3. Scenic Views and Viewpoints

3.a. Approach and Methodology

A view is an aesthetically pleasing landscape or scene comprised of one or more visual features; the visual feature(s) may be natural or built. A viewpoint is a distinct point or platform from which a view can be observed; the point or platform may be developed with benches, signs, lighting, etc. or simply be a publically accessible point from which one can take in a view. In order to inventory scenic views and viewpoints, the following approach was followed:

1. **Map existing inventoried scenic views and viewpoints**
2. **Identify new scenic views and viewpoints**
3. **Document scenic views and viewpoints**
4. **Evaluate scenic views and viewpoints**
5. **Score, rank and group scenic views and viewpoints**

1. Map Existing Inventoried Scenic Views and Viewpoints

Viewpoints and their associated views were identified through past planning efforts including: *Terwilliger Parkway Corridor Plan* (1983), *Willamette Greenway Plan* (1987), *Central City Plan* (1988), *Scenic Resources Protection Plan* (1991), *Central City Plan District* (1992) and *South Waterfront Public Views and Visual Permeability Assessment* (2006). Each plan had a different methodology for identifying and documenting views and viewpoints.

The existing viewpoints were digitized and arrayed using GIS. Because of the scale of the original mapping and different technologies used from 1983-2006, some assumptions were made during the digitizing process. Therefore, the exact location of some viewpoints had to be adjusted to reflect on-the-ground conditions. Staff used the field notes from the original plans to help adjust the viewpoints. An existing viewpoint was not moved to obtain a "better view." If a better view was available at a location with no previous viewpoint, a new viewpoint was added.

2. Identify New Scenic Views and Viewpoints

Potential new views and viewpoints were identified in a number of ways.

A. Central City staff identified potential new views and viewpoints. As part of the Central City 2035 project, staff formed advisory committees to help develop goals, policies and actions for the plan. In the course of that work, including meetings and public events, some viewpoints and views were identified by the advisory committee members and staff.

B. The inter-bureau technical committee identified potential new views and viewpoints based on the work each of the bureaus is conducting.

C. The public nominated potential new views and viewpoints. The criteria for nominating a new view were:
   - The viewpoint may be located within or outside of the Central City. However, the view itself must be of the Central City or features within the Central City or a view across the Central City. For example, the viewpoint may be a street located within the Central City and the view be of the West Hills.
   - The focus of the view must be a natural feature (e.g., Mt St Helens, Willamette River, a park), the skyline or portion of the skyline in general, or a built feature that is in public ownership (e.g., Hawthorne Bridge, City Hall).
   - Views of exclusively privately owned features (e.g., buildings, statues) are not eligible for inclusion as a scenic resource; however may be included as a primary focal element of a view when in combination with other visual features such as mountains, hills or bridges.
   - Public access and safety is important. The viewpoint should be safely accessible from a sidewalk, bike lane, trail, path or other defined and visible access way. If the viewpoint is accessed by automobile, the driver of the vehicle should be able to safely pull out of traffic at a minimum of one location to enjoy the view.
   - Viewpoints must be located on public property, within a right-of-way or on property that is accessible to the general public. Viewpoints located on private property that are not accessible to the general public are not eligible for the Scenic Resources Inventory. Examples of eligible viewpoints are those located in a publically-owned park or natural area, on a trail or street, in a publically-held easement, or on land owned by a park or natural area trust or non-profit organization.

   The nomination process was open from July 15 - August 8, 2014. The public nomination process was advertised through a press release to the major media publications and through the bureau's electronic news.

D. During the field visits to existing viewpoints, staff occasionally identified a nearby point that could provide a better view of the same visual focal points or a new view of a different visual focal point. In this situation, a new viewpoint was documented *in addition* to the existing viewpoint. The most common reason for adding a new viewpoint near an existing viewpoint was a change in vegetation resulting in partial obstruction of the original view.

3. Document Scenic Views and Viewpoints

All existing and potential new views and viewpoints that met the Scenic Resources Inventory criteria for inclusion in this Central City inventory update received one or more field visits. The first round of field visits occurred between July and September 2014, during the "leaf-on" season. Staff performed additional site visits to locations where vegetation was significantly blocking the view during the "leaf-off" season (December 2014 through March 2015). Finally, the Greenway Trail on the western bank in the southern part of the Central City was under construction and inaccessible between July 2014 and

May 2015. The trail opened May 14, 2015 and staff were able to document the viewpoints located along the trail in June.

Data Collection

In order to systematically and thoroughly document views and viewpoints, a field assessment guide was developed. The guide included a list of all the elements to be documented for every existing and potential new view and viewpoint as well as requirements for photographing the view. A geodatabase was created to allow for documenting and comparing a wide range of resources and consistently recording similar information for each resource. Staff used ArcGIS Collector as the platform for gathering data in the field.

The elements included in the field assessment drew on the *Scenic Resources Protection Plan* (1991) and methodologies identified in the case studies. The field assessment elements that were documented included:

1. Background information
   - **Date:** The date the field visit was performed.
   - **Address:** The viewpoint's location or nearest intersection was recorded.
   - **Ownership:** Ownership of the viewpoint was documented. If the city is the owner, the specific bureau that has jurisdiction was documented. If the viewpoint was within the street right-of-way, it was recorded as ROW.

2. Characteristics of the Viewpoint
   - **Size of Viewpoint:** The approximate size of the viewpoint was noted.
   - **Developed Viewpoint:** A developed viewpoint is one that was specifically developed as a point from which to enjoy the view. Many viewpoints do not have a specific spot designated/developed to enjoy the view. This is an important criterion for understanding the amount of public investment in the view from that location.
   - **Viewpoint Amenities:** Whether or not the viewpoint is formally developed, there may be amenities that contribute to the viewing location. All the amenities that support the viewpoint, including, but not limited to, benches, a platform, fencing, interpretive signs, lighting, bathrooms, etc., were documented.
   - **Access to the Viewpoint:** Access to the viewpoint could be by: street, bike lane, sidewalk, formal trail, informal trail or other (described in notes). All ways the viewpoint can be accessed were recorded. There is no information available about ADA access to viewpoints. However, staff did indicate if the viewpoint seemed to support ADA access.
   - **Public Transit near Viewpoint:** There is a public transit stop located within 2 blocks of the viewpoint.
   - **Parking near Viewpoint:** There is a public parking lot or on-street parking immediately adjacent to the viewpoint.
   - **Safety of the Viewpoint:** How safe does the viewpoint feel? The access way is visible, clear and includes space to enjoy the view. If the viewpoint is accessed by automobile, the driver of the vehicle is able to safely pull out of traffic at a minimum of one location to enjoy the view. If the access, viewpoint or view corridor feels unsafe, an explanation was provided.

Note – Previously inventoried viewpoints that were not accessible due to safety concerns were retired. Please see Appendix E for an explanation of why each viewpoint was retired.

- **Amount of Use of the Viewpoint in General:** Based on the location of the viewpoint and how accessible it is, approximately how much annual use does the viewpoint get in general? General use means the number of people at the site, regardless of if they are taking in the view. No counts were performed. Amount of use was estimated based on general knowledge of the site and takes into consideration the seasonal use of places such as the Rose Garden. Amount of use was recorded as low (e.g., Tanner Springs Park), moderate (e.g., West Moreland Park), high (e.g., Forest Park) or very high (e.g., Tom McCall Waterfront Park, Portland Zoo, Pioneer Courthouse Square).
- **Amount of Use of the Viewpoint as a Viewpoint:** How much use does the viewpoint get *as a viewpoint*? In other words, how many people are there to take in the view? Amount of use as a viewpoint was estimated based on the experience of staff during field visits and based on basic internet image searches. Amount of use as a viewpoint was recorded as low (e.g., SW 2nd Avenue and SW Salmon Street's view of Salmon Street Springs), moderate (e.g., the Eastbank Esplanade's view of the city skyline from the Eastbank Esplanade), or high (e.g., Pittock Mansion's view of Mt Hood and the city skyline).

3. Characteristics of the View
   - **Viewing Direction:** The general direction of the view was documented in the field as N, NNE, NE, ENE, E, ESE, SE, etc. If the view includes a wide horizontal angle, the centroid direction of the view was recorded. The general view direction was noted in the field and then corrected using GIS to produce a numeric degree.
   - **Viewing Angle (horizontal):** The width of the view was recorded in the field using a digital angle finder.
   - **Viewing Distance:** The primary focal elements are in the:
     - Foreground – 0 - 0.5 mile
     - Midground – 0.5 - 5 miles
     - Background – 5 - 15 miles
     - Far background – 15+ miles

     If the primary focal elements are located at different distances, more than one was chosen.
   - **Scenic Category of View:** The scenic category is the type of view and may include more than one of these categories:
     - Panorama – an expansive view; typically at least 90° of unobstructed view
     - Overlook – an overview from a viewpoint where the viewer is in a superior position
     - Distant View – a view of a focal element in the far background; may be a peripherally framed view (e.g., a framed view of Mt Hood)
     - Enclosed View – a close-in, framed view (e.g., a framed view of a building or a bridge)
     - Feature – a specific feature, landmark or structure
   - **Character of the View:** The general character of the view was defined as:
     - Natural – mountains, hills, forest/woodland, meadow, open land, wetland, stream, river or a natural area park
     - Groomed Open – golf course, ball fields, campus greens
     - Urban – residential, commercial/office, industrial, hardscape park

    - Rural – agricultural, residential development on lots larger than 0.5 acre
    - Other
- **Visual Focal Points of the View:** The focal points are the components that form the landscape or setting and are foci of the view. Options that could be included were: river, stream, wetland, vegetation, mountain, hills, bridge, building, trail, road, sculpture/art, historic site, culturally significant site, and/or other. Both primary and secondary focal points were documented.
- **Discordant Elements in the View:** Discordant elements are things that interfere with the enjoyment of the view. Power-lines, street lights, overgrown vegetation, buildings, structures, fencing, disrepair, and other physical changes that negatively affect the perception of the view were documented.
- **View is at Risk:** Is the view itself at risk of being blocked? If yes, what is putting the view at risk? Would future development block the view; is vegetation becoming overgrown?
- **Field Observations:** Any important notes about the viewpoint and/or view were documented.
- **Notes:** If the viewpoint was relocated, the original and updated locations were documented under notes.

Photographs

At each view and viewpoint staff took photographs with a Nikon D7000 camera with a Nikon AF-S DX NIKKOR 18-105mm f/3.5-5.6G ED VR lens using the raw NEF format. The camera was set to the landscape scene function. A standard setting of 35mm was used. For all viewpoints, one or more pictures of the view were taken on a tripod set with the center of the lens at 5' 6" from the ground, the average human's eye level. For panoramas, multiple photographs were taken to capture the full horizontal scope of the view; these photos were then stitched together in Photoshop using Photomerge set to Auto layout with the blend images together, vignette removal, and geometric distortion correction boxes checked. As much as was possible, views looking to the west were photographed in the morning and views looking to the east were photographed in the afternoon in order to minimize glare from the sun.

A minimum of two pictures were taken of each view. Pictures included:

1. **The focal elements of the view.** This picture was as true to how the view is experienced by the viewer as possible. One picture was taken from the viewpoint centroid and centered on the primary focal elements. For panoramic views, multiple pictures were taken to capture the entire view and then stitched together in Photoshop.
    a. If possible, one picture was taken from the same location and angle as the 1989 original photo was taken. This allowed for evaluation of how the view has changed over the past 25 years.
2. **The viewpoint itself.** At least one picture of the viewpoint was taken from the vantage of approaching the viewpoint from the primary access route. Any structures that were part of a developed viewpoint (e.g., benches or platform) were included in the picture.
3. **Discordant elements.** Anything that interferes with the view (e.g., vegetation, power-lines, etc.) was photographed. If there were no discordant elements or if the discordant elements were

adequately captured in the photos of the view and/or viewpoint, no additional picture was required.

4. Retiring Viewpoints

As part of this process, several viewpoints are recommended for retirement. A list of retired viewpoints, along with a detailed explanation of why the viewpoint was retired, can be found in Appendix E. Viewpoints were retired if they met any of the following criteria:

1. **There is no identifiable view from the viewpoint**. If development has mostly obscured a view from a specific viewpoint, that viewpoint was retired. Views that are partially or fully blocked by overgrown vegetation were not retired because, through removal and maintenance of the vegetation, the view could be re-established.
2. **The viewpoint is on private property**. If the viewpoint was on private property, or if the only way to access a viewpoint was via private property, the viewpoint was retired with the following exception: Willamette Greenway Plan (1987)-designated viewpoints located on private property and not currently publically accessible were not retired. The Willamette Greenway Zoning Code requires that the viewpoint be developed when the Greenway Trail is built. These viewpoints were kept in the inventory and should be re-evaluated as part of a future update to the Willamette Greenway Plan.
3. **There is no safe way to access the viewpoint**. For example, if the viewpoint was located along a street and there was no safe place to pull a car over out of traffic and no sidewalk to walk to the viewpoint, then the viewpoint was retired.

When a viewpoint was retired, staff made every effort to find a similar viewpoint with a similar view — either existing or that could be added to the inventory — to take the place of the retired viewpoint.

Viewpoints located outside of the Central City, and where development or vegetation within the Central City would not block the view, were not included in this inventory. Viewpoints not included in the Central City SRI update — but in the 1991 *Scenic Resources Protection Plan* — remain protected through that previous effort. Viewpoints that are retired will no longer receive formal protection.

5. Evaluate Views and Viewpoints

The evaluation of views to determine the quality and importance of features of the view was performed by an expert panel. The evaluation of viewpoints to determine their degree of development, accessibility and use was performed by staff. Appendix B provides a detailed explanation of the methodology used to evaluated views and viewpoints. Below is a summary of the methodology.

View Evaluation Methodology

The project consultant developed an evaluation methodology for views that was intended to help:

1. Portland prioritize views of greater scenic quality for potential protection.

2. Identify specific attributes of certain views that are important to retain.

To evaluate the views, the project consultants convened a group of experts comprised of seven people with training in landscape architecture or urban design and/or familiar with Portland and Portland culture. In addition, the panel was diverse in gender, age, ethnic background and geographic location (e.g., people who live or work in Portland or are from other cities but are very familiar with Portland). Panel members included:

- **Brad Cownover** – Head landscape architect for Region 6 of the U.S. Forest Service, headquartered in Portland. Mr. Cownover manages the scenic resource program for the Forest Service in Oregon and Washington. He is the former director of scenic conservation services for Scenic America and is one of the nation's leading authorities on scenic resources.

- **Jurgen Hess** – Landscape architect retired from the U.S. Forest Service who resides in Hood River, Oregon. He was the Head Land Planner for the Columbia Gorge National Scenic Area and has many years of experience in scenic resource management.

- **Lloyd Lindley** – Consulting landscape architect and urban designer. He is past chair of the City of Portland Design Commission and served as co-chair of the Central City 2035, North/Northeast Quadrant Stakeholder Advisory Committee. He has also served on the Urban Forestry Commission, the American Society of Landscape Architects Urban Design Review Committee (Portland), and the Portland American Institute of Architects Urban Design Committee. Mr. Lindley is a Fellow of the American Society of Landscape Architects and an adjunct professor at the University of Oregon.

- **Paul Morris** – Landscape architect previously based out of Portland who now serves as President and CEO of Atlanta Beltline Inc. in Georgia. He has 30 years of experience in a wide array of projects, and was a founding partner in McKeever-Morris, a Portland planning and landscape architecture firm. Mr. Morris is a fellow and past president of the American Society of Landscape Architects.

- **Kate Schwarzler** – Landscape architect and principal at OTAK, a multi-disciplinary consulting firm. She is based in Denver, CO, but lived in Portland for several years. Ms. Schwarzler has more than 15 years of experience, and her expertise in visual resource management includes visual analysis and mitigation plans as well as large scale scenic resource inventories for public lands.

- **Ethan Seltzer** – Professor of Urban Studies and Planning at Portland State University. He is a recognized authority in the subjects of regional planning, regional development and the region of Cascadia. Mr. Seltzer served as the founding director of the Portland Metropolitan Studies, director of the Toulan School of Urban Studies and Planning, and as president of the City of Portland Planning Commission.

- **Judy Bluehorse Skelton** – Senior instructor in the Indigenous Nations Studies program at Portland State University. She is author of six collections of essays for teachers, including *Native*

America: A Sustainable Culture (1999), and *Lewis & Clark Through Native American Eyes* (2003). She wrote and recorded 24 segments on Health & Healing and Sacred Landscapes for Wisdom of the Elders radio programs, airing on Public Broadcasting and AIROS (American Indian Radio on Satellite). Ms. Skelton received the Oregon Indian Education Association's award for Outstanding Indian Educator in 2006, and she serves on the boards of the Urban Greenspaces Institute, Portland Parks and the Native American Community Advisory Council.

The experts received two separate packets of photos: first an upland photo packet, followed by a river packet a week later. The upland photos contain scenes where the Willamette River is not a primary focal feature. The river photos contain scenes where the Willamette River is a primary focal feature. The photographs were presented for rating in a random order, with each view assigned a numerical code. Some views were left out due to field factors, such as temporary blocking of a view (e.g., temporary fencing), lack of access (e.g., photos from Tilikum Crossing were not accessible due to construction) and/or weather constraints. For those reasons, the experts did not review every view. The views that were not evaluated by the experts were assigned a rank by the project consultants by extrapolating the expert evaluation results for similar views.

Before starting to rate the views, the experts were asked to quickly flip through all the photos to gain a sense of the diversity of views and to help frame their intuitive standards for rating all the criteria. They were then asked to go back through and provide ratings based on the criteria below. The experts were asked to rate each image on a scale of 0 to 10 for each criterion, with 10 being the highest rating possible and 0 meaning that specific criterion was not present in the view. The first three overall criteria are of the whole scene.

Overall Criteria

1. **Universal Scenic Quality** – This criterion refers to the scenic beauty of the view in an urban context. This is the instantaneous basic visual appeal. How much does the view draw one's attention and enjoyment, invite one to pause or rest a bit and look, to stop thinking or worrying about other matters, to remember the view, or to come back again (perhaps with another person).
2. **Essence/Iconic of Portland** – This criterion refers to the degree to which a view includes or expresses distinctive and unique content specific to Portland. This local expression may be simple and intuitively noticed or it might require some basic and generally held knowledge of the city's history, landscape evolution, cultural identities or collective sense of place.
3. **Portland Imageability** - This criterion tends to combine both of the above criteria, with the added dimension of strong place identification. An imageable view helps orient the viewer and helps her/him understand where she/he is in relation to a commonly shared mental map of Portland.

Upland Views Criteria

1. **Focal Features** - Elements of the view that draw the eye by virtue of scale, distinction, iconic attraction, and/or how the composition of the view leads the eye to them.
2. **Scenic Depth** - The extent to which a view is enhanced by the clear presence of, and interesting relationships among, two or three different distance zones, i.e. foreground and middle-ground and/or background; and/or because linear perspective or scenic composition effectively draws the eye into the view.
3. **Scenic Scope** - The extent to which the width of the horizontal cone of vision of a view and/or the spatial extent of landscape area visible enhances a view's quality.
4. **Urban Skyline** - The extent to which the form and interest of the shapes, colors and tops of an assemblage of buildings enhances a view's quality.
5. **Water** - The extent to which evident water features enhance a view's quality.
6. **Distant Vegetation** - The extent to which trees in the middle ground and/or urban-forest or forest cover in the background enhances a view's quality.
7. **Horizon and Ridge Tops** - The extent to which an uninterrupted length of horizon or ridge top (near or far) contributes to a view's quality by clearly defining landform(s), including mountains, and/or helping to define the extent of distant background landscape seen in the view.

Experts were given the chance to write in any other important features of each upland view that were not covered by the previous criteria.

<u>River View Criteria</u>

1. **Focal Features** - Elements of the view that draw the eye by virtue of scale, distinction, iconic attraction, and/or how the composition of the view leads the eye to them.
2. **Urban Skyline** - The extent to which the form and interest of the shapes, colors and tops of an assemblage of buildings enhances a view's quality.
3. **Form of Water Surface Boundaries** - The extent to which the shores of the Willamette River enhance a view's quality by virtue of how the edges of the river follow interesting forms, create perspective depth, or are well framed by shore structures.
4. **Vegetation** - The extent to which trees in the foreground and/or urban-forest or forest cover in the background enhances a view's quality.
5. **Horizon and Ridge Tops** - The extent to which an uninterrupted length of horizon or ridge top (near or far) contributes to a view's quality by clearly defining landform(s), including mountains, and/or helping to define the extent of distant background landscape seen in the view.

Experts were given the chance to write in any other important features of the river view that were not covered by the previous criteria.

If experts selected a rating of seven or higher for focal features, urban skyline, water, vegetation or horizon/ridge tops for either the upland or river views, they were asked to place a color-coded dot on the photograph to indicate the specific area that was important to the quality of the view. Experts were also asked to list primary and, if applicable, secondary focal points of the view. In addition, experts were

asked to list any highly discordant elements and indicate their location by placing a color-coded dot on it in each photo.

Viewpoint Evaluation

Along with the view itself, it is important to evaluate the point from which the view is observed. City staff performed an evaluation of each viewpoint using the following criteria:

1. **Developed viewpoint** – This was documented during field visits. A location may be developed in general, but if it is not developed specifically as a viewpoint it did not receive points under this criterion. A developed viewpoint would include at least one of the following improvements: pedestrian refuge or bump-out, automobile pull-out, bench, viewing telescopes, etc. A developed viewpoint indicates public investment in that location as a viewpoint.
   - Developed as a viewpoint = 1 point
   - Not developed as a viewpoint = 0 points

2. **Viewpoint accessibility** – This was documented during field visits and was based on the staff experience accessing the viewpoint. Access that is possible by car, bike and foot was documented along with whether the viewpoint had adjacent parking and if there was a transit stop within two blocks of the viewpoint.
   - Low accessibility = 0 points; the viewpoint is difficult to find and can only be accessed well by one mode of transportation.
   - Moderate accessibility = 0.5 point; the viewpoint is either difficult to find but can be accessed well by multiple modes of transportation. Or the viewpoint is easy to find but can only be accessed well by one mode of transportation.
   - High accessibility = 1 point; the viewpoint is easy to find and can be accessed well by multiple modes of transportation.

3. **Amount of use as a viewpoint** – This was documented during field visits and was based on observations during the field visits as well as professional knowledge regarding the use of different destinations in Portland. It is important to note that a viewpoint may have high use, but not as a viewpoint. For example, Tom McCall Waterfront Park has very high use; however, not all of the viewpoints in the park have high use as a viewpoint. To receive a score of 1, the viewpoint must be a destination for taking in a view. For example, people travel to Pittock Mansion specifically for the view of the city and Mt Hood. However, people using the Eastbank Esplanade may stop anywhere along it to enjoy views of the river, bridges and downtown skyline, but the entire Eastbank Esplanade is not a destination viewpoint.
   - Low use as a viewpoint = 0 points (e.g., SW 2nd Avenue and SW Salmon Street's view of Salmon Street Springs)
   - Moderate use as a viewpoint = 0.5 point (e.g., the Eastbank Esplanade's view of the city skyline)
   - High use as a viewpoint = 1 point (e.g., Pittock Mansion's view of Mt Hood and the city skyline)

6. Score, Rank and Group Views and Viewpoints

As previously explained, river views tended to receive higher scores than upland views. This is because river views contain water, and research shows that people favor views with water over those without. Thus, the methodology used to rank river views was different than that used to rank upland views.

Upland Views

Scoring Methodology

The project consultants ran a statistical analysis of the experts' results for the three overall criteria: universal scenic quality; essence/iconic of Portland; and Portland imageability. The analysis revealed that only the scores for the universal scenic quality were statistically "reliable," meaning that the results across all of the experts were similar enough to ensure that there was no bias in the scoring. Bias can be introduced in scoring by the viewer inadvertently comparing one view to the next, not applying them consistently to each view or because of simple personal preferences in what the viewer finds aesthetically pleasing.

The total score for a viewpoint is the experts' average score for *universal scenic quality* plus the three viewpoint evaluation scores (developed viewpoint, viewpoint accessibility and amount of use as a viewpoint). Each view/viewpoint could receive a total score of 13 points; 10 for universal scenic quality and three for the viewpoint.

The additional criteria were not used to provide an overall score for the upland views. However, this information is still included on the result page for each view to help the reader better understand why a view received a higher or lower score.

Ranking Methodology

Upland views, in combination with their associated viewpoints, were assigned a rank based on the experts' view evaluation and staff's viewpoint evaluation. Ranking the upland views is a way to organize the data into views/viewpoints that are higher quality, are more diverse and are well used as compared to views/viewpoints that are lower quality with less diversity and not well used.

To assign each upland view a rank, the total scores were divided into three tiers based on natural breaks. The three tiers were identified as follows:

Upland View Ranks
TIER I (high): 7.6 - 11.2 (n=17)
TIER II (medium): 4.6 - 7.5 (n=28)
TIER III (low): 0 - 4.5 (n=21)

River Views

Scoring Methodology

For the river views, the project consultants ran the same statistical analysis of the experts' results for the three overall criteria: universal scenic quality; essence/iconic of Portland; and Portland imageability. Here too the ratings of *universal scenic quality* were the most reliable across all experts. However, the reliability of the results for river views was lower than for upland views. This is because nearly all river views scored relatively high; therefore, the statistical analysis is misleadingly magnifying the small differences between the views. Because of this, the same approach to produce an overall score and rank for upland views could not be used for the river views.

An alternative approach was proposed by the project consultant to identify which river views are of slightly higher scenic value and which are of slightly lower scenic value among all the similar views. A signal detection method was used. The approach assess each expert's score for each view at rates it against that expert's own average score for all the other views. In other words, did a particular view score higher or lower than the average score for all the river views?

Grouping Methodology

River views that consistently received a higher than average score for universal scenic quality by all experts were assigned to Group A. River views that consistently received a lower than average scored universal scenic quality by all experts were assigned to Group C. The remainder of the views, all of which had mixed ratings and were scored to have approximately average universal scenic quality, were assigned to Group B.

7. Extrapolating Rankings

Some views from specific viewpoints were not sent to the experts for evaluation for the following reasons:

- The viewpoint was not accessible due to construction. This included views from the new Tilikum Crossing and views from along the Greenway Trail in South Waterfront.
- The view from the viewpoint was not documented due to weather or time constraints. Photos of views that were sent to the experts were only taken on completely sunny days and during the leaf-on season. Therefore, some views were not photographed prior to the expert review. (Photo documentation was made during or after the expert review).
- The view from the viewpoint was completely obscured by vegetation. Many existing viewpoints in the southwest hills, particularly along SW Terwilliger Boulevard, have overgrown vegetation that is blocking the view. The view from that viewpoint, taken during the leaf-off season, was added to the inventory after expert review.

In all situations, staff determined that it is important to keep the views/viewpoints in the inventory for future potential protection. When construction is completed, the viewpoints that are being developed as part of the construction will be open to the public. In the case of overgrown vegetation, vegetation management could re-establish the view.

It is not possible to extrapolate scores from the individual criteria from one viewpoint to the next because the results of the experts' scores for most of the detailed scenic composition criteria were unreliable. The project consultant took a different approach to rank or group the views that were not evaluated by the experts.

The consultant looked at the highest and lowest ranked/grouped views for both upland and river views to find common focal points as well as features or characteristics of the views that likely caused the experts to score the view high or low. The project consultants found that the commonalities among high and low scored views for both river and upland are strong enough that they provide a good predictive framework for ranking/grouping additional views.

Commonalities of higher ranked upland views included:

- Great depth of field out to 50 or more miles (20 of 22 highly rated upland views).
- Presence of certain focal features: 20 have skyline, Mt Hood, river and/or bridges prominently featured; bridges and the urban skyline are notable as favored features.
- All but three have natural vegetation in view.
- All are seen from viewpoints at comparatively mid to high elevation.
- Natural, semi-natural or well landscaped areas are in most of the highly rated upland views, often framing the view.
- The foreground is always free of discordance.

Commonalities of higher grouped river views included:

- Depth of field at least to middle ground distances (5 miles).
- Presence of upland terrain features, such as the West Hills or Cascades as a backdrop or a focal feature.
- Presence of one or more strong focal features, such as urban skyline, bridges, Mt Hood, and/or the West Hills.
- Presence of natural or semi-natural vegetation.
- Wide angle or panoramic views.
- Higher elevation viewpoints.

Common characteristics of low-rated views, both upland and river views, were the absence of the above commonalities. Nearly every low ranked/grouped view:

- Lacked depth of field.
- Was from a low vantage point.
- Did not have a clear focal point (or if it had one it was well off to the side).
- Had little or no natural vegetation.
- Had discordant features in the foreground, such as fencing, roads, utility lines, plain looking concrete piers, or construction debris.

When performing the extrapolation, the consultant also referred to the original instructions sent to the experts. The experts were asked to:

- 'Complete' the vertical extent of the images in their mind's eye when scoring each view.
- Ignore construction fencing in the picture and focus on the elements of the view beyond the fencing.

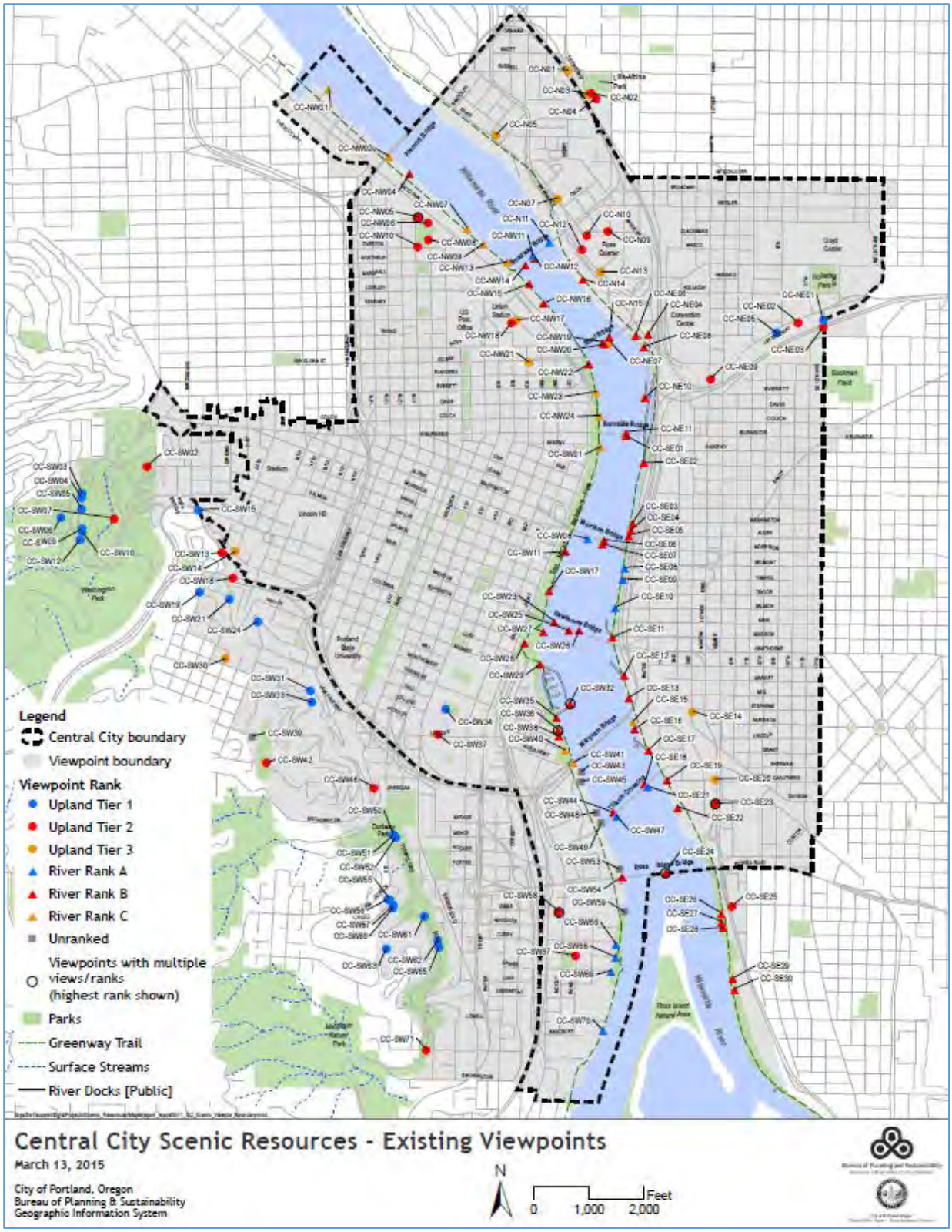
- Rate the views accounting for the extent to which the average viewer would focus beyond discordant features in the immediate foreground (e.g., overgrown vegetation, roads/rail lines) but might still be aesthetically affected by it.

The project consultant reviewed photos taken near the viewpoints that were not accessible due to construction as well as photos of views taken during or after the experts' reviews. When the view had many commonalities with the higher ranked/grouped views it was assigned to Tier I for upland or Group A for river views. When the view had very few or no commonalities with the higher ranked/grouped views it was assigned to Tier III for upland or Group C for river views. The remaining views were assigned a default rank of Tier II for upland or Group B for river views.

3.b. Scenic Views and Viewpoints Results

3.b.1. Analysis of Results

There are 151 views from 143 viewpoints included in the Central City Scenic Resources Inventory (see map 2). For the purpose of this inventory the viewpoints are then further split into quadrants based on the street grids for the city (NW, N, NE, SW, and SE).



Map 2: Scenic Views and Viewpoints

1. Analysis of Results

The project consultants performed analysis of the results for views and viewpoints.

River views, as expected, rated universally higher than upland views. This is consistent with scenic preference research that suggests the presence of water is a strong determinant in scenic quality. Only 12 out of 79 river views had an average rating of 5 or lower. In contrast, 28 out of 57 upland views were rated 5 or lower (total scores for both river and upland were out of 13). This suggests the presence of water alone is a very strong factor in influencing scenic quality rating. This also suggests that all river views are of high scenic quality, including those in Group C.

The project consultant assessed the highest (Tier I/Group A) and lowest (Tier III/Group C) views under both upland and river views to find common features or characteristics of views that may likely have caused the panel members to score views high or low. Views that were scored toward the middle (Tier II/Group B) were not individually assessed; however, most of these views contain some, but not all, characteristics common to the more highly rated views.

Upland Views

Below is a list of common features of highly rated upland views:

- Great depth of field out to 50 or more miles (20 of 22 highly rated upland views)
- Presence of certain focal features: 20 have skyline, Mt Hood, river, and/or bridges prominently featured; bridges and the urban skyline are notable as favored features
- All but three have natural vegetation in view
- All have mid-to-high elevation viewpoints
- Natural, semi-natural, or well landscaped areas are in most of the highly rated upland views, often framing the view
- The foreground is always free of discordance

Upland views that scored low had limited depth of field, lacked focal features, lacked vegetation, were low elevation viewpoints, and had discordant elements in the foreground, such as roads and utility lines.

River Views

Below is a list of common characteristics of highly rated river views:

- Depth of field at least to middle ground distances (5 miles)
- Presence of upland terrain features, such as the West Hills or Cascades as a backdrop or focal feature
- Presence of one or more strong focal features, such as urban skyline, bridges, Mt Hood, and/or the West Hills
- Presence of natural or semi-natural vegetation
- Wide angle, or panoramic views
- Higher elevation viewpoints

Common characteristics of low rated river views were the absence of the above features. Nearly every low rated view lacked depth of field, did not have a clear focal feature (or if it had one it was well off to the side,) and had little or no natural vegetation. In addition, several lower rated river views had

discordant features in the foreground, such as fencing, plain looking concrete piers, or construction debris. Lower rated river views also tended to feature the I-5/I-84 interchange as a major focal feature.

Upland views had some similarities and some differences. Since many of the favored views were from high vantage points, they tended to have greater depth of field, often all the way to the Cascade Mountains and volcanic peaks. Natural vegetation was a characteristic of highly rated views for both river and upland, though it appeared to be a more important factor in upland views than in river views. And viewer position was important, with high viewpoints typically outscoring lower ones.

The commonalities among high and low-rated views for both river and upland are strong enough that they provide a good predictive framework for rating additional views that were either not scored by the expert panel, or could emerge later in this process as suggested viewpoints.

2. Line of Sight Analysis

The experts identified primary focal features of the views and in most cases the experts identified the same primary focal features for the same views. In addition, many viewpoints with views of these primary focal features are located near to one another. In order to understand the relationship between views of the primary focal features, staff performed two line of sight analyses.

Staff began the analysis by drawing a line of sight from all of the Tier I upland views to the primary focal features of the view. Staff also included lines of sight from Tier II upland and Group A or B river views of the major mountains – Mt Hood, Mt Adams and Mt St Helens. If the primary focal feature of the view was identified as "downtown skyline" staff drew lines of sight to one or more of the four most prominent buildings – U.S. Bancorp Tower, Wells Fargo Center, Park Avenue West Tower and KOIN Center – as representatives of the downtown skyline.

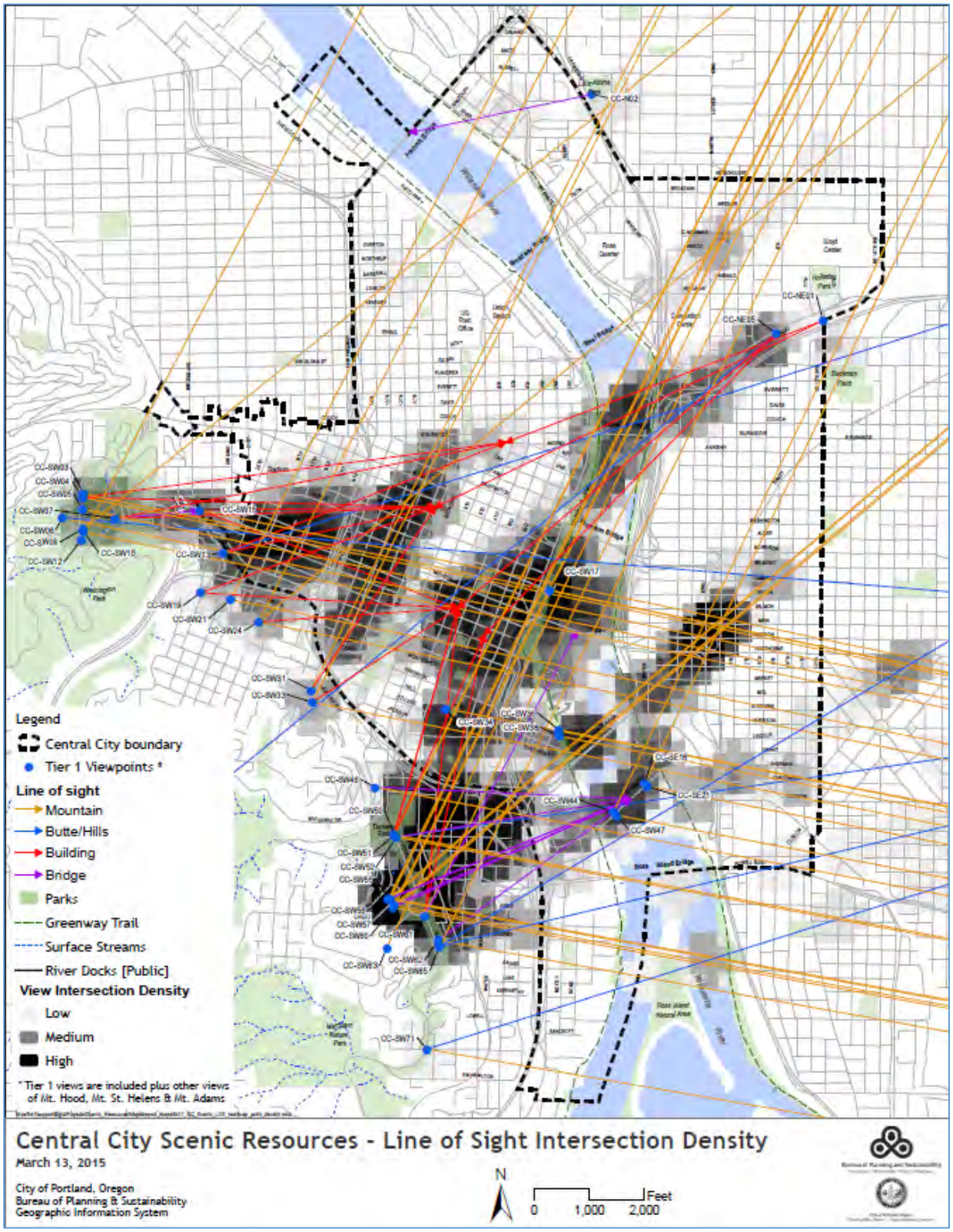
Next an ArcGIS spatial analysis was performed to understand the relationship of the views to each other. Below are detailed explanations of each ArcGIS analysis. A more detailed explanation of the ArcGIS analysis can be found in Appendix D.

Line of Sight: Intersection Density

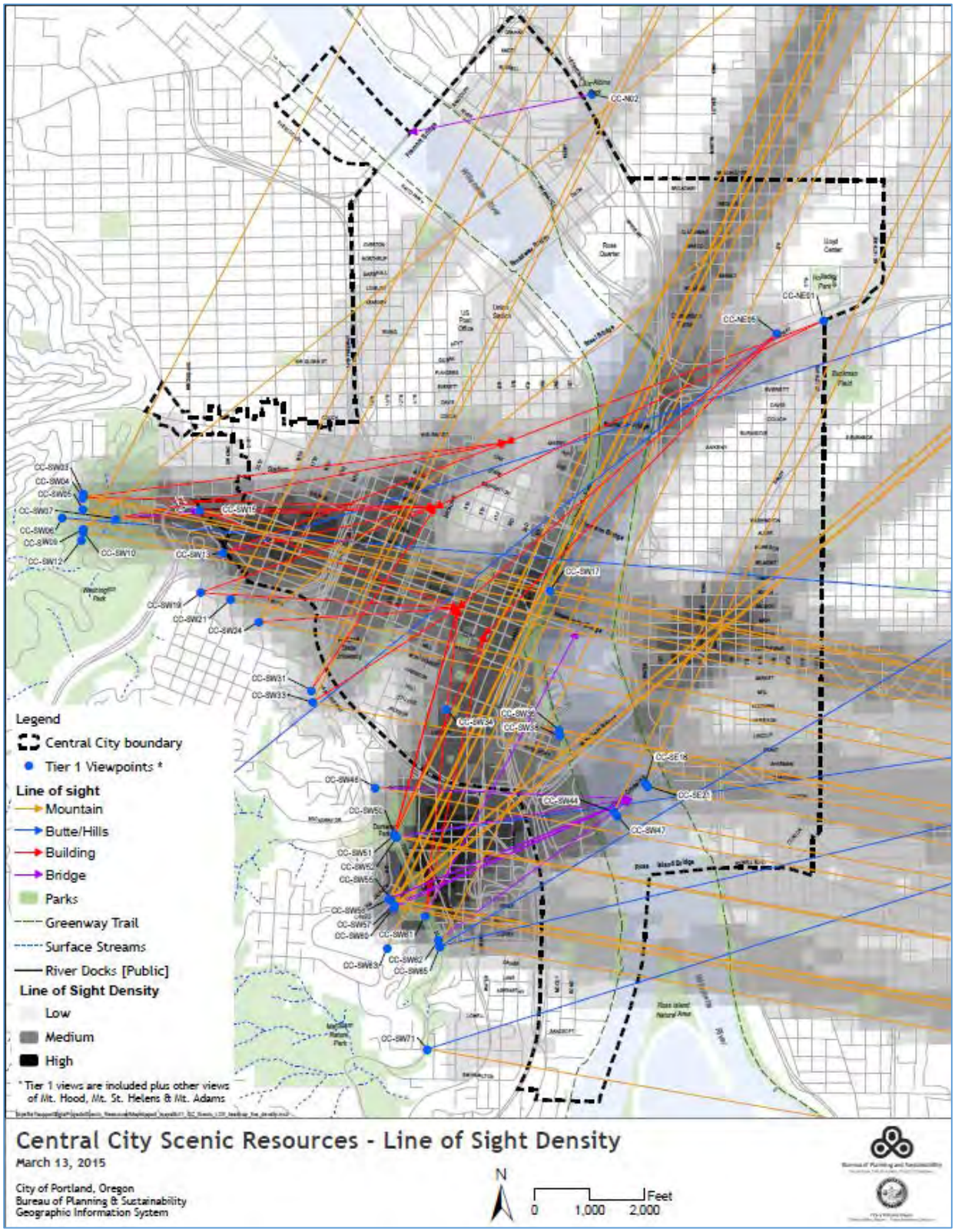
A data layer of points was created where the lines of sight intersect each other and an ArcGIS Spatial Analyst Point Density Tool was used to calculate the density of the intersection points from the lines of sight. In other words, the number of lines of sight intersect at any given point. The results of the analysis are reported by city block. Map 3 shows is areas where many views that cross each other (black) and where fewer (light gray) or no (white) views cross each other.

Line of Sight: Line Density

A data layer of lines was created. Like the intersection analysis, an ArcGIS Spatial Analyst Line Density Tool was used to calculate the proximity of lines of sight to each other. The results of the analysis are reported by city block. Map 4 shows is areas where many views are in very close proximity to other views (black) and where fewer (light gray) or no (white) views are in close proximity to each other.



Map 3: Scenic Views - Line of Sight Intersection Density



Map 4: Scenic Views - Line of Sight Line Density