

**CITY OF BOULDER
TRANSPORTATION ADVISORY BOARD
AGENDA ITEM**

MEETING DATE: July 8, 2013

AGENDA TITLE: Staff briefing and TAB input regarding the Climate Commitment Update

PRESENTERS: Lesli Ellis, Manager, Comprehensive Planning
Brett KenCairn, Senior Environmental Planner, CP&S
Kathleen Bracke, GO Boulder Manager
Randall Rutsch, Senior Transportation Planner
Chris Hagelin, Senior Transportation Planner

EXECUTIVE SUMMARY

Representatives of the city's multi-departmental team from Community Planning & Sustainability and Transportation have prepared a brief update for the Transportation Advisory Board (TAB) outlining initial results of an assessment of options for updating the greenhouse gas (GHG) emissions reductions targets and strategies in the city's newly refocused Climate Commitment. This information is being presented to TAB in advance of the City Council Study Session regarding Climate Commitment on July 30th, 2013.

The primary purpose of the presentation at the July 8th TAB meeting is to provide a background on the overall Climate Commitment planning process and the role of transportation strategy analysis in the development of a comprehensive GHG reduction plan. No specific recommendations or findings related to transportation are to be presented to Council during the July 30th study session.

Staff have been working in two focus areas to guide continued collaboration between the transportation staff and the climate commitment team in identifying and developing additional transportation-related strategies that could help reduce GHG emissions over the coming decades. Staff and consultants will continue to add substance to these focus areas and these options can be considered as part of the on-going TMP update process.

The two areas of focus are:

Data Collection & Reporting

Boulder's transportation program is widely recognized for its innovative in effective transportation data acquisition and management systems. As part of efforts to collect data to assist in identifying GHG reduction opportunities, staff has become aware that certain key data

needed to effectively and efficiently track and manage these transportation emissions factors are not currently available. These data gaps include Vehicle Miles Traveled (VMT) by transportation sector (resident, commuter, freight, student, transit) and more specifically how VMT is distributed by geographic sub-regions such as neighborhoods and districts. While existing information systems will continue to provide effective feedback needed for correlating emissions to certain transportation sectors or activities, there are information gaps that will need to be addressed through finding new ways to utilize existing systems or through augmenting them with additional data gathering systems. A part of the recommendations that will be developed out of this assessment will be options for upgrading existing data gathering systems—both adding new features to the existing travel diary systems, as well as identification of new data gathering system options e.g. mobile apps that can enhance both existing transportation planning and transportation-related GHG management.

Climate Commitment staff will be presenting the initial data analysis to the TAB at the meeting based upon the work-to-date. They will continue to refine this data as we continue to identify ways to utilize existing data sources to evaluate transportation GHG impacts.

Development of Potential Strategies

The second focus area of analysis is the identification of new strategies that can maximize GHG reduction while accomplishing other existing and emerging transportation priorities from the TMP update. These strategies may include both building on existing strategies (expanding Eco-Pass availability) to new approaches to neighborhood-based residential travel management (expanded car/bike share, group electric vehicles/photovoltaic purchases). The strategy identification and development phase of the Climate Commitment work plan is being initiated in July and will be completed by October of 2013. Fox-Tuttle has been retained to assist the Climate Commitment team on both data and strategy identification and development. We anticipate being able to present preliminary recommendations for TAB review during its September meeting.

BACKGROUND

The Climate Commitment staff and consultant team has been working closely with the GO Boulder staff to integrate efforts to identify transportation-related GHG emissions reduction strategies as part of the TMP update. This Climate Commitment analysis is part of a larger assessment of options and opportunities taking place during the updating and revised goal setting of the City's climate action efforts, now referred to as the Climate Commitment. An overview of the Climate Commitment is included in Attachment A.

A central feature of this next generation climate action approach is a much closer involvement and integration of all city departments into the climate strategies development, prioritization and implementation. The fortuitous convergence of this climate commitment update with the TMP update has provided the first opportunity to implement this cross-department/cross-priority collaboration. A flow diagram of the Climate Commitment work plan for the last six months of 2013 is included in Attachment B.

One of the benefits of this approach has been the ability to leverage resources in ways that add value for both initiatives. As part of the Climate Commitment work plan update, for example,

funds were allocated for a transportation consultant to assist with data analysis and strategy development. The selected consultant team—Brendle Group/Fox-Tuttle—is now helping to identify both data and transportation strategies that are augmenting assessments already taking place under the TMP update. In a similar fashion, the consultant group currently assisting the Transit Team in the update of the State of the System report—Nelson-Nygaard—is providing valuable feedback to the Climate Commitment team on the strategies it is considering.

The city’ multi-departmental staff and consultant team will be presenting an update to Council on the work underway to update Boulder climate action strategy, now referred to at the Climate Commitment. The July 30th Study Session will focus primarily on reviewing the issues and considerations in establishing a new greenhouse gas (GHG) reduction goal following the expiration of the city’s previous goal based on the Kyoto Protocol (5% below 1990 levels by 2012). The Council had previously stated in a May 2012 study session that it was considering a new goal of “carbon neutrality by 2050 or sooner.” Given the significance of this goal and the implications for change that achieving such a goal would entail, staff and consultants are developing an extended technical analysis of a range of ambitious carbon reduction goals and key considerations in translating such a goal into shorter term, measurable objectives and strategies. This white paper will be available for review by mid-July.

An excerpt from the white paper (still in production) depicting a graphical representation of the significance of reductions that will need to be achieved to accomplish this goal is included in Attachment C. This graphic comes from the Portland, Oregon Climate Action Plan and displays the scale of reductions necessary to accomplish an 80% reduction below 1990 levels by 2050. The graphic includes a representation of reductions for VMT.

NEXT STEPS

The Climate Commitment team will present its first overview of the new Climate Commitment framework to Council at its Study Session on July 30th. The team intends to complete its preliminary transportation analysis and recommendations on both transportation data and strategies by the end of August so that they can be included in the TMP update planning process . It is anticipated that the larger Climate Commitment plan and associated strategies will be finalized in the first quarter of 2014 and begin full implementation by no later than the second half of 2014.

ATTACHMENTS

Attachment A: Climate Commitment Update & Framework

Attachment B: Climate Commitment 2013 Workplan

Attachment C: Portland, Oregon Carbon Reduction Projections Graphic

Attachment A

Boulder Climate Commitment Update and Framework

Background

Based on staff recommendations discussed with Council in 2012, a series of steps were initiated in January of this year have resulted in the following outcomes:

- A new senior environmental planner position was created and filled (Brett KenCairn) to manage coordination of the City’s Climate Commitment
- A city-wide Climate Commitment staff team has been convened to assist with the development and integration of the Climate Commitment across all city departments. (SHOULD WE LIST PARTICIPANTS?)
- An extensive RFP process was utilized to select a team of consultants to assist the city staff in developing the next generation Climate Commitment implementation plan and strategy. The scope of work was divided into two major task areas: goals/objectives/strategies development; and data management system development. The firms selected and their roles in each task are:

Task 1: Goals, Objectives, Strategies

The [Brendle Group](#) & [Fox-Tuttle Transportation Consultants](#)
[Stockholm Environmental Institute](#) (SEI)

Task 2: Data Management and Reporting Platform

[SWCA Environmental Consultants](#)

- A detailed work plan has been finalized with all consultants and staff work teams to complete a comprehensive repositioning of its climate action efforts with final review and implementation planned for first quarter 2014.

Update of the Climate Commitment Framework

To help organize and integrate the city’s various departments planning efforts with their associated greenhouse gas (GHG) mitigation activities, staff proposed a new Climate Commitment framework in 2012 that created six different categories or “pillars” into which the various supporting city programs or planning activities were organized. These six categories were:

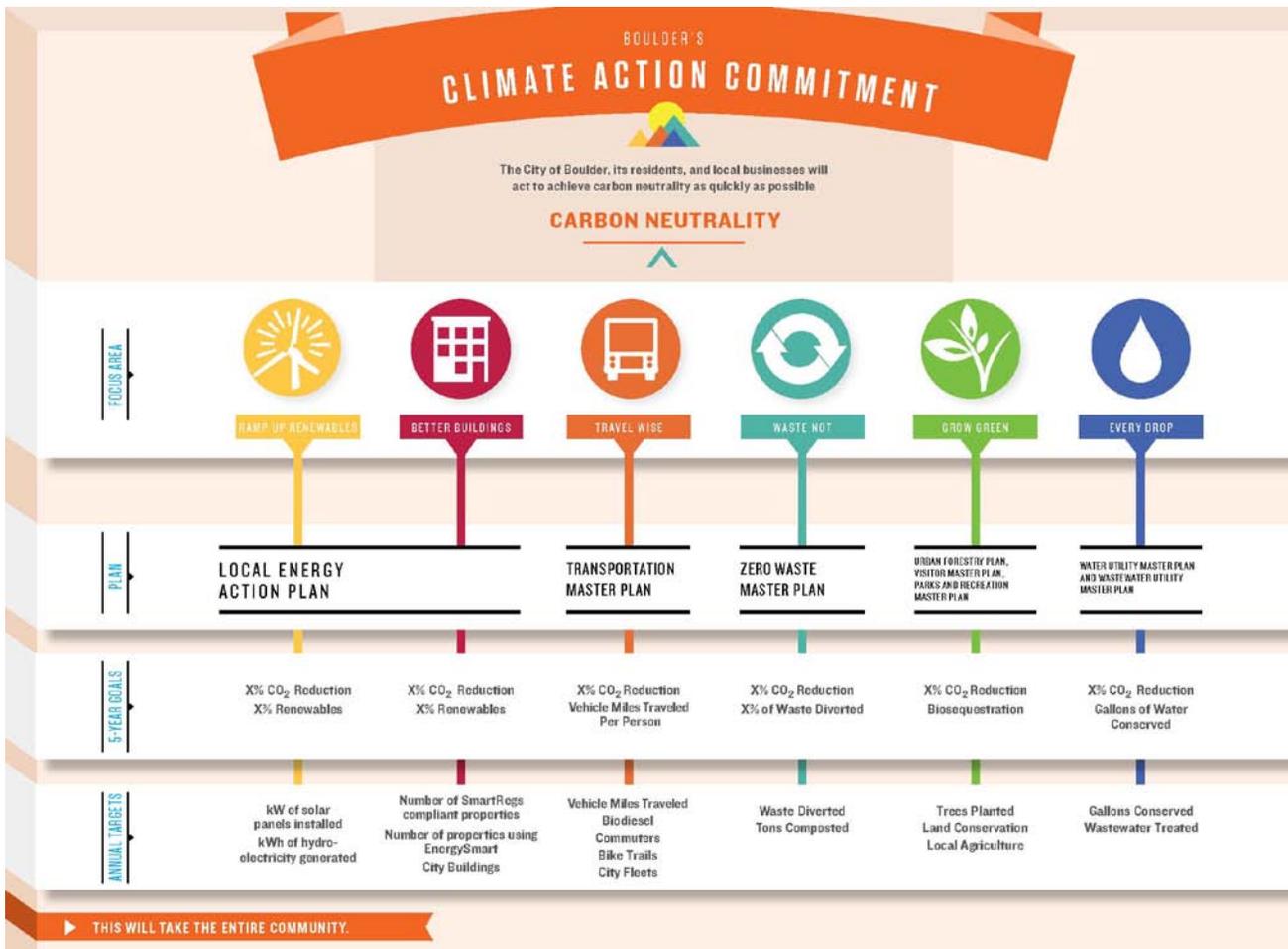
- Better Buildings
- Ramp-up Renewables
- Travel Smart
- Waste Not
- Grow Green
- Every Drop

As part of the research into Boulder’s next generation of climate action options, staff recognized the need to explicitly call out a seventh “pillar”—community design. While it was implicit to the previous framework, community and urban design is increasingly recognized as a specific focus area for GHG reduction actions including land-use and transportation design, infrastructure design & implementation, and distributed generation and utility configuration. The significance of creating an explicit reference to this area will become more apparent in the strategy development phase of this effort. The updated framework is shown in the figure below.

Climate Commitment Framework (Currently Being Updated to add 7th “Pillar”)

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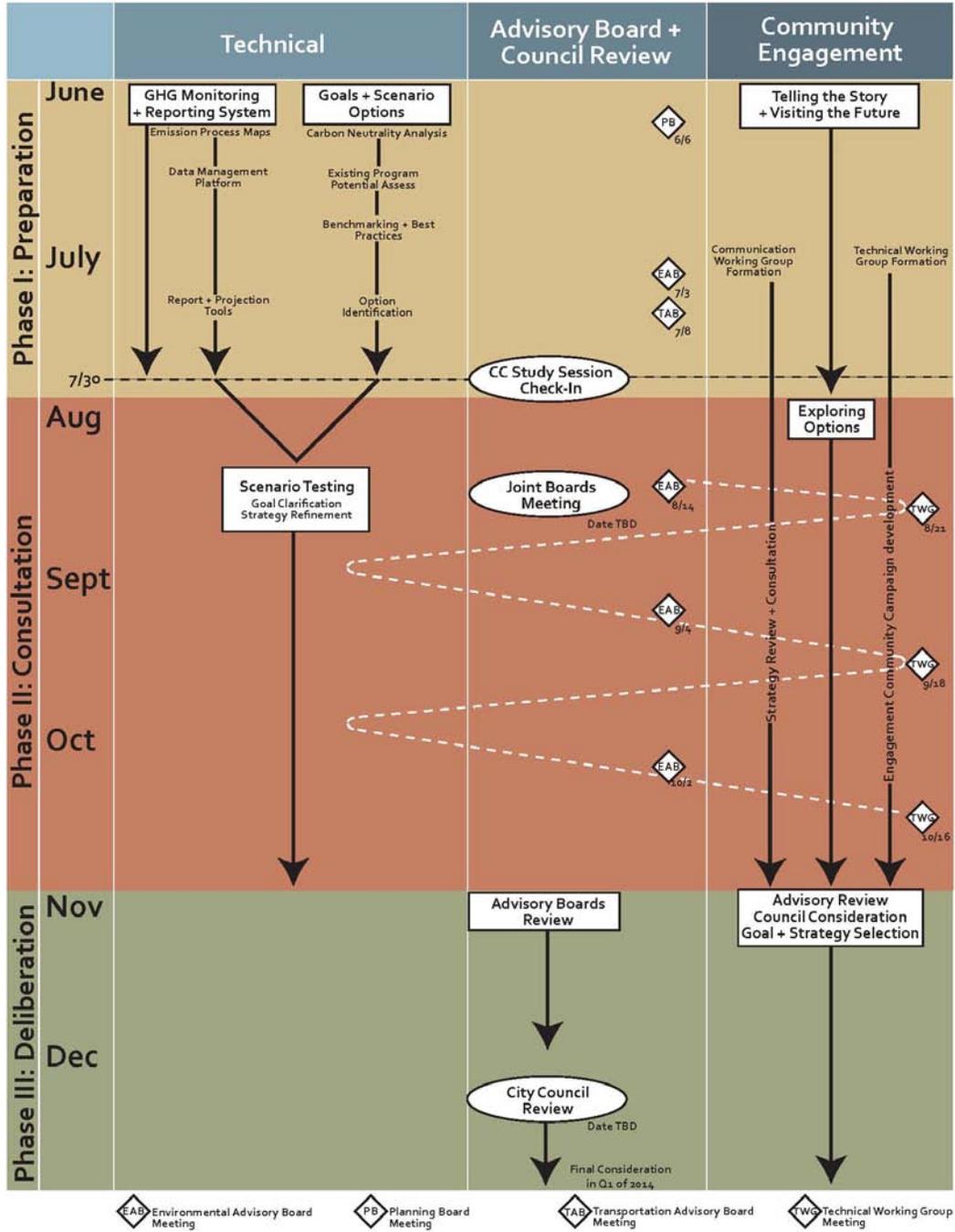
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of creating an explicit reference to this area will become more apparent in the strategy development phase of this effort. A new graphic is being developed which adds this seventh pillar.\

Of these seven supporting pillars for Boulder’s Climate Commitment, four are most significant in near-term climate mitigation objectives: Ramp-up renewable, Better Buildings, Travel wise, and Community Design. These four areas will be the primary focus of efforts in the first phase of Climate Commitment planning and implementation activities. The remaining three pillars—Waste Not, Grow Green, and Every Drop—will have important and growing roles in both mitigation efforts and particularly in climate adaptation planning considerations. These elements will be included with the next phase Climate Commitment planning work in 2014.

Attachment B Climate Commitment 2013 Workplan Timeline

DRAFT 06/11/13 Climate Commitment Work Plan



Attachment C Portland, Oregon GHG Reduction Trajectory

Another way of portraying the magnitude of reductions required to achieve aggressive GHG reductions is to translate these total emissions reductions into per-capita emissions figures. This provides both a more personal metric for the implications of a low carbon trajectory and a way of evaluating progress that could otherwise be obscured by population growth, business activity and other factors. The 2009 Portland Climate Action Plan provided a useful tabular and graphical portrayal of that city's 80% GHG reductions by 2050 goal represented as per-capita figures for GHG emissions, vehicle miles travelled and electricity used.

Portland, Oregon Low-Carbon Budget Projections: 1990-2050

Budget for a Low Carbon Future

	1990	2008	2030	Percent change from 2008	2050	Percent change from 2008
Total carbon emissions (metric tons)	8,599,508	8,495,319	5,134,000	-40%	1,704,000	-80%
Population	584,000	715,000	999,000	40%	1,355,000	90%
Per person carbon emissions (metric tons)	14.7	11.9	5.1	-57%	1.3	-89%
Passenger miles per day per person	17.4	18.5	13.4	-28%	6.8	-63%
Electricity (kWh per person)	13,049	12,081	7,869	-35%	3,815	-68%
Natural gas (Therms per person)	391	382	302	-21%	98	-74%

