would provide a financial incentive for landlords/building owners to take action and lower utility bills for tenants.

Quick Start:

1. **Outcome-Based Incentives**: Seattle City Light should coordinate with other utilities to pilot a performance-based utility incentive program that would pay incentive dollars over time as actual energy savings are verified, rather than paying an up-front incentive based on the projected savings of individual measures.

2. **Innovative Financing Options**: Launch a working group of downtown property owners and managers to evaluate financing tools for commercial buildings and identify those which are most likely to promote deepest energy efficiency investments. Develop a plan to bring the financing tools to market, including a legislative strategy if one is required.

3. **Public Funding for Additional Incentives**: Define the elements of an incentive program that a bond initiative would support. Link the message of public funding to tax exemption programs and rebates to make it clear that the public is collectively investing in their own building stock.

4. **Rental Housing Energy Efficiency Property Tax Exemption:** Pass legislation to get the authority to establish a property tax exemption program for existing rental housing owners who undertake significant energy retrofits.

Efficient Operations

Most of the buildings we will see in Seattle in 2050 have already been built. Making deep efficiency gains in our existing building stock is imperative to meeting the City's climate protection goals. Seattle has a long history as a conservation leader thanks to robust programs from Seattle City Light and an aggressive Seattle energy code that requires significant energy efficiency for buildings undergoing a major renovation. But the City has much less experience and few programs or tools to reaching existing buildings outside those contexts (Community Power Works and the City's Energy Benchmarking requirements are notable exceptions).

The recommendations for existing buildings (found both in this section and in the Pricing & Financing section) recognize a role for mandates to create widespread action. However, implementing the incentives, financing and mandate recommendations should be staged to reflect the interactions, maximize synergies, and avoid unintended consequences. A key to doing so is to focus first on the Pricing & Financing strategies in the section above and the incentives within this section to enable the financial capacity for voluntary action before expanding to mandates.

Core:

1. To make gains in energy efficiency, **energy use must be visible**. This requires real-time, easy to understand information about energy use, and building energy ratings that are easily accessible to the public.
2. Even with a strong economic case driving voluntary action, **there is a role for mandates** in the City's strategy. After providing ample opportunity and incentives for voluntary action, all buildings in the City should be mandated to take cost-effective action to improve their efficiency.

Leadership:

1. **Benchmarking, Disclosure, and Rating:** Establish programs to increase the visibility and awareness of energy performance in our buildings. The right program design varies by building type.
   - For large multifamily and commercial buildings, expand the existing Benchmarking and Reporting program to make benchmarked information more publicly available, with an ultimate goal of having highly visible energy performance (such as by placing energy ratings or real-time meters in building lobbies). This program should follow incentive and assistance programs to improve building performance and promote voluntary disclosure.
   - For single family homes, establish a requirement for disclosing a home energy use or energy efficiency rating at the point of sale.
2. **Energy Efficiency Standard:** Even with attractive incentives and near-term paybacks, many buildings will continue to operate without even the most cost effective energy efficiency upgrades. Requirements for basic energy efficiency can ensure widespread improvements to our entire building stock.   A standard can be strategically implemented to ensure required improvements are cost-effective, and can ramp up over time after tools and incentives are available to assist building owners. The right overall Building Energy strategy should define a clear and easy path for voluntary compliance before requirements are introduced.
   - Expand inspections and enforcement for code compliance.
   - Require large multifamily and commercial building owners to improve the energy performance of buildings at established intervals (e.g. once per decade). Examples include a mandatory building "tune-up" (retro-commissioning), or a change-out of the most inefficient lighting systems.
   - Require cost-effective home energy upgrades for single family homes at the point of sale. This should be a longer-term strategy, enacted only after information, financing tools, and rebate programs are in place to incentivize voluntary action.

3. **City Leadership:** The City should show leadership in its municipal buildings. City buildings can serve as role models, test cases, and case studies for new policies.

Quick Start:

1. **Retro-Commissioning Incentives**: Seattle City Light is currently developing a retro-commissioning pilot program, which will provide an audit to help building managers identify and implement operational and maintenance improvements. If pilot results are positive, identify resources to scale up and expand the program.
2. **Retro-Commissioning City Buildings**: Develop a strategy for retro-commissioning City facilities as part of the Resource Conservation Management Plan under development.
3. **Long-Term Program for Key Elements of Community Power Works:** A three-year pilot program, Community Power Works, is underway to establish and test new strategies that drive deeper energy efficiency upgrades for commercial and residential buildings. Build on the lessons from this pilot to establish a long-term program providing assistance, financing and other tools to help building owners identify and implement more comprehensive energy efficiency upgrades.
4. **Rapid Deployment of Smart Meters:** Through implementation of Seattle City Light's Strategic Plan, support the rapid deployment of advanced metering infrastructure to better support residents with energy management. Smart meters help educate users by providing them with real-time information about their energy use and the impacts of conserving.
5. **Benchmarking, Disclosure, and Rating:** Define and test core program elements for a home energy rating requirement at the point of sale. For example, a near-term pilot could explore how a program would use home inspectors, appraisers, home energy assessors and/or previous utility bills in evaluating home energy performance.

Efficient Construction

The strategic point at which a City can most easily influence energy use in buildings is through the regulations placed on new construction and major renovations. Seattle has a strong history of doing so through its energy code and green building incentives. The energy code should continue to be at the core of the City's strategy to reduce energy use and carbon emissions in new buildings. The State of Washington is already planning to incrementally increase the efficiency of the state energy code, and the City should continue to achieve an even higher bar with its own energy code. Until energy codes requirements mandate deep energy efficiency, incentive programs should encourge new construction to voluntarily achieve those standards.

Leadership:

1. **Outcome-Based Energy Code:** Move toward an outcome-based approach to managing energy code compliance to ensure buildings are attaining their modeled performance. Ultimately the energy code should include a combination of prescriptive elements, performance requirements, and outcome-tracking.
2. **Energy Upgrades with Substantial Alterations:** A substantial alteration is a building code term for a major change to a building or its use. Examples include replacing the interior after a major fire, or restoring a vacant building. Such extensive remodeling typically occurs once every 30 – 50 years in a

building's life, and provides a rare opportunity to economically upgrade a building's energy performance. The City should require that the energy performance of buildings undergoing improvements of this magnitude must come close to (e.g. within 20%) of energy performance requirements for new buildings.

3. **Land Use Policy and Building Codes:** Think creatively about how land use strategies and building energy strategies can integrate to create highly efficient new construction. For example, regulation of building envelopes could strategically drive building designers to better capture passive heating, cooling, and daylighting opportunities. Infrastructure funding related to transportation and land use could also support district energy infrastructure. Integrating energy consideration into land use and zoning discussions could capture additional opportunities for multiple wins.

Quick Start:

1. **Outcome-Based Energy Code:** Evaluate the findings of the existing outcome-based code pilot between the Preservation Green Lab and the City and develop a strategy for building upon the pilot.
2. **Living Building Pilot Implementation**: Work with stakeholders to continue improving the Living Building and Deep Green Pilot Program to promote deep green buildings in Seattle. As part of this work, consider additional protections for solar access to ensure that investments in solar energy can continue to be realized in the long-term.

Infrastructure for Low-Carbon Energy

Energy efficiency can only take us so far: carbon neutrality requires the city to further adopt low- or no-carbon energy sources. Seattle is fortunate to benefit from carbon neutral electricity through Seattle City Light, but there are many buildings that use fossil fuels—natural gas and oil—to heat and cool their buildings. On-site renewable energy systems and district energy systems are part of the solution. District energy systems provide a platform for using waste heat and renewable energy sources, and move these resources around in a system to where and when they are most needed. Given the high cost of infrastructure, the load requirements needed to make district energy cost-effective, and Seattle's carbon neutral electricity, district energy is not a universal solution, but does have a valuable role in targeted locations.

Core:

1. Creating a diversity of **low-to-no carbon energy sources** should be a priority for the city. Hydronic heating infrastructure and connected network of district energy systems can bring versatility to the city's low-carbon energy resources. On-site renewable energy systems help supplement the City's carbon neutral electricity, create diversity in supply, and contribute to the market growth of renewable energy systems.

Leadership:

1. **Waste Heat Recovery:** Develop district energy systems and incentive programs to capture and utilize waste heat (e.g. from industrial operations, data centers, or sewage lines). In the longer-

term, and where appropriate, mandate waste heat recovery. Heat recovery not only makes use of a waste product, but in some cases can reduce other energy needed to cool the excess heat.

2. **Use of Public Space for Alternative Energy:** Where appropriate, allow public space, including the public right-of-way, to be used for alternative energy, such as solar panel encroachment, and inserting ground source heat wells to provide heating and cooling to nearby buildings. This alternate siting of ground source heating can provide benefits to the construction schedules and budgets because construction will not need to cease on the building site while the wells are being installed.

Quick Start:

1. **District Energy Pilot**: The City is currently undertaking a study to test the feasibility of developing a district energy system with a private utility partner. If results of the feasibility analysis are positive, support development of the system while ensuring its commitment to low-carbon fuel sources.
2. **Low Carbon Energy Master Plan:** Successfully establishing low-carbon energy infrastructure requires a long-term strategy and careful coordination. The City should develop a master plan to guide the establishment of low-carbon energy systems in the City. The plan should identify priority locations, priority energy sources, and e policies on utility coordination, as well as consider the advantages of hydronic heating in future code evolutions and identify associated land use impacts or other policies, requirements, and incentives. The plan should recognize and build upon existing district energy successes in Seattle, and focus growth of district energy in ways that minimize carbon and other emissions that impair air quality.
3. **Carbon Neutral Electricity:** Maintain SCL commitment to meet load growth with conservation and renewables, as well as to providing zero net emission electricity. SCL should also facilitate the adoption of electric vehicles in Seattle to help reduce our dependence on oil.

Guiding Recommendations for Building Energy

Recommendations intended to guide how building energy strategies are implemented.

1. **Taking broader view of policy design can enable building energy strategies to achieve additional community outcomes**. For example, expanding some incentive programs beyond a focus on energy to also consider green building and health goals can help Seattle achieve greater energy and water conservation, healthier indoor environmental quality, more use of recycled materials, and improved housing and business affordability. The City should explore options for capturing broader environmental, health, and equity goals into the implementation of the recommendations.
2. The recommendations should be implemented to recognize and **enhance shared prosperity among Seattle residents and businesses**. Investments in energy efficiency support local job growth, keep utility bills low, and improve the quality of our community's building stock.

Building Support for Climate Action Recommendations

The actions necessary to move Seattle toward a low-carbon future that is healthy, safe and prosperous require deep and sustained commitment by all of us—residents, businesses, local government. Seattle has a long history of environmental stewardship that positions us well to move forward on an ambitious agenda to reduce our contribution to global warming and adapt to anticipated impacts within our region. However, public discourse on climate issues has seriously eroded over the last few years resulting in little support for policy makers to act. Therefore, we need to **leverage Seattle's history and build the community commitment necessary to support the policies that will help Seattle become a world leader in climate-action.**

FIRST STEP:
Building support can be challenging because climate change goals are sometimes seen as competing with other community goals, and often times get drowned out by events that seem more immediate in our minds. But in fact, Seattle's climate goals are very well aligned with the goals of shared prosperity, social equity, and environmental sustainability. Furthermore, there is a tremendous opportunity to link climate action with a healthy, just and prosperous future for all Seattle residents. However, in order to articulate those connections effectively, we need to **understand what is most important to Seattle residents and businesses and how climate policies may align with and support the values expressed by the community**.

Quick Start Actions
> ➢ **Conduct local message and values testing** to identify what is most important to Seattle residents and businesses, what climate narrative is most compelling, and what communications methods will be most successful.
> ➢ **Develop a compelling climate action narrative that is connected to what people care about.** Use existing networks, organization, and community engagement efforts to communicate the narrative**.**
> ➢ **Use the narrative consistently and frequently in elected official and City department communications.** Emphasize that our decisions on this issue are among the most important we will make as a community. In other words, addressing this issue is not an extra duty but a core duty which directly aligns with voter aspirations. Also, make connections between the impacts we are experiencing and climate change.
> ➢ **Build a regional network of organizations and individuals committed to using the same proven narrative and messages when talking about climate action.**

WITH THAT FIRST STEP IN HAND, WE CAN MOVE AHEAD IN PARALLEL WITH THE FOLLOWING:

A. Seattle's climate protection goals must be achieved over time, as the outcome of many discrete policies and programs that are implemented as individual efforts. The community dialogue over these policies often focuses solely on immediate impacts while the effort's contribution to our long-term climate protection goals is lost. In addition, policy discussions can feel abstract and disconnected from people's daily lives leading them to disengage from the policy discussion. **Therefore we need to help people see the future through images that make clear the connections between the impact of our individual decisions and actions on a daily basis and policies that would encourage a more sustainable, healthy lifestyle for Seattle residents in the in the short- and long-term.**

> **Develop images, info-graphics, and videos** to illustrate the outcomes of implementing the Climate Action Plan and the alternative potential future if we do not move forward with the recommendations.
> **Connect climate change to projected local impacts that people relate well to** such as the potential impact of rising seas on Seafair activities, declining snowpack impact on skiing in December, storm water quality/ocean acidification impact on Salmon and job/economic loss impact of this etc.
> **Explore how new media strategies, such as Facebook, Twitter, and video game technology can tell the compelling story of climate action**.

B.   Seattle's residents are a vast resource of bright ideas that could bring fresh thinking to long-standing challenges, help identify unintended consequences of actions, and highlight barriers to implementation. **Provide opportunities for the community to be involved in policy and program design and implementation.**

Quick Start Actions

> **Use crowd-sourcing tools and other emerging technologies** to provide opportunities for the general public to participate in designing climate policies and actions.
> **Host bright ideas contest** to tap into the community's creativity to solve a pressing policy or program design challenge**.**
> **Partner with higher education institutions** to provide opportunities for students and faculty to apply their knowledge to policy, planning, and technical challenges**.**

C.   Thanks to several decades of focus on creating livable communities, Seattle already has many examples of climate strategies in action. Telling these stories through case studies can powerfully demonstrate the tangible outcomes from real world implementation of the Climate Action Plan. **Provide local examples of on-the-ground implementation of climate actions** that illustrate how climate actions – when effectively integrated – work together to further community goals.

Quick Start Actions

> Develop **neighborhood profile case studies** detailing the on-the-ground impact of climate action policies, programs and investments in specific neighborhoods.
> **Develop "strategies in action" profiles** that highlight the outcomes of individual climate action strategies, such as the City's parking demand management and energy benchmarking programs.

D.   Widespread support for climate actions should be cultivated through local leaders serving as champions for action. Leaders should represent a broad cross section of interests and be recognizable to the public and role models to youth. **Create an alliance of unusual champions to serve as the new faces of climate change who are committed to helping the City implement the Climate Action Plan and to being early adopters of climate strategies.**

Quick Start Actions

> **Activate a network of leaders** from across the community (including business, education, civic, labor, research, and philanthropic organizations) to advise and assist the City in implementing the Climate Action Plan, make climate action commitments, and serve as allies in the community.

➤ **Identify new and unexpected messengers** (artists, athletes, teachers, chefs, writers, entertainers**,** youth) to spread the word about the benefits of climate action.

E. Support for bold actions on the community scale often is built by encouraging action at the individual level. Community organizations are trusted messengers for calls to action, and have the energy and desire to work with their networks to help residents and businesses reduce their impact on the climate. **Through modest investments in training, funding and project support, the City can help significantly enhance community organization's climate action efforts.**

Quick Start Actions

➤ Create an ongoing program to **support community-initiated climate action projects** (e.g. neighborhood barter fairs, programs that support new bicycle riders, etc).

➤ Work with an existing **school-focused community organization** (e.g. Washington Green Schools) on a project that increases student engagement in climate action.

➤ Create or build on an existing **social media tool** to provide a venue for people and organizations to share the actions they have taken and offer assistance to others.

➤ Create mechanism to provide **feedback** on the impact of collective actions to reinforce the value of individual efforts.

Draft Meeting Summary
Green Ribbon Commission Meeting #6
Funding & Building Community Support
October 9, 2012
3:00 p.m. – 5:30 p.m.
Seattle Municipal Tower, Room 4050

3:00   Welcome & Introductions

Meeting Notes:

Doris Koo, Co-Chair, welcomed the Green Ribbon Commission (GRC) to the meeting. See **Attachment 1** for a list of meeting participants.

3:05   Administration & New Business

Meeting Notes:

The GRC briefly reviewed the draft September 13 meeting summary and approved it by consensus. The Co-Chair introduced the draft motion to adopt the GRC's complete recommendations that will be considered at the last GRC meeting, October 24th. GRC members were requested to provide any input to the Office of Sustainability and Environment (OSE) before the next meeting.

Comments on Recommendations:

- There was a question as to whether GRC members could start distributing the draft recommendations.

  - GRC members can distribute the draft recommendations now within their organizations (make sure to include "Not for Distribution"), but it might be easier to wait so they can be distributed as one packet.

The GRC also reviewed the draft letter to City Council supporting items in the proposed budget that further GRC's emerging recommendations, as the City's budget process will wrap up before the Climate Action Plan (CAP) is complete. It was noted that the letter offers general support for items in the budget rather than outlining specific GRC recommendations.

Comments on the letter:

- Consider adding how these investments relate to jobs and economic resiliency.

- Consider reordering the bulleted items, putting the ones that the GRC feels most strongly about at the top.

- Most bullet points include a specific amount of money, but a few do not. Each bullet point should include the dollar amount.

3:25   Funding Recommendations & Carbon Tax Proposal

Funding Recommendations

Meeting Notes:

OSE reviewed materials that provided an overview of CAP implementation funding needs and the Commission's funding recommendations in the transportation and building energy sectors.

There were questions on transportation funding needs, such as why "deferred maintenance" was included and how the table was organized.

- There was a suggestion for the table to more clearly indicate which elements are parts of the CAP and which are not.

- OSE clarified that transportation costs included in the subtotal are costs to maintain the status quo and current transit levels. The total cost is more aggressive and increases the commitment to the CAP.

- Since this distinction was confusing to many GRC members, OSE noted that the table was intended to set the context for the day's discussion and would not be in the GRC recommendations or CAP.

OSE then reviewed a table handout that mapped out all future and existing bonds and levies, broken down by state, school, county, and city initiatives. It will be important for the GRC to consider these when thinking about how to address funding issues.

Comments:

- Add a specific goal on making schools more energy efficient.

- There was a question about why some funding recommendations are tied to other recommendations and others are not. What happens to recommendations not tied to specific funding recommendations?

  o It was clarified that the funding recommendations are focused on approaches that will generate revenue to support implementation. OSE has not yet mapped out funding for each action, as this will primarily happen after the CAP is released.

- It would be easy for the public to interpret all these recommendations as costs, so it will be important to clearly address why these are a good investment for the community and what the cost of inaction is.

- It was suggested that asterisks continue to be used for those items requiring legislative action.

Carbon Tax Proposal

Presentation:

Alan Durning, Executive Director of Sightline Institute provided an overview of carbon taxes.   Such a tax in Washington could be levied on CO_2 emissions from fossil fuels purchased for combustion in the state, and possibly on the carbon content of electricity imported from other states.

It is important to consider the historical context of environmental taxes. In the past 10 years, a carbon tax has been the subsidiary option to cap and trade systems, and there has been a divide over which is the better option. The philosophies of both proponents have more in common than not. In theory, the difference is that for a cap and trade system, we set a quantity of pollution that can be emitted legislatively and the price varies, and for a carbon tax, we set the price legislatively and let the quantity of pollution that can be emitted vary according to the market.

In 2008, British Columbia (BC) enacted the most comprehensive carbon tax system to date. The tax started at $10/ton on all carbon from fuels burned in the province, though it included a rebate for low-income individuals. The tax is being increased by $5/ton/year for the first 5 years, but it has not yet been determined what will happen after those initial 5 years. All the revenue is given back to taxpayers in the province through reductions in personal income taxes and business income taxes. Today, the tax has affected gas prices by approximately 30 cents per gallon. CO_2 emissions in BC have been declining at a greater rate than in Canada overall, while BC's economy has outpaced the rest of Canada.

In 2009, the Washington legislature considered a regional cap and trade system, but this failed. Discussions have begun with fiscal conservatives about the potential for a carbon tax , modeled on BC. The legislative barriers in Washington are substantial.

Overall Comments on including a Carbon Tax in the Recommendations:

GRC members had differing viewpoints on whether or not a carbon tax should be included in the CAP Funding Recommendations. Some were in favor of it, and others were opposed.

- If the carbon tax is included, the GRC will have to decide if it is framed as a funding mechanism or as something that is essential to achieve the GRC's climate goals.

- - Some GRC members felt the carbon tax should be framed as the latter, but others were uncomfortable with this as carbon pricing would facilitate implementation, however, the actions are not dependent on carbon pricing. .

- Frame the carbon tax as a regional effort, rather than something the City is taking on by itself.

- The Carbon Tax seems out of place in the GRC recommendations since there is not a direct City connection.

- There was doubt as to whether Seattle had the power to take meaningful action.

  - There is nothing Seattle can do to directly tax other fossil fuels dispensed within City limits, as this would require special permission from the state legislature.

  - It was noted that City of Seattle electricity is already carbon neutral.

- There is a desire to understand price elasticity.

- One GRC member was uncomfortable placing a tax on things we don't want, such as carbon, as he felt this would create a problem of declining revenues over the long-term. This was proven with the tobacco tax.

- Consider framing the carbon tax as a "pollution tax", as this might garner more support. It was noted that there is currently no political framing on what to call it.

- Address how to integrate our recommendations with funding that already exists (e.g. SPU, ballot measure for seawall, etc.)

  - Present this information in a more creative way. How can we repurpose money that already exists, be more effective, etc. rather than having a list of taxes?

- Revise the recommendations/options so they are no longer tied to specific sectors (except for those specific to transportation).

Discussion Summary

The GRC agreed by consensus to outline the importance of putting a price on carbon in a broad sense and to provide a menu of funding options, which would include a carbon tax, but would not make specific recommendations since it is unclear what will gain political traction and what the unintended consequences would be of doing so. OSE will make revisions based on this discussion and bring a final draft to the final GRC meeting.

4:30   Building Community Support

Meeting Notes:

A representative from the September 17 Building Community Support Optional Meeting provided a brief summary of the revised recommendations on building support for climate action. Those highlighted at the meeting included:

- Research the community's core values and concerns up front.

- Develop a common narrative based on the community's values, and use that narrative consistently and frequently.

- Connect climate change to local impacts that will affect what people value.

  - It is important to convey that we are not asking citizens to give up the things they love; rather, we are connecting the dots on how climate change will affect the things they love in the region and how we are trying to protect those things.

- Use crowd-sourcing tools and other emerging technologies to provide opportunities for the public to participate in designing climate policies and actions that will help protect the things they love.

- Develop success stories, illustrating that people are already taking action.

- Identify leaders in the community from a variety of backgrounds to help implement the CAP.

  - There was question as to whether GRC members should help find and cultivate those leaders after the GRC process is complete.

- Create an ongoing program to support community-initiated climate action projects. The CAP will fail if it only includes actions the City must take.

Comments:

- There was a suggestion for a climate communications team.

- It is important to consider who will implement these recommendations. "Who are the actors?"

  - What is the role of GRC after this process ends.

  - Work with non-governmental organizations (NGOs) that are spearheading climate change efforts (e.g. City education programs, such as Green Schools)

- We should partner with Seattle Community Colleges and Universities in addition to UW.

- There was a question as to whether there is a budget for what is needed to make these recommendations happen.

- There was question as to whether the recommendations propose a *centralized* or *decentralized* engagement process, and this sparked an in-depth discussion.

  - OSE indicated that the recommendations propose both approaches, though it will primarily be a decentralized process, as change typically comes from the many actors.

However, before that can happen, the a centralized approach will play an important role upfront in order to capture the attention of the community.

- o Challenges exist with both approaches. A centralized process is very expensive, and it's hard to have a consistent message with a decentralized process. It was noted that while a centralized process is expensive, it could be funded by foundations (after a focused media effort) if such a process is not within the City's budget.

- o This topic needs clarification in the recommendations because it currently reads as a centralized process,.

- There were several comments/suggestions on how to implement a decentralized process.

  - o It will be essential to have a clear messaging strategy and to train the messengers.

  - o It is essential to build support long-term, not just for one year. People tend to think an issue is resolved when they are no longer hearing about it.

  - o The recommendations must address how individual actions have collective impact, and they need to connect back to a "feedback loop" that would account for and support these individual actions. We need to assure people that what they are doing has value in order to break the pattern of people feeling helpless, giving up, and not taking action.

- There was a suggestion to incorporate climate in emergency preparedness; present climate change as a real danger that requires a sense of urgency that is as serious as an earthquake.

5:10	**Overarching Recommendations**

Meeting Notes:

OSE provided a general overview on the draft overarching recommendations, which will be located at the beginning of the GRC recommendations. This section will frame the overall document and inform everything in the CAP. These included:

- Be bold.

- Embed equity in every solution.

- Combat climate change by creating a great place to live.

- Use systems thinking to design solutions.

- Build support for climate action.

- Planning is important, but implementation is critical.

- Funding (*this is not written yet but will be in the final version*)

These will be discussed further at the final GRC meeting, and GRC members should email OSE any additional ideas before October 24.

Initial Reactions:

- Overall, GRC members reacted very positively to the recommendations.

- Consider further incorporating a sense of accountability to the global community and to future generations.

- Consider switching the order of "Embed equity…" and "Combat climate change…"

- Revise the tone of "Combat climate change by creating a great place to live" to one that celebrates action and efforts.

5:25   Looking Ahead & Adjourn

- Optional Congestion Pricing Recommendation Development, **October 18, 3:30-4:30 p.m.**

- **FINAL full GRC Meeting, October 24, 2:00-5:00 p.m. (NEW)**

  - GRC will finalize and approve the package of recommendations. The only piece that will be relatively new is the revised adaptation recommendations.

  - Comments:

    - Outline next steps and how GRC members can be stewards. There is a sense of ownership in this process, and GRC members do not want to lose momentum. Who will carry the ball, take ownership, and keep this effort moving?

    - Further discuss having one big press event upon the release of the GRC recommendations versus a more long-term roll out.

    - Consider a visible symbol for the GRC that can be used in the future, e.g. a green ribbon.

- Roundtable with Mayor McGinn, Councilmember O'Brien, and Bill McKibben (environmental author and activist, currently on tour for his "Do the Math" campaign, which talks about the future of "the climate crisis"), **November 7, 12:00-1:30 p.m.**.

- Presentation of recommendations to the Mayor and Council, **December 10, 3:30-5:30 p.m.**

Attachment 1: Meeting Participants

Green Ribbon Commission Members			
Last	**First**	**Affiliation**	**Attended?**
Hayes ***Co-Chair**	Denis	President, Bullitt Foundation	✓
Koo ***Co-Chair**	Doris	Senior Advisor, Enterprise Community Partners	✓
Bagsby	Sean	Vice President, International Brotherhood of Electrical Workers, Local 46	☐
Carrasco	Jorge	Superintendent, Seattle City Light	☐
Duvernoy	Gene	President, Forterra	☐
Fleming	Dr. David	Director and Health Officer, Public Health – Seattle & King County	✓
Franz	Hilary	Executive Director, Futurewise	✓
Frumkin	Dr. Howard	Dean, University of Washington School of Public Health	✓
Geller	Brian	Executive Director, Seattle 2030 District	✓
Glaberson	Terri	Executive Director, CoolMom	✓
Golden	KC	Policy Director, Climate Solutions	☐
Gregory	Bert	CEO, Mithun	☐
Hahn	Peter	Director, Seattle Department of Transportation	☐
Johnson	Rob	Executive Director, Transportation Choices Coalition	✓
Kenworthy	Craig	Executive Director, Puget Sound Clean Air Agency	✓
Mann	Michael	President, Cyan Strategies	✓
Martin	Chris	President, CleanScapes	☐
Maryman	Brice	Landscape Architect, SvR Design Company	✓
Ortega	Estela	Executive Director, El Centro de la Raza	☐

Owen	Megan	Director of Market Development, McKinstry	☐
Packard	Ben	Vice President, Global Responsibility, Starbucks Coffee Company	✓
Ridihalgh	Kathleen Casey	Senior Organizing Manager, Sierra Club	✓
Rosario	Tania Maria	Political Director, Service Employees International Union, Local 6	☐
Simmons	Jill	Director, Office of Sustainability & Environment	✓
Sugimura	Diane	Director, Seattle Department of Planning & Development	☐
Taniguchi	Harold S.	Director, King County Department of Transportation	✓
Twill	Jason	Senior Project Manager, Sustainability, Vulcan	✓
Washienko	Kathy	National Advisory Board Executive Committee, Union of Concerned Scientists	✓

Project Team/Other Staff			
Last	**First**	**Affiliation**	**Attended?**
Baumel	Christie	Seattle Office of Sustainability & Environment	✓
Morgenstern	Tracy	Seattle Office of Sustainability & Environment	✓
Frahm	Annette	Seattle Office of Sustainability & Environment	✓
Saviskas	Sarah	Triangle Associates	✓
Wheeler	Bob	Triangle Associates	✓