

**OPEN SPACE FINANCING IN SEATTLE:**  
**A Closer Look at the Effects of Open Space on Property Values,**  
**City Revenues and Housing Affordability**

By

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## **EXECUTIVE SUMMARY**

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This paper, commissioned by Open Space Seattle 2100, takes a broad look at the impacts of open space on property values and the various implications of those effects, both on the side of financing and on the side of feared displacement of low-income homeowners. Open Space Seattle has presented a cohesive vision of green infrastructure for Seattle and now needs to think critically about implementation. The analysis in this paper provides Open Space Seattle with greater direction for implementation and an informed response to the financial questions that are posed to them. Each of the three research questions explored in this paper and resultant findings are summarized below.

*What are the relationships between provision of urban parks and the financial return to property owners, developers and the public in higher property values, especially in dense urban areas?*

The rich body of academic research on this question has produced mixed results, especially for different types of open space. However, more studies found that urban parks, natural areas and wetlands showed positive effects on property values in dense urban areas, such as Seattle. The four Seattle-based studies cited in this paper all found that open space caused increases in property values, with the one exception being that the King County Urban Growth Boundary decreased small lot prices (but increased middle and large lot prices). Given the national and local research, it is safe to assume that open space in Seattle causes a slight increase in property values of nearby homes. In cases where parks are being created in underdeveloped areas, these parks may serve as an incubator for new high-value development, resulting in a larger increase in property values than what is experienced in more fully developed areas.

*Will increased property values generate revenues to protect open space and if so, what models are feasible in Seattle?*

This paper considers several financing mechanisms that take advantage of higher property values including regular property taxes, tax increment financing, local improvement districts, the creation of an independent park district and levies. Each of these methods are evaluated within the context of Seattle using several criteria including the ability to fund open space maintenance

and operations, the stability of the revenue stream, ease of introduction and ease of implementation. While this analysis is not in enough depth to confidently recommend a specific financing mechanism, it does shed more light on the pros and cons of each mechanism and provides an informed platform from which to undertake further research. To support financial decision-making, a financial framework tool that clearly identifies the costs and benefits of open space is presented. This tool can help to generate the political will necessary to maintain a strong parks system and secure a stable revenue stream for open space.

*Assuming that open space raises the value of property, how can housing choices near open space remain available to people with diverse incomes?*

Many believe that open space and affordable housing are in competition with each other for the following reasons: 1) If open space causes nearby property values to rise, then housing in neighborhoods with more open space become less affordable; 2) if scarce land is used for open space, then it cannot be used for housing, which diminishes the supply of housing and causes prices to go up; 3) public funds that go toward open space are public funds that are not going toward affordable housing programs.

These arguments, while logical, are misleading in the context of Seattle. Open space contributes very little to the rapidly increasing housing prices in Seattle and thus, should not be targeted as the primary cause of increasing housing prices. With regards to open space taking over land that could potentially be used for housing stock, as housing density increases, open space plays a crucial role in keeping the city livable. Thus, increasing open space supports increases in the stock of smaller more affordable units. Lastly, public funding for open space and for affordable housing programs come primarily from different sources. To pit open space and affordable housing against each other is not only misleading, but also detrimental to good urban planning and contradictory to the goals put forth in the Seattle Comprehensive Plan.



## **CHAPTER 1: INTRODUCTION**

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The city of Seattle is known as the Emerald City for its evergreen trees and vast tracts of open space. Back in 1903 when the city was transitioning from a distant wild outpost to a regional urban hub, the Olmsted brothers were commissioned to outline a plan for parks that would take advantage of the stunning natural beauty and enhance the city for years to come. Many of the Olmsted brothers' plans did come to fruition and Seattle has been known as a place that puts a high value on open space, so much so that people have been flocking to Seattle ever since. The Puget Sound Metropolitan Area has grown by 23% between 1990 and 2003, and these very open spaces that make the city so desirable are at risk because of development pressures from the growing population (U.S. Census, 2005). Seattle will become the vibrant, ecological city it strives to be in the future only through careful and visionary planning today. To lay the foundation for achieving these goals, Open Space Seattle 2100, a coalition made up of professionals, citizen activists and students, has put forward a clear and bold vision of open space and green infrastructure for Seattle.

### ***OPEN SPACE SEATTLE 2100***

On February 3 and 4, 2006 over 300 citizens on 23 teams collaborated in the Green Futures Charrette to develop open space plans that address the entire city. Each charrette team, comprised of planners, designers, developers, artists, engineers, ecologists, citizens and open space advocates, focused on a different watershed in the city to envision livable, healthy urban watersheds and neighborhoods for the next century. Each team put forward two open space layout plans: one 20 years from now and one 100 years from now. See Appendix A and B for the resulting composite maps of the short and long term proposals.

Many of the concrete plans put forward by the charrette teams attempt to better align the natural landscape with city infrastructure. For example, rather than working against natural drainages, wetlands and forested areas by paving, tunneling and piping, many of the teams designed infrastructure that incorporates these natural features and allows them to provide ecological



services. More permeable surfaces enable rainwater to filter through the soil, providing free natural cleaning before the water goes into the Puget Sound. Daylighted creeks, rather than piped creeks, provide for greater filtration as well as valuable riparian habitat and corridors for animals. Trees provide sound barriers, CO<sub>2</sub> absorption, soil stabilization and dispersal of rainfall. Proposed parks and natural areas were strategically placed to provide ecological connectivity between the city's existing open spaces. Green infrastructure, as defined by Open Space Seattle, does not stop with ecological features. It also includes public gathering places such as plazas, community centers and community gardens as well as transportation corridors such as pedestrian-bicycle paths, green streets and mass transit. Lastly, green infrastructure promotes urban hubs that increase density and allow for community building.

### ***RESEARCH QUESTION***

At this point, Open Space Seattle has combined the work of the 23 teams to present a cohesive vision of green infrastructure for Seattle. This provides a starting point to understand where systems of connective corridors and patches for people and wildlife might cohere on regional, city and watershed scales. Open Space Seattle now needs to look critically at implementation. Most people agree that the vision put forward is wonderful, but funding immediately rises as a potential barrier. Open Space Seattle has commissioned this paper to address the following questions:

- ❖ What are the relationships between provision of urban parks and the financial return to property owners, developers and the public in higher property values, especially in dense urban areas?
- ❖ Will increased property values generate revenues to protect open space and if so, what models are feasible in Seattle?
- ❖ Assuming that open space raises the value of property, how can housing choices near open space remain available to people with diverse incomes?

Answers to these questions will give Open Space Seattle more direction with regards to implementation and greater credibility as they attempt to get buy-in on their vision from City officials and the general public.

## ***RESEARCH METHODS***

The primary research methods used in this paper include a literature review, semi-structured interviews, and research from sources including state laws, budgets, local newspapers and policy reports.

The first research question is informed through a literature review of economic studies from across the country that examine the effect of different types of open space on property values. The purpose of the literature review was to provide an understanding of the current thinking on this topic and to enable the author to make educated inferences regarding the effects of open space on property values in Seattle.

To address the second research question, several open space funding mechanisms that take advantage of higher property values are compared against a set of criteria to determine whether or not these mechanisms could be used successfully in Seattle, given the city's legal, political and financial environment. To provide further support for this research question, a cost-benefit financial framework that was prepared for an open space advocacy organization in Minnesota is presented. To demonstrate how this framework can be used in Seattle, cost figures from a park that is currently being built by the Seattle Parks & Recreation Department are plugged in and tested. This financial framework is presented as a tool that can be used to make better decisions about financing open space.

For the third research question, knowledge and data garnered from research and interviews are used to develop an informed argument that Open Space Seattle can use to respond to concerns about the effect of open space on housing affordability.

The data gathered for the analysis of the second and third research questions came largely from research of state law, local newspaper articles and policy white papers as well as semi-structured interviews with various stakeholders. The interview participants included individuals who are involved in open space issues in Seattle or who are experts in a particular financing mechanism being examined (participants listed in Appendix D). The interviews helped to synthesize complex information and provide historical context for open space financing in Seattle. In

addition, the interviews were used to identify the pros and cons of different open space financing mechanisms from several different perspectives. Interview participants were not asked identical questions, because their expertise varied and all participants did not have an informed opinion on all the topics covered.

### ***BACKGROUND ON OPEN SPACE SEATTLE 2100***

Careful research, broad public input, multiple public education events and a year of process and participation firmly grounded the Green Futures Charrette work in real conditions, existing planning and environmental science. Every team was given a set of predicted future scenarios including over a million people living within the city limits, changing climatic conditions and water supply regimes, elevated oil prices and new transportation modes. Charrette teams worked on two time scales, first envisioning what their study area's open space layout might be a full century from now and then proposing 20-year plans with near-term priorities and implementation strategies. The teams focused on the following guiding principles as they developed plans for their assigned areas:

- ❖ **Regional Responsiveness:** Consider Seattle's role as an ecological, economic, and cultural crossroads; its location in one of the world's great estuaries and between two dramatic mountain ranges; its critical position as a threshold to two major watersheds (Cedar and Green/Duwamish); and its relationship to salt and fresh water bodies throughout the city.
- ❖ **Integrated And Multi-Functional:** Integrate a variety of types of open space within a unifying, coherent structure. Incorporate considerations for streets, creeks, parks, habitat, urban forests, trails, drainage, shorelines, commercial and civic spaces, back yards and buildings. Consider layering multiple functions and uses within green spaces to create high-functioning, high value open spaces.
- ❖ **Equity And Accessibility:** Within a network of open spaces provide equitable access for all persons to a variety of outdoor and recreational experiences. Distribute appropriate open space types to every neighborhood, in order to address the needs of diverse population groups. Prioritize public access to water.

- ❖ **Connectivity/Coherence:** Create a wholly connected system that facilitates non-motorized movement, enhances habitat through connectivity, links diverse neighborhoods, and is easy to navigate and understand. Connect these in-city amenities to surrounding communities, trails and public lands.
- ❖ **Quality, Beauty, Identity And Rootedness:** Use Seattle’s many natural strengths to create an exemplary, signature open space system. Build on intrinsic qualities, both natural and cultural; reflect, respond to and interpret geographic, ecological, aesthetic and cultural contexts; address emotional and spiritual needs; and inspire a deep connection to place.
- ❖ **Ecological Function And Integrity:** Expand the quantity and quality of natural systems in the city: Provide quality habitat for all appropriate species, with a special emphasis on the waters’ edge. Design for hydrological health (water temperature, water quality, water regimes, stormwater), and consider appropriate water and resource conservation strategies. Connect to regional ecosystems in order to achieve integrity, resiliency and biodiversity in the face of climate change.
- ❖ **Health And Safety:** Continue to make the city a safe and healthful place to live. Reduce the risk of natural hazards (slides, flooding, earthquake, soil and water contamination) while reclaiming and treating previously toxic sites. Provide multiple opportunities for exercise, physical activity, and a connection to nature to be integrated into daily lives.
- ❖ **Feasibility, Flexibility And Stewardship:** While visionary, the plan should be lasting and feasible, with a complementary set of near-term implementation strategies that include mechanisms for both public and private investment that are achievable in incremental steps and adaptable over time. (e.g. codes, funding sources and incentives). It should be maintainable, inspiring shared stewardship between public agencies, private businesses, and individual citizens to foster pride, purpose and community.

As mentioned earlier, many of the concrete plans put forward by the charrette teams attempt to better align the natural landscape with city infrastructure. While many of their proposals have to do with more traditional forms of open space such as parks, greenbelts and wetlands, a large number of ideas have to do with greening of Seattle’s infrastructure. Although each team put

forward a unique proposal for their assigned watershed, the following are themes that clearly emerged across all the teams' visions:

- ❖ Create integrated, connected “green infrastructure” that supports urban functions without damaging the atmosphere or water which includes bikeways, green freeways, natural drainage filtration and tree canopy cover.
- ❖ Plan for density and community by focusing development into urban nodes that contain civic spaces, local identities, walkable amenities and public transit.
- ❖ Strive for public and private ecological open spaces that restore ecological functions and promote aquatic and terrestrial biodiversity.
- ❖ Provide democratic access to open space, so that all people, in all neighborhoods.

Since the charette, Open Space Seattle has displayed the results around the city in several public locations. They have also printed a comprehensive report of the results and a scaled-down brochure. These pieces of literature have been distributed to the charette participants as well as key players within Seattle. Everyone interviewed for this project had heard of Open Space Seattle and their spokesperson was quoted in several recent articles in the local press on open space issues. Thus, it appears that Open Space Seattle has made itself known in Seattle.

## CHAPTER 2: OPEN SPACE PLANNING IN SEATTLE

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### *CITY COMPREHENSIVE PLAN*

The City Comprehensive Plan, which was adopted in 1994 and revised in 2000 and 2005, develops the idea of urban villages. As Seattle's population and job base grow, urban villages are the areas where conditions can best support the increased density needed to house and employ the city's newest residents. By concentrating growth in these urban villages, Seattle can build on successful aspects of the city's existing urban character, continuing the development of concentrated, pedestrian-friendly mixed-use neighborhoods of varied intensities at appropriate locations throughout the city. Seattle's urban village categories build on the urban center and manufacturing/industrial center designations called for in the Countywide Planning Policies. The Comprehensive Plan uses the following terminology to designate areas of increasing density:

- ❖ **Single-family residential areas** are lower density areas outside the urban village boundaries.
- ❖ **Residential urban villages** are intended for predominantly residential development around a core of commercial services.
- ❖ **Hub urban villages** will also accommodate a broad mix of uses, but at lower densities, especially for employment, than urban centers.
- ❖ **Urban center villages** are intended to be the densest areas with the widest range of land uses.
- ❖ **Manufacturing/industrial centers** are intended to maintain viable industrial activity and promote industrial development.

Within the context of urban villages, the Comprehensive Plan promotes an open space network that provides places for recreation, ecological protection and enhancement of the urban villages concept.

Following the adoption of the Comprehensive Plan, the City initiated a nationally recognized neighborhood planning program. Between 1994 and 2000, 37 neighborhood plans were completed by citizen-led groups, which incorporated thousands of volunteer hours. Neighborhood plan recommendations were included in the 2000 Seattle Parks and Recreation Plan and were the basis of the ProParks Levy.

### ***PARKS AND RECREATION PLAN***

The Seattle Department of Parks and Recreation is responsible for 6,100 acres of parkland and operates a park system that includes community centers, swimming pools, beaches, golf courses, sports fields, P-Patch gardens, natural areas and many other facilities. The City has set the following distribution guidelines for open space:

- ❖ **Breathing room** is the combined acreage of all dedicated open spaces (including non-City owned spaces), but not including tidelands and school properties. The goal is to have one acre per 100 residents, and an acceptable level is one-third acre (or offset such as school grounds, green street, etc.) per 100 residents.
- ❖ **Neighborhood parks or usable open space** (excluding trails such as the Burke-Gilman, school properties and natural areas) distribution goals are listed for the different population areas in Figure 1 below.
- ❖ **Greenspaces** include areas designated for preservation because of their natural or ecological qualities and their potential to contribute to an interconnected open space system. The City hopes to preserve such areas where they meet the designation criteria established in the Greenspaces Policies. These areas should be preserved regardless of relationship to distribution guidelines.
- ❖ **Public shoreline access** should be provided every one-half mile of Seattle shoreline.
- ❖ **Parks & Recreation facilities of various types** (pools, playgrounds, trails, soccer fields, tennis courts, picnic facilities, boat ramps, etc.) are each designated with specific distribution goals for Seattle. This data will not be included in this report, as the scope does not encompass individual amenities provided within the open space.

**Figure 1: City of Seattle Neighborhood Open Space Distribution Goals**

	Proximity Goals	Population-based Goals	Village Commons
Primarily Single Family Residential Areas	Half acre of Usable Open Space within ½ mile of households	None	None
Residential Urban Villages	Minimum of 10,000 sq. ft. of Usable Open Space within 1/8 mile of households	One acre of Usable Open Space per 1,000 households	At least one usable open space of at least one acre where residential density is ten households per gross acre or more.
Hub Urban Villages	Minimum of 10,000 sq. ft. of Usable Open Space within 1/8 mile of households	One acre of Usable Open Space per 1,000 households	At least one usable open of at least one acre.
Urban Centers Villages	Minimum of 10,000 sq. ft. of Usable Open Space within 1/8 mile of households	One acre of Usable Open Space per 1,000 households plus one acre per 10,000 jobs	At least one usable open space of at least one acre where the existing and target households are 2,500 or more.

Source: Seattle Parks and Recreation, “An Assessment of Gaps in Seattle’s Open Space Network: The 2006 Gap Report Update.”

The Parks and Recreation Department uses GIS maps, demographic data and other information to track new open space acquisitions and identify remaining gaps in Seattle’s open space network. The 2006 Gap Report shows that existing open space meets the desired goals for “breathing room” open space citywide. The Gap Report reveals that 18 of the 38 urban villages do not meet one or more of the open space goals described in the table above.

The Gap Report indicates that the urban villages which are considered to have the most significant gaps in open space are those which:

- ❖ Do not meet one or more of the Comprehensive Plan’s Village Open Space goals
- ❖ Have high residential densities currently or anticipated in the near future
- ❖ Anticipate additional demand for open space amenities faced by urban centers with higher workforce populations



When taking into account these factors, the City finds that the urban center villages with the highest existing and estimated residential densities have the largest gaps in the distribution of open space. The urban center villages that fit this description include the Denny Triangle, First Hill, 12<sup>th</sup> Avenue, and University District. While Belltown is currently well served by open space, because of the expected increase in density, the City also puts it in the high priority category.

Among single-family residential areas (non-urban villages), the Gap Report indicated that the following areas have the greatest open space deficiencies:

- ❖ Wittier neighborhood in northeast Ballard
- ❖ Wedgewood neighborhood to the northeast of Dahl Playfield
- ❖ Beach Drive area northwest of the Morgan Junction Residential Urban Village in West Seattle

The City's goals for open space focus more on increasing access for residents to open space than on ecological connectivity. Because of this priority, the City is considering smaller isolated pocket parks to fill the gaps. While Open Space Seattle is in favor of this type of open space acquisition, it would like to see a greater emphasis placed on ecological criteria and connectivity between open space environments including parks, shorelines, wetlands, creeks and trails. Furthermore, Open Space Seattle goes beyond the City's Parks & Recreation Plan by including green infrastructure such as street landscaping, green roofs, bioswales, SEA streets, bike trails, etc. Open Space Seattle integrates ecology, transportation and recreation, while the City's plan primarily focuses on recreation with ecology being a secondary goal.

### ***PRO PARKS LEVY***

In 2000, Seattle voters approved a \$198 million levy for open space acquisition and environmental stewardship, maintenance and programming. The levy also included the Opportunity Fund for unforeseen park development projects and land acquisition opportunities. In general, the Opportunity Fund gave priority to projects that address a park or open space deficiency, and are in areas experiencing growth, particularly in City-designated "urban villages"

or in "revitalization areas." The levy generally prioritized access over ecological importance in selecting projects.

As of January 2007, 42 acres of open space have been acquired and 23 acres are in negotiation. Eighteen projects have been completed and 15 projects are underway. \$21 million in state and local matching funds and private donations have been leveraged through the levy. The levy is expected to run out in 2008 and there is concern about how parks will be maintained from that point on, as the mayor is not in support of renewing the levy.

### ***SEATTLE PARKS FOUNDATION***

Seattle Parks Foundation is a private, nonprofit organization dedicated to improving and expanding Seattle's parks and green spaces. In the five years since it was founded, private donations and grants have enabled Seattle Parks Foundation and community partners to complete two new parks, nine improvement projects, and three restorations of historic park features. Seattle Parks Foundation is currently undergoing a fundraising campaign to develop Lake Union Park. The organization has also recently produced a comprehensive report titled "Bands of Green," which puts forward a comprehensive plan for connecting existing Seattle parks through biking and walking trails. The report is very practical in its approach and details specific routes for trails as well as implementation strategies. This organization is distinct from the City Parks & Recreation Department and sets its priorities according to its members and board of directors.

### ***KING COUNTY GREENPRINT***

The King County Department of Natural Resources produced its Greenprint report in 2005, with the primary objective being to create a common conservation vision for King County. The project team interviewed over twenty incorporated cities, agency officials, and a significant number of non-profit entities that play important roles in acquiring, preserving and protecting critical resource lands within King County. The report specifies high priority areas for conservation and suggests strategies for implementation. The King County Greenprint may provide a larger context within which Seattle could develop its conservation plans.

## **CHAPTER 3: TYPES OF OPEN SPACE**

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### ***FOCUS ON TRADITIONAL FORMS OF OPEN SPACE***

Because Open Space Seattle covers such a wide range of land uses, this report focus on the more traditional forms of open space found in urban areas including urban parks, natural areas, greenways and wetlands because they are visible, ecologically beneficial and well studied. Furthermore, these categories of open space are a large part of the Open Space Seattle vision and require significant capital outlay for purchase, construction and maintenance.

This report will not focus on the smaller forms of open space that include street landscaping, bioswales, permeable surfaces, green roofs and small creeks because they are far less visible and there is less documentation on their effects on property values. These elements of the Open Space Seattle vision can be categorized as green infrastructure, rather than open space. Green infrastructure, much like the “gray” infrastructure of pipes and concrete, provide services to a city such as drainage and transport, which is perhaps less noticeable to residents than larger tracts of open space. Furthermore, from a financing perspective, these smaller projects may be folded into other larger capital projects, unlike a park or wetland.

Although a part of the Open Space Seattle vision, community centers and civic space will not be addressed in this report because these elements do not provide any ecological services and are not traditionally thought of as open space. Bodies of water may also be considered open space, but this report will not address water bodies as these forms of open space are already in existence and are not dependent on new funding sources.

### ***DEFINING TYPES OF OPEN SPACE***

More thorough definitions of the types of open space that will be addressed in this report are as follows:

- ❖ **Urban parks** are areas that are dedicated to recreational uses and are usually publicly owned. Parks intended for “active” use may have ball fields, swimming pools or courts. Parks may also be designed for “passive” use such as walking or observing nature. There are many examples of urban parks in Seattle.
- ❖ **Natural areas** may include nature preserves or natural habitat and are generally are areas that have been set aside and protected from development through zoning. An example of this in Seattle is the Schmitz Park Preserve in West Seattle.
- ❖ **Greenways and parkways** are linear areas of vegetation along transportation corridors or other natural corridors such as a river. They may be either preserved natural areas or landscaped corridors. Greenways may provide for movement of people through natural areas or through more developed, less natural areas and include bike paths and walkways. The Burke-Gilman trail is an example of a greenway in Seattle.
- ❖ **Wetlands** include swamps, marshes and other low-lying areas. Because the water table lies at or close to the surface of the land, shallow water either continuously or occasionally covers the area. Wetlands are sometimes filled to allow for development, though state law requires mitigation of most filling. Examples of wetlands in Seattle are those that are being restored in Magnuson Park.

## CHAPTER 4: OPEN SPACE AND PROPERTY VALUES

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A rich body of academic literature exists on the effect of open space on property values. Thus, the best way to gain a better understanding of how open space might affect property values in Seattle is to do an analysis of relevant studies that have been done in urban areas across the country.

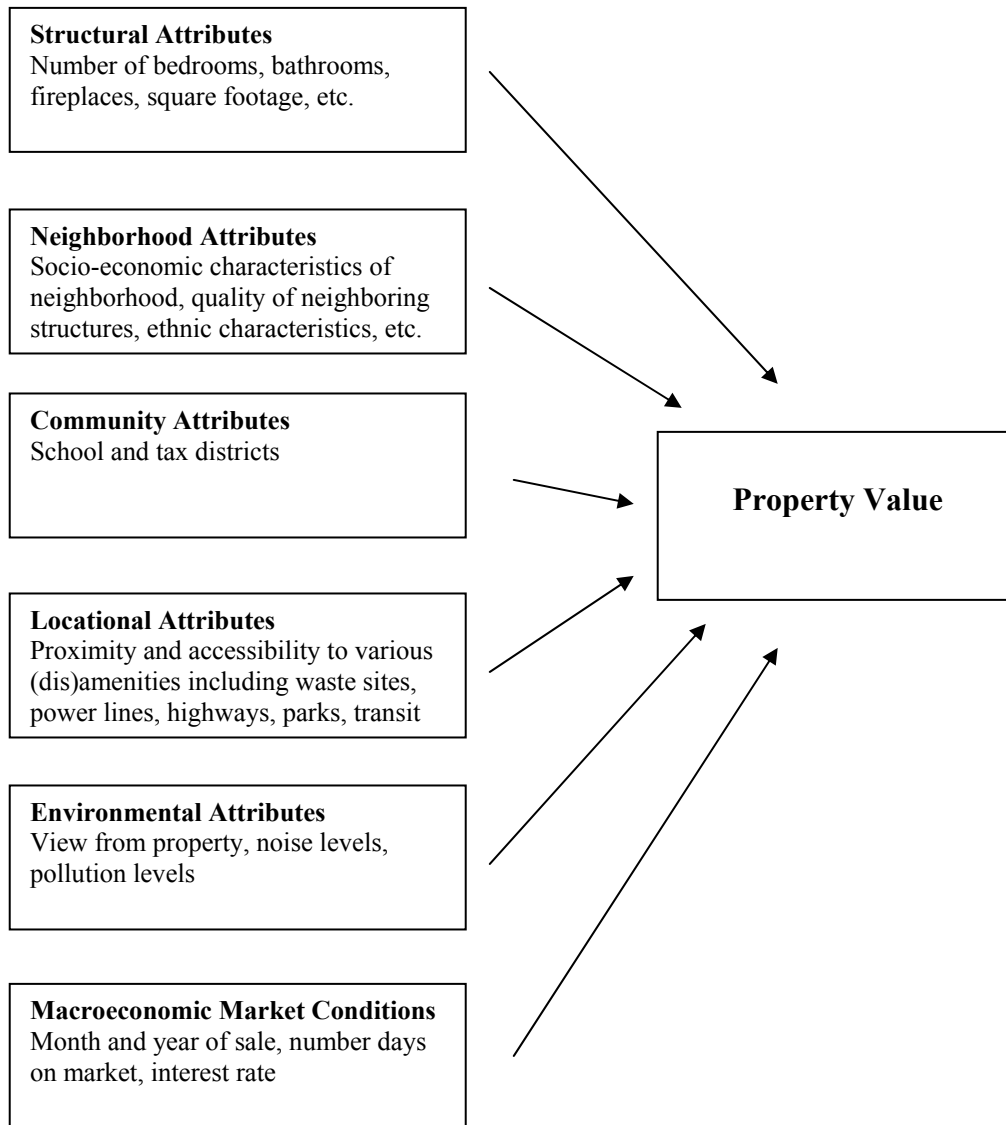
The wide array of research on this topic demonstrates that the effect of open space on property values varies considerably depending on the type and size of open space and the context of the surrounding environment. For example, studies have shown a different type of effect in urban, suburban and rural settings. Seattle should be treated primarily as urban, as the entire city is fairly dense and there are no large tracts of undeveloped or agricultural land. Some of the neighborhoods on the fringe might be considered suburban. Given that Open Space Seattle is interested in such a wide variety of open spaces, it will be difficult to generalize the effect of the Open Space Seattle vision on property values.

### *HEDONIC PRICING METHOD*

Trying to determine the extent of factors that affect property values is difficult because there are so many factors and they often interact with one another. However, a methodology called the Hedonic Pricing Method has been developed by economists to measure the effect of various factors on property values. Many studies have been done to try to isolate the effect of open space on property values using this method. K. J. Lancaster laid the theoretical foundation of the hedonic pricing technique in 1966 when he proposed that utility was derived from the characteristics or attributes of goods. Thus, the price of a home can be disaggregated according to the various utility-bearing attributes that constitute it, and a value estimated for each. The factors that influence property prices can be separated into six broad categories of characteristics as indicated in Figure 2. The hedonic model is operationalized using a standard multiple regression technique in which property prices are regressed on measures of these properties'

attributes. Regression coefficients are thus interpreted as implicit marginal prices of, or willingness to pay for, each of the individual attributes considered in the regression.

**Figure 2: Factors Influencing Property Values**



Source: Crompton, 2005

The hedonic approach is subject to several assumptions. The property market analyzed is assumed to be at or near equilibrium, and homebuyers are expected to maximize their utility

subject to budgetary constraints. Homebuyers are assumed willing and able to choose from among all available properties in the area. Buyers and sellers are assumed to possess perfect knowledge of the market, and there must be sufficient variation within each attribute such that the full range of attribute choices is offered. Buyers' perceptions of the existence and quantity of each of these attributes are assumed constant, with the only variations existing between their preferences for a particular bundle of home characteristics (Crompton and Nicholls, 2005).

While the hedonic method is useful because it provides data from actual market decisions made by consumers, there are several drawbacks to keep in mind. First of all, if an important factor affecting the price of a home is omitted from the statistical model, then the effect of open space can be misleading. This problem is referred to as the "omitted variables problem." Second, the hedonic pricing method does not capture all of the value of an open space to the surrounding community. People who live in homes far enough away from an open space to not be affected financially may still use and value that open space. Furthermore, the hedonic method does not capture "existence" value. Some people may not use the open space nor is it reflected in the value of their property, but they get value from knowing that it is there. The hedonic model will only capture the value that is reflected in property values.

### ***NATIONAL RESEARCH FINDINGS ON THE VALUE OF OPEN SPACE***

Because there has been so much research done on the question of effects of open space on property value and such a wide variety of results, the research will be categorized by open space type. All identified studies based in the Seattle area are included; however, because these are so few, information is primarily drawn from the following two reports, which each reviewed and synthesized over 30 studies.

- ❖ "The Value of Open Space: Evidence from Studies of Nonmarket Behavior," by Virginia McConnell and Margaret Walls. *Resources for the Future*, January 2005.
- ❖ "The Impact of Parks on Property Values: Empirical Evidence From the Past Two Decades in the United States," by John L. Crompton. *Managing Leisure*, 10, 203-218 (October 2005).

Some general conclusions can be drawn from the literature. One conclusion is that the effect of open space on property values is highest in urban areas, where open space is at a premium. Most studies that examine open space in suburban and rural areas found no significant effect on property values. Earlier studies did not often differentiate between different types of open space, but recent studies have started to do this and it appears that natural areas have a greater effect on open space than urban parks.

## **URBAN PARKS**

The findings for property value of homes near parks is mixed. While a greater portion of the studies find higher property values near parks, the actual amount of the increase varies considerably. Many studies find that houses very close to parks have lower property values because of park-related nuisances such as noise and traffic. An early study of Green Lake in Seattle by Brown and Pollakowski (1977)<sup>1</sup> found that the publicly accessible parkland surrounding Green Lake had a positive effect on house prices. In a study of homes in Portland, Oregon, Lutzenhiser and Netusil (2001) found that small urban parks have negative effect on property values, but park acreage has a positive effect on price, making the mean park acreage result in a positive effect on home price. Anderson and West (2003)<sup>2</sup> looked at urban and suburban areas in the St. Paul, Minnesota area. They found that proximity to parks has an overall positive effect on property values in urban areas and no effect in suburban areas. They also found that the effect of distance differs depending on the size of the park, with price rising more substantially with closer proximity to a larger park. In a 2006 study, Anderson and West reinforced their earlier conclusions and additionally found that amenity value of neighborhood parks is higher in neighborhoods with more children, higher crime rates and greater wealth. Schultz and King (2001) found that neighborhood parks had a negative effect on property values in Tucson, Arizona. In his synthesis of two decades of studies, Crompton (2005) concludes that there was consensus among the studies that parks had impact on property values up to 600 feet away, and in the case of larger parks, up to 2,000 feet away. Beyond that, there was little or no discernable effect. Crompton also finds that parks serving “passive” use such as walking and

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<sup>1</sup> Referenced in Halvorsen and Layton, 2006.

<sup>2</sup> Referenced in McConnell and Walls, 2005.



observing nature had a more positive effect than those serving “active” uses such as basketball, baseball or swimming.

While not a part of the academic literature, parks created in blighted urban areas can often generate significantly increased property tax revenue by spurring entirely new residential and commercial development in the surrounding area. An example of this is Chicago’s Lakeshore East Park, built in a previously underutilized area of the downtown Loop. This land, in one of the densest urban areas in the nation, had previously contained parking and car impound lots and a par 3 golf course, all of which brought in minimal property tax revenue. The new 6-acre park will ultimately draw \$4 billion in mixed-use development, which will result in significantly increased property tax revenues to the City of Chicago (Martin, 2006). The majority of the academic studies described in this report consider changes in value to properties that are continuing to be used in the same way. The Chicago case depicted here is different in that the use of the surrounding property has changed to one of higher value as a result of the park being constructed. The change in use has a multiplier effect throughout the community that has led to dramatically higher property tax revenues for the City. There are many examples of new urban parks that have served as an incubator for community revitalization in blighted urban areas including Bryant Park in New York City, Meridian Hill Park in Washington D.C. and the Martin Luther King Jr. National Historic Site in Atlanta (Trust for Public Land, 1999).

## **NATURAL AREAS**

There is more consensus in the literature that natural areas have a positive effect on property values, especially in urban areas. Lutzenhiser and Netusil (2001) found natural areas to have a large positive effect on home prices in Portland, Oregon. Anderson and West (2003)<sup>3</sup> also found a positive effect in urban areas of St. Paul, Minnesota, but no effect in suburban areas. While Schultz and King (2001) found that a wildlife habitat in Tucson, Arizona caused a positive effect, they found that a medium-sized undeveloped park caused a negative effect. At least five additional studies have focused on the effect of formal forest preserves or natural forested areas

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<sup>3</sup> Referenced in McConnell and Walls, 2005.

on home prices and all found positive impacts<sup>4</sup>. In a working paper, Alberti, Bjorn, Mills and Waddell (2004) look at the impact on property value of a 10% increase in trees within a 300 square meter area of a home in King County. They looked at the value of trees at incremental distances up to a 1,020 square foot radius. They find that more trees lead to an increase in property value and trees closer to the home have a greater effect than those farther away. They also looked at the increase in pavement and the increase in grass surrounding a home and found a negative effect on property value. In a 2002 Master's Degree Project, Who-Seok Oh found that the urban growth boundary (UGB) in King County had no significant effect on overall housing prices in the county. However, more specific analysis showed that the UGB had a significant impact on housing prices according to lot size. It showed that the UGB increased middle and large lot housing prices and decreased small lot housing prices. These increases, though minor, were statistically significant. The study also found that housing prices were higher near the UGB, indicating that the open space was seen as an amenity.

## **GREENWAYS**

Greenways and parkways tend to have much smaller and less certain impacts on home values than do parks and other larger areas. According to a review of several studies of greenways, Anton (2005) concludes that about 40% of these studies showed significant positive effects and the rest showed no significant effects. Little research has been done on parkways specifically but what has been done gives mixed results. In 1987, the City of Seattle conducted a non-statistical study of the effect of the Burke-Gilman trail on property values. Data was collected through interviews with residents near and adjacent to the trail, real estate agents who buy and sell homes near the trail, and police officers who patrol neighborhoods adjacent to the trail. The interviews revealed that the trail is considered an amenity by residents and homes near, but not adjacent to, the trail are easier to sell and according to realtors sell at a 6% premium. Homes adjacent to the trail do not sell at a premium, but are believed to be easier to sell than similar homes far away from the trail. The existence of the trail has had little, if any, effect on crime and vandalism experienced by adjacent property owners. From the available research, it appears to be safe to conclude that neither greenways nor parkways have negative effects.

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<sup>4</sup> Referenced in McConnell and Walls, 2005.

## **WETLANDS**

Two hedonic studies of wetlands in urban areas were found. One is in Portland, Oregon (Mahan et al., 2000) and one is in suburban St. Paul, Minnesota (Doss and Taff, 1996)<sup>5</sup>. Both looked at the effects of the following four different types of wetlands:

- ❖ Forested: Wooded swamps and bogs, tend to be along rivers and streams, show little water
- ❖ Open water: Includes shallow ponds and reservoirs
- ❖ Emergent vegetation: Relatively open, can be seasonally flooded
- ❖ Scrub-shrub: Usually have waterlogged soil, more open than forested wetlands, have wide variety of vegetation

Doss and Taff found that scrub-shrub wetlands had the highest positive effect on housing prices, followed by emergent-vegetation, and the open water wetlands. It found that forested wetlands had a negative effect on prices. The Mahan study showed the larger and closer the wetland, the higher the house price. However, Mahan did not find house prices differed significantly with different types of wetlands.

### ***DOES THE NATIONAL RESEARCH APPLY TO SEATTLE?***

As was indicated in the previous section, data is somewhat inconclusive regarding the effect of open space on property values. While more of the studies do find a positive effect on property values, the range of the effect varies substantially. The four Seattle-based studies cited in the previous section all found that open space caused increases in property values, with the one exception being that the King County Urban Growth Boundary decreased small lot prices (but increased middle and large lot prices). Given the national and local research, it is safe to assume that open space in Seattle causes a slight increase in property values of nearby homes.

Since 1990, the average annual increase for home prices in King County has been 5.4%, with an average of 7.0% from 1997 to 2004 (KCGMPC, 2004). Another source indicates that housing prices in Seattle increased 38% between 1999 and 2004 (Money Magazine, 2005). The literature surrounding property values in Seattle suggest that this very high growth rate has little to do with parks and open space. Paul Waddell, Professor of Public Affairs and Urban Design and Planning

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<sup>5</sup> Referenced in McConnell and Walls, 2005.

at the University of Washington, also agreed with this conclusion. While parks and open space may have a slight direct effect on surrounding property values, this price increase is almost negligible as compared to the larger increase caused by other factors such as job growth, the economy, climate, safety, culture and natural beauty. The skyrocketing housing prices minimizes the property value effect of open space in the eyes of the public. The small increases in property value due to open space, relative to increases due to other factors, makes it difficult for the City to separately capitalize on any property value increases resulting from open space. With or without open space nearby, Seattle residents can count on their property values to increase substantially, giving them little incentive to care about the effect of parks on their property value.

In the cases where large new parks such Lake Union Park, Olympic Sculpture Park or converted brownfields are coming into existence in underdeveloped neighborhoods, the surrounding property values may be more substantially increased than in developed residential neighborhoods. These new parks may lead to surrounding land currently in very low-value usage such as industrial complexes and parking lots to be replaced with high-value usage such as condominiums and commercial buildings. In essence, these strategically placed parks may serve as incubators for new development, as Lakeshore East Park is doing in Chicago, leading to large and noticeable increases in the surrounding property values.

## **CHAPTER 5: CAPITALIZING ON PROPERTY VALUES**

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One of the big questions that Open Space Seattle is asking is whether the City of Seattle can capitalize on the higher property values resulting from open space to pay for open space acquisition or maintenance. Any financing mechanism that does capitalize on property values must also meet several other criteria to be useful in Seattle. The methodology used to address this question is to identify several financing mechanisms that take advantage of higher property taxes and judge them against the set of criteria described below.

### ***CRITERIA***

#### **TAKES ADVANTAGE OF HIGHER PROPERTY VALUES**

Because this paper was commissioned to examine ways in which increases in property values can be leveraged to fund open space, any financing mechanism considered must take advantage of higher property taxes.

#### **ABLE TO FUND PARK MAINTENANCE AND OPERATIONS**

A major challenge the City of Seattle currently faces with regards to parks and open space is the funding of ongoing maintenance and operations (M&O). Any financing solution will have to address that issue. Under the Pro Parks Levy, the City has acquired 42 acres of open space and is negotiating over 23 additional acres. The levy also provided some funding for environmental stewardship, maintenance and programming. When this levy expires in 2008, the City will have to look elsewhere for some of the maintenance and operations funding. According to the City of Seattle Director of Finance Dwight Dively, because parks are a high priority for Mayor Nickels, he will likely reprioritize general fund allocations to make sure that basic park maintenance is covered. However, enhanced maintenance and programming that are currently funded by the levy may go by the wayside if other funding sources are not found. Furthermore, new park acquisitions will be far less likely because of the difficulty in funding ongoing operations costs. Thus, funding of M&O is critical for a strong open space system in Seattle.

## **REPRESENTS A SECURE, DEDICATED REVENUE STREAM**

Open Space Seattle might be best off if they attempt to push for policy changes that will ensure a secure and dedicated revenue stream to fund maintenance and operations of open space. With so much of Parks operations resting on financing from the City's general fund, open space in Seattle is subject to the vagaries of politics and the economy. Identifying and institutionalizing more secure dedicated revenue streams to fund open space will lead to greater stability of open space in Seattle as well as higher ecological quality that Open Space Seattle is advocating for. The Environmental Finance Center cites a dedicated revenue stream as a key component of successful environmental protection. In a white paper regarding financing strategies for watershed restoration in the Schuylkill watershed, the Environmental Finance Center states,

It could be argued that the most critical issue facing watershed restoration efforts across the region and the country is the need to leverage sufficient, sustainable revenues necessary to implement and maintain critical programs. Money alone does not ensure success, but without sufficient revenue streams, implementation of many of the most critical best management practices will not occur...It is important to remember, however, that the ultimate revenue source for ensuring the protection of water resources throughout the region will always be the citizens of the region.

The process of leveraging sustainable, dedicated revenue or financing sources is critical in the restoration process. Much of the innovation related to implementing the water resource protection efforts in the years to come will not be represented in the form of new technologies and best management practices. Rather, innovation will be associated with the political will necessary to leverage revenue resources from the citizens, taxpayers, consumers, and businesses within the community.

## **EASE OF INTRODUCTION**

Ease of introduction refers to the difficulty of introducing a particular financing mechanism given organizational structure of the city, current tax statutes, the political environment and budgets. Areas to examine include voting requirements, the technical requirements, state legislative involvement and creation of a new governing body.

## **EASE OF IMPLEMENTATION**

Ease of implementation refers to the cost and labor that would go into implementing the financing mechanism once it is set up. The higher the costs, the greater the complexity and the more staff required to implement the program, the less likely it is to be successful.

## ***WELL-KNOWN FINANCING MECHANISMS FOR OPEN SPACE***

To narrow down possible financing solutions, financing mechanisms that take advantage of higher property taxes were identified from the list of well-known methods for financing open space. “Well-known” financing mechanisms are defined as those that are commonly described on open-space advocacy websites, such as Trust for Public Land, Urban Land Institute, Open Space Seattle, Cascade Land Conservancy, etc. The thirteen mechanisms included in the list below have been replicated in different settings and come up regularly in the literature and in the interviews conducted. Each of these financing mechanisms is more fully explained in Appendix C.

- ❖ Regular property taxes (not initiated by a levy)
- ❖ Tax increment financing
- ❖ Local improvement districts
- ❖ Park district
- ❖ Levies (voter-approved)
- ❖ Bonds (voter-approved)
- ❖ Real Estate Excise Tax (REET)
- ❖ Impact fees
- ❖ Transfer of development rights
- ❖ Land banking
- ❖ Sales tax earmarked for open space
- ❖ Density bonus
- ❖ Federal grants/conservation programs
- ❖ Private contributions
- ❖ User fees/enterprise

From the list above, the first seven financing mechanisms take advantage of higher property values. In the section below, the first five mechanisms are described in more detail and analyzed for feasibility using the criteria presented above. REET or bonds are not described or analyzed because they are currently in use and are unlikely to be implemented as more than a peripheral funding mechanism.

## ***COMPARING FINANCING MECHANISMS***

### **LIFT THE PROPERTY TAX CAP**

#### *Description*

The first and most obvious way for the City to capitalize on higher property values is to collect more property taxes, which accrue to the City's general fund. In most cities, a property tax rate is set and as the assessed value of the property increases, property tax revenues also increase. However, in Washington, since the passage of 1-747 in 2000, the total amount of property taxes collected by government is limited to a 1% increase per year (DeSilver, 2002). With this structure, if the total amount of property taxes collected by the City were \$100, the following year the City could only collect \$101, regardless of how many new homes were constructed and how much individual property values increased. According to Dively, because property values in Seattle are increasing at more than 1% per year, many residents' property tax rates are actually declining. As a result of the property tax cap law, the City is unable to fully capitalize on increases in property value, be it from open space or other factors. Thus, under the current law this financing mechanism cannot be relied upon to increase funding for open space as property values go up.

Because M&O is typically funded from the general fund, the tax cap especially puts a pinch on M&O funding as open space expands. Without an adequate funding source for maintaining parks, the City is expected to become more reluctant to acquire new parks, which inhibits the realization of Open Space Seattle's vision of connected ecological spaces.<sup>6</sup> Because the Pro Parks Levy expires in 2008, voters could pass another levy to fund parks, which will be on top of

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<sup>6</sup> Based on interviews with Donald Harris, Real Estate Acquisition Manager for the Department of Parks & Recreation and Dwight Dively, Director of Finance for the City of Seattle.



their capped property taxes; however, as mentioned previously, levies are generally used for capital improvements and not to fund operations. Mayor Nickels has indicated that he does not want to try to renew the Pro Parks Levy when it expires, possibly because it does not solve the problem of funding maintenance of existing parks (Barnett, 2007).

In 2006, the property tax limit was struck down in court as unconstitutional. This ruling is currently on hold, pending review by the state Supreme Court (Guppy, 2007). Until then, the 1% limit stands. This year the legislature considered, but did not pass, a bill that would permanently limit tax increases to 1%.

### *Discussion*

Given the pressures put on open space financing by the property tax cap and given the recent policy window that has opened due to the 2006 court ruling, now might be an appropriate time for Open Space Seattle to push for the demise of the property tax cap. Higher property taxes would obviously take advantage of higher property values, provide funding for M&O, and be easy to administer. However, without having a portion dedicated to open space, these revenues would be subject to the vagaries of politics and the economy. Thus, it would be important for open space advocates to push for a portion of the revenues to be dedicated to open space M&O or acquisition.

While the property tax issue is much larger than open space and larger than Seattle (it is a state law), property taxes affect many of the aims of Open Space Seattle including green infrastructure, connected areas of open space and public transit. Open Space Seattle would have to join a larger statewide coalition to push for this change and it could be a long and difficult process. This policy option could be especially appealing to open space advocates if a certain portion of the property tax increase were dedicated to open space and environmental protection.

## **TAX INCREMENT FINANCING (TIF)**

### *Description*

Tax increment financing is a financing tool that permits local governments to capture future increases in property taxes that result from public investment in infrastructure. The captured future value of such taxes is used to finance the public infrastructure. For example, if a city wants to build a park, they designate a tax increment district in the area surrounding the park, assuming that the park will lead to higher assessed values of the surrounding properties. The incremental property tax increase is designated to repay bonds that financed the public improvement. When the bonds are paid in full, the district would no longer capture the increased property tax revenues and all the taxing jurisdictions would benefit from the increased tax base (Reich, 2002).

The Washington State Constitution and tax statutes place a number of constraints on the usage of TIF, making TIF more restrictive than in other states. RCW 39.89 allows for capture of only a portion of the incremental property taxes paid within the designated increment area. Some portion of incremental property taxes are required by law to fund specific services and RCW 39.89 states that the tax revenues that can be captured are limited to those derived from seventy-five percent of any increase in the value of the property. Another restriction is that the Act limits the authority of a sponsoring jurisdiction from diverting incremental property tax dollars from another jurisdiction without the consent of that jurisdiction.

In 2006, the State Legislature passed the Local Infrastructure Financing Tool (LIFT), which provides funding for local infrastructure using sales tax, property tax and selected other excise tax increases generated by an economic development project as part of a revenue development area designated by the sponsoring local government. This legislation supplements the existing TIF legislation. The incremental increase in taxes may be credited against the state sales and use tax revenues up to \$1 million per year per project. The annual aggregate amount of local taxes credited against the state sales tax is limited to \$5 million per year. The bill includes three specific demonstration projects in Bellingham, Vancouver, and Spokane, all of which have park elements incorporated into their projects. It also allows additional jurisdictions to submit projects for approval for funding in a competitive process administered by the Community Economic Revitalization Board, although it is limited to one per county (Municipal Research and Services Center of Washington).

### *Discussion*

While TIF does take advantage of higher property taxes, according to Jeff Nave, a Spokane-based attorney who specializes in public finance, there are several reasons why tax increment financing is very difficult to use in Washington. He claims that 1) property tax increases are capped at 1% of the prior year's levy and a certain portion of tax revenue is already dedicated to other services, so TIF fails to produce enough revenue for most capital projects; 2) a redevelopment agency must reach agreement with local government from which taxes will be diverted, which is cumbersome and politically difficult; and 3) TIF funds can only be used to address needs identified at the time of inception (Nave, 2003). Others I interviewed for this report agreed that TIF is not a feasible financing option for parks at this time because of the constraints of the legislation itself as well as the constraints proposed by current tax statutes. Furthermore, TIF monies can only be used to fund capital projects, rather than operations. TIF would be a stable dedicated revenue source, but given the constraints, it would not generate enough revenue to fund most open space projects.

The LIFT program does not provide much additional support for Seattle due to the limitation of one project per county and the significant administrative hurdles required to meet program requirements. Because the LIFT program is new, it will be wise to keep an eye on the pilot projects and see how this financing tool works and possibly consider it in the future.

### **LOCAL IMPROVEMENT DISTRICT (LID)**

#### *Description*

LIDs can be formed to pay all or part of the cost of a capital improvement, such as a park. The neighboring properties are assessed an extra amount (beyond the regular property tax) to pay for the improvement. This assessment can be paid in cash or the government will provide financing (typically for 10-15 years). LIDs require a demonstration that the property values increase at least as much as the assessment. LIDs can be rejected if a sufficient percentage of property owners oppose the assessment. In Seattle the largest recent use of a LID was for the South Lake Union streetcar.

### *Discussion*

While a LID is a feasible way to capitalize on property value increases in Seattle and it represents a stable and dedicated revenue source, it hasn't been used much lately because property values are already high and it is hard to demonstrate that capital projects will increase property values significantly. Furthermore, a LID cannot be used to fund operations. LIDs are generally done in a business district where the amenity will increase business and many parks are in residential neighborhoods. According to a Seattle Department of Transportation employee who has dealt with several transportation-related LIDs, generating initial support and meeting the technical requirements of proving that the benefit to residents will equal or exceed the additional tax is the largest barrier to LIDs. In his experience most LIDs do not move past this point. However, once this hurdle has been cleared, residents are generally willing to vote for the improvement. In his assessment, LIDs are fairly difficult to initiate and there may be better, more comprehensive ways to fund open space. A Parks & Recreation Department Communications Manager stated that LIDs have not been considered for parks in Seattle because they are labor intensive and inequitable (only wealthier neighborhoods are able to afford to tax themselves to pay for additional services). This is evident in the South Lake Union Streetcar example, where most of the 750 properties involved were high-end condominiums and commercial buildings.

## **CREATION OF A PARK DISTRICT**

### *Description*

Voters may approve the creation of a park district, which would be an independent authorizing body to collect and allocate park funds. This body would have to be approved by the State Legislature. The voters within the geographic boundary of the district would set an annual rate they would be willing to pay this body, which would be collected through property taxes (but would be outside the 1% tax increase cap). Unlike the Pro Parks levy, once in place, this body and the tax rate would not have an expiration date. Voter approved levies, such as the Pro Parks Levy, are not typically used to fund operations. However, levies that fund park districts, because of their permanence, are typically used to fund operations. A successful example of a park district is the Metro Park District in Tacoma. The cities of Chicago and Minneapolis also recently formed independent park districts.

### *Discussion*

A park district was entertained in Seattle in 1999 before the 1% property tax cap was passed. At that time, an independent park district was seen as unnecessarily complicating operations because property taxes could be raised to generate more revenue. There were also significant concerns about the accountability of an independent district. Thus, the Legislature did not approve the measure. Now that the 1% property tax cap limits funding capabilities, this option might be better supported. However, it still presents the difficult challenge of how to structure the independent body given the existing structure of Seattle city government and the Parks and Recreation Department. How would an independent Parks District operate within the City government? How would accountability be ensured? How would duplication be prevented? When this option was considered previously, the City Council was to be the board of directors and the Parks & Recreation Department would become the parks district. A Parks & Recreation Communications Manager who was interviewed believes the greatest barrier would be getting the Legislature to approve such a move because of its general distrust of Seattle-based initiatives. The Parks & Recreation Policy Manager fears that with the creation of a Parks District, current revenues to Parks would simply be supplanted by new tax dollars and overall revenues to Parks would not increase.

On the positive side, getting the requisite voter approval to fund a park district does not appear to be a huge concern. Although housing costs are high in Seattle and voters would have to approve the additional tax levy, Seattle voters have demonstrated that open space is a priority that they are willing to pay through the passage of open space levies in 1989, 1991, 1995, 1999 and 2000. Furthermore, a park district does not pose the challenge of LIDs that require proof that the capital improvement will increase property values by a certain amount. Creation of a park district would allow for a stable revenue source that does not compete with other city services for funding. This stability would give the park district the greater flexibility necessary to implement the connected ecological spaces sought by Open Space Seattle. Further study would have to look into the feasibility of creating a park district in Seattle; however, it does present an appealing possibility because of its ability to fund M&O, its tie in to property values and its permanence.

## **LEVY**

### *Description*

Levies are voter-approved property tax increases that can be used for operating or capital expenses. Levies require a simple majority (more than 50%) approval from the voters and are not subject to the 1% property tax increase cap. While not limited to capital purchases, philosophically, levies are not considered an appropriate source of funding for basic operations because they come with an expiration date. As described earlier in this paper, Seattle voters approved the \$160 million Pro Parks levy in 2000 and have historically been supportive of open space levies. The Pro Parks levy, which will expire in 2008, dedicates \$198 million for open space acquisition and environmental stewardship, maintenance and programming.

### *Discussion*

Because the readers of this report are familiar with levies as an open space financing mechanism in the context of Seattle, this section will not go into the same depth of discussion of the feasibility and pros and cons of the mechanism as was done with the less familiar financing mechanisms described above. However, despite the fact that the mayor has expressed disinterest in supporting another levy, it is a viable financing option that many do support. As such, it should be on the table along with the other potential financing mechanisms analyzed in this paper. The primary drawback of another levy is its instability as a revenue source and thus, it is not wise to depend on a levy to fund M&O. If another levy were to pass, given the current needs of the Parks and Recreation Department, a larger portion of the revenues would probably go toward M&O as opposed to acquisition, putting operations at further risk when it expires in a few years. On the other hand, a levy would be fairly easy to implement as it has been done before and based on historical precedent, voters are likely to support it.

## **OVERALL IMPRESSIONS**

The following table helps to clearly convey how each of the financing mechanisms above compares when judged against the criteria.

**Figure 3: Comparing Financing Mechanisms**

<b>Financing Mechanism</b>	<b>Takes advantage of property tax increases</b>	<b>Can fund M&amp;O</b>	<b>Is a stable and dedicated revenue source</b>	<b>Ease of introduction</b>	<b>Ease of implementation</b>
Property Taxes	√+	√	√-	√-	√+
TIF	√+		√-	√	√-
LID	√		√	√-	√
Park District	√	√	√+	√-	√
Levy	√	√-	√-	√	√+

Legend: no check = no; √- = somewhat; √ = yes; √+ = yes, very well

***NEXT STEPS***

Given Seattle’s current tax limitations, skyrocketing housing prices and concerns regarding M&O costs, it appears that there is no easy financing solution for open space that capitalizes on increased property values. This paper takes just a preliminary look at some financing options that take advantage of higher property value and compares their strengths and weaknesses at a very high level according to five criteria. This paper does not do a detailed examination of each of these options. At this point, it is recommended that Open Space Seattle use the information that has been synthesized in this paper as a launching point to do more research on the existing options to be able to select the most appropriate option to pursue. In addition, rather than just looking at financing mechanisms, open space advocates might be well off to also take a closer look at the costs and benefits of open space, of which increased property values plays a role. Using a cost-benefit approach, once the net cost of a particular open space project is understood, an appropriate financing mechanism may more easily be identified.

At this point in time, parks in Seattle are seen as a cost sink. The net cost primarily includes the sum of land acquisition, capital improvements and M&O costs. While it is understood that there are ecological, recreational and economic benefits to parks, they are never incorporated into the cost equation. Some of these benefits can be quantified and incorporated into the equation. While these quantifiable benefits do not obscure the fact that money still must be found to cover acquisition, capital improvements and M&O, clearly delineating them helps City officials and

the public see what kind of financial benefits are produced by open space and where those benefits accrue. That understanding is key to securing stable sources of funding. The following section proposes a more holistic financial framework for assessing the costs and benefits of open space.



## **CHAPTER 6: EXPLORING THE COSTS AND BENEFITS**

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### ***COMPONENTS OF VALUE OF OPEN SPACE***

The first step in doing a cost-benefit analysis is to identify the different components of the value of open space. Once this has been done, one can attempt to examine the public financial implications of each. The list below details the different components of value of open space.

### **PRESERVATION OR CREATION OF OPEN SPACE**

The first and most obvious financial impact of the decision to preserve open space is the public cost of acquiring the land itself.

### **ADDITIONS TO THE VALUE OF NEARBY PROPERTY**

As detailed in the research surveyed earlier in this study, open space is an amenity that often adds value to the properties located nearby. This actual change in market value is, in most cases, a private benefit that accrues to the owners of that property. However, in many cases there is a concrete benefit to the public in the form of higher property tax receipts from those properties. In Washington the total amount of property taxes collected by government is limited to a 1% increase per year. Because property values are already increasing at more than 1% per year in Seattle, despite parks contributing to that property value increase, in most cases the City of Seattle cannot capture increased property tax revenue. However, because the current property tax cap is being appealed and could possibly change, we will consider this benefit in our financial framework.

### **AVOIDED NET COSTS OF ALTERNATIVE DEVELOPMENT**

In attempting to capture the full financial implications of an open space decision, a community should estimate the full financial impact of the alternative development that would occur on the land. A full financial analysis should consider three elements:

- ❖ The stream of future property taxes foregone if the land is not developed

- ❖ The avoided cost of the public infrastructure improvements needed for the alternative development
- ❖ The avoided cost of the added future public services (police, schools, garbage collection, etc.) that would have been needed if the development had occurred

Because Seattle does not contain large undeveloped tracts of land, the second and third bullet points are negligible because the infrastructure and public services are already provided throughout the city and the type of open space being considered are not large enough to displace existing infrastructure and public services.

### **RECREATIONAL USE OF LAND**

If a particular parcel of open space is not simply preserved but is to be used for recreational purposes, there are additional factors that need to be included in the full financial analysis:

- ❖ One-time cost of capital improvement to prepare the land for recreational use
- ❖ Operating costs of the recreational facilities (net of any anticipated fees)

The benefits of the recreational use of land accrue, as do additions to property values, to the private individuals who make use of the recreational facilities. Those benefits are clearly important in the policy decision faced by the community, perhaps through its parks department. They do not, however, affect the finances of the community except to the extent that fees are charged for the use of particular facilities.

### **STORM WATER AND FLOOD MANAGEMENT**

If a particular open space project can make a contribution to the management of storm water runoff, the lowered cost of water management should also be reflected in a thorough analysis of the project. Undeveloped land can often absorb more water than land with residential or commercial development. Wetlands can make a significant contribution to storm water management and that contribution needs to be recognized in the financial implications for the local community. And sometimes a large green space can absorb significant amounts of water during floods and yet be available for recreation as dry land during normal times.

A complete analysis of the preservation of a wetland, the creation of a stormwater holding pond, or some green space projects needs to include the saved cost from not having to provide pipes and other so-called “grey infrastructure” for alternative flood management. Most of the financial

impact is on capital cost of constructing water management systems, but there can also be an ongoing maintenance cost component and both should be included in assessing the full financial impact of an open space project.

## **WATER QUALITY PROTECTION**

By allowing storm water to percolate through the ground and recharge ground water stores, water treatment costs are reduced. Although some of the storm water drains in Seattle go directly to the Puget Sound, many feed into the sewer system, which gets treated at the water treatment facility. Sometimes water is also pumped through the system. Less water feeding into this system means reduced costs for treatment and pumping and reduced chances for pollutants getting into the Puget Sound.

## ***A FULL FINANCIAL FRAMEWORK***

The different elements discussed above can be melded into a full financial framework that should serve as the basis for analyzing the total net cost of an open space project. Figure 4 below shows how the different factors fit together in one financial analysis. Paul Anton at Wilder Research developed this financial framework for a study commissioned by Embrace Open Space, a group of non-profit organizations conducting a campaign to encourage Minnesota residents to become more involved in local land-use decisions.

The figure summarizes all of the financial factors considered above in two columns, the one-time or capital costs of the project and the ongoing annual impact of the project on local budgets. This framework should prove helpful in analyzing both pure open space initiatives, such as a proposal to purchase and preserve a small wooded area, and larger development projects and policies that impact the amount of open space in a community.

**Figure 4: A value analysis framework for open space**

Components of economic value	Public financial impact	
	One-time impact	Annual impact
Preservation/creation of open space	(-) One-time cost of acquiring or protecting open space	
Addition to value of nearby property		(+) Increased property taxes from nearby units (or avoided reduction in future taxes)
Effects of alternative development	(+) Avoided cost of public infrastructure	(+) Avoided net costs of public services
		(-) Lost property taxes from foregone development
Recreational use of land	(-) Cost of improvements for recreational use	(-) Net operating and maintenance costs
Storm water and flood management	(+) Lowered capital cost of alternative water management	(+) Lowered water management costs
Water quality protection		(+) Lowered water treatment costs
Other Factors: Additional recreational use and enhancement of value of existing park and open space areas; preservation value; wildlife habitat and movement; improved air quality; other environmental impacts	Not estimated	Not estimated
<b>Totals</b>	<b>Total capital cost (-) or savings (+)</b>	<b>Total annual costs (-) or savings (+)</b>

Source: Anton, Paul. "The Economic Value of Open Space." Wilder Research, 2005.

***CASE STUDY: APPLYING THE FINANCIAL FRAMEWORK TO A SEATTLE PARK***

This next section provides an example of how this framework can be implemented in Seattle. Counterbalance Park is currently being built on a 12,000 square foot site on the corner of Queen Anne Avenue N. and Roy Street. The site, originally a gas station, had been sold to a developer to build condominiums; however, after a lengthy public process, the community decided that this was the appropriate spot for a small urban park. Thus, the City bought the lot from the developer.

The site was purchased for \$1.7 million using Pro Parks Levy money and an additional \$270,000 was provided for development of the park. The remaining dollars to fund development have been raised by the community, with unusually large contributions from nearby businesses. The environmental cleanup will be handled and paid for by the gas station owner. This park is currently under construction and scheduled to open in 2008. This park is compatible with the goals of the City’s open space planning and is desirable to the local businesses because it is viewed as a way to increase foot traffic in this busy urban area. The park may be used for a farmers market or concerts as well as a place to eat lunch or take children to play.

**Figure 5: The value of Counterbalance Park in Lower Queen Anne** <sup>7</sup>

<b>Components of economic value</b>	<b>One-time impact</b>	<b>Annual impact</b>
Acquisition of open space	-\$1,700,000	
Development and maintenance	-\$270,000	-\$31,000
Change in property taxes of nearby homes		+\$155,135
Avoided costs of public infrastructure and services for new homes	\$0	\$0
Lost property taxes from foregone development		-\$58,606
Lowered costs for water management	+\$25,000	+\$2,000 <sup>8</sup>
<b>Totals</b>	<b>-\$1,945,000</b>	<b>+\$67,529</b>

Source: Seattle Parks & Recreation Department

Initial impressions of cost of Counterbalance Park would have revealed one-time costs of acquisition and development at \$1,970,000 and annual costs of \$89,606 because of M&O costs and lost property taxes from forgone development on the site. As the analysis shows, these costs can be reduced through lowered costs for water management and additional property tax revenues (if they could be collected in Seattle).

**EXPLANATION FOR THE NUMBERS IN THE TABLE**

- ❖ The Parks & Recreation Department provided the cost of acquisition
- ❖ The one-time impact of development and maintenance includes the capital cost of building the park. The annual impact of \$31,000 is the amount allocated to the Parks & Recreation

<sup>7</sup> This analysis does not account for the increases sales taxes that might be generated as a result of the new park. Sales tax revenues might be an additional component of economic value to be added to this financial framework in the future.

<sup>8</sup> This number is an estimate. Without actually measuring the reduction in water flowing through the system as a result of the park design, it is difficult to calculate an exact amount.

Department for annual M&O. This number is higher than in many parks of equivalent size because it is in a dense urban area and expected to get a lot of traffic.

- ❖ The change in property taxes of nearby homes was calculated by looking at the total assessed values of all existing residential units, including condominiums, apartment buildings and single-family homes within a 500-foot radius of the park. Taking into consideration the research on the effect of open space on property values, a conservative 5% premium was added to the property values to determine the increase in property taxes generated by Counterbalance Park. No changes in land use are expected in the properties surrounding Counterbalance Park; however, this is the place within this framework that property value increases resulting from brand new development would be incorporated.
- ❖ In such a dense urban area and with such a small park, all public infrastructure and services that would have been necessary for a condominium rather than a park would have already been in place. Thus, there are no avoided costs of public infrastructure or services.
- ❖ The lost property tax from not developing a condominium on the site was estimated by calculating the property taxes generated from a neighboring condominium of similar size.
- ❖ Parks and Recreation Department Project Manager, Patrick Donohue, verified that a park with pervious surfaces has lower water management costs than any other use with an impervious surface, such as a condominium. He estimated that the capital savings in not having to design and install a storm water system were around \$25,000. He also mentioned that there would be reduced annual maintenance costs of that system as well as reduced costs to the water treatment plant as less storm water would be flowing through the system, which was estimated at \$2,000 per year.

While the analysis above absolutely does not deny the costs of acquiring and maintaining a park, it also points out some actual or potential (i.e. increased property tax revenues) cost savings or revenues to the City (albeit not directly to the Parks Department) that result from parks.

### ***LIMITATIONS OF THE FINANCIAL FRAMEWORK IN SEATTLE***

While the above framework is valuable in quantifying some of the benefits yielded by parks and open space, it is only one piece of the funding puzzle. Because of the Washington State tax

structure and some of the financing laws, many of the financial benefits demonstrated in this framework do not directly translate to more funding for parks. Examples of this are described below.

- ❖ Because of the property tax cap of 1%, the City will not necessarily capture the increased property tax revenue described in the framework. Were the property tax cap lifted, this framework could provide the justification necessary for the Parks and Recreation Department to claim this additional bit of revenue from the City's general fund.
- ❖ In a developed city like Seattle, the cost of public infrastructure avoided by building a park rather than buildings amounts to very little because the infrastructure already exists. This would be more of a factor when comparing a park with development in a rural area where the infrastructure doesn't already exist.
- ❖ The cost savings regarding water management and treatment will accrue to Seattle Public Utility. By Washington State law, revenues accumulated by the Utility stay with the Utility. Thus, those cost savings could not be transferred to the Parks Department budget to fund maintenance and operations.

Because of the legal constraints that make some of the quantifiable benefits of open space difficult to capture within the Parks and Recreation Department budget, this framework is more useful as a tool to generate the political will to maintain a strong parks system than as a budgeting tool. It demonstrates that parks are not as great of a cost sink as originally thought. Specifically this framework may help to justify the allocation of a greater portion of general fund revenues to the Parks and Recreation Department and to support the quest for other sources of funding to maintain a strong open space system in Seattle. Furthermore, this kind of thinking could spur more collaboration between distinct departments. For example, at the new Jimi Hendrix park (which was formerly the Coleman School parking lot), Seattle Public Utility paid the Parks and Recreation Department \$24,371 to replace an asphalt parking lot with sod, which would reduce water management costs and allow the groundwater to be recharged naturally<sup>9</sup>. This type of creative collaboration becomes easier to do when the benefits to other departments are more obvious and widely understood. This framework helps to make that case. However,

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<sup>9</sup> Information provided by Patrick Donohue, City of Seattle Parks & Recreation Department Project Manager.

despite the reduction in overall park costs presented in the framework, sources of funding still must be uncovered to pay for the acquisition and maintenance of a great parks system.



## CHAPTER 7: OPEN SPACE AND HOUSING AFFORDABILITY

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We now turn our attention to the relationship between open space and housing affordability. According to the U.S. Housing and Urban Development website, “The generally accepted definition of affordability is for a household to pay no more than 30 percent of its annual income on housing. Families who pay more than 30 percent of their income for housing are considered cost burdened and may have difficulty affording necessities such as food, clothing, transportation and medical care.” Using this measuring stick, in 2004 a first-time buyer in King County (who typically earns 80% of the area median income) could afford to pay about \$186,600 for a home. This is \$106,400 less than the median-priced home. In 2004 only about 15% of homes sold for \$187,000 or less. In 2002, 32% of King County owner households paid more than they could afford for housing. Because of the high price of housing in King County, the homeownership rate is approximately 61%, which is behind the national average of 68% (KCGMPC 2004). Ultimately, a city that wants to have affordable housing is striving to have a high rate of home ownership and a low percentage of owners paying more than 30% of their income for housing.

Many believe that open space and affordable housing are in competition with each other for the following reasons: 1) If open space causes nearby property values to rise, then housing in neighborhoods with more open space become less affordable; 2) if scarce land is used for open space, then it cannot be used for housing, which diminishes the supply of housing and causes prices to go up; 3) public funds that go toward open space are public funds that are not going toward affordable housing programs.

These arguments, while logical, are misleading in the context of Seattle. As mentioned earlier in this paper, open space contributes very little to the rapidly increasing housing prices in Seattle and thus, should not be targeted as the primary cause of increasing housing prices. With regards to open space taking over land that could potentially be used for housing stock, as housing density increases, open space plays a crucial role in keeping the city livable. Thus, increasing open space is compatible with increasing housing stock. Lastly, public funding for open space

and for affordable housing programs come primarily from different sources. These arguments will be further explained in the following section.

## ***COMMON MYTHS***

### **MYTH #1: OPEN SPACE PRICES PEOPLE OUT OF NEIGHBORHOODS**

As mentioned earlier in this paper, open space is a minor contributor to the rapidly increasing price of housing as compared with job creation and other factors. Trends indicate that housing in Seattle is going to become less and less affordable with or without open space. Thus, it doesn't make sense to abandon open space because it may be a factor contributing to increased property values. Furthermore, to respond to a shortage in affordable housing by allowing neighborhoods to degrade to the point where they become undesirable and property values drop violates the City's goal of having "decent" homes in attractive neighborhoods that are affordable to people with varying incomes. This goal is made clear in section B of the Housing Element of Seattle's Comprehensive Plan, "Despite trends, the City wants to encourage home ownership opportunities in order to promote a sense of community, encourage investment in housing, and to minimize displacement of low-income residents due to gentrification of neighborhoods. The City also has an interest in safeguarding the condition and quality of the housing stock and in maintaining attractive and livable neighborhoods."

### **MYTH #2: OPEN SPACE DIMINISHES AVAILABLE HOUSING STOCK**

Seattle is already developed, thus at this point Open Space Seattle is looking for plots of open space to provide ecological connectivity between natural areas. Some of the areas identified for potential open space are unsuitable for housing such as steep slopes or ecologically sensitive riparian areas. Other potential sites such as decommissioned military lands and industrial areas would not displace existing housing. Open Space Seattle also suggests converting some existing residential plots into open space, with the idea that the displaced homes would be made up for in more dense multi-family units nearby. Many recommendations of Open Space Seattle such as green streets, SEA streets, green roofs and trails do not take away from available housing stock.

Thus, new open spaces that are currently being considered would not have much effect on available housing stock.

Furthermore, as the City attempts to increase housing density by zoning for more multifamily units, open space will become more necessary as fewer people have private back yards. The goal of increased residential density is made clear in section B of the Housing Element of the City's Comprehensive Plan: "Moderate- and high-density multifamily apartments are needed to help accommodate expected housing demand over the next 20 years. This kind of residential development is often more affordable than ground-related housing due to the frequently smaller size of the units. This Plan accommodates the majority of residential growth in moderate- and high-density multifamily developments in urban centers and urban villages."

To make the sort of dense residential community described above habitable, open space is essential. The Oh (2002) study mentioned previously found that the King County Urban Growth Boundary increased middle and large lot housing prices and decreased small lot prices. This effect actually increases overall affordability as smaller lots, which are generally going to be purchased by lower income individuals, become more available as a result of open space. More open space is compatible with the City's comprehensive plan of increased density, and in such an environment, should not reduce overall housing affordability. In this arena, open space advocates and affordable housing advocates are actually aligned to meet a mutually desired long-term goal.

### **MYTH #3: OPEN SPACE TAKES FUNDS FROM AFFORDABLE HOUSING PROGRAMS**

Within the City of Seattle budget, parks and affordable housing programs do not compete for the same dollars. According to the City's Director of Finance, very little of the city's general fund goes toward affordable housing. The money that funds affordable housing programs generally come from the federal government, the Seattle Housing Levy or the market through innovative programs such as the density bonus, which allows developers to build higher if they agree to provide a certain number of affordable housing units. Thus, in terms of a direct budgetary tradeoff, there is no competition between affordable housing and open space. However, open space and affordable housing programs might compete for funds directly if both items are on the

ballot and voters feel they need to make a choice between an affordable housing levy and an open space levy.

It should be understood that while acquiring and maintaining parks does cost the City money and may raise surrounding property values, parks may also reduce City expenditures on storm water management and water treatment and increase City revenues through higher property taxes as illustrated earlier in this paper.

### ***MECHANISMS TO KEEP HOUSING AFFORDABLE***

As is argued above, affordability of housing in Seattle is not necessarily diminished by increases in open space. However, there is no question that housing in Seattle is not affordable to over a third of residents and that there are many mechanisms that can be used to make housing more affordable. While a complete analysis of these mechanisms is beyond the scope of this paper and not within the purview of open space advocacy, a brief list of creative mechanisms that have been successfully employed to keep housing affordable is provided below. This list looks beyond the traditional source of affordable housing funding (federal government tax credit program) and suggests innovative ways to generate additional funding for affordable housing. These mechanisms could be applied specifically to housing near parks to prevent displacement of low-income residents in such neighborhoods.

- ❖ **Community Land Trusts (CLT)** - The CLT model generally separates the price of land from the improvements or building. A CLT, which is a private non-profit corporation, purchases and holds the land in trust and signs a long-term ground lease with the homeowner, who must meet specified income requirements. The homeowner purchases only the improvements and agrees to a predetermined resale formula that is intended to keep the home at an affordable price for the next buyer. CLTs prohibit speculation of land and housing, promote ecologically sound land-use practices, and preserve the long-term affordability of improvements on the land. A CLT could be set up near a park to ensure a certain amount of affordable housing near parks.
- ❖ **Recapture Model** (currently used by City of Seattle) – The government provides a subsidy to buyers below a specified income level who meet specified criteria. Buyers may take this

subsidy and purchase a home anywhere in the City. In Seattle, this program is funded primarily through the Seattle Housing Levy.

- ❖ **Inclusionary Zoning** – Because government will never be able to fully meet the demand for affordable housing, inclusionary zoning is a way to extract money for affordable housing from the market. Inclusionary zoning requires that a developer reserve a certain number of units for affordable housing or put money into an affordable housing fund. Inclusionary zoning can include incentives, such as the density bonus used in Seattle, where a developer will be granted permission to increase height or square footage if they set aside a certain number of units for affordable housing.
- ❖ **High density zoning around parks** – As mentioned earlier, increasing residential density around parks is often a way to provide smaller, more affordable residences near open space.
- ❖ **Expediting the permitting process** – Some local governments are expediting the permitting process or waiving government fees to developments that include a certain number of affordable housing units.

## CHAPTER 8: CONCLUSION

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This paper has taken a broad look at the impacts of open space on property values and the various implications of those effects, both on the side of financing and on the side of feared displacement of low-income homeowners. Each of the research questions and resultant conclusions are reiterated below.

*What are the relationships between provision of urban parks and the financial return to property owners, developers and the public in higher property values, especially in dense urban areas?*

The vast array of academic research on this question has produced mixed results, especially for different types of open space. However, more studies found that urban parks, natural areas and wetlands showed positive effects on property values in dense urban areas, such as Seattle.

The four Seattle-based studies cited in this paper all found that open space caused increases in property values, with the one exception being that the King County Urban Growth Boundary decreased small lot prices (but increased middle and large lot prices). Given the national and local research, it is safe to assume that open space in Seattle causes a slight increase in property values of nearby homes. It should be understood that this increase is just a small part of the significant increases to property values seen in Seattle over the past two decades. In cases where parks are being created in underdeveloped areas, these parks may serve as an incubator for new high-value development, resulting in a larger increase in property values than what is experienced in more fully developed areas.

*Will increased property values generate revenues to protect open space and if so, what models are feasible in Seattle?*

This paper considers several financing mechanisms that take advantage of higher property values including regular property taxes, tax increment financing, local improvement districts, the creation of an independent park district and levies. Each of these methods are evaluated within the context of Seattle using several criteria including the ability to fund open space maintenance and operations, the stability of the revenue stream, ease of introduction and ease of implementation. While this analysis is not in enough depth to confidently recommend a specific

financing mechanism, it does shed more light on the pros and cons of each mechanism and provides an informed platform from which to undertake further research. To support more informed financial decision-making, a financial framework tool that helps to more clearly identify the costs and benefits of open space is presented. This tool can help open space advocates generate the political will necessary to maintain a strong parks system and secure a stable revenue stream for open space.

*Assuming that open space raises the value of property, how can housing choices near open space remain available to people with diverse incomes?*

Many believe that open space and affordable housing are in competition with each other. This argument, however, is misleading. First, open space contributes very little to the rapidly increasing housing prices in Seattle and thus, should not be targeted as the primary cause of increasing housing prices. The City's response to the shortage of affordable housing should not be to let neighborhoods degrade to the point where they become undesirable and property values drop. Instead, in accordance with its stated goals, the City should continue to make Seattle neighborhoods great places to live and address affordable housing through the various mechanisms available to do so. Second, many believe that open space uses land that could potentially be used for housing stock. However, as housing density increases, open space plays a crucial role in keeping the city livable. Thus, increasing open space supports increases in the stock of smaller more affordable units. Alignment between open space advocates and affordable housing advocates on this issue should be leveraged to facilitate greater cooperation and dispel myths that pit open space against housing affordability. Lastly, open space and affordable housing programs are primarily funded from different sources and thus, they do not compete directly in a financial sense. To pit open space and affordable housing against each other is not only misleading, but also detrimental to good urban planning and contradictory to the goals put forth in the Seattle Comprehensive Plan.

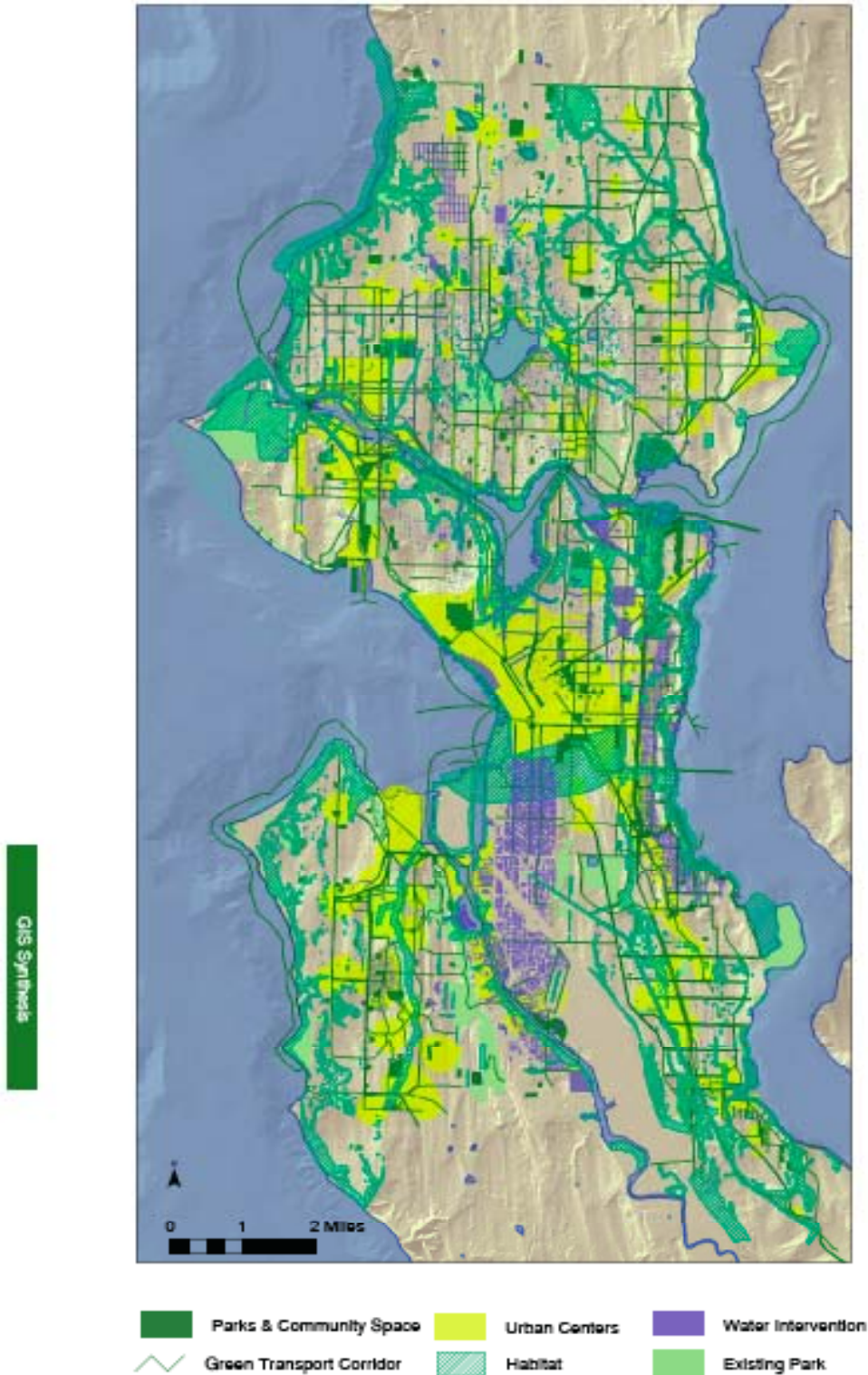
Open space should be viewed in the context of the City's overall Comprehensive Plan, which addresses open space, growth, infrastructure, affordable housing, ecological mitigation, transportation, and economic development in an integrated way. If open space is thought about

and implemented in conjunction with these other values, it should not be seen as a tradeoff with other public benefits but rather as a compliment to all types of public benefits that any great city strives to provide. In hopes of promoting this kind of expansive thinking about open space to an audience that perceives it as competing with other public priorities, this report demonstrates ways in which open space creates different types of value for individuals, businesses, the environment and city government. Open Space Seattle has proposed a broad and thoughtful vision for open space and green infrastructure. Hopefully their proposal will be seriously considered by city officials and the public and integrated into a comprehensive set of future goals for Seattle.

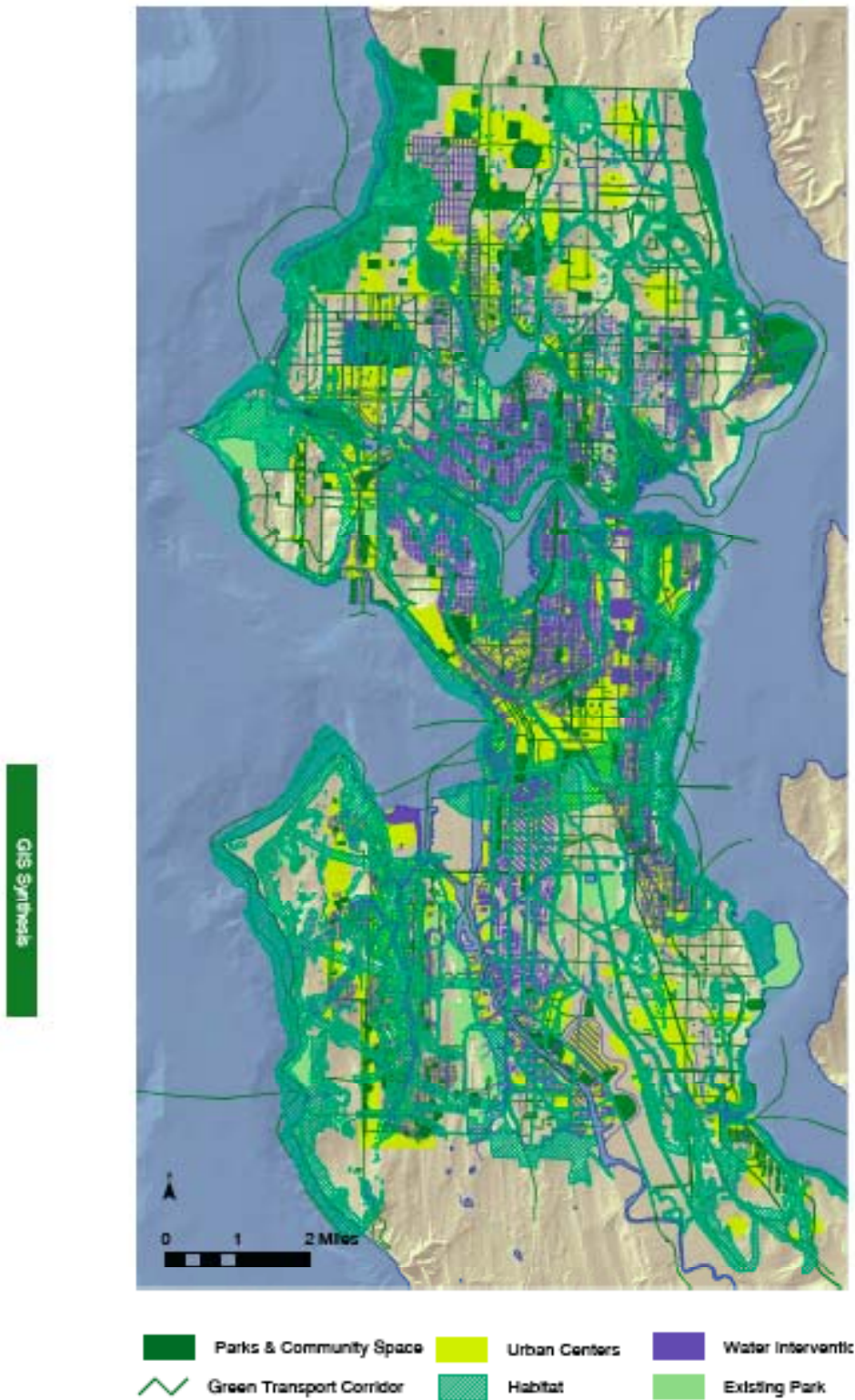


# APPENDICES

## APPENDIX A: 2025 GREEN INFRASTRUCTURE COMPOSITE MAP



**APPENDIX B: 2100 GREEN INFRASTRUCTURE COMPOSITE MAP**



## ***APPENDIX C: OPEN SPACE FINANCING MECHANISMS***

<b>Mechanism</b>	<b>Description</b>	<b>In the Context of Seattle</b>
Impact Fees	Developers are charged a one-time impact fee to offset the additional public service costs of new development. Usually applied at the time building permit is issued. Proposal in Seattle would have charged developers up to \$2.72 per square foot and raised \$85 million for new parks (to cover half cost of desired open space for districts) . Can only be used for capital purchases.	Nickels proposed in 2005 for 6 Seattle urban centers targeted for growth: Uptown, downtown, South Lake Union, Capitol Hill/First Hill, the University District and Northgate; no support by 2007; opponents felt it would deter development in areas targeted for density, would not raise enough money, City needs to put more money towards park maintenance (The Seattle Times, April 2, 2007)
Transfer of Development Rights (TDR)	Allows for a developer to purchase development rights from a less developed area in order to build higher or more dense in a more urban area	King County and the City of Seattle have an interlocal agreement approved in 2000. Between 1999 and 2005, 91,500 acres have been preserved through King County's TDR Program – nearly twice the land of any other TDR Program in the United States. (King County TDR Website). Very successful; model program. The developer of the Olive 8 hotel/condo project in downtown Seattle paid \$930,000 to go above the 300 ft limit by adding three more floors. King County used the money to buy development rights to 300 acres in rural King County.
Tax Increment Financing (TIF)	The city designates a tax increment district, which is generally one that is undergoing revitalization. The difference between taxes before and after development can be used to repay bonds that finance public improvements.	Washington State Constitution and tax statutes don't allow for wide-open TIF. Reasons: property tax increases are capped at 1% of prior year's levy so TIF fails to produce enough revenue; redevelopment agency must reach agreement with local government from which taxes will be diverted; TIF funds can only be used to address needs identified at time of inception. State Legislature has looked at this and made minimal TIF available, but full TIF would require substantial changes to the law. In 2006 Legislature passed LIFT, which includes a State match and many regulations. Supposedly the State Legislature does not fully support TIF, hence the more regulated LIFT solution. One LIFT project per county. Pilot projects in Spokane, Bellingham and Vancouver.
Levies (voter approved)	Levies are voter-approved property tax increases that can be used for operating or capital expenses. Levies require a simple majority and must be within the state limit of \$3.60 per \$1000 in assessed property value, but can go above the 1% tax cap. While not limited to capital purchases, philosophically, levies not considered a good source of funding for M&O.	Pro Parks Levy: in 2000 Seattle voters approved \$198 million for acquisition, environmental stewardship, maintenance and programming. Runs out in 2008. Seattle residents generally supportive of open space measures and passed levies in 1989, 1991, 1995 and 1999. Turned down Seattle Commons levy because it would displace too many businesses and be expensive to maintain.
Bonds (voter approved)	Bonds are voter-approved property tax increases that can only be used for capital expenses. Bonds require a 60% majority and can go over the limit of \$3.60 per \$1000 in assessed property value.	
Land Banking	Purchase of land off-site where conservation is more appropriate as a way to mitigate environmental damage on-site.	Seattle Shoreline Alternative Mitigation Plan offers land banking to developers using the shoreline between the Locks and the Montlake Cut as an alternative to on-site mitigation.

		Restoration will take place at City-managed sites within a stated boundary. Mitigation of adverse shoreline impacts is required by both the Shoreline Management Act (SMA) and the State Environmental Policy Act (SEPA). The City of Seattle implements these state laws through its Shoreline Master Program and its SEPA policies. This plan represents an additional implementation tool and does not impose additional mitigation requirements nor does it reduce them.
Sales Tax Earmarked for Open Space	Sales tax can be imposed on specific items and earmarked for specific uses. These taxes usually have a sunset date.	Sales taxes do not currently fund open space.
Density Bonus	Granting a developer the privilege to build at higher densities or exemption from other zoning restrictions in exchange for providing open space or other amenities not otherwise required by local regulations.	In 2006, the Seattle City Council approved granting height exemptions to developers who set aside a certain number of units for low to moderate-income housing or pay into a fund for affordable housing.
Federal Grants	Land & Water Conservation Funds, administered by the National Park Service, are for planning, acquisition, development or redevelopment of open space.	States and local governments can apply. Washington has received funds through this grant for many years and in 2006, the City of Seattle received money from this grant for three parks.
Private Contributions	Donations from private individuals or foundations for public projects.	The Seattle Parks Foundation has raised funds for several parks in the past five years.
Local Improvement Districts (LID)	LIDs can be formed to pay all or part of the cost of a capital improvement. The neighboring properties are assessed an extra amount (beyond the regular property tax) to pay for the improvement. This assessment can be paid in cash or the government will provide financing. LIDs require that the property values increase at least as much as the assessment. LIDs can be rejected if a sufficient percentage of property owners oppose the assessment.	Seattle hasn't made much use of LIDs lately because property values are already high and it is hard to demonstrate that capital projects will really increase property values significantly. The only large recent use was for the South Lake Union streetcar, which involved 750 properties.
Park District (independent district)	A Park District is an independent district with its own governing board that can receive and handle tax money. Operations can be funded by a voter levy that is permanent and subject to a 1% tax increase cap. Can fund capital and M&O.	This option was entertained in Seattle in 1999. At that time, a Parks District was seen as unnecessarily complicating things because property taxes could be raised to generate more revenue and there were questions about accountability. Now that the 1% cap limits funding capabilities, this option might be better supported. Metro Parks Tacoma is an example of a Park District.
Real Estate Excise Tax (REET)	The sale of a property is taxed and that revenue funds a dedicated purpose.	In King County, a tax of 1.28% of a property selling price is levied to fund capital projects listed on their comprehensive plan. A city or county can levy an additional tax if voters approve.
Regular property tax	Property taxes are levied on assessed value of property. The governing body determines the rate.	In Washington, property tax increases are limited to 1% of the total levy from the previous year.
User fees/ Enterprise	Charges for entry, parking, permits, facility use, etc. Could also include corporate sponsorship such as naming a park after a corporation.	Seattle Parks & Recreation Department has made more effort to increase enterprise in parks, especially for weddings, concerts. However, neighbors have complained about this.

## ***APPENDIX D: INTERVIEW PARTICIPANTS***

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## WORKS CITED

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- Alberti, Marina; Bjorn, Andrew; Mills, April; Waddell, Paul. "Impacts of Land Cover on Housing Prices in King County, Washington." Working Paper, U. of Washington, 2004.
- Anderson, Soren; West, Sarah. "Open space, residential property values, and spatial context." Regional Science and Urban Economics 36 (2006): 773-89.
- Anton, Paul. The Economic Value of Open Space: Implications for Land Use Decisions. Wilder Research, October 2005. 2 May 2007 <[www.wilder.org](http://www.wilder.org)>.
- Barnett, Erica. "In the Hall." Editorial. The Stranger. Seattle, WA. 25 April 2007. 7 May 2007 <<http://www.thestranger.com/seattle/Content?oid=207206>>.
- Bolitzer, B; Netusil, N.R. "The impact of open spaces on property values in Portland, Oregon." Journal of Environmental Management 59 (2000): 185-193.
- City of Seattle. Department of Parks & Recreation. An Assessment of Gaps in Seattle's Open Space Network: The 2006 Gap Report Update. 8 May 2006.
- City of Seattle. Department of Parks & Recreation. Seattle's Parks and Recreation 2006 Development Plan. May 8, 2006.
- City of Seattle. Department of Planning and Development. City of Seattle Comprehensive Plan. 2005.
- City of Seattle. Department of Planning and Development. Shoreline Alternative Mitigation Plan: Overview. May 2006.
- City of Seattle, Office for Planning. Evaluation of the Burke-Gilman Trail's Effect on Property Values and Crime. May, 1987.
- Cohen, Aubry. "Average Seattle Worker Can't Afford to Live Here." Seattle Post-Intelligencer 2 Apr. 2007. 25 May 2007 <[http://seattlepi.nwsourc.com/business/309914\\_affordable02.html](http://seattlepi.nwsourc.com/business/309914_affordable02.html)>.
- Crompton, John; Nicholls, Sarah. "Impacts of Regional Parks on Property Values in Texas." Journal of Park and Recreation Administration 23.2 (2005): 87-108.
- Crompton, John L. "The impact of parks on property values: empirical evidence from the past two decades in the United States." Managing Leisure 10 (2005): 203-18.
- DeSilver, Drew. "Questions and Answers: Property Taxes." The Seattle Times 17 Nov. 2002. 2 May 2007 <[http://seattletimes.nwsourc.com/news/business/taxes/qa/page\\_03.html](http://seattletimes.nwsourc.com/news/business/taxes/qa/page_03.html)>.

Environmental Finance Center. Schuylkill Action Network Financing Strategy. University of Maryland, January 2007.

Guppy, Paul. Failure to enact permanent 1% limit could lead to \$1.5 billion property tax increase. Washington Policy Center. March 2007.

Guppy, Paul. Property Tax Limitation in Washington State. Washington Policy Center. 2003.

Halvorsen, Robert; Layton, David. Explorations in Environmental and Natural Resource Economics. Northampton, MA: Edward Elgard, 2006.

Hopper, Kim. Increasing Public Investment in Parks and Open Space, Volume 1. Trust For Public Land. 1998. 14 May 2007  
<[http://www.tpl.org/tier3\\_cdl.cfm?content\\_item\\_id=1048&folder\\_id=825](http://www.tpl.org/tier3_cdl.cfm?content_item_id=1048&folder_id=825)>.

[KCGMPC] King County Growth Management Planning Council. King County Benchmarks: Affordable Housing 2004. 19 Jan. 2005. 12 May 2007  
<[www.metrokc.gov/budget/benchmrk/bench04/AffHsg/aff\\_housing.htm](http://www.metrokc.gov/budget/benchmrk/bench04/AffHsg/aff_housing.htm)>.

Knaap, Gerrit; Lindsey, Greg. "Willingness to pay for urban greenway projects." Journal of the American Planning Association 65.3 (1999): 297-313.

Langston, Jennifer. "Nickels wants builders to fund parks." Seattle Post-Intelligencer 3 Aug. 2005. 2 May 2007 <[http://seattlepi.nwsourc.com/local/235064\\_parks03.html](http://seattlepi.nwsourc.com/local/235064_parks03.html)>.

Lindblom, Michael. "Seattle Breaking Ground Today for South Lake Union Streetcar." The Seattle Times 7 July 2006. 26 Apr. 2007  
<[http://seattletimes.nwsourc.com/html/localnews/2003110164\\_streetcar07m.html](http://seattletimes.nwsourc.com/html/localnews/2003110164_streetcar07m.html)>.

Lutzenhiser, Margot; Netusil, Noelwah. "The effects of open space on a home's sale price." Contemporary Economic Policy 19.3 (2001): 291-98.

Mahan, Brent L; Polasky, Stephen; Adams, Richard M. "Valuing Urban Wetlands: A Property Price Approach." Land Economics. 76.1 (2000): 100-113.

Martin, Frank E. "Preemptive Park." Landscape Architecture Magazine Nov. 2006: 94-101.

McConnell, Virginia, Walls, Margaret. The Value of Open Space: Evidence from Studies of Nonmarket Benefits. Resources for the Future. January 2005.

Mildner, Gerard C.S.; Staley, Samuel R. "Urban-Growth Boundaries and Housing Affordability: Lessons from Portland." October 1999.

Money Magazine "The 100 Major Markets." 1 June 2005. 7 May 2007  
<[http://money.cnn.com/2005/05/12/real\\_estate/re2005\\_100markets\\_0506/](http://money.cnn.com/2005/05/12/real_estate/re2005_100markets_0506/)>.

- Municipal Research and Services Center of Washington. Website. 25 May 2007 <<http://www.mrsc.org/Subjects/Econ/ed-revitalization.aspx>>.
- Nave, Jeff. "Tax increment financing: why it isn't working here." Daily Journal of Commerce 2 Oct. 2003 [Seattle] . 26 Apr. 2007 <<http://www.djc.com/news/co/11149492.html>>.
- Oh, Who-Seok. "The Impact of Urban Growth Boundary on Housing Prices in King County, 1982-2001." Diss. U of Washington, 2002.
- Reich, Jay. "Tax Increment Financing Revisited: RCW 39.89." 18 July 2002. Kirkpatrick & Lockhart Preston Gates LLC website 3 May 2007 <<http://www.klgates.com/newsstand/Detail.aspx?publication=3479>>.
- Seattle Parks Foundation. Bands of Green: A Plan for Continuing Development of Trails, Boulevards and Linear Parks in Seattle. 2007.
- Shultz, Steven D; King, David. "The use of census data for hedonic price estimates of open space amenities and land use." Journal of Real Estate Finance and Economics. 22: 2/3 (2001): 239-252.
- Sharon, Chan P. "Sims to seek \$210 million in levies for county parks." The Seattle Times 30 Mar. 2007. 26 Apr. 2007 <[http://seattletimes.nwsourc.com/html/localnews/2003642666\\_parks30m.html](http://seattletimes.nwsourc.com/html/localnews/2003642666_parks30m.html)>.
- Spitzer, Hugh. "The new tax increment financing law is loaded with hurdles." Editorial. Puget Sound Business Journal 21 Apr. 2006. 2 May 2007 <<http://seattle.bizjournals.com/seattle/stories/2006/04/24/editorial3.html>>.
- Thomas, Emory. "Washington finally gets an economic development LIFT." Editorial. Puget Sound Business Journal 24 Mar. 2006. 2 May 2007 <<http://seattle.bizjournals.com/seattle/stories/2006/03/27/editorial1.html>>.
- Trust for Public Land. Economic Benefits of Parks and Open Space. 1999.
- U.S. Census Bureau, Population Change in Metropolitan and Micropolitan Statistical Areas: 1990–2003. September 2005.
- Young, Bob. "Mayor shelves plan for new parks." The Seattle Times 2 Apr. 2007. 2 May 2007 <<http://archives.seattletimes.nwsourc.com/cgi-bin/taxis.cgi/web/vortex/display?slug=openspace02m&date=20070402>>.