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TO: Portland/Multnomah County Climate Action Plan (CAP) Project Team:
Michele Crim, Kyle Diesner, Ingrid Fish, Tim Lynch, Desiree Williams-Rajee

FROM: Greg Schrock, CAP Equity Scan Consultant

RE: Equity Scan for the 2013 Portland/Multnomah County Climate Action Plan Update

I. Overview: Keeping Portland's Sustainability Edge through Social and Racial Equity

There is a growing recognition that local sustainability efforts need to take social equity more seriously. While it commonly appears in the form of lofty and prosaic language of the “triple bottom line,” “social sustainability” or “the 3 E’s: economy, environment, equity,” equity is often left behind in practice. This is especially true with climate action plans (CAPs), which tend to subordinate equity goals in favor of actions and goals with the greatest impact on reducing local greenhouse gas emissions and adapting to local impacts of climate change. Overlooked with regularity is the fact that CAPs are put into practice in the context of urban environments where inequity and injustice – especially in terms of race and class – is pervasive. Simply put, local CAPs need to account more clearly for how climate change – and potentially, efforts to address climate change – will exacerbate those existing inequities, but also how the benefits of those efforts can be targeted in progressive ways to reduce existing disparities and achieve equity goals articulated and established elsewhere.

The 2013 Portland/Multnomah County Climate Action Plan (CAP) update represents an important opportunity in this regard. The CAP update will lay out a new set of three-year actions that will help continue the City’s and County’s progress toward long-term carbon reduction goals, and adaptation toward the various impacts that are anticipated on natural, economic, social and cultural systems as a result of likely climate change scenarios.

By strengthening their focus on social equity goals in the 2013 CAP update, Portland and Multnomah County have an opportunity to build on their established reputation as leaders in local sustainability initiatives. Fortunately there are two recent initiatives upon which Portland and Multnomah County can build. One is the Portland Plan, which calls attention to persistent disparities for communities of color and disadvantaged populations in the city (as documented by the Coalition of Communities of Color, Urban League of Portland and others) and elevates social equity as a strategic goal cutting across a variety of local planning priorities, from transportation to housing to economic development. The other is the recent development of “equity lens” toolkits that build upon the pioneering work of the King County Race and Social Justice Initiative. These tools, which have been adapted recently by Multnomah County and the Portland Bureau of Planning and Sustainability (BPS), help policy makers and practitioners to assess the equity impacts of their actions, and choose alternatives that maximize equity benefits to the greatest extent possible. What

is important about these two developments is that they provide Portland BPS and Multnomah County with a framework and set of social equity goals to which the CAP can articulate, as well as a set of adaptable tools for assessing equity impacts and outcomes.

This memo is designed to support these efforts to strengthen the 2013 CAP's equity focus. The second section looks back at the 2009 Portland/Multnomah County CAP and assesses its focus on social equity, with a particular focus on "missed opportunities" to connect with equity goals. The third section looks forward to the forthcoming 2013 CAP and offers a set of recommendations for strengthening the equity focus. An inventory of additional resources, including summaries and links to other plans, reports and tools related to sustainability and equity, is included as an Appendix.¹

II. Looking Back: Assessing the 2009 CAP's Equity Focus and Impacts

The first step in considering how Portland and Multnomah County can strengthen the equity focus for its CAP is to look back at the 2009 CAP and consider how and whether it discussed equity as an overall goal, and in its strategies. In this section I discuss (a) how the 2009 CAP discussed equity overall (and where it missed opportunities to do so); (b) specific equity co-benefits of the 2009 CAP and whether they appear to have been capitalized upon, and (c), unanticipated equity burdens that (may have) resulted from the 2009 CAP's actions and strategies.

The findings in this section were drawn from an analysis of the 2009 CAP document, as well as progress reports posted on the BPS website.

A. Equity in the 2009 CAP: Prominent frame, but largely disconnected from actions

On one hand, the 2009 CAP appears to be very strong in its commitment to social equity as a goal. On page 8 of the plan, it identified "Improve Social Equity" as a prominent goal, and in its vision for 2050, it envisioned a community in which the benefits of climate protection efforts – green infrastructure, walkable and bikeable neighborhoods, etc. – "are shared equitably throughout the community" (p. 16). Indeed, relative to many local climate action plans, the Portland/Multnomah County CAP was among the most strongly worded with respect to equity as a goal².

Yet the plan could have been much clearer in its equity focus. In particular, it could have offered a clearer discussion of pre-existing inequities and disparities, especially by race and income, in Portland and Multnomah County. The plan acknowledges, in very broad terms, the existence of disparities and inequities (p. 8), but fails to identify specific disparities – both climate-related and otherwise – that the CAP aims to mitigate. Even where the plan identifies geographical disparities, such as the analysis of the "20-minute complete neighborhood" map (p. 41), there is no discussion

¹ I acknowledge the research assistance of Jamaal Green with various elements of this memo.

² This is the finding of an analysis recently completed by myself, Prof. Ellen Bassett, and Jamaal Green of 28 recently completed CAPs and Sustainability Action Plans from medium and large U.S. cities. Portland was one of only a handful where equity was a prominent theme.

of how those disparities map onto race, class, etc. Without such language, it is difficult to see where the CAP's strategies connect with broader social equity goals.

At the same time, the subsequent progress reports suggest the nascent adoption of an "equity lens" in the implementation of the CAP. For example, the 2012 Progress Report mentions the collaboration between the City of Portland and Multnomah County around the use of a health equity lens for informing updates to the city's Transportation Systems Plan (p. 32, 36).

B. Equity Co-Benefits: Several potential areas, but equity connections of "who" and "how" could have been more explicitly drawn.

In reading through the 2009 CAP's myriad proposed actions, there were many that had the potential to offer benefits, either directly or indirectly, on a progressive basis (i.e., that could reduce disparities). Yet with very few exceptions, the 2009 CAP's actions were silent on equity either as a primary or secondary outcome to be achieved.

The potential equity connections here could have been made two ways. One, in terms of who (or where) would be targeted for public investments. Which types of neighborhoods would be targeted for tree-planting efforts, broadband investments, new sidewalks or bike lanes? While it may seem obvious (and implicit in practice), stating that priority for such investments should go toward areas and populations suffering from disparate access or outcomes – especially where those inequities have been established already – could have formalized equity as a guiding principle for the implementation of the CAP. But as mentioned, the plan is not very specific with regards to existing disparities. In practice, it is possible that many of the investments were in fact directed to these communities, but this is not known.

The second missed opportunity here pertains to how the employment and wealth-creation opportunities resulting from the plan would be distributed, especially in light of existing economic disparities by race, gender, income, etc. Although the 2009 CAP spotlights the Clean Energy Works Portland pilot program, which established ambitious and progressive hiring and contracting goals for historically disadvantaged populations, it fails to articulate whether such equity-oriented policies would be applied elsewhere. While it is likely that some positive equity impacts resulted from the contracting and hiring that occurred as a result of the plan, it is difficult to know how much, and how much greater of an impact there might have been with a stronger equity statement in the CAP document.

C. Equity Burdens: No obvious concerns, but indirect impacts on vulnerable households may be worth recognizing.

In reviewing the 2009 CAP and subsequent progress reports, there were no obvious "red flags" where the actions likely had regressive impacts, i.e., the burdens fell disproportionately on low-income and/or communities of color. Part of this, of course, depends on what is assumed and how far the chain of impacts is played out. For example, some argue that limited expansion of the region's Urban Growth Boundary (action 5(i)), which has the direct effect of promoting more compact development, also has the side effect of decreased affordability and displacement of

communities of color from desirable inner-Portland neighborhoods. Others claim that the city's bike infrastructure investments have been a catalyst for such effects. Ultimately it is difficult to parse out the marginal impact that the CAP actions may have on such complex dynamics of neighborhood change.

Still, although the negative impacts of *inaction* on climate change are likely to fall hardest on low-income and minority populations, it is imperative to bear in mind the distributional costs of climate action as well. The 2009 CAP could have recognized, as a broader principle, the need to mitigate economic impacts – even indirect ones – that the plan's actions may have on low-income populations and communities of color. One example here is the proposed action to “reduce the role of carbon (...) in Portland's electricity mix” (action 3(iv)). In the near term, switching from carbon-based to renewable energy sources may result in increased energy costs for consumers, which could represent a disproportionate burden on low-income households. Such impacts could be mitigated or offset by targeted efforts to promote energy efficiency and conservation within these populations.

III. Looking Forward: Strengthening Equity in the 2013 CAP Update

As noted earlier, to date relatively few cities have developed local climate and sustainability plans that demonstrate a strong and credible commitment to social and racial equity. While the 2009 CAP was a step in the right direction, there are several ways that the 2013 CAP update can build upon this.

How can the 2013 CAP update strengthen its focus on equity? Plans, including climate action plans, maximize their equity focus when they:

- Make social and racial equity a top-level commitment and priority;
- Connect the plan's strategies and actions to documented disparities and community goals;
- Articulate metrics for progress on those disparities and equity goals; and
- Facilitate implementation by providing useful guidance for planners, policy makers and the involved public.

I recommend that the 2013 CAP update address social and racial equity on three different levels: (A) through top-level framing and commitment around equity, connected to equity goals established in the Portland Plan and other recent plans; (B) through the development of a “climate equity lens” that can be applied to different types of actions within the CAP, so that they can be implemented in ways that maximize equity benefits while mitigating equity burdens; and (C) through chapter-level crosswalks between the CAP's actions and objectives, documented disparities and community goals, and potential equity metrics.

In part I of the Appendix, I briefly summarize recent climate/sustainability plans from three U.S. cities – Boston, Philadelphia, and Newark – that contain social equity elements that could be incorporated in the Portland/Multnomah County plan. Where relevant, I note these elements below as well.

A. Top level commitment to social and racial equity

The 2009 Portland/Multnomah County CAP was notable for its articulation of social equity as a broad goal and “co-benefit” of the plan. To strengthen this commitment to social and racial equity, the 2013 CAP update needs to lay out a clear and specific vision for how the plan will help make Portland and Multnomah County a more just and equitable place, in addition to addressing climate change. The plan should offer a series of affirmative, “the CAP will” statements that succinctly articulate how the CAP will contribute toward different dimensions of social and racial equity that have been established elsewhere (Table 1).

By doing so, this will help to set forth an expectation that the CAP will be implemented in a way that prioritizes equity. For example, the City of Boston’s 2011 Climate Action Plan update declares that “Implementation of the climate action recommendations should not exacerbate existing social and economic inequalities and should, wherever possible, contribute to reducing those inequalities” (p. 8). Ultimately the Climate Action Plan Update Steering Committee will need to weigh potential tradeoffs between equity goals and other critical goals such as GHG reduction in deciding which actions to prioritize.

Table 1. How the Portland/Multnomah County CAP Contributes to Equity

An equitable Portland is...	Present inequities and disparities	How the CAP will promote equity and reduce disparities
Healthy	Communities of color and low- income populations suffer disproportionately from acute and chronic illness due to social, economic and environmental factors, reducing their opportunities and life chances.	The CAP will mitigate environmental factors leading to health disparities, such as barriers to active lifestyles and transportation, pollution exposure, disparate access to greenspace and other natural amenities.
Safe and Livable	Communities of color and low-income populations live disproportionately in housing that is unaffordable and neighborhoods that are unsafe, reducing their quality of life.	The CAP will promote investments in housing energy efficiency that will make them safer, more comfortable and affordable, and in community infrastructure that enhances pedestrian and bike safety, and other elements of livability.
Accessible	Communities of color and low-income populations live disproportionately in “low opportunity” and “incomplete” neighborhoods, and are disproportionately transit-dependent, resulting in a greater burden of transportation cost and time in order to complete daily tasks.	The CAP will promote investments that improve neighborhood accessibility, by bringing services to underserved neighborhoods and supporting equitable expansions of public transit and active transportation infrastructure.

Prosperous	Communities of color experience persistent disparities in poverty, incomes and wealth relative to White populations, and they and other low-income populations encounter significant economic, spatial and institutional barriers to opportunity, upward mobility and wealth creation.	The CAP will promote the creation of employment and small business opportunities with potential to lift up and empower households and communities, and maximize that potential through equitable hiring and contracting policies that target those opportunities toward historically underrepresented populations.
Inclusive	Communities of color and low-income populations have lacked representation and power in planning and other public decision-making processes, resulting in a bias toward the goals, priorities and perspectives of White, middle- and upper-class residents.	Communities of color and other historically underrepresented populations will be included in every step of the CAP process, from the definition of goals to implementation. Proactive, culturally-appropriate strategies will be undertaken to reach out to these populations and involve and empower them through the CAP's actions and programs.

B. “Climate equity lens” to inform implementation

It is probably not feasible for the 2013 CAP document to specify how each action could or should be implemented so that it maximizes social and racial equity. Aside from adding significantly to the length of the document, such detail may not be appropriate given unknown parameters regarding the implementation of proposed actions. At the same time, agency officials and other stakeholders need a way to assess the potential net equity benefits of proposed actions, and to consider the options that they have for implementing actions in ways that maximize equity benefits relative to costs.

I recommend the development of a “climate equity lens” that would build on and extend the equity analysis tools that have been developed recently by BPS (Equity Framework Decision Support Tool) and Multnomah County (Equity and Empowerment Lens). This tool would put forth a set of “equity considerations” that are particular to the types of actions proposed in the CAP, recognizing that there are common sets of opportunities and pitfalls associated with that type of action. In broad terms, actions within the CAP can be broken into four categories:

1. Regulation;
2. Public programs, investments and government operations;
3. Market transformation; and
4. Planning, public outreach and education.

Not every action will fit neatly to a type, while some may be a combination of multiple types. For each type of action, the climate equity lens would ask about the potential benefits and burdens of

that particular action, how they relate to documented social and racial disparities, and what options exist for maximizing the benefits and mitigating the burdens.

1. Regulation: Regulatory actions in the CAP seek to limit the activities of private actors (businesses, consumers, etc.) that generate excessive carbon emissions, or threaten natural systems important to preparation and adaptation to climate change. Regulations can include changing land use zoning practices and outcomes, tightening environmental standards, or raising energy standards.

With any type of regulation, there is a critical issue of who benefits (and how much) and who pays (and how much), and whether those costs are shifted or passed along, for example, from landlords to tenants or from producers to consumers. From an equity standpoint, the key question is: *does the proposed regulation generate cost burdens, either directly or indirectly, to communities of color and low-income communities?*

Equity considerations

- What is the activity or outcome that is being regulated? Is this activity or outcome related to a documented disparity faced by low-income and communities of color (e.g., disparate exposure to environmental toxins)? Does the proposed regulation directly mitigate that disparity or source of inequity?
- What are the costs of the regulation? Who bears the direct cost? How likely is it that the costs get shifted to other parties? If so, to whom?
- Is this a cost that falls disproportionately on low-income households? If so, are there practical ways of mitigating or offsetting those costs?

Example: A regulation increasing stormwater management standards for new residential construction, for example by requiring significant investments in green infrastructure or other mitigation systems, could have the unintended effect of increasing building costs and reducing housing affordability. One possibility for mitigating equity burdens generated by this regulation would be to provide a rebate to developers of affordable housing to offset the incremental costs of meeting the new standards. In other cases, the costs of regulation may be offset by reduced downstream costs; for example, regulations increasing residential energy efficiency standards may be offset to a significant degree by subsequent reductions in energy costs for residents. Even then, however, it may be worth considering measures to reduce the up-front (capital) costs of adapting to the regulation, similar to how the Clean Energy Works program helps homeowners finance energy efficiency measures through a revolving loan fund.

2. Public programs, investments and government operations: Public expenditure is one of the largest categories of CAP actions. This can include shorter-term programmatic efforts to support recycling, brownfield remediation, government operations, and so forth, but also larger, longer-term capital investments in infrastructure (e.g., buildings, transportation, utilities) that support a low-carbon economy and sustainable lifestyles on the part of residents, and help the City and County adapt and prepare for climate change. With public programs and

investments, the key equity question is: *Can the benefits of those programs and investments be targeted in progressive ways to reduce historical and current disparities?*

Equity considerations

- What benefits does the proposed program or investment provide? Do the benefits relate directly to any documented disparities faced by low-income populations and communities of color?
- Are all stakeholders who are potentially impacted by this program being involved and empowered to the greatest extent possible in the program's design and implementation, especially populations with historically low levels of power and involvement? (See section 4 below)
- To what extent can the program's benefits be targeted toward particular neighborhoods or communities of need? To what extent are there significant barriers or tradeoffs against other climate action goals, such as GHG reduction, in doing so?
- Who is likely to be doing the work of this program? To what extent will the program require contractors or new job creation on the part of existing agencies or contractors? Are there current or historical disparities and barriers to equitable representation (e.g., by race, gender) within the related occupations and industries? If so, are there opportunities to incorporate equity provisions for contracting (i.e., MWESB) and hiring (e.g., local/first source hiring) related to this program?
- What is the quality of jobs created through this program? Do the jobs created pay a living wage and offer benefits?
- How is the program funded? If funded through specific revenue sources, are they regressive in nature (i.e., disproportionately borne by lower-income residents)? To what extent are the costs aligned with the populations who benefit directly from the program?³
- Does the program have the potential to contribute toward displacement of low-income populations and communities of color, e.g., by increasing amenity values or accessibility in neighborhoods identified as susceptible to gentrification?

Example: An application to a public investment program would be a tree-planting program. While the trees would likely generate significant ecosystem service benefits (i.e., carbon sequestration) regardless of their location, their potential for additional co-benefits, such as improving air quality and reducing heat island effect, would depend on where the trees are planted. To maximize the equity benefits, the program would target neighborhoods with low tree canopy and/or low air quality, and would incorporate strong equity provisions, such as a local hire policy that would require contractors to work with community-based organizations for recruitment and hiring. For example, Boston's recent Climate Action Plan update proposes

³ Economists refer to this as the "benefits principle" – that public investments, such as roads, are most equitable when the costs are targeted toward those who benefit from those investments. But in the case of programs that are designed to serve low-income populations, this does not imply that the costs should be borne by them also. On the other hand, if the benefits of a program or capital investment are shared broadly but borne disproportionately by lower-income residents, then this represents an equity issue.

the establishment of hiring goals (50% resident, 25% minority, 10% women) for all CAP-related projects.

3. *Market transformation:* Several of the CAP's actions attempt to stimulate or catalyze the market for "climate preferable" goods or services, often through public subsidies or technical assistance to producers or consumers of that good or service. They are similar to public programs, but with an objective of leveraging private market investment and activity, and changing the market incentives for consumers of such goods and services, and helping producers achieve economies of scale and market viability. For example, the Clean Energy Works Oregon program has attempted to catalyze the market for residential energy efficiency by providing low-cost financing tools for homeowners, using small amounts of public funding to leverage private investment in energy efficiency. The key equity question for market transformation actions is: *are the benefits of this new market's goods and services broadly accessible to households throughout the community?*

Equity considerations

- What is the good or service that is to be encouraged by this action? Is it a good or service that will be broadly accessible to all residents?
- To what extent would the provision of this good or service to disadvantaged populations and communities help to address documented disparities or inequities? If so, what are the barriers to doing so?
- Does the transformation of this market have any potential to negatively impact the price and/or availability of existing (less climate preferable) goods or services that low-income populations or communities of color depend upon?⁴

Example: Building the market for fresh and local food through farmer's markets is a common goal of climate action plans, including the 2009 Portland/Multnomah County CAP. Yet low-income populations, who commonly have less access to fresh and healthy food, face barriers to taking part in this market due to the higher price relative to processed foods, as well as lack of proximity to farmer's market locations. To address the financial barriers, many communities provide subsidies to low-income residents through the Supplemental Nutrition Assistance Program (SNAP); for example, Philadelphia's Philly Food Bucks program gives SNAP users an additional two dollars for every five that they spend at a farmer's market. Similarly, Portland Farmers Market neighborhood locations provide matching funds to SNAP (Oregon Trail) participants through its Fresh Exchange program⁵, and efforts are underway to expand

⁴ It is hard for me to think of a specific example of this off hand. For example, it is doubtful that the establishment of a farmer's market in a low-income neighborhood would undermine the market for traditional or discount grocery stores in that area, or that stimulating the adoption of electric vehicles would lessen access to transit. Still, as with regulation, the general point here is about the potential for unintended consequences that limit choice and impose costs for low-income populations.

⁵ <http://www.portlandfarmersmarket.org/programs-and-services/snap-participants>

availability of Community-Supported Agriculture (CSAs) to SNAP participants⁶.

This model of providing subsidies to reduce the up-front and/or marginal cost of climate-preferable goods and services that mitigate other disparities (health, etc.) for low-income populations could be extended to other areas, such as active transportation (e.g., Portland's bike share) or car-share programs like Zipcar that could give low-income and transit-dependent populations cheaper, more fuel-efficient options for personal transportation, when needed.

4. *Planning and public outreach and education:* Finally, many CAP actions call for further planning, assessment, public outreach and education. The key equity question for planning actions is: *are low-income communities and communities of color, and other vulnerable, impacted populations, being engaged and empowered in a meaningful, authentic and culturally appropriate manner?*

Equity considerations:

The BPS Equity Framework Decision Support Tool provides excellent guidance for assessing the importance of different stakeholders to the planning process, in terms of how much they will be impacted by the decisions, and how much influence they have within the process. Equity considerations posed there include:

- What strategies are to be undertaken to engage with all relevant stakeholders, including communities of color and low-income populations, and to enhance the power of stakeholders who are highly impacted but would otherwise have low levels of power?; and
- How will racial and social impact criteria be used in stakeholder decisionmaking processes?

Section F (Community Engagement) of the BPS tool focuses on engagement and outreach with diverse and underserved populations around service delivery and program access. The equity considerations presented there include:

- Is the language used to market the program geared toward a mainstream, educated, middle and high income audience?
- Is there a direct plan on how to market the program to historically under-represented communities of color?

In both cases, the general “equity lens” prescribed in that document seems appropriate and sufficient for the purposes of the Climate Action Plan.

C. Chapter-level crosswalk to disparities and equity goals

Finally, I recommend that each of the chapters in the 2013 Portland/Multnomah County CAP update report feature a crosswalk that connects the objectives and actions of that chapter with the disparities that those actions relate to, and potential metrics and equity goals for measuring the CAP's progress toward a more equitable Portland and Multnomah County.

⁶ http://www.oregonlive.com/living/index.ssf/2013/04/oregon_csa_farms_lead_nationwi.html
<http://www.oregonsnapcsa.com/>

The potential equity goals and metrics fit into two categories:

- *Equitable provision of services and benefits* from CAP-related actions and public investments; and
- *Reduction of disparities*, by race, income and other relevant dimensions, in outcomes related to those areas.

Below is a potential framework for organizing the crosswalk, as well as potential metrics relating to each chapter (Table 2). The disparities listed there are drawn from a variety of recent reports, which are listed in Part II of the Appendix; unfortunately I was not able to identify a data source for all of the disparities listed. However, each CAP chapter team should be responsible for augmenting the information identified in Table 2, and selecting equity goals and metrics that are both appropriate and actionable.

Table 2. Crosswalk of CAP chapters to Disparities and Potential Goals and Metrics

Chapter	Objectives/Actions	Related Disparities (source from Appendix)	Potential Goals/Metrics
1) Buildings and energy	<ul style="list-style-type: none"> • Increase energy efficiency of building stock • Increase utilization of renewable and distributed energy 	<ul style="list-style-type: none"> • Housing cost burden (energy cost/ inefficiency) ^{(b) (c)} • Housing quality and safety (indoor air quality) • Underrepresentation of women and minorities in building trades occupations/ contracting opportunities ^(f) 	<ul style="list-style-type: none"> • Equitable provision of publicly- subsidized energy efficiency services • Improvements in home energy performance/energy savings by neighborhood • Improvements in indoor air quality / reduction in asthma morbidity rates • MWESB contracting goals for EE/RE programs • Underrepresented population hiring targets for EE/RE contractors
2) Urban form and mobility	<ul style="list-style-type: none"> • Enhance access to and utilization of alternative/active transportation • Reduce vehicle miles travelled (VMT) • Improve fuel efficiency 	<ul style="list-style-type: none"> • Neighborhood “completeness” ^(a) • Transit access (overall, to employment centers) ^(b) • Walkability and Bikability ^{(b) (g)} • Pedestrian safety ^(b) • Obesity rates ^(b) 	<ul style="list-style-type: none"> • Equitable provision of transportation and transit infrastructure and safety improvements • Reduction in neighborhood disparities in “completeness”, transit access, ped safety, walkability, bikability • Changes in bike counts by neighborhood, or other measures of active transportation utilization
3) Consumption and solid waste	<ul style="list-style-type: none"> • Reduce waste generation • Increase recycling rates 	<ul style="list-style-type: none"> • Exposure to solid waste processing/ municipal recycling facilities • Recycling program access/utilization (e.g., by 	<ul style="list-style-type: none"> • Equitable utilization of recycling and composting services • Equitable siting/expansion of solid waste/recycling facilities

		linguistically isolated groups)	(if relevant)
4) Urban forestry and natural systems	<ul style="list-style-type: none"> Expand urban forest canopy Protect natural systems such as watersheds 	<ul style="list-style-type: none"> Tree canopy cover ^(a) Ambient air quality (number of times above benchmark level) ^(b) Asthma rates ^(b) 	<ul style="list-style-type: none"> Equitable provision of urban forestry investments Reduction in neighborhood disparities in: <ul style="list-style-type: none"> tree canopy cover air quality ER visits for respiratory distress
5) Food and agriculture	<ul style="list-style-type: none"> Reduce consumption of carbon-intensive foods Enhance local food consumption, production 	<ul style="list-style-type: none"> Food insecurity rates ^(c) Access to healthy food sources/ exposure to unhealthy food sources (Retail Food Env't Index) ^{(b) (g)} Health disparities related to diet: Obesity, diabetes, cardiovascular disease rates ^{(b) (g)} 	<ul style="list-style-type: none"> Reduced neighborhood disparities in access to grocery store or fresh food sources Share of SNAP (Oregon Trail) users participating in local farmer's markets, Community Supported Agriculture and food buying co-ops Equitable access to community gardens/urban agriculture infrastructure
6) Community engagement	<ul style="list-style-type: none"> Engage businesses and residents around ways to reduce carbon emissions 	<ul style="list-style-type: none"> Underrepresentation/lack of empowerment of communities of color and low-income populations in planning processes Inaccessible/inappropriate public engagement materials 	<ul style="list-style-type: none"> Equitable representation of high-need and vulnerable communities in CAP development and implementation process Reduced disparities in participation of high-need and vulnerable communities in CAP-related outreach and education events
7) Climate change preparation	<ul style="list-style-type: none"> Expand green infrastructure Develop resilience and adaptation plans 	<ul style="list-style-type: none"> Vulnerability to extreme weather events/social vulnerability⁷ Urban heat island effect impacts Incidence of heat-related illness 	<ul style="list-style-type: none"> Reduced neighborhood disparities in Green Infrastructure access Reduced disparities in heat island effect impacts Reduced disparities in heat related illness Equitable distribution of emergency preparedness infrastructure (e.g., cooling centers)
8) Local government operations	<ul style="list-style-type: none"> Reduce carbon emissions from gov't operations 	<ul style="list-style-type: none"> Disparities in government contracting ^(a) Workforce diversity 	<ul style="list-style-type: none"> MWESB goals for public contracts related to greening government operations

⁷ Defined as “the social, economic, demographic and housing characteristics that influence a community’s ability to respond to, cope with, recover from, and adapt to environmental hazards.” Source: Hazards and Vulnerability Research Institute, University of South Carolina: <http://webra.cas.sc.edu/hvri/products/sovifag.aspx>.

Considerations in developing metrics

- *Linking spatial data to social and racial disparities.* Much of the data that is collected is spatial rather than social in nature: in other words, they indicate which locations have particular attributes (e.g., tree canopy, access to grocery stores), but not necessarily the social characteristics of those communities. Some sources, such as the recently-updated CLF Regional Equity Atlas, allow you to cross-reference maps against neighborhood poverty rates, but do not generate summary statistics that reflect the systematic nature of disparities. In terms of measuring disparities (and progress toward narrowing them), I recommend that the City and County develop indices that relate key climate-related outcome metrics to neighborhood socioeconomic and demographic characteristics – in particular, high-poverty/low-income Census tracts, and communities of color – and summarize the disparity.

For example, the Portland Plan identifies (p. 139) that higher-poverty areas have lower rates of tree canopy coverage than lower-poverty areas. This information could be rendered into a “disparity index” form by aggregating areas (either based on poverty rates, or non-White population share) and calculating differential tree canopy rates for those areas. Such information would lend itself to setting of equity goals to lessen the disparities over time, and ongoing tracking of progress against those disparities.

- *Collecting program data to track and report progress on equity.* As noted in the Portland Plan Framework for Equity, the City of Portland is committed to tracking and reporting spending and public service delivery by place and community. With respect to the Climate Action Plan, this should take several different forms:
 - Detailed geographic data should be collected on the location of program spending or other kinds of neighborhood improvements, to ensure that they are distributed equitably. Note that “equitably” does not mean “equally” – differences in the distribution of program benefits and services should reflect differential needs.
 - Where programs serve specific households or individuals, or engage individuals in planning processes, data should be collected on demographic and socioeconomic characteristics of participants, to ensure that participation is representative; and
 - Where CAP actions result in contracting opportunities and new job creation, data should be collected to ensure that goals for MWESB contracting are met, and where feasible, that data on hiring of underrepresented populations is tracked. And wherever possible, contracting and hiring data should be disaggregated by MWESB categories (minority, women and emerging small businesses), and racial/ethnic categories, to ensure that disparities are not masked.
 - The City and County should report progress on the CAP’s equity goals and indicators through its own website for the 2013 CAP Update, but also make the underlying datasets on CAP-related programs and investments available through open-data portals like CivicApps.org, which would allow the public to access and analyze .

Appendix

Supplemental Resources Related to Climate, Sustainability and Equity

I. Equity-Oriented Climate and Sustainability Plans in Other U.S. Cities

- Philadelphia, PA: “Greenworks Philadelphia” (2009)

<http://www.phila.gov/green/greenworks/2009-greenworks-report.html>

“Greenworks Philadelphia” was developed by the administration of Mayor Michael A. Nutter as a strategy for addressing enhancing sustainability, livability and economic vitality within the city. The plan is organized around five E’s: Energy, Environment, Equity, Economy and Engagement. The plan’s Equity chapter focuses primarily around reducing disparities in natural and environmental amenities between neighborhoods, which in a highly segregated city like Philadelphia maps directly onto racial disparities. For example, the plan focuses on closes gaps in park and recreational resources between neighborhoods, by setting out quantitative goals for increasing green space access, and establishing a priority for green space creation in “low-served neighborhoods” (p. 48). Elsewhere, the report documents significant geographical disparities in tree cover, heat-related deaths, and fresh food access.

- Boston, MA: “A Climate of Progress: City of Boston Climate Action Plan Update 2011”

<http://www.cityofboston.gov/climate/bostonsplan/>

“A Climate of Progress” was Boston’s second CAP produced under Mayor Thomas Menino, with the first released in 2007. This plan is notable for its equity focus in at least two respects: one, the report states clearly and definitively that equity will be a guiding principle of the plan, stating that its implementation “should not exacerbate existing social and economic inequalities, and should, wherever possible, contribute toward reducing those inequalities.” Second, the plan is very specific in identifying policies that will contribute toward equitable distribution of the CAP’s economic benefits, for example noting that all CAP-related projects will be subject to the City’s existing Resident Jobs Policy, which requires that at least 50% of workers hired on city-funded projects be city residents, 25% minority and 10% women.

- Newark, NJ: “The City of Newark Sustainability Action Plan” (2013)

http://www.sustainablewk.org/NewarkSustainabilityActionPlan_2013.pdf

Newark’s recently completed sustainability plan focuses on addressing many of the city’s significant environmental, economic and social challenges. The plan is framed to a significant extent by Environmental Justice principles, stating that the city’s sustainability efforts will “put a priority on addressing the environmental health needs of those who are most vulnerable or currently most disproportionately burdened with environmental health costs” (p. 5). In addition to a vision and set of actions, each of the report’s six chapters identifies a set of challenges that the city and its residents face, including significant disparities and inequities in those burdens, such as high energy costs, poor air quality, or environmental toxic exposure.

II. Reports and Resources on Disparities in Portland region

- a) Portland Plan, April 2012
 - “A Framework for Equity”
<http://www.portlandonline.com/portlandplan/index.cfm?c=58776&a=420370>
 - “Measures of Success”
<http://www.portlandonline.com/portlandplan/index.cfm?c=58776&a=420372>
- b) Coalition for a Livable Future, “Regional Equity Atlas: The Portland Metro Region’s Geography of Opportunity” (Version 2.0, 2013)
<http://clfuture.org/programs/regional-equity-atlas/>
- c) Greater Portland Pulse
<http://portlandpulse.org/>
- d) Coalition of Communities of Color in Multnomah County, “Communities of Color in Multnomah County: A Disturbing Profile,” 2010.
<http://www.coalitioncommunitiescolor.org/docs/AN%20UNSETTLING%20PROFILE.pdf>
- e) Urban League of Portland, “The State of Black Oregon 2009”
<http://ulpdx.org/wp-content/uploads/2012/04/UrbanLeague-StateofBlackOregon.pdf>
- f) Kelly, Maura and Lindsey Wilkinson. “Apprenticeship Needs Assessment in Heavy Highway Construction Workforce.” Report to the Oregon Bureau of Labor and Industry. Portland, OR: Portland State University, 2012.
http://www.skillupwa.org/storage/documents/Portland_State_University_Assessment.pdf
- g) Clapp, Elizabeth and Moriah McSharry McGrath, “Built Environment Atlas: Active Living, Healthy Eating, Multnomah County Oregon” Multnomah County Health Department, Health Assessment and Evaluation, June 2011
http://web.multco.us/sites/default/files/health/documents/built_environment_atlas.pdf
- h) Multnomah County Health Equity Initiative, 2009
http://web.multco.us/sites/default/files/health/documents/hei_report_2009_0.pdf
- i) Multnomah County Community Health Assessment
<http://web.multco.us/health/reports>

Examples from other cities

- Metro Boston Indicators Project, “The State of Equity in Metro Boston,” December 2011.
<http://regionalindicators.org/>
- Mile High Connects, “The Denver Regional Equity Atlas,” 2012.
<http://milehighconnects.com/equity-atlas.html>

III. Other Reports and Resources

- Human Impact Partners, “SCS Health and Equity Performance Metrics,” August 2011
<http://www.humanimpact.org/doc-lib/finish/7-policy-hias/132-scs-health-a-equity>

This report proposes a set of 13 performance metrics for California regions, and Metropolitan Planning Organizations (MPO), as part of their Sustainable Communities Strategy (SCS), required under the state’s 2008 legislation (SB 375) mandating decreases in greenhouse gas emissions. These metrics fall into seven categories: Safety; Access to Goods, Jobs and Services; General Transportation; Future Growth; Economic; Environmental Pollution; and Equity. Their Equity metric calls for officials to “measure and stratify all indicators by race/ethnicity, income, geography; age; disability.”

As of 2013, four of California’s MPOs have adopted the SCS Health and Equity metrics in some form as part of their Regional Transportation Plans⁸.

- California Office of Health Hazard Assessment and California Environmental Protection Agency, “California Communities Environmental Health Screening Tool,” April 2013
<http://oehha.ca.gov/ej/pdf/042313CalEnviroScreen1.pdf>

This report introduces an analytical tool, called CalEnviroScreen, for assessing a community’s vulnerability to adverse effects of pollution. The tool identifies 11 different measures of environmental and pollution burden, ranging from air quality to groundwater threats, and seven measures of demographic/socioeconomic factors rendering populations sensitive to those burdens, including age, asthma rates, poverty and race/ethnicity. The tool combines these two broad sets of factors into a single measure of community environmental health and vulnerability, allowing planners and policy officials to assess, at a ZIP code level, spatial patterns of disproportionate burden from environmental hazards.

- Nutters, Heidi. “Addressing Social Vulnerability and Equity in Climate Change Adaptation Planning”. San Francisco Bay Conservation and Development Commission, June 2012.
<http://www.adaptingtorisingtides.org/wp-content/uploads/2012/06/Equity-White-Paper.pdf>
- Cutter, Susan and Christina Finch, “Temporal and Spatial Changes in Social Vulnerability to Natural Hazards,” *Proceedings of the National Academy of Sciences*, February 2008.
<http://www.pnas.org/content/105/7/2301.full>
- Morello-Frosch, Rachel, Manuel Pastor, James Sadd, and Seth B. Shonkoff. “The Climate Gap: Inequalities in How Climate Change Hurts Americans & How to Close the Gap”. Los Angeles: Program for Environmental and Regional Equity, University of Southern California, 2009.
http://dornsife.usc.edu/pere/documents/The_Climat_Gap_Full_Report_FINAL.pdf

⁸ http://saferoutescalifornia.files.wordpress.com/2012/11/hip_healthequitymetrics_impacts_table_11_16_12.pdf