

Locating Farmers Markets:  
an evaluation methodology to inform site selection for farmers markets

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**Abstract**

Locating Farmers Markets:  
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Matthew J. Peters

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As the amount of money that is spent at farmers markets continues to increase across the country, the benefiting markets are undergoing the need to relocate due to development pressures. In Seattle, WA, markets managed by the Neighborhood Farmers Market Alliance (NMFA), which is responsible for organizing seven farmers markets in the city, are succumbing to development pressures and being forced to relocate. The purpose of this professional project is to create a tool to evaluate possible sites for a relocating market. Using a multi-criterion approach, this project establishes criteria, appropriate weights for stakeholders, and evaluates potential sites for the relocation of the Columbia City Farmers Market. In comparing three sites to the current location, the top choice is the street-closure site of South Edmunds Street in the Columbia City Historic District. With some improvements, a vacant lot in the Rainier Vista development on the corner of South Alaska Street and Martin Luther King Jr. Way South is a close second. The evaluation tool is meant to inform NFMA when making future decision and to continue the discussion concerning how farmers markets can be permanently integrated into the built environment while meeting the needs of the vendors, customers, and market organizers.

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## **Chapter I: Introduction**

Increasingly, farmers markets in the Seattle area are finding it difficult to situate in a stable location. Seattle farmers markets are moving due to increased development pressures resulting in a loss of spaces large enough to accommodate a market. One of the markets impacted by redevelopment is the Columbia City Farmers Market (CCFM), located in south Seattle in the National Historic District of Columbia City. The CCFM is held on Wednesday evenings from April to October in a parking lot adjacent to Rainier Avenue. Recently, the market organizers were notified that in two years the parking lot will be redeveloped, rendering the market with no future space on that lot. This has caused the CCFM organizers, the Neighborhood Farmers Market Alliance (NFMA), to work with concerned citizen groups to start the process of finding a future home for the CCFM.

Many issues surround the relocation of the CCFM. Some stakeholders in the Columbia City area, including business and property owners, would like to see the market stay close to the businesses along Rainier Avenue within the Historic District boundary. The farmers have space requirements and other issues, such as the desire to park vehicles close to stalls, which need to be accommodated. Social advocates would like to see the market stay in the area due to the equity issues surrounding access to healthy options for people on food assistance programs, such as the Women, Infants and Children and Food Stamps programs. In addition, the Neighborhood Farmers Market Alliance is interested

in securing a permanent home for the CCFM, to reduce the chance of losing the site again in the future.

In this paper, I will first outline the scope of the relationship established with the Neighborhood Farmers Market Alliance to build the market site selection tool. Next, I will discuss the context of the project within greater planning interests, and describe the methodologies I used for creating the site selection tool and conducting the following site evaluations. I will then describe the criteria that make up the site selection tool and their appropriate weights. Following this, I will describe each site and report on the analysis completed using the site selection tool. Finally, I will reflect on the professional project.

### **Scope**

The arrangement I have established with the Neighborhood Farmers Market Alliance is that I will produce a tool to facilitate the process of selecting a farmers market site. This tool will address the selection of sites within a pre-defined market area determined by the NFMA. Therefore, this tool does not address the analysis of market demand or customer demographics and consumer preferences to determine a large market area that would dominate a traditional retailer's store placement model. Rather, this tool is tailored to give some direction to choosing specific sites within the market area that will best suit the specific needs of the NFMA, the vendors, and potential customers.

After building a tool, I was expected to test it on a number of sites in the Columbia City community to help with the relocation process of the current Columbia City Farmers

Market. Following the design of the evaluation tool and the analysis of the sites, I will present my findings to the NFMA and lead a tutorial on how to use the market selection tool so that they will be able to use it for future site selection.

## Chapter II: Context

Food security and food planning discussions have increased over the past decade as more of our nation's food supply travels ever increasing distances. The food typically eaten by Americans now travels between 1,500 and 3,000 miles before it reaches a person's dinner plate.<sup>1</sup> Life cycle assessments have shown that local (and organic) food has a smaller greenhouse gas footprint than internationally (and conventionally) grown food.<sup>2</sup> The reliance on food produced outside of the regional foodshed has prompted food activists to increase awareness of the general population surrounding the benefits that local farmers and food preparation can lend to the local economy, as well as have an impact on reducing greenhouse gas emissions. The economic and environmental benefits are two of the important reasons that a strong local food system is integral to regional sustainability.<sup>3</sup> The American Planning Association's (APA) food system planning activities have recently increased. In 2007, the APA adopted the Policy Guide on Community and Regional Food Planning. The guide suggests that planners begin to acknowledge how the planning profession has impacted the current food system and recommends that support for sustainable food systems can develop through policies implemented by planners.<sup>4</sup>

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<sup>1</sup> Smith, Alisa and J.B. MacKinnon (2007), *Plenty*, Harmony Books, New York.

<sup>2</sup> Morgan, Daniel et al. (no date) "Seattle Food System Enhancement Project: Greenhouse Gas Emission Study," Accessed on 23 May 2008, <[http://faculty.washington.edu/bborn/Final\\_GHG\\_Report.pdf](http://faculty.washington.edu/bborn/Final_GHG_Report.pdf)>.

<sup>3</sup>

<sup>4</sup> American Planning Association (2007), "Policy Guide on Community and Regional Food Planning," Accessed on 23 May 2008, <<http://www.planning.org/policyguides/food.htm>>.

One of the ways to increase the amount of food that is produced locally is to ensure that a market exists for food goods once they are produced. There are a few ways to create markets. One way is through institutional purchasing and partnerships, like the farm-to-school movement. In Washington State, there are multiple programs that provide outreach and assistance to help school districts include local food into a portion of each school's food budget.<sup>5</sup> Legislation recently passed in Washington State that will continue to promote farm-to-school programs around the state.<sup>6</sup>

Another way to help the production of local food is by creating actual farmers markets within urban areas to increase access to fresh, local food and to create a direct market for farmers.<sup>7</sup> The number of farmers markets in the United States has more than doubled over the past fifteen years.<sup>8</sup> Even though the number of markets has substantially increased, the combination of bureaucratic hurdles and the difficulty in finding adequate market sites strongly impact the longevity and survival of farmers markets.<sup>9</sup> Independent farmers market organizers have tried to facilitate and take on the difficulties of running a market to allow farmers to focus on growing food. The Neighborhood Farmers Market Alliance is such a non-profit organization that helps to create markets for farmers and other food vendors in Seattle's urban neighborhoods. Placing these markets in urban

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<sup>5</sup> *FarmToSchool.org Home Page* (2006), Urban and Environmental Policy Institute, Accessed on 23 May 2008, <<http://www.farmtoschool.org>>. and *King County Extension – FarmtoSchool* (2008), Washington State University King County Extension, Accessed on 23 May 2008, <<http://king.wsu.edu/foodandfarms/farmtoschool.htm>>.

<sup>6</sup> Geiger, Tom (2008), "Governor Gregoire Signs Local Farms-Healthy Kids Law: State of Washington becomes national leader in trend for better food choices," *Washington Environmental Council Press Release*, 27 March, 2008.

<sup>7</sup> Groc, Isabelle (2008), "Growers' Gamble," *Planning*, 74(3), 34–37.

<sup>8</sup> *ibid.*

<sup>9</sup> *ibid.*

areas near existing services builds a synergy of uses and helps to reduce travel to farm stands outside of the city by individual customers. Providing better access to healthy food and improving the overall health of the population can be accomplished if planners help create places conducive to farmers markets.

### **Evaluating Farmers Market Sites**

Choosing a site is only one aspect of creating a successful farmers market. Getting community support, soliciting complementary and interested vendors, choosing a time, and selecting a general market area are all important pieces.<sup>10</sup> While there has been increasing discussion in the planning literature and in the political arena raising the question of the importance of local food systems,<sup>11</sup> there has been little discussion about the "best" place to locate farmers markets. In some regards a farmers market is much like any other retail or grocery store; discussions surrounding where a farmers market locates is left to individual markets. However, markets play the sometimes nostalgic, at other times active, role of a festival. Not only are markets viewed as places to purchase produce, they are also sometimes an important "third place" for a community.<sup>12</sup>

Considering a market to be a community asset suggests that it is in the interest of the city to help create solutions for market locations. While some cities have taken an active role to maintain a market in a historic location (e.g., Pike's Place Market in Seattle, WA) or

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<sup>10</sup> Corum, Vance, Marcie Rosenzweig, and Eric Gibson (2001), *The New Farmers' Market*, New World Publishing, Aurburn, CA.

<sup>11</sup> Note the recent City of Seattle adoption of a food policy, "Council Passes Local Food Action Initiative," *Seattle City Council News Release*, 26 May 2008, and Vancouver, CA has also founded a food policy council, Groc, Isabelle (2008), "Growers' Gamble," *Planning*, 74(3), 34–37.

<sup>12</sup> *Public Markets* (2008), Project for Public Spaces, Accessed on 17 May 2008, <<http://www.pps.org/markets>>.

have allowed markets to use public parks (e.g., Union Square in New York, NY), markets are sometimes forced to make other connections with the community or private agencies to find future market sites.

Few tools dealing with market site selection have been formally developed and shared within the market community. Some researchers have conducted surveys and have asked about the importance of certain characteristics, such as location, market layout, and parking, but have not resulted in a comprehensive tool.<sup>13</sup> Many markets are likely to attempt a trial by error method, which may get expensive and produce a bad reputation for a market agency, or develop some sort of internal system for selecting sites. Vance Corum, with Farmers' Market America, out of Vancouver, WA, has developed a point system using his years of experience with markets and is currently testing it in Portland, OR to help find new sites for markets.<sup>14</sup> Corum's rating system uses internalized weights and awards points for categories, like Visibility & Traffic Count, Facilities-Water/Elec/Recy, and Public Transit, that most market organizers probably consider, at least intuitively, when planning for a future market site. However, the nature of Corum's point-based Site Evaluation Tool indicated that there was a need for a method that used objective data paired with weights particular to a specific market organizer, in this case the NFMA. Corum's tool does contain many valuable categories for evaluation, which informed some of the criteria chosen and implemented in the tool created for the NFMA.

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<sup>13</sup> Govindasamy, Ramu et al. (1998), Farmers' Markets: Managers' Characteristics and Factors Affecting Market Organization, New Jersey Agricultural Experiment Station, Accessed on 8 June 2008, <[http://www.dafre.rutgers.edu/documents/ramu/fm\\_mn.pdf](http://www.dafre.rutgers.edu/documents/ramu/fm_mn.pdf)>.

<sup>14</sup> Corum, Vance (2007), Farmers' Market Site Evaluation Tool, 3 April 2008, personal communication.

## **Chapter III: Methodology**

### **Site Selection Tool**

The site evaluation tool I created for the NFMA is a tool tailored to the needs of the organization, vendors, and customers to assist and inform the decision process in selecting sites for farmers markets. Using such a tool will better prepare the NFMA and the results may carry more weight when they engage in political discussions with outside stakeholders, such as the city or neighborhood associations to determine where the market should be located. The type of tool I developed uses a multi-criterion approach similar to Corum's. In contrast to a point system, however, I used a method that compares the scores of each criterion to a relative high and low and normalizes the corresponding answer for each site.<sup>15</sup> In addition, since not all criteria should be considered equally, each of the criteria are assigned weights based on their importance. These weights were established with the input from the NFMA staff through a series of exercises. For the exercises, each NFMA staff member was given counters to divide amongst the criteria, allocating counters so that criteria that hold the most significance receive the most points. Individual responses were then averaged to establish the final weights. Multiple sets of weights were developed to correspond with each of the main stakeholders, the NFMA, the vendors, and the customers. Instead of collecting data from vendors and customers, the NFMA staff was considered an adequate proxy due to regular interaction with these stakeholder groups. Ideally, a top-ranking site that independently scored highly across each of these groups would display its resilience to satisfy the

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<sup>15</sup> Miller, Donald (2004), "An Introduction to Multicriteria Methods of Evaluation," Unpublished Working Paper, University of Washington, Seattle.

specific need of each group. In addition, each of the weights for the individual groups was combined to make one unified weight where each group was represented equally. Chris Curtis, the Director of the NFMA, explained the inherent challenges of meeting the needs of all three groups of stakeholders and suggested that each of the groups be weighted equally when creating a unified weight.

The tool was built using Microsoft Excel.<sup>16</sup> The data from the weighting results was averaged to establish weights for each criterion by stakeholder group. The spreadsheet was created so that when a user enters data for each possible site, the calculations standardize the data by using the following formula, where *value* is the collected criterion data for the site, *max* is the maximum value, *min* is the minimum value, and *stdvalue* is the value now standardized with the rest of the inputs. This is shown below.

$$\frac{value - min}{max - min} = stdvalue$$

The minimum and maximum are not necessarily the highest and lowest input values for a certain criterion. They could be natural or imposed limits. For example, for the distance to the community landmark criterion the minimum would be zero (the market could be right next to the landmark) and the maximum will be the highest reported value for the sites being analyzed. However, for the size criterion the minimum would be the size requirement the NFMA imposed as a restriction during site selection (no site smaller than 10,000 square feet) and the maximum would be the size of the largest site. Lastly, the maximum could be imposed, like in the electricity criterion. Having a site with more

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<sup>16</sup> The Site Selection Tool excel document is on file and available through author.

than ten electrical outlets becomes unimportant to tally, and so the maximum is set at 10.

This case is also similar to the criteria that use scales to guide the input.

The standardized values then become calibrated for inverted criteria. When the smaller value is best and the larger value is worst, like the distance to community landmark, then the standardized value is subtracted from 1. This calibrates all of the values so that higher values mean better performance for each criterion. Next the values are weighted for each stakeholder group. These values are multiplied by 100, to eliminate the need for decimals, and then summed for each stakeholder group arriving with a final score out of 100. This method facilitates the ranking of the alternative sites. The sites can be compared equally through the sum of the weighted scores and provides evidence showing the magnitude of desirability of one site over another. For example, if one site had a score of 90 and another of 45, then the first site is twice as desirable as the second site.

### **Site Evaluation**

The data collection to fill in the evaluation tool for each of the sites included internet data collection, field work, and discussions with the NFMA staff. Although advanced data collection techniques using GIS could have been employed for some of the criteria, a conscious decision was made to use techniques that would be readily accessible to NFMA staff or volunteers. If techniques other than the ones used in this analysis are available, the measurement methods can be adjusted as long as they meet the intent of the original criteria. When new measurement techniques are introduced, care must be given

so that the sites that are being compared are analyzed using the same data collection techniques.

The principal sources of data collection for Internet sources include the following:

Google maps for distance criteria and establishing quarter and eighth of a mile circles, the King County Metro Transit and the Sound Transit websites for transit data, the United States Census Bureau and King County Housing Authority websites for estimating residential density, and the Seattle Department of Transportation website for traffic data.<sup>17</sup> For estimating residential density, I used the 2000 Census data and selected Census blocks that were at least 50% by area within the quarter-mile circle. Even though the population data is almost a decade old, the Census data still serves as a proxy for residential density since any densification would probably be equal throughout the small area of analysis, especially since the zoning is similar.<sup>18</sup> One exception is the Seattle Housing Authority (SHA) development, Rainier Vista. I omitted these blocks when collecting data from the Census website and used the SHA projections for the project instead.

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<sup>17</sup> *Google Maps* (2008), Google, Accessed on 26 May 2008, <<http://maps.google.com>>; *Metro Online Home Page* (2007), Metro Transit, Accessed on 26 May 2008, <<http://transit.metrokc.gov>>; *Sound Transit* (2008), The Central Puget Sound Regional Transit Authority, Accessed on 26 May 2008, <<http://www.soundtransit.org>>; *American Factfinder* (2007), United States Census Bureau, Accessed on 26 May 2008, <<http://factfinder.census.gov>>; *Rainier Vista*, Seattle Housing Authority, Accessed on 26 May 2008, <<http://www.seattlehousing.org/Development/rainiervista/rainiervista.html>>; *SDOT – Traffic Flow Data and Maps* (2008), Seattle Department of Transportation, Accessed on 26 May 2008, <<http://www.seattle.gov/transportation/tfdmaps.htm>>.

<sup>18</sup> *DPD – Zoning Maps* (2008), City of Seattle Department of Planning and Development, Accessed on 27 May 2008, <<http://www.seattle.gov/DPD/Research/Zoning%5FMaps/>>.

For non-Internet data collection, the primary means of collecting site data was through field work. By visiting the sites and walking the surrounding streets I calculated many of the remaining criteria. Where there was little information regarding a specific criterion, either the result was assumed to be the worst case, for example zero storage at some of the sites, or a reasonable expectation, for example five years of staying at a site since the NFMA would probably not strike an agreement to use the site for less than five years.

## **Chapter IV: Site Selection Criteria**

### **General Requirements**

For a site to work as a possible farmers market there are some prerequisites that must be met before additional evaluation continues. All of the selected sites met the minimum criteria. The following requirements were established through discussions with the NFMA as essential to the selection of an adequate site.

#### *Minimum Site Area*

The minimum area of the site will vary from one farmers market to another. There is a threshold of farmers that need to be present to create a variety and appropriate agglomeration effect for possible shoppers. If the process is to evaluate a site for a current market, there may be a minimum number of farmers that the NFMA will anticipate accommodating for political reasons so as not to disrupt existing relationships between vendors.

#### *Minimum Site Dimension*

The possible site must have the minimum depth of a stall plus a walkway. Without this there will be no room for people to walk or to stop and socialize while shopping. This will create a situation where the circulation flow will be restricted and make shopping difficult.

#### *Utility Requirements*

Access to water, an electric outlet, and waste collection need to be present on the site.

Water access and electrical access are the two primary criteria that would not be

consistent from site to site. Generally, scheduling garbage and recycling collection can happen anywhere in the city.

*Permanent Signage*

In an effort to establish a presence for the market, the ability to post a sign year-round at the site will help with advertising and branding the site as a farmers market location.

*Produce and three compartment sink*

These two requirements are mandated by health codes. A produce sink must be on-site at the market, and a three compartment sink must be nearby (possibly through an agreement with a restaurant) and be accessible to vendors.

**Criteria Introduction**

In addition to the minimum site requirements, the list of criteria, generated through a literature review and discussions with the NFMA staff, attempt to capture the intricacies and various dimensions of a site. The criteria were chosen, and initially conceptualized, as positive characteristics important to an ideal farmers market site. Following the creation of a comprehensive list of criteria, measurement techniques that accurately reflect the intent of each criterion were developed that accommodated the limited resources the NFMA can offer to site selection. Thus, while some of the criteria seem to be easily and perhaps more “accurately” measured using GIS or other software, simpler methods such as walking around the site to perform the evaluation, were favored. See Appendix B for a recommendation for collecting the data needed for completing the site

selection tool. The following are the expanded set of criteria for selecting a new site for locating a farmers market, the method of measurement, and a short discussion of each criterion's relevance to the project. The criteria have been broken into the categories of location, physical features, and use agreement to make distinctions between the types of information they are meant to evaluate.

### **Location Characteristics**

#### *Distance from Former Farmers Market Site*

This criterion is the measurement, in miles, of the distance to the current farmers market site in the community. This criterion is meant to capture the existing community (i.e. consumer) knowledge of the location. The closer the site is to the former location, the less rebranding, marketing, and general awareness education is needed on behalf of the NFMA.

#### *Distance to Neighborhood Retail Core*

This criterion is the measurement, in miles, to the closest community business district. The criterion measures the proximity to the existing retail core for the community. This takes into account the existing traffic and centrality that the neighborhood core would give to the market. Locating close to a retail district would also support the shoppers in creating multi-purpose trips, which would encourage the use of the market while running other types of errands. This criterion is important to the greater planning community as cities try to reduce their vehicle miles traveled (VMT) per capita. Locating uses in central spots throughout the community decreases VMT, which has impacts on

greenhouse gas emissions, losses through time spent in travel or congestion, and dependence on non-renewable fuel sources.<sup>19</sup>

#### *Distance to Community Landmark*

This criterion is the measurement, in miles, to the nearest landmark that is well known to the community. The reason for this criterion is to measure the distance from a nearby landmark for purposes of branding and connectivity of the site with the community. Possibilities of such a landmark include a park, library, or even a well known sign or business. Care must be taken to maintain a similar level of community connection for the chosen landmark for each of the alternative sites.

#### *Residential Density*

This criterion is the measurement of the number of people living within a quarter-mile of the farmers market site. This criterion is meant to measure the immediate possible pedestrian local demand created from higher residential density. A quarter-mile is the farthest many people go while making daily trips. A majority of people walk less than 500 ft for daily errands.<sup>20</sup> The market is more of a “specialty good,” rather than a daily good, so a quarter-mile seems like a logical measure for residential density. Another consideration is that people who come to the market may leave with large bags and therefore may be less apt to walk longer distances than if they were unencumbered. The United States Census website, [www.census.gov](http://www.census.gov), has an interactive map to select block

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<sup>19</sup> Glickman, Mark M. (2001), “Beyond Gas Taxes: Linking Driving Fees to Externalities,” *Redefining Progress*, Accessed on 26 May 2008, <[http://www.rprogress.org/publications/2001/beyond\\_gas\\_taxes.pdf](http://www.rprogress.org/publications/2001/beyond_gas_taxes.pdf)>.

<sup>20</sup> Southworth, Michael (2005), “Designing the Walkable City,” *Journal of Urban Planning and Development*, 131(4), 246–257.

groups surrounding a location. While data on this website is from the last census collected in 2000, it serves as a general proxy and will be more accurate following the upcoming decennial collection.

#### *Traffic Intensity*

This criterion is measured by counting the number of daily trips traveled on arterials within a quarter-mile of the site. This criterion is meant to capture the accessibility and possible market of a site located closer to one or more major arterials. Even though there may not be direct line of sight to the potential market, signage and general awareness could divert trips off of the arterials. A potential way to measure this criterion is to use the Traffic Flow maps produced by the Seattle Department of Transportation.<sup>21</sup>

#### *Transit Accessibility*

This criterion is the measurement of the number of transit unit stops over the course of an hour within an eighth of a mile of the site. A transit unit is one set of public transportation vehicles. One bus or a set of train cars connected together is one transit unit. The standard is to look at the number of trips that pass within an hour to determine the frequency of the transit.<sup>22</sup> The number of stops is the highest number during any one hour that the market is in session. Since a transit unit may make more than one stop within the eighth of a mile buffer, select one stop and count the frequency for one stop. An eighth of a mile was selected as the distance for calculating this criterion due to the

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<sup>21</sup> *SDOT – Traffic Flow Data and Maps* (2008), Seattle Department of Transportation, Accessed on 26 May 2008, <<http://www.seattle.gov/transportation/tfdmaps.htm>>.

<sup>22</sup> Vuchic, Vukan R. (2005), *Urban Transit: Operations, Planning, and Economics*, John Wiley & Sons, Inc., Hoboken, NJ.

argument that using a quarter-mile air distance doesn't always result in a quarter-mile walking distance.<sup>23</sup> Therefore, an eighth of a mile air distance was selected as being a reasonable proxy instead of calculating the walking distances from each site. This may result in distances less than a quarter-mile. However, since the market is generally a "grocery" good stop, people may be unwilling to carry heavy bags far distances to transit.

#### *Bike Parking*

This criterion is the measurement of the number of spaces in bike racks adjacent or on-site. Even though street furniture and other infrastructure, such as fences and sign posts, can act as temporary bike storage facilities, the purpose of this criterion is to measure the ease of finding guaranteed and traditional bike storage near the site.

#### *Free parking with a 2 hr limit*

This criterion is the measurement of the number of street parking spots within an eighth of a mile that have two hours or shorter time limits that are free to use. The purpose is to account for the parking capacity afforded by these short-term parking spots that will have a quick turn-over for shoppers.

#### *Pay for parking*

This criterion is the measurement of the number of parking spots within an eighth of a mile that a user must pay to occupy. These include park and pay lots as well as on street metered parking. Usually deals can be brokered between merchants, in this case the farmers market, and pay-to-park lot owners to provide free parking to customers through

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<sup>23</sup> Ryus, Paul et al. (2000), "Development of Florida's Transit Level-of-Service Indicator," *Transportation Research Record*, 1731, 123–120.

tokens or other means. Street metered parking was included in this count since it is not free parking, even though it still results in higher turn-over than unlimited length parking.

#### *Nearby sidewalks*

This criterion is a measurement of the percentage of the blocks within an eighth of a mile that have side walks. Each side of the street counts towards the total percentage, so if there is only a sidewalk on one side of all of the streets within an eighth of a mile, then the resulting percentage would be 50%. One of the primary reasons that a farmers market would desire a street network with sidewalks is perceived safety. Customers who perceive a safer environment will be more likely to walk to the market or stop in their cars.

#### *Available off-site parking for farmers*

This criterion is a measurement of the area available for farmers to park vehicles off-site. The area that is measured should be available consistently during each market day, so as to ensure a reliable opportunity rather than taking a chance that there will be space available in street parking. Even though there is a preference among farmers to be able to locate vehicles on-site, this criterion is meant to measure the opportunity of moving farmers vehicles off-site, either due to the small size of the site or for future expansion of the market.

#### *Visibility*

This criterion is the total number of streets that the market fronts (or where there is open space or a parking lot between the street and the market). If the market can be seen from

the “main street” of the community, count the street twice since visibility from this street adds both a connectedness of the market to the “main street” as well as increased traffic. Visibility is an important aspect of any retail enterprise. Fronting the street is always preferable to being tucked away behind a building or down an alley because it gives greater access to the occasional window shopper and is easier to see by people in cars traveling at faster velocities than pedestrians.

### **Physical Characteristics**

#### *Size*

This criterion is the measurement, in square feet, of the area of the site that could be used for the farmers market. The size of the site controls the number of vendors, whether there will be room for vehicles, and the ability of the site to meet future growth needs. It is important for the site to be large enough to allow for a large enough diversity of vendors so that there is a higher likelihood that the customer will be able to locate whatever goods they are searching for, and at a best case scenario have the option to comparison shop.

#### *Layout of Market*

No adequate measurement was established for this criterion. While it was deemed to be an important factor in evaluating the site through the result of the weighting exercise, this criterion has been omitted from the site selection calculations. Conversations with NFMA staff, as well as layout discussion in publications, did not yield a market layout

preference.<sup>24</sup> Other factors, such as size, diversity, and entrances, in addition to no quantifiable difference between varying layouts resulted in an inability to establish a meaningful measurement methodology. This is a place for additional investigation to establish a way to measure either the strength of a given layout, or the ability of a site to accommodate multiple layout scenarios. Known layouts include: Linear, L, T, Cross, Circular, and Doughnut. Each could include a combination of areas that are only single-sided or double-sided.

#### *Surface Condition*

This criterion is the rating of the type of surface of the site where the market will be located. The quality of the surface must be placed on the following scale: 0 – Dirt, 3 – Gravel with an uneven surface, 4 – Grass, 6 – Asphalt with an uneven surface, 8 – Gravel with an even surface, 10 – Asphalt with an even surface. The rating was established through conversations about preference with the NFMA staff. The goal of this criterion is to account for the ease of operations and better shopping conditions that come with a better ground surface. Potholes and poor drainage may negatively impact shoppers' preference for the market.

#### *Grade*

This criterion is the class of the slope of the site. Class 0 is for a steep slope. Class 1 is for a moderate incline. Class 2 is for a slight slope. Class 3 is for a flat or fairly flat site. This class system is used instead of measuring the actual grade change of a site due to the

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<sup>24</sup> Corum, Vance, Marcie Rosenzweig, and Eric Gibson (2001), *The New Farmers' Market*, New World Publishing, Auburn, CA; *Public Market* (2008), Project for Public Spaces, Accessed on 17 May 2008, <<http://www.pps.org/markets>>.

complexities and resources required to measure the actual topography of the site. The class system is formatted to realize the preference that a flat site, as compared to a more sloped site, is preferable for a successful farmers market.<sup>25</sup>

#### *Possible Entrances*

This criterion measures the flexibility of the site to accommodate different entrance options. The following list describes a scale to evaluate the entrance flexibility. An “entrance” is described as a place where pedestrians can access the site unencumbered. Possible limiting factors may include landscaping, buildings, and fences. 1 – there is 1 entrance to the site; 2 – there are 2 entrance, one at each end of the market; 3 – there are three to five entrance options; 4 – the edges of the site are porous (pedestrians could enter the market at many points). This criterion is used to measure the flexibility experienced by customers regarding entering and exiting the market.

#### *Public Restrooms*

This criterion accounts for whether restrooms are available for vendors and for the general public within 100 feet of the site. The scoring for this credit follows the following description: 0 – if there are no restrooms, 1 – if there are restrooms available to the vendors of the market, and 2 – if there are restrooms available to the general public. One of the reasons for this criterion is that if there are no restrooms, then the NFMA is required to provide toilet facilities. The existence of restrooms reduces this cost, as well as possibly acting as an amenity to shoppers.

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<sup>25</sup> Corum, Vance (2007), *Farmers' Market Site Evaluation Tool*, 3 April 2008, personal communication.

*Covered Area*

This criterion is the measurement of the area, in square feet, of the site to be used for the market that is permanently covered. Permanently covered space increases the attractiveness of holding a year-round market.<sup>26</sup> A permanent structure also is a marketing tool and helps to visually define the market space.

*Shaded Area*

This criterion is the measurement of the area, in square feet, of the site that is shaded during market time when the sun is highest. Shade helps to provide a cooler and more pleasant environment for shoppers and also helps to extend the longevity of the produce and vendors' goods.

*Electricity*

This criterion is the number of plugs available for vendors to use. Some vendors have electricity needs and this criterion is meant to measure the ability for the site to meet those needs. A 220V outlet counts as two outlets due to the added benefit of having a large capacity outlet rather than just a standard outlet. Some vendors would prefer to run their equipment using a 220V rather than a standard outlet.

*Lights for night*

This criterion tracks the range of lighting present on the site for night use. Use the following scale when evaluating lighting. 0 – The site would need additional lighting to allow for clean-up and breakdown of market. 1 – There is enough lighting for clean up

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<sup>26</sup> Corum, Vance, Marcie Rosenzweig, and Eric Gibson (2001), *The New Farmers' Market*, New World Publishing, Auburn, CA.

and breakdown. 2 – There is adequate lighting to run the market so that customers can carry out transactions and feel safe. Lights are important for a market, especially for evening markets that extend late into the fall. Lights are helpful for clean up and for the option of extending the market into the evening hours or later into the season when the sun sets earlier.

#### *Storage*

This criterion is a measurement of the area of storage available for use on the site. The NFMA has equipment that could be stored on-site to reduce the work of hauling it to the site for each market. Items like signs and market specific promotional items and even barricades could be storage items for the NFMA. Therefore, the availability of storage is an asset to a site.

#### **Use Agreement Characteristics**

##### *Cost to use site*

This criterion is the measurement, in dollars, to use the site for one day. Cost is important to the NFMA. It is not a charge they pass on to vendors directly (yet), but it nevertheless has a strong impact on the ability to use a site as a farmers market. This difference of cost between sites is independent of the other characteristics. The weights imposed at the end of the evaluation process will account for the other amenities that a site might have, and therefore cause it to cost more.

*Ability to stay at the site into the future*

This criterion is the measurement, in years, of the length of the initial lease, plus the length of the first renewal option. Usually a lease, or agreement between the land owner and the NFMA, stipulates a length of time for the NFMA to use the site. There should also be a renewal option of the lease that stipulates another length of time that the lease can continue. Even for agreements with the city regarding possible street closures, the NFMA should work to include a clause that describes the expected length of an agreement to reduce the risk of having to find a new site for the market in the short term. The ability of staying on the site is important for customer recognition as well as for reducing the cost of finding another site in the future.

*Availability for Use*

This criterion is the number of days that the site is available for use during desired market times, which includes preparation and take down requirements. In addition to meeting a market specific requirement for a preferred day, this will account for the ability to expand the market to multiple days, or switch to a different day, if so desired.

**Criteria Summary**

The separation of the criterion into different characteristic categories helps to distinguish between criteria that the NFMA may have control over. Many of the location criteria, with the main exceptions of bike parking, 2 hour parking, and off-site parking for farmers, are fixed; the NFMA does not have the ability to directly change items like transit accessibility, sidewalks, or residential density (although there is a possibility that indirectly through political influence these items could be changed). In contrast, for the

physical and use agreement characteristics, the NFMA can influence the change of all of these criteria, except perhaps size, depending how early the NFMA is brought into design discussions for the redevelopment of a site. Even if the site is not being redeveloped, improvements like storage, lights, or a surface upgrade, are all within the NFMA's power to influence.

In summary, the criteria presented are a starting point for a further discussion about what aspects are important to the siting of a successful farmers market. They are a snapshot of the current needs and perceptions for creating a farmers market that will meet the needs of the vendors and community. The intent, the measurement, and the method of collection are all open to review and revision to fit the NFMA's future needs.

### **Criteria Weights**

The weights for individual criteria that were established through the weighting exercise with the NFMA staff are displayed in Table 1. The weights for each stakeholder group sum to one hundred. The weights convey the relative importance between criteria for each stakeholder group. For example, the NFMA weights for the criteria "Covered Area" and "Storage" are 2.7 and 5.4 respectively. This means that the area of storage is twice as important as the amount of covered area.

Table 1: Criteria Weights: the relative importance between criteria for each stakeholder group.

Category	Criterion	NFMA	Farmers	Shoppers	Unified
Location	Distance from Existing Farmers Market	5.2	3.8	5.0	4.6
	Distance to Neighborhood Retail Core	3.6	3.3	6.8	4.6
	Distance to Community Landmark	2.3	1.5	3.5	2.4
	Residential Density	5.2	7.9	4.4	5.8
	Traffic Intensity	3.6	3.3	2.3	3.1
	Transit Accessibility	3.6	0.9	4.1	2.9
	Bike Parking	1.1	0.4	3.0	1.5
	Parking with 2 hr limit	4.5	6.0	10.4	7.0
	Pay for Parking	2.9	2.0	4.6	3.2
	Nearby Sidewalks	2.9	1.3	5.3	3.1
	Availability of off-site parking for farmers	3.9	6.1	0.4	3.4
	Visibility	5.0	7.1	4.2	5.5
Physical	Size	6.6	5.9	8.3	6.9
	Layout of Market	0.0	0.0	0.0	0.0
	Surface Condition	5.5	4.9	3.6	4.7
	Grade	4.1	4.6	3.3	4.0
	Number of possible entrances	1.4	2.0	3.9	2.4
	Public Restrooms	3.0	2.9	4.4	3.5
	Covered Area	2.7	5.1	3.7	3.8
	Shaded Area	2.9	4.2	4.2	3.8
	Electricity	3.8	4.8	1.5	3.3
	Lights for night	2.2	2.7	2.1	2.3
	Storage	5.4	0.6	0.0	2.0
Use Agreement	Cost to use site	6.8	5.3	0.5	4.2
	Ability to stay at site into the future	8.0	9.2	4.2	7.1
	Days/Time available for use	4.0	4.2	6.3	4.8
<b>Total Sum:</b>		100	100	100	100

Source: Author

The criteria most heavily weighted for each stakeholder group is shown in Table 2. The NFMA and the farmers both favored the “Ability to stay at site into the future” as the most important criterion. The top three criteria combined across all groups are “Ability to stay at site into the future,” “Parking with 2 hr limit,” and “Size.”

Table 2: Top Three Criteria by Weight

<b>Stakeholder</b>	<b>Criterion</b>	<b>Weight</b>
Neighborhood Farmers Market Alliance	Ability to stay at site into the future	8.0%
	Cost to use site	6.8%
	Size	6.6%
Farmers	Ability to stay at site into the future	9.2%
	Residential Density	5.2%
	Visibility	5.0%
Shoppers	Parking with 2 hr limit	10.4%
	Size	8.3%
	Distance to Neighborhood Retail Core	6.8%

Source: Author

The distribution of the weights across the general criteria categories of location, physical, and use agreement, show that while the individual distributions are different between the NFMA and the farmers, the overall distribution between the categories is fairly similar as shown in Figure 1. However, the categorical distribution for the shoppers stakeholder weights placed more emphasis on the location criteria than the use agreement criteria, which is not surprising since most shoppers probably are not worried much about the cost of the site or the ability for the market to stay in one location.

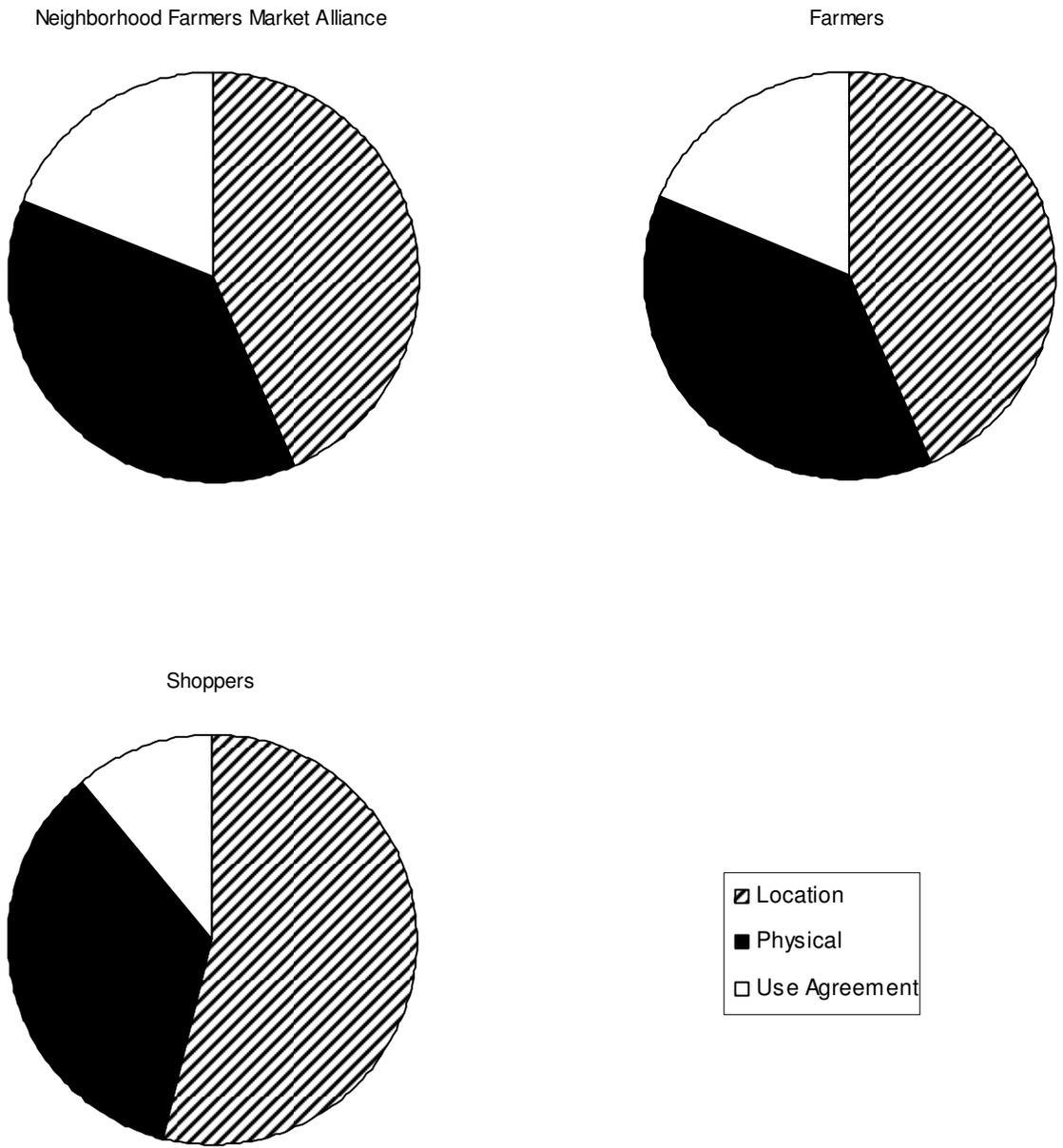


Figure 1: Criteria Characteristic Splits: relative importance between categories for each stakeholder group.  
Source: Author

### **Explanation of the Site Selection Tool**

The site selection tool was constructed using Microsoft Excel integrating the criteria and weights established with the NFMA.<sup>27</sup> This section will describe the resulting excel file. There are eight tabs in the tool: Instructions, Input, Results, Census Data, Transit Data, Weights, Calculations, and Applying Weights. Please see Appendix A for examples of the spreadsheets. The information in these tables can be adapted by changing the information in the Weights tab and by adding criteria to fit the needs of whoever is using the spreadsheet.

The Instructions tab contains an explanation of how to use the Site Selection Tool. The Input tab contains the list of criteria and each site has a data and notes column for keeping track of information. The inputs for the data column drive the calculations and results. The numbers entered into the data column should correspond to the explanation of the criteria and units of measurement presented in Chapter II. Changing the site names in this tab will change the site names for the rest of the excel file. The next tab is the Results tab. This displays the final scores for each site as well as show the top site and runner-up for each stakeholder.

The Census Data and Transit Data tabs are to assist with the collection and organization of data associated with the population and transit accessibility criteria. For the Census Data tab, after cutting and pasting the information gathered from the Census Factfinder, the population within a quarter-mile will be displayed at the top. The Transit Data tab

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<sup>27</sup> The Site Selection Tool excel document is on file and available through author.

contains a table that can be filled out with the appropriate transit information for each site. The person collecting the data will need to fill in the table with the nearby bus routes and then record the highest number of arrivals per hour for the site in the Input tab.

The Weights tab contains the weights collected for each stakeholder to be used in the evaluation process. See Table 1 for an example. This tab does not need to be changed for each new site evaluation, only periodically when new weights are established for a stakeholder group. The last two tabs, Calculations and Applying Weights, standardize and weight the data entered into the Input tab to be displayed in the Results tab. In the Calculations tab there is a list of the criteria and then the Minimum and Maximum is displayed based upon the data from the Input tab or imposed limits (e.g., the site cannot be below a certain size, so that is the imposed minimum). The following column contains the calculation for the Denominator of the standardization formula. This calculation subtracts the Minimum from the Maximum. Then for each site the data from the Input tab is standardized by subtracting the Minimum from the data for each site and dividing it by the Denominator column. These effectiveness scores are then calibrated so that “one” is the best and “zero” is the worst. This is done since for some criterion the lower score is best (e.g., distance from former farmers market site).

The calibrated effectiveness scores are then used in the Applying Weights tab. For each criterion and for each stakeholder, the effectiveness scores for the site are multiplied by the information in the Weights tab. The resulting scores for each criterion are summed at

the top to arrive at a total score for the site for each stakeholder group. This information is summarized in the Results tab.

## **Chapter V: Application: Columbia City Farmers Market**

In addition to creating a site selection tool for the Neighborhood Farmers Market Alliance, I evaluated four sites related to the relocation of the Columbia City Farmers Market. In this section I will describe the sites, show the results of my analysis, and discuss the implications.

### **Spatial Dynamics of CCFM**

The Columbia City Farmers Market (CCFM) is currently located in the Columbia Plaza parking lot near the corner of Rainier Avenue South and South Edmunds Street in the Columbia City Historic District in Seattle, Washington. The market site is 19,260 square feet and has 45 vendors. The market is a circular layout with vendors lining both sides of the aisle. Most of the stalls' dimensions are 10 x 25 feet, although some have larger or smaller dimensions to fit the space or vendor's need. The aisles are between 17 and 20 feet wide, which, anecdotally, feels like enough space for people to stop and talk without impeding the flow. There is also space for small booths which either non-profit or for-profit organizations can use. On a recent market day, Zipcar, a national car sharing business, was advertising special deals for Rainier Valley residents, the large sub-region where Columbia City is located. In addition, one corner of the market is dedicated to special events, which may include a local band or a food preparation demo. In this area there are also a couple of tables that the public can use to sit down and eat food purchased at the market or just socialize.

### Possible sites and characteristics

Four locations were selected for an evaluation and comparison using the site selection tool. All of the sites are located near the neighborhood of Columbia City in Seattle, WA, see Figure 2. The sites are referred to as the Columbia City Farmers Market (the current location), South Edmunds Street, Rainier Vista, and Zion Prep. For the location of the sites see Figure 3. The current location, although there is no guarantee that the site could be used after the next two years, was used as a baseline to see how the possible new locations compare and as a way of testing the tool to make sure it is robust and meets the NFMA's needs.

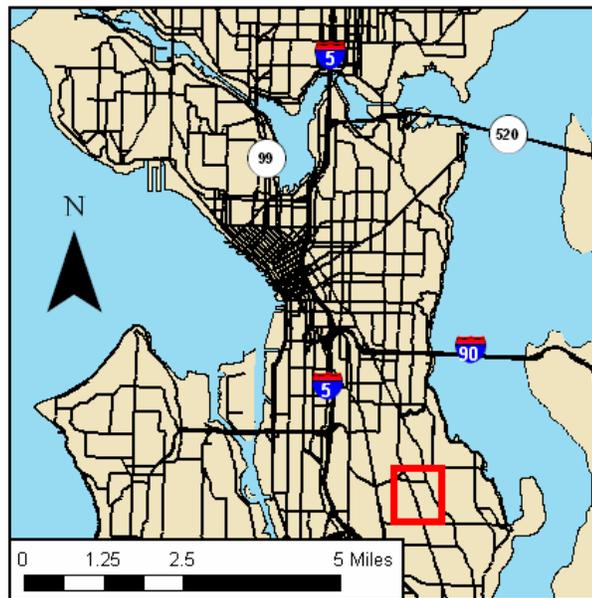


Figure 2: Location of Possible Sites in Greater Seattle.  
Source: City of Seattle, King County

#### *South Edmunds Street*

The South Edmunds Street site is directly adjacent to the current location of the CCFM.

A road closure along South Edmunds Street between 36<sup>th</sup> Avenue South and 37<sup>th</sup> Avenue South would allow the market to occupy the street. There is a possibility that in the near

future both the Columbia Plaza (the current CCFM location) and the school site across South Edmunds Street will be developed. The NFMA has been active in the design discussions held by both developers since there is an interest to keep the market nearby, because it is viewed as an amenity to the projects. Possible designs suggest reconfiguring the sidewalk and right-of-way space to make it more conducive to a market setting, including eliminating curbs to make it easier to set up stalls and finishing the street with a different surface to differentiate the space from the surrounding streets. The South Edmunds Street site benefits from the same positive location aspects of the current site. It is close to the central business area and the Columbia Park and Library, and is already a tested and known location for customers.

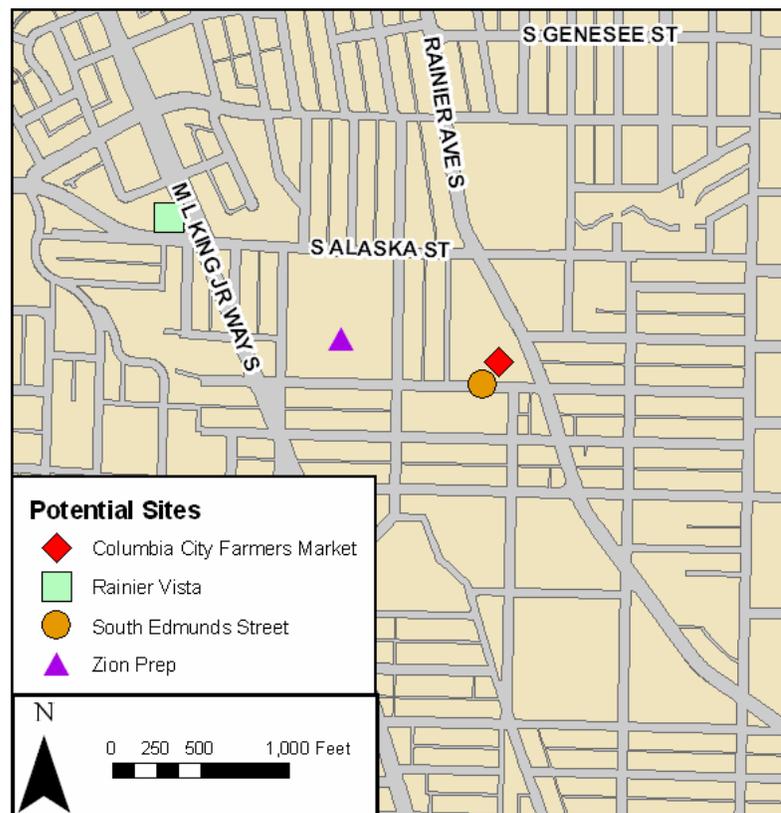


Figure 3: Potential Farmers Market Sites in Columbia City.  
Source: City of Seattle, Author

*Rainier Vista*

The Rainier Vista site is located on the northwestern corner of the intersection of South Alaska Street and Martin Luther King (MLK) Jr. Way South. The land is currently owned by the Seattle Housing Authority and is part of the development of Rainier Vista, a mixed-use, mixed-income community. The site is currently vacant and covered with rock spall (i.e. large gravel). A farmers market in this location could be an interim use until a building is constructed, or could become a permanent fixture if the site integrated a plaza into future designs. One of the reasons for including the Rainier Vista site in the evaluation, even though it is outside of the Columbia City Historic District, is in response to the future impact that the light rail system will have on this corridor, since the site is less than an eighth of a mile from a future light rail station. The proximity of the redeveloped Rainier Vista also might add to the future growth of residential, retail, and community uses and overall prominence of the area near MLK Jr. Way South.

*Zion Prep*

The Zion Prep site is located within the campus of the Zion Preparatory Academy, a preschool through middle school institution located in the block bounded by South Alaska Street, 35<sup>th</sup> Avenue South, South Edmunds Street, and 32<sup>nd</sup> Avenue South. The entrance to the site is off of South Alaska Street. The site is behind the school in the playground area, which is partially covered by a large structure. There are many parking spaces in the front lot, but there is no retail connectivity nearby and it is not visible from the street.

## Findings

The results of the analysis using the site selection tool led to the South Edmunds Street site being the most preferred for the future Columbia City Farmers Market (see Table 3). This site scored the best across all stakeholder groups and slightly higher than the current market location, and much higher than Rainier Vista and Zion Prep locations. The combined score for the South Edmunds Street site was 72.1, the CCFM site was 64.8, the Rainier Vista site was 56.1, and the Zion Prep site was 51.0. This indicates that the South Edmunds Street site is the top ranking alternative.

Table 3: Scores from Site Analysis for each of three stakeholder groups.

	CCFM	South Edmunds St	Rainier Vista	Zion Prep
NFMA	64.7	68.2	54.6	50.9
Farmers	59.6	69.4	56.0	50.8
Shoppers	70.2	78.8	57.5	51.3
Unified	64.8	72.1	56.1	51.0

Source: Author

## Discussion

The Site Selection Tool should be used primarily as an indicator for the NFMA to help them choose the sites that need the most attention both for securing future leases, as well as those where influence in a possible redevelopment opportunity could yield a desired result. For example, the South Edmunds Street site scored highly against the other possibilities. However, for the South Edmunds Street site to be successful, the NFMA must continue to be involved in the redesign discussions and appear to be wholly committed, by supporting the site politically. Similarly, the Rainier Vista site could possibly be redeveloped in such a way as to accommodate the farmers market. The tool can also be used to determine which sites, out of those that could undergo some large

upgrades, the NFMA may want to pursue and begin discussions with the owners about locating on their property. Not only does the tool help with selecting the “best” site, but it also allows some flexibility to compare an existing site to the optimal site to figure out where time and energy should be spent on building alliances for bringing optimal site to fruition.

There are a few projects that could complement the discussion and work completed thus far. One is to compare the results from the site selection tool to Vance Corum’s (2007) point system for selecting farmers market sites. This will help to compare, validate, and continue the discussion surrounding how to select successful sites for farmers markets.

Another project to make the site selection model more robust would involve collecting weights from actual customers and vendors for the criteria. Although using the NFMA staff as a proxy was an adequate approach for the creation of this tool, collecting information from customers and vendors would further strengthen the application of the model. This could be completed by organizing an advisory group consisting of a representative sample of farmers and customers. This group would participate in a similar weighting exercise that the NFMA staff completed when establishing the existing weights. Each person would represent their own stakeholder group when completing the weighting exercise. The shoppers would weight the criteria like shoppers, and the vendors like vendors. These weights could then substitute the existing weights for each stakeholder group.

Another future area of research would be to attempt to figure out how to evaluate the possible market layouts criteria. The results of this project could lead to a conclusion that layout is insignificant, or establish an understanding of how to evaluate the ability of a site to accommodate preferred market layouts. The site selection tool model could be used by planners to help identify strategies to accommodate farmers markets more effectively.

The methodology presented and incorporated into the site selection tool can be used for other farmers market organizers or for other applications entirely. Other applications include evaluating option for locating other types of uses or making decisions where the criteria have different levels of importance. However, when using this methodology as a model reassessment must take place. Adding criteria that are not included in the current tool and using weights that are representative of stakeholder interests are important in order to arrive at results and information that is tailored to the specific organization.

Hopefully, this tool will be helpful to the Neighborhood Farmers Market Alliance as they move forward with finding new sites for farmers markets that have to vacate their current locations or that have not yet been founded. Whether relocating current markets or searching for new sites when founding a farmers market in a new neighborhood the tool will help to inform the NFMA about what to look for in a new site and how to convey the needs of a farmers market to parties interested in helping with the relocation or search. While politics, personal connections, and intuition will continue to play a role in site

selection, the site selection tool will help to provide a credible and reliable base for comparison and help to focus the NFMA's time and energy towards successful site selections.

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## Appendix A: Tables from Site Selection Tool

The following examples are spreadsheets from the Site Selection Tool created by the author.

### Input tab:

	Criterion	CCFM	
		Data	Notes
Location	Distance from Former Farmers Market Site	0	
	Distance to Neighborhood Retail Core	0	
	Distance to Community Landmark	0	
	Residential Density	2030	
	Traffic Intensity	54900	
	Transit Accessibility	21	
	Bike Parking	8	
	Parking with 2 hr limit	58	
	Pay for Parking	0	
	Nearby Sidewalks	100	
	Availability of off-site parking for farmers	0	Park on Street
	Visibility	3	
	Physical	Size	19280
Layout of Market		-	
Surface Condition		10	Asphalt
Grade		2	Check onsite
Number of possible entrances		3	
Public Restrooms		1	Restrooms for Vendors, still supplies Port-a-john
Covered Area		0	
Shaded Area		0	
Electricity		9	On the electric poles
Lights for night		2	Two light poles
Use Agreement	Storage	120	
	Cost to use site	225	\$5/vendor w/ 45 vendors
	Ability to stay at site into the future	2	
	Days/Time available for use	5	Monday-Friday

**Results tab**

Summary of Point Totals

	CCFM	S Edmunds St	Rainier Vista	Zion Prep
NFMA	65.4	71.6	52.4	52.0
Farmers	60.9	73.8	52.4	51.0
Shoppers	70.6	81.4	53.8	50.6
Together	65.6	75.6	52.9	51.2

Top two Sites for Each Category

	1st Choice	2nd Choice
NFMA	S Edmunds St	CCFM
Farmers	S Edmunds St	CCFM
Shoppers	S Edmunds St	CCFM
Together	S Edmunds St	CCFM

**Census Data tab**

The total population within a quarter mile of the site is: 455

Census Population Data

Geography	Total population:
Block 3002, Block Group 3, Census Tract 101, King County, Washington	112
Block 3003, Block Group 3, Census Tract 101, King County, Washington	66
Block 3004, Block Group 3, Census Tract 101, King County, Washington	39
Block 4013, Block Group 4, Census Tract 101, King County, Washington	24
Block 4014, Block Group 4, Census Tract 101, King County, Washington	32
Block 4015, Block Group 4, Census Tract 101, King County, Washington	42
Block 4002, Block Group 4, Census Tract 103, King County, Washington	41
Block 4003, Block Group 4, Census Tract 103, King County, Washington	80
Block 4004, Block Group 4, Census Tract 103, King County, Washington	19

**Transit Data tab**

Frequency	Transit Options							Total
Times	39N	39S	42N	48N	48S	LR N	LR S	Total
3-4	2	2	3	6	4	8	8	33
4-5	3	3	2	5	6	10	10	39
5-6	2	4	2	5	6	10	10	39
6-7	1	4	3	4	4	8	8	32

**Weights tab**

Category	Criterion	NFMA	Farmers	Shoppers	Unified
<b>Location</b>	Distance from Existing Farmers Market	5.2	3.8	5.0	4.6
	Distance to Neighborhood Retail Core	3.6	3.3	6.8	4.6
	Distance to Community Landmark	2.3	1.5	3.5	2.4
	Residential Density	5.2	7.9	4.4	5.8
	Traffic Intensity	3.6	3.3	2.3	3.1
	Transit Accessibility	3.6	0.9	4.1	2.9
	Bike Parking	1.1	0.4	3.0	1.5
	Parking with 2 hr limit	4.5	6.0	10.4	7.0
	Pay for Parking	2.9	2.0	4.6	3.2
	Nearby Sidewalks	2.9	1.3	5.3	3.1
	Availability of off-site parking for farmers	3.9	6.1	0.4	3.4
	Visibility	5.0	7.1	4.2	5.5
<b>Physical</b>	Size	6.6	5.9	8.3	6.9
	Layout of Market	0.0	0.0	0.0	0.0
	Surface Condition	5.5	4.9	3.6	4.7
	Grade	4.1	4.6	3.3	4.0
	Number of possible entrances	1.4	2.0	3.9	2.4
	Public Restrooms	3.0	2.9	4.4	3.5
	Covered Area	2.7	5.1	3.7	3.8
	Shaded Area	2.9	4.2	4.2	3.8
	Electricity	3.8	4.8	1.5	3.3
	Lights for night	2.2	2.7	2.1	2.3
Storage	5.4	0.6	0.0	2.0	
<b>Use Agreement</b>	Cost to use site	6.8	5.3	0.5	4.2
	Ability to stay at site into the future	8.0	9.2	4.2	7.1
	Days/Time available for use	4.0	4.2	6.3	4.8
<b>Total Sum:</b>		100	100	100	100

**Calculations tab**

	Minimum	Maximum	Denominator
Distance from Formers Farmers Market Site	0.00	0.30	0.30
Distance to Neighborhood Retail Core	0.00	0.20	0.20
Distance to Community Landmark	0.00	0.15	0.15
Residential Density	0.00	2201.00	2201.00
Traffic Intensity	0.00	54900.00	54900.00
Transit Accessibility	0.00	39.00	39.00
Bike Parking	0.00	8.00	8.00
Parking with 2 hr limit	0.00	58.00	58.00
Pay for Parking	0.00	0.00	0.00
Nearby Sidewalks	0.00	100.00	100.00
Availability of off-site parking for farmers	0.00	0.00	0.00
Visibility	0.00	4.00	4.00
Size	10000.00	32000.00	22000.00
Layout of Market	----		
Surface Condition	0.00	10.00	10.00
Grade	0.00	3.00	3.00
Number of possible entrances	1.00	4.00	3.00
Public Restrooms	0.00	1.00	1.00
Covered Area	0.00	24000.00	24000.00
Shaded Area	0.00	16000.00	16000.00
Electricity	1.00	10.00	9.00
Lights for night	0.00	2.00	2.00
Storage	0.00	120.00	120.00
Cost to use site	0.00	300.00	300.00
Ability to stay at site into the future	0.00	10.00	10.00
Days/Time available for use	1.00	7.00	6.00
Explanation			max-min

	Effectiveness Scores			
	CCFM	S Edmunds St	Rainier Vista	Zion Prep
Distance from Formers Farmers Market Site	0.00	0.00	1.00	0.37
Distance to Neighborhood Retail Core	0.00	0.00	0.10	1.00
Distance to Community Landmark	0.00	0.00	0.73	1.00
Residential Density	0.92	0.92	1.00	0.72
Traffic Intensity	1.00	1.00	0.59	1.00
Transit Accessibility	0.54	0.54	1.00	0.72
Bike Parking	1.00	1.00	0.00	0.00
Parking with 2 hr limit	1.00	1.00	0.22	0.86
Pay for Parking	1.00	1.00	1.00	1.00
Nearby Sidewalks	1.00	1.00	0.90	0.95
Availability of off-site parking for farmers	1.00	1.00	1.00	1.00
Visibility	0.75	1.00	0.75	0.00
Size	0.42	0.80	1.00	0.20
Layout of Market				
Surface Condition	1.00	1.00	0.30	1.00
Grade	0.67	1.00	0.67	1.00
Number of possible entrances	0.67	0.67	1.00	0.00
Public Restrooms	1.00	1.00	0.00	1.00
Covered Area	0.00	0.00	0.00	0.20
Shaded Area	0.00	0.00	0.11	0.00
Electricity	0.89	1.00	0.44	0.22
Lights for night	1.00	1.00	0.50	1.00
Storage	1.00	0.00	0.00	0.00
Cost to use site	0.75	1.00	0.00	0.00
Ability to stay at site into the future	0.20	1.00	0.50	0.50
Days/Time available for use	0.67	1.00	1.00	1.00
Explanation	Input - Min / Denominator			

	Calibration for Inverted Scales			
	CCFM	S Edmunds St	Rainier Vista	Zion Prep
Distance from Formers Farmers Market Site	1.00	1.00	0.00	0.63
Distance to Neighborhood Retail Core	1.00	1.00	0.90	0.00
Distance to Community Landmark	1.00	1.00	0.27	0.00
Residential Density	0.92	0.92	1.00	0.72
Traffic Intensity	1.00	1.00	0.59	1.00
Transit Accessibility	0.54	0.54	1.00	0.72
Bike Parking	1.00	1.00	0.00	0.00
Parking with 2 hr limit	1.00	1.00	0.22	0.86
Pay for Parking	0.00	0.00	0.00	0.00
Nearby Sidewalks	1.00	1.00	0.90	0.95
Availability of off-site parking for farmers	0.00	0.00	0.00	0.00
Visibility	0.75	1.00	0.75	0.00
Size	0.42	0.80	1.00	0.20
Layout of Market				
Surface Condition	1.00	1.00	0.30	1.00
Grade	0.67	1.00	0.67	1.00
Number of possible entrances	0.67	0.67	1.00	0.00
Public Restrooms	1.00	1.00	0.00	1.00
Covered Area	0.00	0.00	0.00	0.20
Shaded Area	0.00	0.00	0.11	0.00
Electricity	0.89	1.00	0.44	0.22
Lights for night	1.00	1.00	0.50	1.00
Storage	1.00	0.00	0.00	0.00
Cost to use site	0.25	0.00	1.00	1.00
Ability to stay at site into the future	0.20	1.00	0.50	0.50
Days/Time available for use	0.67	1.00	1.00	1.00

**Applying Weights tab**

	<b>CCFM</b>			
	<b>NFMA</b>	<b>Farmers</b>	<b>Shoppers</b>	<b>Together</b>
Totals	65.4	60.9	70.6	65.6
Distance from Formers Farmers Market Site	5.2	3.8	5.0	4.6
Distance to Neighborhood Retail Core	3.6	3.3	6.8	4.6
Distance to Community Landmark	2.3	1.5	3.5	2.4
Residential Density	4.8	7.3	4.0	5.4
Traffic Intensity	3.6	3.3	2.3	3.1
Transit Accessibility	1.9	0.5	2.2	1.5
Bike Parking	1.1	0.4	3.0	1.5
Parking with 2 hr limit	4.5	6.0	10.4	7.0
Pay for Parking	0.0	0.0	0.0	0.0
Nearby Sidewalks	2.9	1.3	5.3	3.1
Availability of off-site parking for farmers	0.0	0.0	0.0	0.0
Visibility	3.8	5.4	3.2	4.1
Size	2.8	2.5	3.5	2.9
Layout of Market	0.0	0.0	0.0	0.0
Surface Condition	5.5	4.9	3.6	4.7
Grade	2.7	3.0	2.2	2.7
Number of possible entrances	1.0	1.3	2.6	1.6
Public Restrooms	3.0	2.9	4.4	3.5
Covered Area	0.0	0.0	0.0	0.0
Shaded Area	0.0	0.0	0.0	0.0
Electricity	3.4	4.2	1.3	3.0
Lights for night	2.2	2.7	2.1	2.3
Storage	5.4	0.6	0.0	2.0
Cost to use site	1.7	1.3	0.1	1.1
Ability to stay at site into the future	1.6	1.8	0.8	1.4
Days/Time available for use	2.6	2.8	4.2	3.2

## **Appendix B: The Helpful Hint Handbook**

### **How to use the Farmers Market Site Selection Tool**

The following is a suggestion on how to proceed to measure and fill out the site selection tool. Reviewing the explanation and intent of each criterion in the main text will be helpful before measuring and completing the site reviews. The first six criteria can be measured using data from the Internet. Some of the rest of the data require either a site visit or gathering information from someone who is knowledgeable about the possible agreement with the farmers market organizer. The criteria covered in the handbook are those where finding and deciphering the information is most difficult.

#### *Getting Started*

1. Map the quarter and eighth of a mile circles around the site.

To start, locate the site on a map. Google has good maps, but sometimes the scale bar doesn't print off. You can estimate the scale from the computer monitor, or make a photocopy of a detailed road map. Draw two circles with the site as the center. Make one with a radius of a  $\frac{1}{4}$  mile (1320 feet), and the other with a radius of an eighth of a mile (660 feet). These will help to keep track of where measurements need to be taken.

#### *Residential Density*

To find the total population within a half mile of the site, the Census Bureau's Factfinder is a good proxy for current population, even though the data is from the previous census.

If other data is available that was more recently collected and available for all of the comparison sites, feel free to use that instead.

1. Select Census blocks within a quarter-mile.

To find the census data first go to <http://www.census.gov>. Then click on the “American Factfinder” link. Then find the “Decennial Census” category and click “get data.” Make sure the “Census 2000 Summary File 1” is selected and click “Detailed Tables.” Select the “map” tab at the top, which will allow you to select by location. First click the link to reposition on “a street address” and enter in the appropriate information. Cross streets will work here, and don’t forget the zip code. Alternatively, you can input latitude or longitude, which you can get off of Google maps, but this is not necessary. Go to the drop down menu under “Select/Deselect:” and click on “Block.” This will allow you to select blocks, which will yield a more specific level of data. Now just click each block on the map you would like to add to the list. If you accidentally selected a block, click it again to deselect. Select all of the blocks that are mostly within the quarter mile circle you’ve drawn on the map using the streets as a reference. You may have to change the view on the census map to see all of the blocks within the circle.

2. Download the Total Population data for the Census blocks.

Once you are done selecting the blocks, scroll down and click the “next” button. Then select “P1. Total Population” (there are many other types of information as well, but this is the only one relevant for the criterion) and click “add.” Then click the “show result” button. Hover over the “Print/Download” bar and click “download.” Then select under the “zip file” heading, “Microsoft Excel (.xls)” and click “ok.” Download the file and open the zip folder. Open the excel file named “dt\_dec\_2000\_sf1\_u\_data1” and in it you will find the population by census block.

3. Copy the data into the Site Selection Tool

Copy the relevant information (the Geography and Total population column) into the tool under the tab labeled “Census Data.” If you are downloading new information for each site, delete the existing information (print it off if you want a copy) to be sure that you are only counting information from the site you are currently working on.

### *Traffic Intensity*

1. Download the Traffic Flow map

Use the Traffic Flow map produced by the City of Seattle Department of Transportation (SDOT). This map can be found on the SDOT

website. The current link as of May 20, 2008 is  
<http://www.seattle.gov/transportation/tfdmaps.htm>.

2. Identify major streets that go through the quarter-mile circle.

Use the  $\frac{1}{4}$  mile circle on your map to identify which streets are within a quarter mile of the site. Look at the Traffic Flow map to see if any of those streets are represented. Not all of them are well labeled, but use your best judgment. If a street is represented, it means that SDOT has done a traffic count for that street.

3. Add up the number of trips that travel near the site.

Use the legend to estimate the number of trips if there is no number label. Add up the trips for each road that is within the  $\frac{1}{4}$  mile circle to get the input number for the tool.

### *Transit Accessibility*

1. Locate nearby transit routes (bus, light rail, etc.) within an eighth of a mile.

To calculate the transit accessibility, use the eighth of a mile circle on your map to determine where possible transit stops could be located.

Remember to consider bus, future light rail, or street car when counting transit trips. If using Google maps, zoom in far enough until the map shows bus stops. This works for Seattle, WA since Google uses data from Metro. Clicking on the bus icons shows which bus stops at that

point. It is possible that there is more than one stop for a bus line within the eighth of a mile circle. This criterion only counts the number of times a bus goes through the eighth of a mile circle over the course of an hour, not how many times it stops.

2. Fill out the “transit data” table in the Site Selection Tool.

Find all of the bus routes that stop within the eighth of a mile circle and put them in the tool tab labeled “transit data.” Be sure to include Northbound and Southbound routes, even though they may have the same number, they are essentially different bus routes since they are going to different places. Also adjust the times so that they are appropriate to the market. If the market is scheduled between the hours of 3pm – 7pm, then split the time by hours (3-4pm, 4-5pm, 5-6pm, 6-7pm) over the duration of the market.

3. Fill out the timetable information for each route.

Next go to the Metro King County website, <http://transit.metrokc.gov/>, or another appropriate transit website (e.g., Sound Transit, Community Transit...), and look up the timetables for each bus route. Choose the closest time point on the schedule, since most likely there won't be one right next to the site. Be sure that the bus that you are counting actually travels near the site, since some of the buses have multiple “end routes”

(e.g., the 48 goes to Rainier Beach OR Columbia City depending on the bus) or terminate early. Then count the number of buses that are scheduled during each hour and fill out the transit table in the spreadsheet. Use the time shown at the time point for whether it is a 3-4pm bus, instead of trying to estimate the “actual” time that the bus will stop near the site.

4. Don't forget about other transit.

For the light rail line, current Sound Transit publications state that the trains will leave every 6 minutes during rush hour and 10 – 15 minutes during midday and evening hours.<sup>28</sup>

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<sup>28</sup> “Link Light Rail,” Sound Transit, 23 May 2006, <[http://www.soundtransit.org/documents/pdf/projects/link/FACT\\_Link.pdf](http://www.soundtransit.org/documents/pdf/projects/link/FACT_Link.pdf)>.

## Appendix C: Examples of Farmers Market Layouts

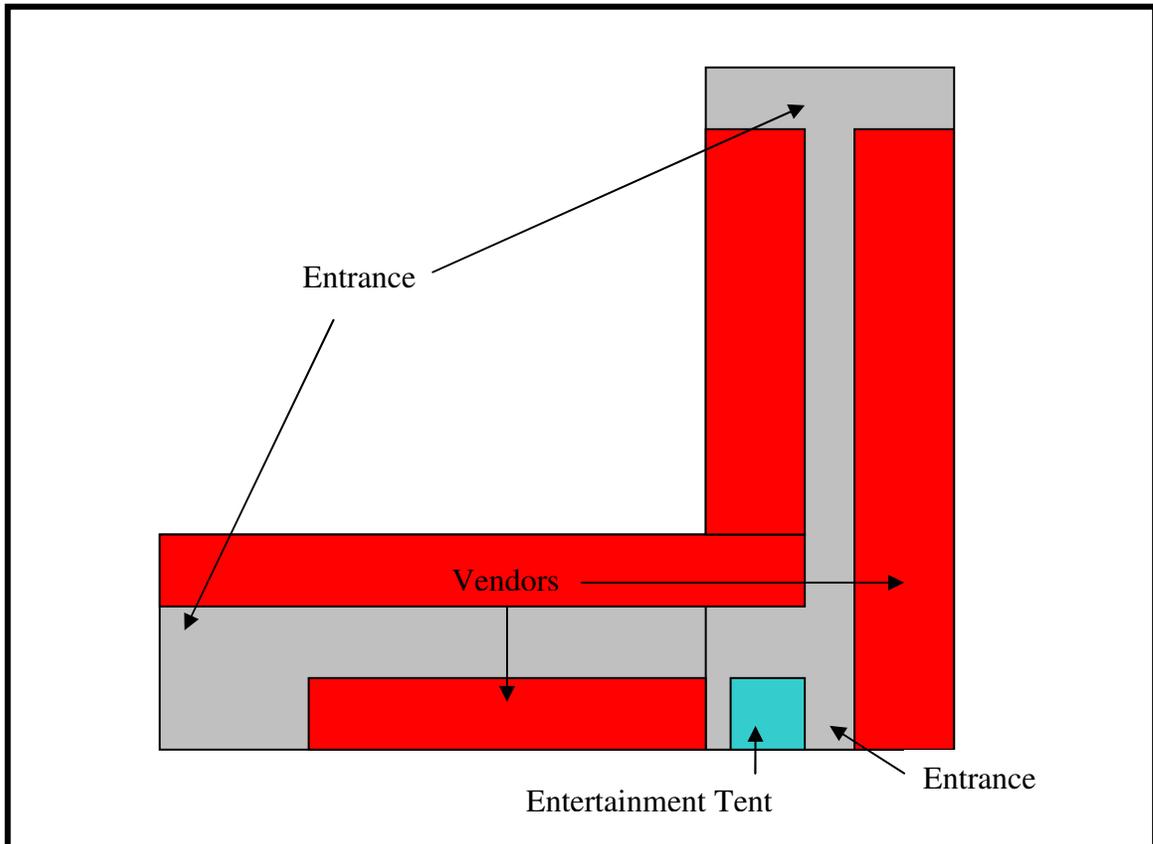
The following are diagrams of Seattle farmers markets that are busy and seem to be well liked by vendors and shoppers. The diagrams are not to scale and are meant to show the variety of market layout and subsequent issues of evaluating sites for their layout potential.

### Ballard Sunday Farmers Market



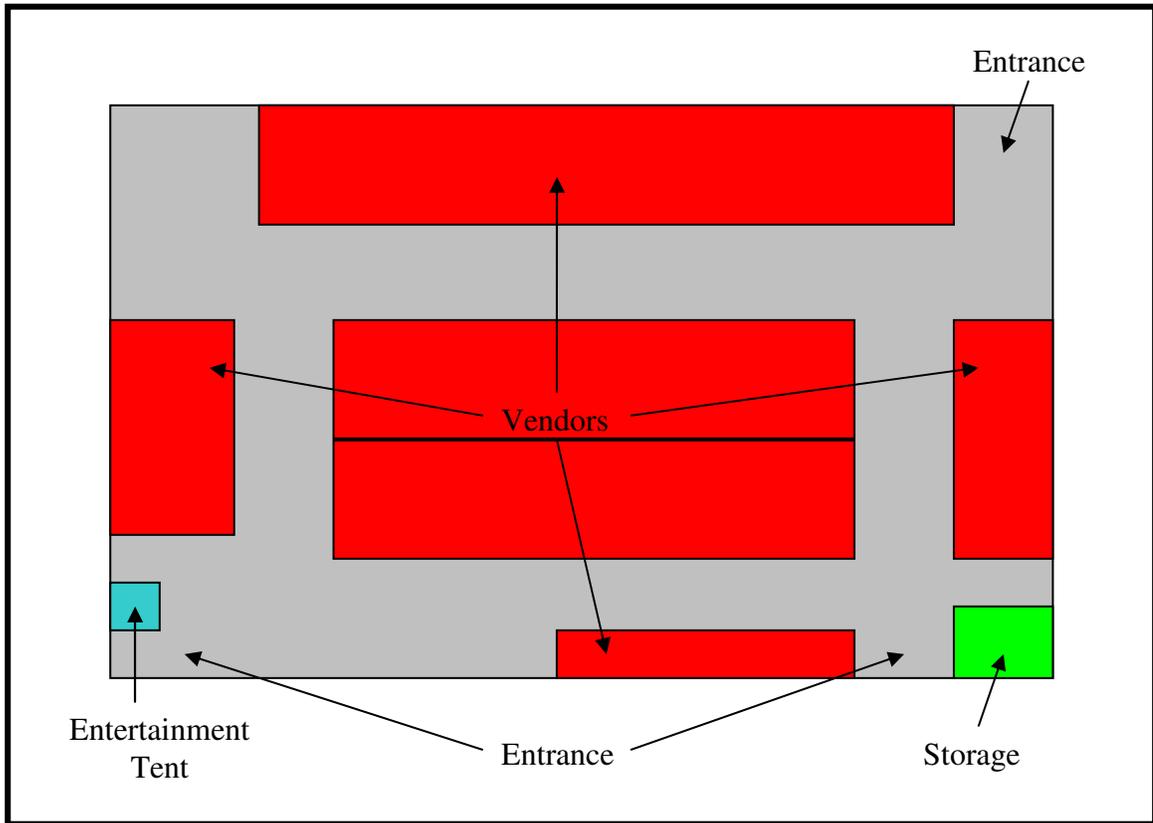
The Ballard Sunday Farmers Market is a model of a linear market with vendors back to back to one side of Ballard Avenue. The street is closed on market days and there is room for pedestrians to walk along the sidewalk on one side of the vendors and in the street and sidewalk on the other side. There are shops and cafes lining both sides of Ballard Avenue. The market runs year-round.

## Broadway Farmers Market



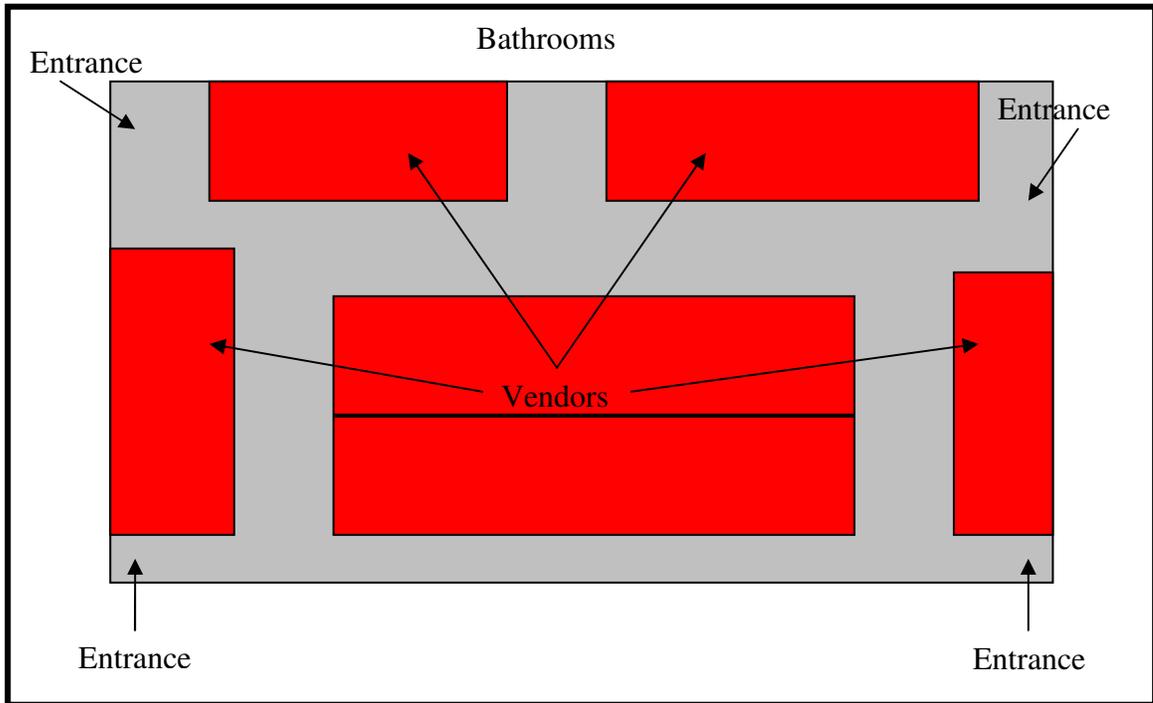
The Broadway Farmers Market is an L-shaped market with vendors on both sides of the aisle. The market is held in a Bank of America parking lot on Sundays. There are three entrances, two a short walk from Broadway and the third on a parallel street. There is an entertainment booth in the center. The market is held during the late spring, summer, and early fall.

## Columbia City Farmers Market



The Columbia City Farmers Market is located on the parking lot of the Columbia Plaza, a small strip mall. The market occupies a rough circular layout with vendors lining the inside back-to-back. There is an entertainment space and storage on the site. There are three main entrances, though some of the edges to the site are a bit porous (e.g., knee high walls or landscaping along the sidewalk). The market is open during the late spring, summer, and early fall.

### University District Farmers Market



The University District Farmers Market uses a circular layout with one part of the circle containing vendors on only one side (the part along NE 50<sup>th</sup> Street). The market is held on Saturdays in the parking lot of a former school now used as a community center. There are four entrances and a high fence surrounds the rest of the market. The market functions year-round.