



Viewshed Analysis & Public Process *(updated April 25, 2016)*

In Olympia, important views are protected through public ownership of the shoreline, as well as through design and development regulations, including those included in the Shoreline Master Program. The recently updated Comprehensive Plan shifted an emphasis from protecting certain views from public streets to protecting and enhancing views from certain public observation points. The intention was for these observation points to be more like public gathering places rather than auto-centric areas. The Plan guides the City to implement a public process to identify viewsheds (*line of sight between an observation point and important view.*) Part of the scope of work for the Downtown Strategy is to complete this for viewsheds related to downtown.

Land Use Chapter, Goal #8: Community views are protected, preserved, and enhanced.

PL8.1: Implement public processes, including the use of digital simulation software, to identify important **landmark views** and **observation points**.

PL8.2: Use visualization tools to identify view planes and sightline heights between the landmark view and observation point.

PL8.3: Prevent blockage of landmark views by limiting the heights of buildings or structures on the west and east Olympia ridge lines (*areas are outside the scope of the Downtown Strategy*)

PL8.4: Avoid height bonuses and incentives that interfere with landmark views.

PL8.5: Set absolute maximum building heights to preserve publicly-identified observation points and landmark views.

The MAKERS team will analyze up to ten community-valued viewsheds and provide recommendations on view protection through the following steps:

1. Determine up to 10 viewsheds to be analyzed (expected completion May 10 2016);
2. Conduct viewshed analysis. *Using 3D graphics illustrate how views can be protected with different land use and urban form alternatives. Analyze the impacts of protecting these views to economic, housing and other goals.* (March-August 2016); and
3. Recommend updates to City view protection standards (Fall 2016).



MAKERS' scope of work calls for a digital analysis of up to ten viewsheds. However the City can and likely will continue to protect additional views, as our community has already taken steps to secure several important over the water views through public ownership of waterfront lands (*see lists starting on page 4*).

Determining Views to be Analyzed

The process to determine views for analysis builds on past views planning efforts. The following steps have been completed:

- Potential landmark views and observation points identified during the Comprehensive Plan and Shoreline Master Plan updates were used as the basis for identifying a preliminary list of views to be analyzed.
- An exercise at DTS Workshop #1 (11/21/15) had participants prioritize certain viewsheds (*only those with observation points within the downtown*) that were most important to them. Participants also had an opportunity to provide write-in comments. The exercise confirmed:
 - Views of the Olympic Mountains, Capitol Dome, Budd Inlet, and Capitol Lake are particularly valued.
 - Many valued views are unlikely to be blocked by future development because the observation point is adjacent to the landmark or over the water.
 - View from the Capitol Campus Promontory to Budd Inlet is a priority which should be analyzed.
- Staff reviewed prior work by Mithun consultants, which had identified an observation point where two marine channels on Puget Sound converge - a point from which we can analyze impacts to certain views.
- Staff & MAKERS composed three lists (*see lists starting on page 4*):
 - Five views that come up repeatedly in public conversation and could potentially be impacted by future development, thus following 'green light' from Council's Land Use Committee we began analysis in early March
 - Five views that probably should be looked at, but kept on hold pending an opportunity for the public to make other suggestions (*note: one of these views was found not to exist*)
 - Over 20 views unlikely to be blocked by future development, thus not recommended for further analysis



- Between March 17-27, 2016, 482 people responded to online Survey 2; Results included:
 1. The respondents' rank of the following views in order of importance:
 - Very important/important:
 - Capitol Campus Promontory to Budd Inlet
 - West Bay Park to Mt Rainier
 - Park of the Seven Oars to Mt Rainier
 - Important:
 - East Bay Drive to Capitol Dome
 - Puget Sound Navigation Channel to Capitol Dome
 - Priest Point Park to Capitol Dome
 - Somewhat important:
 - Madison Scenic Park to Capitol Dome/Black Hills
 - Capitol Way/Union to Olympic Mountains
 - Not important:
 - Cherry Street to Capitol Dome
 2. Views are important to respondents for the following reasons (in order of popularity):
 - Sense of beauty (67%),
 - Connection to natural landscape (66%),
 - Sense of place (58%), and
 - Connection to historic fabric (39%).
 - "Other" responses coalesced around the theme that protecting the natural views is important.
 3. Community members made (17) additional suggestions for views to analyze *(see lists starting on page 4)*
- MAKERS completed a preliminary analysis of the suggested views for analysis, and with help from staff formed a recommendation for which of these should be analyzed further
- On May 4, the recommendation will be shared with the Stakeholder Work Group
- On May 10, staff is asking City Council for direction on this recommendation. At this time, it is important to determine the complete list of views for analysis so that an exercise using the digital analysis can be presented to the public at the June 6 workshop



Viewsheds Related to Downtown, by Category

For visuals, refer to the document, “Preliminary Viewshed Analysis Information”

On March 3, the Council’s Land Use & Environment Committee (LUEC) guided MAKERS and staff to move forward with analysis on the following five views due to their prominence in the public discussion and potential for impacts:

5 Views Selected for Analysis			
	Public Observation Point FROM	Landmark View TO	NOTES:
1	State Capitol Campus Promontory	Budd Inlet	View is across the Isthmus. Observation point on Capitol Campus is top of the north campus trail in front of the Temple of Justice/Law Enforcement Memorial. Most important view on Survey 2.
2	Cherry Street	Capitol Dome	Also useful for exploring potential effect of 1063 Building on views of the dome. View from Cherry Street considered "not important" on Survey 2.
3	Madison Scenic Park	Capitol Dome, Black Hills	Turns out this view would not be blocked under current zoning. Considered "somewhat important" on Survey 2.
4	Puget Sound Navigation Channel	Capitol Dome and/or Mt. Rainer	Prior work by Mithun consultants identified observation point in the water where 2 navigation channels meet. Considered "important" on Survey 2. Tie with analysis for view #1.
5	West Bay Park Lookout	Mt. Rainier	View is thru dt. Considered "important" on Survey 2.



Potential Views for Further Analysis

MAKERS scope calls for up to 10 views to be analyzed regarding how they could be protected or enhanced, along with trade-offs to economic, housing and other goals. There are five more views that can be added to the list for further analysis. **MAKERS and staff recommend views highlighted in green for further analysis.** Other suggestions that were identified to be outside of the study area can be saved for consideration as part of a future public process to explore citywide views.

	Public Observation Point (FROM)	Landmark View (TO)	Redundant with previous views	View corridor inside study area	NOTES:	Not within study area	Unlikely to be blocked	Proximity to similar view	Highly constrained view
Views identified before Survey 2									
6	Capitol Way & Union Ave	Olympic Mountains			Considered "somewhat important" on Survey 2.				
7	Park of the Seven Oars	Mt. Rainier			Considered "very important" on Survey 2. Not recommended for further analysis because preliminary analysis shows view would not be affected by development at current zoning build out		X		
8	Priest Point Park	Capitol Dome			Observation point is at the end of the trail on the beach. Considered important" on Survey 2. Not recommended for further analysis because preliminary analysis shows view would not be affected by development at current zoning build out		X		
9	East Bay Drive Lookout	Capitol Dome			Observation point at the benches about 400' from the intersection of Olympia Ave & East Bay Dr. Considered "important" on Survey 2.				
<p><i>Note: Also suggested for analysis early on was Marathon Park (on Deschutes Parkway) to Mt Rainier, but no view of Mt Rainier exists from Marathon Park.</i></p>									



	Public Observation Point (FROM)	Landmark View (TO)	Redundant with previous views	View corridor inside study area	NOTES:	Not within study area	Unlikely to be blocked	Proximity to similar view	Highly constrained view
Views identified as part of Survey 2									
A	Capitol Campus (two possible observation points were looked at A1 & A2)	Mt. Rainier	NO	YES, Only affects 3 blocks	This is a very constrained view due to development on the East Capitol Campus and in some cases blocked by trees. Most of the land between the observation point and view are on the Campus, where the City does not have zoning authority. The A-1 viewshed barely clips 2 blocks within the south end of the study area. Not recommended for further analysis due to the minimal existing view and existing potential to be blocked by development on the capitol campus.	X - MOST AREAS			X
B	Port Plaza	Capitol Dome	Yes, view to Dome from Puget Sound Navigation Channel and Priest Point Park	YES	Development along Water Street on the Heritage Park Block, if allowed heights greater than current limit of 35' could potentially block views, but it's possible that a modest height increase of 7'-10' would not. Similar to view #C.		X	X	
C	Percival Landing	Capitol Dome	Yes, view to Dome from Puget Sound Navigation Channel and Port Plaza	YES	Development along Water Street on the Heritage Park Block, if allowed heights greater than current limit of 35' could potentially block views, but it's possible that a modest height increase of 7'-10' would not. Similar to view #B, although impacts potentially greater. Recommendation is to analyze potential for modest height increases while continuing to protect view.		X	X	



	Public Observation Point (FROM)	Landmark View (TO)	Redundant with previous views	View corridor inside study area	NOTES:	Not within study area	Unlikely to be blocked	Proximity to similar view	Highly constrained view
D	East Bay Drive mini-park	Capitol Dome	View	YES	Suggestion was to consider establishing viewpoints/continuous views elsewhere along the ROW beyond just the lookout/bench along East Bay Dr. This view is similar to #9, only location is further north along East Bay Drive.			X	
E	Route 101 at Red Lion Inn	Mt. Rainier	NA	NO	View corridors from this viewpoint would be outside of the study area.	X			
F	Harrison Roundabout	Mt. Rainier	YES, view from Park of the Seven Oars	YES	There are large evergreen and deciduous trees that frame this view similar to Seven Oars Park. As you walk along the east side of the street south toward the lower roundabout at 4th and Olympic Way, your view will be blocked by trees for most of the year(Spring, Summer, Fall) until you start to turn the corner at the roundabout and head onto the 4th Avenue Bridge. Not recommended for further analysis as intent is not to protect views from auto-oriented locations such as roundabouts and due to close proximity to Park of the Seven Oars, which is already on the list of potential viewsheds to analyze.			X	X
G	4th Avenue (Lower) Roundabout	Mt. Rainier	NO	YES	The view from the 4th Ave Bridge to Mt. Rainier (near the roundabout) is already on the list of views unlikely to be blocked by future development - preliminary 3D analysis also demonstrates this as the mountain is higher than the potential development heights within the viewshed. View from the roundabout not recommended for further analysis as intent is not to protect views from auto-oriented locations such as roundabouts and proximity to view from 4th Ave Bridge.				X



	Public Observation Point (FROM)	Landmark View (TO)	Redundant with previous views	View corridor inside study area	NOTES:	Not within study area	Unlikely to be blocked	Proximity to similar view	Highly constrained view
H	Deschutes Parkway	Mt. Rainier	NO	YES	There is a good view of Mt. Rainier as you travel from 5th Ave southwest along Deschutes Parkway. By the time you reach the first bench south of the bus stop, the view is blocked by trees and the 9th & Columbia Bldg and is barely visible along the parkway from that point forward due to trees and existing development.				
I	Lakeridge Drive	Capitol Dome & Capitol Lake	NA	NO	View corridors from this viewpoint would be outside of the study area.	X			
J	San Francisco Street	Capitol Dome	NO	YES	The Capitol Dome is not visible at the intersection of East Bay Drive and San Francisco Street. It becomes visible above the tree-line as you travel up the hill until it becomes blocked by taller trees along the west side of East Bay Drive.		X		
K	Eastern Washington Butte (Heritage Park)	Mt. Rainier	NO	YES	There is a partial view of the mountain between the Governor House Hotel and Evergreen Plaza, although it is partially blocked by the Governor House Hotel.				
L	Port Plaza viewing tower	Mt. Rainier	Overlaps with view 5	YES	Mt. Rainier is only slightly visible above the 3 story Market Centre office/retail building south of the Farmers Market building. Not recommended for further analysis as there is barely a view to be seen.				X



	Public Observation Point (FROM)	Landmark View (TO)	Redundant with previous views	View corridor inside study area	NOTES:	Not within study area	Unlikely to be blocked	Proximity to similar view	Highly constrained view
M	Unknown viewpoints	East Bay & West Bay Ridgelines		YES	This seems like it would be exceptionally restrictive. What is the observation point? There is a policy in the Comp Plan that states, "PL8.3 Prevent blockage of landmark views by limiting the heights of buildings or structures on the west and east Olympia ridge lines" but limiting views on the ridgelines is outside of the scope for the Downtown Strategy. Not recommended for further analysis.	X			
N	County Courthouse	Capitol Dome	NA	NO	View corridors from this viewpoint would be outside of the study area.	X			
O	Henry & State	Capitol Dome	NO	YES	Generally, this area is elevated relative to most of the study area meaning current zoning within the study area would not block this view; Thus, not recommended for further analysis at this time. Note: Probably should be looked at as part of future process to analyze citywide views as development outside of downtown could impact this view.		X - by DT dev		
P	Quince & Bigelow (Bigelow Springs Park)	Capitol Dome	NO	YES	This area is in R-4-8 zone. Generally, this area is elevated relative to most of the study area meaning current zoning within the study area would not block this view. Thus, not recommended for further analysis.		X		
Q	4th Avenue dam looking north under the bridge	Olympic Mountains	NO	NO	View corridors from this viewpoint would be outside of the study area.		X		



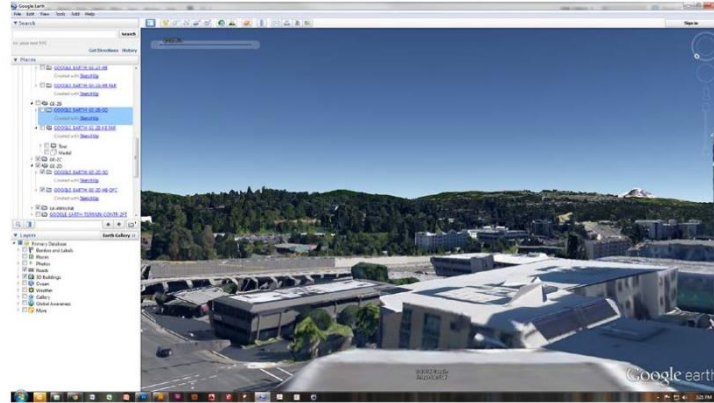
The following 21 views were identified early on as unlikely to be blocked, thus are not recommended for further analysis.

A. Viewsheds not Recommended for Further Analysis				
Unlikely to Be Blocked Because ...			Viewshed is:	
Public Observation Point FROM	Landmark View TO	Over the water	Over or adjacent to public ROW/ park	NOTES:
1 4th Ave Bridge to	Capitol Lake	X	X	State controlled lands
2 "	Olympic Mountains	X		
3 "	Mt. Rainer	X	X	
4 "	Capitol Dome	X	X	State controlled lands
5 "	Budd Inlet	X		
6 Capitol Way & 11th	Budd Inlet (looking north)		X	Looking north over Capitol Way and the Farmers' Market
7 Capitol Way & Talcott Ave	Capitol Lake	X	X	State controlled lands
8 Capitol Way & Amanda Smith Way	Capitol Lake	X	X	
9 Chestnut & 4th	Budd Inlet (looking north)			
10 Deschutes Parkway	Budd Inlet	X	X	State controlled lands
"	Capitol Lake	X	X	"
"	Capitol Dome	X	X	"
11 East Bay Dr. Lookout (benches at appx. 400' from intersection of Olympic Way & East Bay Dr.)	Budd Inlet	X		
12 "	Olympic Mountains	X		thru Swantown Marina
13 Northpoint	Budd Inlet	X		Lookout ID'd by Port
14 "	Olympic Mountains	X		"
15 Percival Landing	Capitol Dome	X	X	
16 "	Olympic Mountains	X		Expansive views along this path
17 "	Budd Inlet	X		"
18 Simmons St	Capitol Dome	X	X	
19 "	Capitol Lake	X	X	
20 West Bay Park Lookout	Budd Inlet	X	X	
21 "	Capitol Dome	X	X	

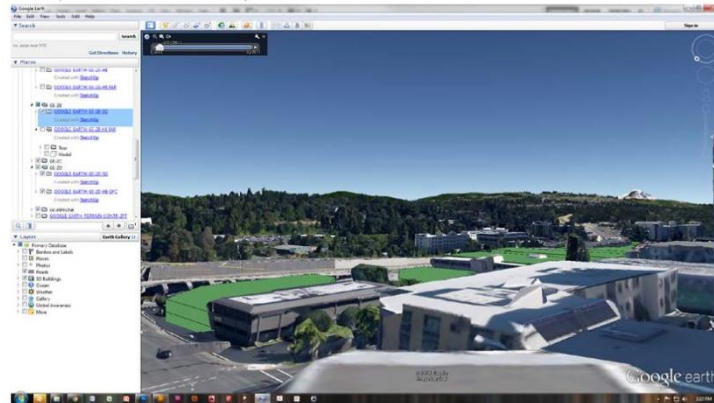


Downtown Bellevue Viewshed Analysis: City Hall to Mt Rainier

Existing view



Development under current zoning



Development with higher FAR



Process for Analysis of the 10 Viewsheds

The MAKERS team will digitally analyze up to ten viewsheds. Public Workshop #3 on June 6 will include an exercise to gather feedback from the public on this digital analysis, and the relationship of protecting views to other downtown goals.

Digital 3D modeling. The analysis will include digital 3D modeling of buildings and landscape for the selected views. The views will likely fall under two types of analysis:

- Views affected by zone-wide height standards (e.g., view from Marine Channel across downtown to Mt Rainier), and
- Views affected by redevelopment at a specific site (e.g., 1063 blocking view of Capitol).

Zone-wide height increases analysis. For the first type of analysis, the models will show each view: 1) as it exists now, 2) if redeveloped under current zoning, and 3) under any zoning options being explored. Because of the number of buildings involved, the 3D model is built with a minimal level of detail to simply illustrate massing. (See the sample at right.)

Site-specific analysis. For the second type of analysis, and in some cases to integrate this analysis with additional urban design and character analyses, graphics may be provided that overlay a photo of the view with potential redevelopment. For example, the images below shows a view the Edmonds community wanted to protect. Potential development on the site in question was overlaid on the photo to demonstrate the reality of the potential development. This type of analysis can be more palatable for community members not accustomed to viewing massing models and is effective for exploring design guideline techniques to protect views. However, because it requires more detailed site analysis and building design, it can take more resources than the massing model. The team will need to judiciously select the 10 views for modeling and the type of analysis to perform on each.



Model (new buildings in color)



View with new building massing



Existing view



View with architectural detail



Analyze effect on other priorities. Economic feasibility, housing diversity, urban design, and character can be affected by view protection. If the 3D model illustrates that a view could be blocked by development, the strategies for view protection must be shaped with these other priorities in mind. The team will use the site-specific analysis described above for a limited number of sites to explore this range of priorities simultaneously. For example, the team may develop sample site designs with multiple variations to show the effect of different view protection techniques (e.g., setbacks, step backs, and height limits) on the economic feasibility of a housing development. The designs would simultaneously show various approaches to character and the development's effect on the overall urban design of the area.

Public feedback at Workshop 3. Applicable portions of the viewshed analysis will be presented at Workshop #3 and integrated with the related topics of economic development, housing diversity, urban design and character. Depending on the results of the analysis, workshop activities may ask participants to weigh in on the extent of views protection, especially when affecting other priorities. The full analysis and results may be displayed on boards and/or the summary report (see below) may be provided for people interested in more information.

Viewshed analysis summary report. The viewshed analysis results will be available in a summary report. It will illustrate each view's 3D modeling results, highlight where protection strategies are needed, and show sample strategies that would protect these views.

Recommend protection standards. Based on public feedback at Workshop #3, the team will refine the view protection strategies. View protection standards will likely be in the form of design guidelines and potentially development regulations. As part of the implementation tools for the Downtown Strategy, the team will provide design guideline recommendations and graphics, as well as land use and development code recommendations as needed, to address views protection.