CHAPTER 6. UPDATES FOLLOWING PUBLICATION OF THE SDEIS

The intent of this chapter is to present substantive updates to the SDEIS that may have affected the meaning of the text, interpretation of data, or disclosure of impacts. Non-substantive, minor edits that have been made to SDEIS text or figures, such as typos or grammatical corrections, are not noted.

Aerial Photos

Aerial photos from 2008, the most updated available upon publication, are used for this FEIS, in conjunction with a subdivision plat map from Clackamas County. The Land Use Technical Report and FEIS have been updated to reflect this development which occurred after the 2006 analysis of land use within the Sunrise Project Land Use Study Area.

New Parks and Recreation Section

Information on parks and recreation areas was included in the SDEIS in the Land Use section. For the FEIS, the information was moved to a separate section. At the time of the SDEIS publication, the planned trails were identified as potential Section 4(f) resources. The status of those trails was reviewed in accordance with federal guidance on Section 4(f) resources. It was determined that the trails would not meet criteria for designation as Section 4(f) resources. A discussion of this issue has been added to the Parks and Recreation section.

Biology Section

Based on agency input during the update of the biology technical report, the discussion of noise impacts on wildlife, habitat classifications, additional species, and general impacts of urbanization of wildlife was expanded. The following text has been added to the FEIS discussion of general impacts:

Within the project area, native landscapes and natural systems have largely been replaced by urban development: primarily light industrial, retail shopping centers, moderate to high-density residential neighborhoods, and their supporting infrastructure. A common result of urbanization is that the number of native species declines while the total density of wildlife increases as a few exotic species become very abundant. This can be seen as a trend of less diversity of native species combined with greater density of wildlife from the urban fringe to the urban core. The proportion of native bird, mammal, amphibian, and reptile species progressively declines as urban development intensifies.

The effects of noise on wildlife are not clear-cut and vary for different species. Some studies have found that breeding bird densities of some species decline near roads. Some, though not all species, are sensitive to highway noise and the distance over which this effect occurs can be considerable, varying from a several feet to more than 1.5 miles. Studies of large mammals, including ungulates, do not provide a clear response to highway noise levels. Studies of small mammals are also inconclusive with respect to highway noise.

Cultural Resources Section

There are two substantial changes to the Cultural Resources section of Chapter 3 in the FEIS compared to the SDEIS: a change in effect to a previously identified historic resource and results of additional cultural resource survey work completed after the publication of the SDEIS.

The status of Camp Withycombe changed from an eligible historic district with an adverse effect to a historic resource that will have no adverse effect due to changes on the property that were unassociated with the Sunrise Project.

Additional surveys for cultural resources were completed after publication of the SDEIS. First, a supplemental survey of the APE for the **Preferred Alternative** identified 24 new historic resources, two of which were eligible for the

NRHP (Clackamas Cemetery and the Mather-Foster House). The **Preferred Alternative** will not have an adverse effect on these or any of the eligible resources identified in the SDEIS (see Appendix B for forms). Second, property access for properties not previously surveyed for archaeological resources was obtained, and additional properties were surveyed to assess the presence of resources. Archaeological isolates were found in different locations within the APE, but were not determined to be eligible for the NRHP. However, supplemental survey work at site 35CL330 led to the adoption of avoidance measures for a portion of the site determined to be eligible for listing on the NRHP.

Subsequent to the June 1 and July 26 SHPO concurrences on Section 106 Findings, the FHWA, SHPO and ODOT executed an MOA to resolve a Section 106 "Adverse Affect" because of incomplete survey work at an identified archaeological site and lack of access to several properties. The MOA is included in Appendix B.

Utilities Section of the SDEIS

The following text has been modified slightly in this FEIS to reflect more accurately the cost responsibility for relocating utility facilities.

SDEIS text:

Affected utilities will be required to relocate their facilities into designated Public Utility Easements acquired for that purpose. Utility providers typically pay for relocation or modification of their facilities within the right-of-way. The proposed Sunrise Project would be required to pay for those relocations or modifications outside of the right-of-way. The estimated minimum utility cost for modifications outside the right-of-way would be $7.7 million. Some utilities did not provide estimates, so the cost would likely be higher.

FEIS text:

When identifying who will pay for the costs of relocating utilities, it is assumed that all permitted utilities that require relocation or modification within the public right-of-way are at the expense of the utility provider, unless the utility can prove a compensable prior property right or easement. Accordingly, where relocation of existing facilities within the right-of-way is required and the utility can prove a compensable property right or easement, the Sunrise Project will be required to reimburse the utility for the relocation cost. The project shall be responsible to make the utility facility whole for all reimbursable utility relocations.

SDEIS text:

The estimated minimum utility cost for modifications outside the right-of-way [for **Alternatives 2** and **3**] would be $7.7 million. Some utilities did not provide estimates, so the cost would likely be higher.

FEIS text:

Based on subsequent documents provided, the utility reimbursement cost estimate would range between $9.5 million and $17.8 million.

Right-of-Way 2007 Technical Report and Cost Estimates in the SDEIS

Math and formula errors as well as some inconsistencies between options were found and corrected in supporting data. Corrections were made to the right-of-way cost estimates previously stated in the Right-of-Way Technical Report and in the SDEIS, Table 1 (on page ES-6, Executive Summary) and on page 19 of the SDEIS. Updated numbers are in red font below.

The costs in Table 1 for **Alternatives 2** and **3** and the design options have been updated to 2009 from 2008 so that direct, current-year comparisons can be made between them and the **Preferred Alternative**. There were no changes to the estimates for construction presented in the SDEIS; the numbers are different only because they have an annual factor for inflation built in.

Text on page 19 of the SDEIS has been modified as follows: "Table 1 shows that in 2009 dollars, **Alternative 2** is estimated to cost $1,254 ~~1,209~~ million, while **Alternative 3** is estimated at $1,186 ~~$1,147~~ million. **Alternative 2 with Design Option B-2** has the highest estimated cost—$1,359 ~~1,308~~ million—while **Alternative 3 with Design Option D-2** has the lowest estimated cost—$1,105 ~~1,064~~ million."

Table 1. Preliminary Construction and Right-of-Way Cost Estimates for Build Alternatives (millions)

	Project Costs in 2009			Project Costs in 2013[1]
Alternative/Design Option	**Construction**	**Right-of-Way**	**Total Project**	**Total Project**
Alternative 1 – No Build	n/a	n/a	n/a	n/a
Alternative 2 – Build with Midpoint Interchange	$1,084	$170	$1,254	$1,445
w/Design Option A-2	$1,070	$173	$1,243	$1,432
w/Design Option B-2	$1,185	$174	$1,359	$1,568
w/Design Option C-2	$961	$173	$1,134	$1,303
w/Design Option C-3	$1,093	$177	$1,270	$1,463
w/Design Option D-2	$1,078	$172	$1,250	$1,441
w/Design Option D-3	$1,097	$170	$1,267	$1,461
Alternative 3–Build without Midpoint Interchange	$1,026	$160	$1,186	$1,368
w/Design Option A-2	$1,013	$163	$1,176	$1,355
w/Design Option C-2	$1,030	$161	$1,191	$1,373
w/Design Option C-3	$1,036	$163	$1,199	$1,382
w/Design Option D-2	$939	$166	$1,105	$1,270
w/Design Option D-3	$1,040	$152	$1,192	$1,376
Preferred Alternative	$1,085	$216	$1,301	$1,493

[1]Dollars are inflated to anticipated year of construction.
Construction costs were adjusted assuming 4.3% annual inflation through 2011 and 4% inflation between 2011 and 2013. Right-of-way costs were assumed to remain stable over the planning period.

Hazardous Materials of Chapter 3 of the SDEIS

Camp Withycombe (site #13) was mislocated on Figure 67. Figure 57 of this FEIS shows a number of different areas that refer to site #13, both south of and north of the proposed alignment, namely the former firing ranges and backstops along the foot of the hill side.

Ambler West (site #14) was mislocated on Figure 67 of the SDEIS. The location of site #14 has been corrected on Figure 57 of this FEIS.

Biology 2007 Technical Report and SDEIS

Phillips Creek was omitted from the discussion of critical habitat. A discussion of the creek has been added to the revised technical report and relevant sections of this FEIS.

The discussion of the Rock Creek West Tributary in the 2007 Biology Technical Report text is actually Graham Creek. The upper reach of Cow Creek at the base of the Clackamas Bluffs was incorrectly labeled Graham Creek on the maps and incorrectly identified as Graham Creek in the text. Graham Creek was not labeled on the maps in the SDEIS.

Alternative 2 was incorrectly identified in the text as affecting a total of 122.1 acres of Metro's mapped upland wildlife habitat and riparian corridors when the total was 100.9 acres. The corresponding table had the correct impact number (100.9).

The errors have been corrected in the 2010 Biology Technical Report and affected FEIS sections.

Water Quality 2007 Technical Report and SDEIS

After development of the **Preferred Alternative**, new analysis was performed to evaluate the impacts of the **Preferred Alternative** and a baseline condition that corresponded to the design footprint of the **Preferred Alternative**. In order to more accurately size and locate water quality facilities required for the **Preferred Alternative**, the analysis also added three drainage basins (Mount Scott Creek, Kellogg Creek, and Clackamas River), and removed one (Sieben Creek). The analysis method was modified to reflect more information about the drainage basins, their topographical details, and the roadway geometrics of the **Preferred Alternative** that will control the direction of stormwater runoff.

Floodplains

The **Preferred Alternative** for the Sunrise Project will have some floodplain impacts that were omitted in the SDEIS. A proposed bridge located just above the confluence of Mount Scott Creek and Dean Creek will require fill in approximately 2.1 acre-feet of floodplain. An equal amount of material will be removed in the same area. No mapped floodways are affected. The information has been added to the Water Quality 2010 Technical Report and water quality section of the Biology Section of this FEIS.

Relationship between Short-term Use of the Environment and Long-term Productivity

A discussion of the potential trade-offs between short-term use of resources and the enhancement of long-term productivity was omitted in the SDEIS. The section has been added to this FEIS.

Lack of Signatures on Some Technical Reports

Several of the technical reports lacked signed signature pages. Names and signatures of all preparers and reviewers have been added to each of the technical reports.