

## Urban Green Space and Tree Canopy

### Planning Commission Recommended Policy Language

February 11, 2013, the Olympia Planning Commission passed the following recommended goals and policies regarding Urban Green Space and Tree Canopy:

*Commissioner Tousley moved, seconded by Commissioner Ingman, that the proposed Urban Green Space goal and policy language reflect the following:*

*Urban Green Space is available to the public and located throughout the community and incorporates natural environments into the urban setting, which are easily accessible and viewable so that people can experience nature daily and nearby.*

- a) Provide urban green spaces in which to spend time. Include such elements as trees, garden spaces, variety of vegetation, water features, green walls and roofs, and seating.*
- b) Provide urban green spaces that are in people's immediate vicinity and can be enjoyed or viewed from a variety of perspectives.*
- c) Establish a maximum walking time to urban green space for all community members.*
- d) Increase the per capita area of urban green space and the tree canopy-to-area ratio within each neighborhood.*
- e) Establish urban green space between transportation corridors and adjacent areas.*

*Commissioner Leveen moved, seconded by Commissioner Ingman, to amend Policy #3 to remove the words "walking time" and replace with "distance."*

*The motion, with the proposed amendment, passed unanimously.*

### Planning Commission February 11, 2013 Discussion Minutes:

"The sponsor, Vice Chair Bardin, described her proposal. The focus was on green spaces apart from parks and open space for health, psychological, and social justice benefits. Vice Chair Bardin noted the Commission had in front of them revised language from the last time this topic was discussed.

Commission Discussion:

- Policy #3 should be listed as the first policy under the goal language.
- The goals and policies would be new language and not replacing any existing language in the July Draft; possibly within a new section titled "Urban Green Space" in the Land Use and Urban Design Chapter.
- Concern expressed that the policies include performance measures and about how those measures would be achieved; in particular by what means would additional open space be dedicated or acquired?

- Key provisions within the policy language are accessibility and establishment of performance targets.
- Tree canopy may be better addressed through sub-area planning, as it can vary throughout the City. Can anticipate challenges in implementation of expansion in certain areas.
- Suggestion made that Commissioners present proposed language exactly as it would appear in the Draft, and within the proposed context.
- Population increases need to be met with a constant ratio of green space to people through planting of more trees and limiting the removal of trees.
- A clearer definition of "green space" is needed; clarify that this isn't the traditional definition of open space so that it is clear that implementation can and should happen in a variety of ways. Example cited: funding the street tree program.
- Concern about who is providing the green space to meet the policies; existing development, new development, or both? Sponsor noted it should be a combination and that a variety of tools should be used, such as acquiring land and requiring it be set aside through private development.
- Language has same meaning as "require," in that it states "provide."
- Requirement should apply to all new development, including infill in the downtown, like townhouses.
- Concern noted that the City has a fixed amount of space and an increasing population; at some point it becomes impossible to continue to expand open space.
- Concern expressed that much of the existing tree canopy and urban green space is on private property and would require more extensive restrictions on removal or development to retain. Sponsor noted the environmental benefits of retaining trees.
- Concern expressed for how to define a maximum walking time. Walk speeds differ widely among the population. Sponsor noted the policies also include a combination of visual distance and accessibility, and that the Commission may wish to establish an average walking time.
- Concern expressed for how this might apply to already-developed areas.
- Discussion on how widely the goal and policies apply to residential areas, but instead may be focused more on new development and downtown. There may be adequate green space in residential neighborhoods.
- Further definition needed as to whether green space must be public.
- Add to the goal language: "Urban green space is *available to the public and located* throughout the community..."
- Move policy #3 to position #1.
- Remove the word "current" from policy #4.
- Remove "and maintain" from policy #2. Sponsor noted that maintain is purposely included to ensure no net loss of walking time. Other policies fulfill this intent.
- Concern about focus on walking time; sponsor noted current literature cites walking as the most effective metric.

## **Policy Discussion Background Information—Provided by the Planning Commission Sponsor**

Olympia Planning Commissioner Judy Bardin sponsored the recommended policy language. In support of the proposed language, she submitted the following information.

*Describe the scope of the topic.* Green space provides a number of benefits including ecological, environmental, health, economic, and social. It is an essential component of the urban environment and will become even more important for people's well-being as Olympia's population increases and the region becomes denser.

- Ecological and Environmental—Green space provides habitat for a variety of birds, fish and other animals. Trees can remove air pollutants that are prevalent in the urban environment such as particulate matter, ozone, nitrogen oxides and carbon monoxide. They also sequester the greenhouse gas carbon dioxide<sup>1</sup>. A tree can remove 48 pounds of carbon dioxide a year and sequester a ton of carbon dioxide by the time the tree reaches age 40<sup>2</sup>. The heat island effect is caused by large areas of heat-absorbing surfaces in combination with high energy use. Heat islands are likely to occur as Olympia becomes more urbanized and climate change causes warmer temperatures. Trees provide natural air conditioning; they shade and cool buildings and streets; and they use evapotranspiration (tree sweating) to cool themselves and surrounding areas<sup>3</sup>. Trees also reduce energy costs for buildings, both for heating and cooling. Increased vegetation reduces storm water runoff and improves water quality by filtering water. A mature tree in a year can intercept about 760 gallons of rainwater and cause evapotranspiration of 100 gallons of water<sup>4</sup>. Trees will also help diminish the flooding predicted with climate change. Noise reduction is another benefit of trees. Wide tree belts can reduce noise by 4-8 decibels<sup>5</sup>.
- Health – Green space has a direct effect on people's health. Studies have shown a relationship between the amount of green space in the living environment and the degree of physical and mental health and longevity<sup>6</sup>. Increased green space has been found to decrease death rates<sup>7</sup>. People living closer to green space have greater levels of physical activity and are less likely to be obese<sup>8</sup>. Fifty percent of Washington's population is either overweight or obese. Having places where people want to exercise will aide people in living healthier life-styles. The public's perception of their general health has been found to be related to the amount of green space in their environment<sup>9</sup>. Views of nature can improve people's health and well-being by providing relief from stress and mental fatigue<sup>10</sup>. Hospital patients have been found to make quicker recoveries and need less pain medications when they have a view of a park compared to patients who only had a view of a wall<sup>11</sup>.
- Economic – Green space increases property values<sup>12</sup>. Property values are directly related to the distance to green space and the type of green space. People living in multi-unit dwellings value living near an area with green-space while people in houses value living near a park<sup>13</sup>. Businesses are more likely to locate near an area having green or open spaces<sup>14</sup>. Places with urban natural capital tend to attract skilled workers. Having a skilled

work force further enhances the attractiveness of an area for businesses<sup>15</sup>. Places that are beautiful also increase tourism.

- Social Capital – Urban green spaces provide opportunity for people to gather and interact with family, friends and neighbors. People living near these areas feel a greater sense of cohesion and are more likely to help their neighbors<sup>16</sup>.

*References:*

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3. New York State, Department of Environmental Conservation. Heat Island Effects: The Effect of Trees on Urban Health Islands. Accessed 01/07/13 from <http://www.dec.ny.gov/lands/30344.html>
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*Why does this issue demand attention? (i.e., why the treatment in the July draft is, to the sponsor, inadequate.)* The issue of urban green space in the immediate vicinity of where people live is not addressed in the July draft or if it is addressed the language is too vague.

*Is this topic addressed in the July Draft?* There are goals, but they do not address the issue of green space in people's immediate vicinity. However, there are couple issues that should be discussed in the language for the below objectives (see underlines).

Parks, Arts, and Recreation Chapter:

PR 3.1 Provide parks in close proximity to all residences.

*This goal is vague. Perhaps we should have a more specific measurable goal such as:*

Set targeted goals for parks, such as people will be within a five minute walking distance of a park.

PR 3.2 Ensure that Olympia's park system includes opportunities for experiencing nature, solitude, and an **escape from the fast pace of urban life.**

Why would some need to escape urban life, aren't we designing a city that people would want to live in? If people have green space nearby they may not have to escape to parks

PR 4.2 Use existing rail, utility and unopened street rights-of-way, valleys, streams (where environmentally sound), and other corridors for urban trails.

PR 4.3 Preserve unimproved public rights-of-way for important open space, greenway linkages, and trails.

Natural Environment Chapter:

Policy PN11.1: Ensure that all members of the community have nearby access to a natural space with opportunities to see, touch, and connect with the natural environment.

Land Use and Urban Design Chapter:

Policy PL18.3: Include housing, a food store, and a neighborhood park or civic green at all neighborhood centers.

Policy PL20.2: Create sub-area strategies that address provisions and priorities for community health, neighborhood centers and places of assembly, streets and paths, cultural resources, forestry, utilities, and open space and parks.

Policy PL21.5: Require a neighborhood center, a variety of housing connected trails, prominent open spaces wildlife habitat, and recreation areas in each village.

Policy PL21.9: Limit each village to about 40 to 200 acres...require at least 5% of the site be open space with at least one large usable open space for the public at the neighborhood center. This seems like very limited land allocation (5%, why not 35%)

*Provide the specific goal or policy language that you propose (or a motion if goal/policy language is not applicable.)*

People will have non-park urban green space in their immediate vicinity so that they can experience nature daily and nearby. Green space can include: gardens, community gardens, trails, plazas, waterfronts (sounds, lakes and streams), fountains, stands of trees and tree canopy.

- Establish a ratio of green space per person (population).

- People will have visual access to urban green space from where they live, work and play
- People can reach green space quickly. Set a targeted goal for walking to green space such as: people will be within one minute walking distance to green space.
- Include plans for seating next to green space for new office and apartment buildings and multifamily housing.
- Include a green buffer between arterial corridors and housing.
- Place green belts along civic boulevards.
- Plan buildings with sufficient set-backs for trees that will grow as tall as the lesser of building height or 50 feet, featuring a proportionate, un-pruned canopy.
- Plan new development with sufficient tree canopy such that canopy will increase by 1.5% annually until an average of 35% has been reached for the City overall.
- Require new development to meet these standards.