

I-205 Toll Project

MEMORANDUM



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To Lucinda Broussard, Mandy Putney, Jeff Buckland, Ben White, and Michael Holthoff (ODOT)
From Emma Johnson, WSP
Subject Cumulative Impacts Methodology Memorandum – Draft #4
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2 INTRODUCTION

3 This memorandum describes the methods that will be used in the I-205 Toll Project (Project)
4 Environmental Assessment (EA) analysis to evaluate cumulative impacts of the Project
5 alternatives. The analysis and results will be documented in a technical report and summarized
6 in the EA that will be developed to comply with federal guidelines and regulations, including
7 the National Environmental Policy Act (NEPA) and local and state policies, standards, and
8 regulations.

9 The cumulative impacts analysis will evaluate impacts from the construction, operations, and
10 maintenance of the Project and will identify mitigation measures as needed.

11 LEGAL REGULATIONS AND STANDARDS

12 Laws, Plans, Policies, Regulations, and Guidance

13 The following is a list of federal laws, policies, and guidance documents that guide or inform
14 the assessment of cumulative impacts:

- 15 • Oregon Department of Transportation (ODOT) Environmental Impact Statement (EIS)
16 Annotated Template, Chapter 4: Cumulative Impacts (ODOT 2010)
- 17 • American Association of State Highway and Transportation Officials (AASHTO)
18 Practitioner’s Handbook: Assessing Indirect Effects and Cumulative Impacts Under NEPA
19 (AASHTO 2016)
- 20 • Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500–1508)¹
- 21 • CEQ, Guidance on the Consideration of Past Actions in Cumulative Effects Analysis (CEQ
22 2005)

¹ On July 15, 2020, the CEQ issued its final rule modifying the implementing procedures of NEPA. The new regulations apply to NEPA actions initiated after September 14, 2020 and are not anticipated to apply to this project.

- 1 • CEQ, Considering Cumulative Effects Under the National Environmental Policy Act (CEQ
2 1997)
- 3 • Federal Highway Administration (FHWA) NEPA-implementing regulations, Environmental
4 Impact and Related Procedures (23 CFR Part 771)

5 Additional guidance on cumulative impact analysis is provided in the Environmental Review
6 Toolkit website maintained by FHWA.

7 **AREA OF POTENTIAL IMPACT**

8 An API is a geographic boundary within which impacts to the human and natural environment
9 could occur with the project alternatives. A cumulative impact is “the impact on the
10 environment which results from the incremental impact of the action when added to other past,
11 present, and reasonably foreseeable future actions regardless of what agency (Federal or non-
12 Federal) or person undertakes such other actions.”² Because it must take into account actions
13 beyond the Project, the API for cumulative impacts is broader in scope than the APIs for
14 individual resource topics. Per CEQ guidance, the cumulative impacts study area should follow
15 logical boundaries, such as legislative boundaries (CEQ 1997).

16 The cumulative impacts API is preliminary and will be used to identify the past, present, and
17 future actions that are to be assessed in the cumulative impacts analysis. Prior to preparation of
18 the Cumulative Impacts Technical Report, the API may be modified once the alternatives to be
19 studied in the EA have been identified, projected traffic volumes have been refined, and the
20 impacts to resources (including impacts from proposed project mitigation) are better
21 understood.

22 The preliminary API for cumulative impacts to human resource topics is defined as the
23 Portland-Hillsboro-Vancouver Metropolitan Statistical Area (MSA), which includes
24 Multnomah, Clackamas, Washington, Yamhill, and Columbia Counties in Oregon and Clark
25 and Skamania Counties in Washington, as shown in Figure 1. This API is intended to capture
26 the area within which direct and indirect impacts from the Project could, in combination with
27 other past, present, and reasonably foreseeable actions, contribute to cumulative impacts to
28 human resources.

² 40 CFR 1508.7

Figure 1. Preliminary Cumulative Impacts API



1 **DESCRIBING THE AFFECTED ENVIRONMENT**

2 **Published Sources and Databases**

3 Data used in the 2018 Documented Categorical Exclusion (DCE) prepared for the I-205
4 Improvements Project will be reviewed to confirm its relevancy and applicability to this study.

5 **Existing Resource Conditions**

6 “Existing conditions” refers to the overall conditions, stability, or vitality of a particular
7 resource, as well as any trends that be may be affecting it (ODOT 2010). The description of the
8 existing conditions of each resource will rely on the environmental baseline conditions
9 documented in the Project’s EA sections and supporting technical reports.

10 **Historical Context**

11 The purpose of the historical context is to provide a general understanding of how a resource
12 got to its existing conditions, including identification of past activities that have influenced the
13 resource (ODOT 2010). The understanding and description of the historical context of the API
14 will rely on the following resources:

- 15 • U.S. Census Bureau data
- 16 • Historical maps
- 17 • Aerial photographs
- 18 • Historic information available online (e.g., websites for the cities, counties, states, and local
19 chambers of commerce)
- 20 • Municipal planning documents

21 **Present and Future Actions**

22 Under CEQ guidance, the present and future actions considered in a cumulative impact
23 analysis should be (1) similar to the proposed action, and (2) have some influence on the
24 resources affected by the proposed action (CEQ 1997). Proximity to the proposed action is not
25 the sole deciding factor for inclusion as a project may be physically close without any overlap in
26 impacts.

27 A list of present and future actions in the API will be developed through review of existing
28 planning documents available online (i.e., local agencies’ capital improvement plans, master
29 plans, and other adopted planning documents), and through coordination with planning staff at
30 local agencies. This list will include the following types of projects for consideration in the
31 analysis: major transportation, development, utility infrastructure, and environmental
32 enhancement projects recently constructed, under development, or scheduled for construction,
33 as well as the planned projects that are reasonably likely to be constructed. The following future
34 actions are examples of the types of foreseeable projects anticipated to be included in the
35 cumulative impacts analysis:

- 1 • I-205 Improvements: Stafford Road to OR 213
- 2 • I-5 Rose Quarter Improvement Project
- 3 • Interstate Bridge Replacement

4 Potential contacts for developing the list of present and future actions include:

- 5 • ODOT
- 6 • Washington State Department of Transportation
- 7 • Metro Planning and Development
- 8 • Clackamas County Planning and Zoning Division
- 9 • Washington County Department of Land Use and Transportation
- 10 • Multnomah County Land Use Planning Division
- 11 • Yamhill County Department of Planning and Development
- 12 • Columbia County Planning Division
- 13 • Clark County Community Planning Department
- 14 • Skamania County Planning Division
- 15 • Marion County Planning Division
- 16 • City of Oregon City Planning Division
- 17 • City of West Linn Planning Division

18 **Field Surveys or Testing**

19 No surveys or testing would be conducted for the cumulative impacts analysis. The analysis
20 will build upon the direct and indirect impacts identified for individual resources in the Draft
21 EA and supporting technical reports, which may rely on the results of field surveys or testing
22 for those resources.

23 **IMPACT ASSESSMENT METHODS**

24 The analysis will address the potential for the Project, in combination with other present and
25 reasonably foreseeable actions, to contribute to long-term and/or short-term cumulative
26 impacts. The ODOT EIS Template (ODOT 2010) presents an eight-step process that will be used
27 to develop and write the Project's cumulative impacts analysis. The eight steps are as follows:

- 28 1. Identify the resources that may have cumulative effects to consider in the analysis.
- 29 2. Define the geographic and temporal API for each affected resource.
- 30 3. Describe the current health and historical context for each affected resource, including
31 recent growth trends and projections.
- 32 4. Identify direct and indirect impacts that may contribute to a cumulative impact.
- 33 5. Identify other current and reasonably foreseeable actions that may affect resources.
- 34 6. Assess potential cumulative effects to each resource; determine timing, magnitude and
35 significance and note any differences in the Project's contribution between alternatives.

1 7. Document the results.

2 8. Assess and discuss potential mitigation measures for all adverse impacts.

3 Given the nature of the Project and the very limited physical construction impacts anticipated, it
4 is anticipated that the cumulative impacts assessment will primarily focus on those resources
5 that are most likely to experience direct and indirect impacts as a result of changes in traffic
6 patterns, namely, transportation, land use, noise, economics, environmental justice, social
7 resources and communities, energy and greenhouse gas emissions, air quality.

8 Where feasible, the cumulative impacts analysis will be quantitative, such as acres of wetlands
9 filled. Qualitative analyses will be presented where quantitative data are not available and to
10 provide a comprehensive understanding of the resource and how it would be affected.

11 Examples of potential short-term cumulative impacts include:

- 12 • High level of particulate emissions, reducing regional air quality or causing localized areas
13 of reduced air quality caused by excavation from the construction of multiple projects
- 14 • High levels of localized traffic congestion caused by traffic detours from multiple projects

15 Examples of potential long-term cumulative impacts include:

- 16 • Loss of wetlands and riparian habitat caused by multiple projects
- 17 • Changes in land use patterns due to increased or decreased traffic on certain roads caused
18 by multiple projects

19 **MITIGATION APPROACH**

20 Potential mitigation measures will be identified for cumulative impacts to which the Project is
21 found to make a substantial contribution. This analysis will reference measures already being
22 applied for other environmental topics and will develop new measures if required for
23 contributions to cumulative impacts.

24 **PERFORMANCE MEASURES**

25 Because cumulative impacts are the incremental impacts of the action when added to other
26 actions (past, present, and reasonably foreseeable), the cumulative impacts analysis will rely on
27 the performance measures identified for other environmental disciplines.

28 **REFERENCES**

29 American Association of State Highway and Transportation Officials (AASHTO). 2016.
30 Practitioner's Handbook: Assessing Indirect Effects and Cumulative Impacts Under
31 NEPA.

32 Council on Environmental Quality (CEQ). No date available (n.d.). CEQ NEPA Regulations
33 Proposed Rulemaking. <https://ceq.doe.gov/laws-regulations/regulations.html>

- 1 Council on Environmental Quality (CEQ). 2005. Guidance on the Consideration of Past Actions
2 in Cumulative Effects Analysis. [https://www.energy.gov/nepa/downloads/guidance-
3 consideration-past-actions-cumulative-effects-analysis-ceq-2005](https://www.energy.gov/nepa/downloads/guidance-consideration-past-actions-cumulative-effects-analysis-ceq-2005)
- 4 Council on Environmental Quality (CEQ). 1997. Considering Cumulative Effects Under the
5 National Environmental Policy Act.
6 https://ceq.doe.gov/publications/cumulative_effects.html
- 7 Council on Environmental Quality (CEQ). 1987. Regulations for Implementing the Procedural
8 Provisions of the National Environmental Policy Act. Codified in 40 CFR Parts 1500–
9 1508.
- 10 Federal Highway Administration (FHWA). n.d. Environmental Review Toolkit: NEPA and
11 Transportation Decisionmaking: Questions and Answers Regarding the Consideration
12 of Indirect and Cumulative Impacts in the NEPA Process.
13 <https://www.environment.fhwa.dot.gov/nepa/QAimpact.aspx>
- 14 Federal Highway Administration (FHWA). 1992. Position Paper: Secondary and Cumulative
15 Impact Assessment in the Highway Project Development Process.
16 <http://www.dot.ca.gov/ser/vol1/sec1/ch1fedlaw/PosPaper.pdf>
- 17 Oregon Department of Transportation (ODOT). 2010. Environmental Impact Statement
18 Annotated Template, Chapter 4: Cumulative Impacts.