INDUSTRIAL WAY
INTERSECTION PROJECT | LONGVIEW
OREGON WAY

Air Quality Technical Analysis

Prepared for:

Washington State Department of Transportation

Cowlitz County Washington

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FEBRUARY 2018

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Acronyms and Abbreviations

BMPs	Best management practices
CO	Carbon monoxide
Ecology	Washington State Department of Ecology
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
FHWA	Federal Highway Administration
GSA Alternative	Grade-Separated Option A Alternative
MSAT	Mobile source air toxic
NAAQS	National Ambient Air Quality Standards
NO_X	Oxides of nitrogen
PGSB Alternative	Partial Grade-Separated Option B Alternative
PM_{10}	Particulate matter less than 10 micrometers in size
$PM_{2.5}$	Particulate matter less than 2.5 micrometers in size
SR	State Route
SWCAA	Southwest Clean Air Agency
WSDOT	Washington State Department of Transportation
$\mu g/m^3$	Micrograms per cubic meter

1.0 INTRODUCTION

The Industrial Way / Oregon Way Intersection Project is located in the industrial area of Longview, Washington at the intersection of Industrial Way (State Route (SR) 432), Oregon Way, and SR 433. This intersection provides a critical connection of two Highways of Statewide Significance that support significant passenger and freight truck movement. The purpose of the project is to develop an affordable long-term solution that:

- Maintains or improves emergency response
- Improves travel reliability for all vehicles
- Accommodates current and future freight truck and passenger vehicle movement through the intersection and across the region and states.

The purpose of this document is to describe the existing air quality conditions, discuss effects and benefits the project would have on those conditions, and recommend mitigation measures to address adverse effects. The information contained in this technical analysis supports the project's Environmental Impact Statement (EIS).

Methodology for the analysis contained in this document is presented in the Impact Assessment Methodology memorandum included as Attachment A.

2.0 DESCRIPTION OF ALTERNATIVES

Three alternatives are being evaluated to address the project's purpose and need: the No Build Alternative, the Grade-Separated Option A Alternative (GSA Alternative), and the Partial Grade-Separated Option B Alternative (PGSB Alternative). Each alternative is described in Chapter 2 of the project's EIS.

3.0 AFFECTED ENVIRONMENT

Automobiles and other vehicular traffic are major contributors to air pollution. The amount of pollution generated by these mobile sources depends on the number of vehicles in use, the amount of travel done by the vehicles, the type and quality of fuel used by the vehicles, and the speeds the vehicles travel at. Under the Clean Air Act, the U.S. Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS), which specify maximum concentrations for carbon monoxide (CO), particulate matter less than 10 micrometers in size (PM_{10}), particulate matter less than 2.5 micrometers in size ($PM_{2.5}$), ozone, sulfur dioxide, lead, and nitrogen dioxide. These pollutants are referred to as criteria pollutants. The project is located in an area that meets the NAAQS for the criteria pollutants. As such, the area is classified as in attainment of the NAAQS. CO and ozone precursor pollutants, such as nitrogen oxides, PM_{10}, and $PM_{2.5}$, are the pollutants most likely to be caused by construction and operation of transportation projects.

3.1 Pollutants of Concern

The main criteria pollutants emitted from motor vehicles are CO, PM_{10}, $PM_{2.5}$, and ozone precursors—volatile organic compounds and oxides of nitrogen (NO_x). Greenhouse gases and air toxic emissions are also pollutants of concern. This subsection discusses the effects of the main pollutants of concern on public health and the environment.

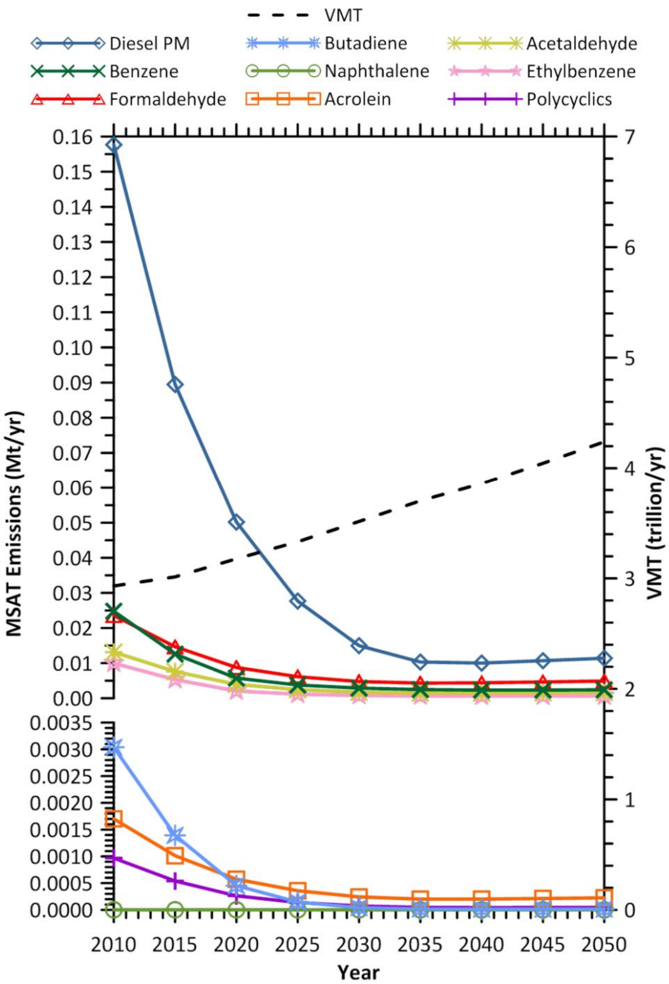
CO is a colorless and odorless gas that interferes with the transfer of oxygen to the brain. It is emitted almost exclusively from the incomplete combustion of fossil fuels. Prolonged exposure to high levels of CO can cause headaches, drowsiness, loss of equilibrium, or heart disease. CO concentrations can vary greatly over relatively short distances. Relatively high concentrations are typically found near congested intersections, along heavily used roadways carrying slow-moving traffic, and in areas where atmospheric dispersion is inhibited by urban “street canyon” conditions.

Ozone is a colorless toxic gas that enters the bloodstream and interferes with the transfer of oxygen. It also damages plants by inhibiting their growth. Although ozone is not directly emitted, it forms in the atmosphere through a chemical reaction between reactive volatile organic compounds and NO_x. Ozone is also produced from industrial sources and automobile emissions. Particulate matter refers to the mixture of solid particles and liquid droplets found in the air. Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen with the naked eye. Others are so small they can only be detected using an electron microscope. Particle pollution includes PM_{10} which refers to inhalable particles, with diameters that are generally 10 micrometers and smaller; and $PM_{2.5}$ which refers to fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller. Sources of particulates include motor vehicles, industrial boilers, wood stoves, open burning, road dust, quarries and construction activities. In the project area, high PM_{10} and $PM_{2.5}$ concentrations occur in fall and winter during periods of air stagnation and high use of wood for heat.

In addition to criteria pollutants, air toxics are pollutants known or suspected to cause cancer or other serious health effects. Most air toxics originate from human sources, including on-road mobile sources, airplanes, and certain kinds of businesses or industries. EPA identified nine compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers or contributors and non-cancer hazard contributors. These are 1,3-butadiene, acetaldehyde, acrolein, benzene, diesel particulate matter, ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter. While FHWA considers these the priority mobile source air toxics (MSATs), the list is subject to change and may be adjusted in consideration of future EPA rules.

A 2007 EPA rule requires controls that will dramatically decrease MSAT emissions through cleaner fuels and cleaner engines. According to an FHWA analysis using EPA's MOVES2014a model, even if vehicle activity (vehicle-miles traveled) increases by 45 percent as assumed from 2010 to 2050, a combined reduction of 91 percent in the total annual emission rate for the priority MSATs is projected for that same period (Figure 1).

Figure 1. FHWA Projected National MSAT Emission Trends 2010-2050 for Vehicles Operating on Roadways Using EPA's MOVES2014a Model

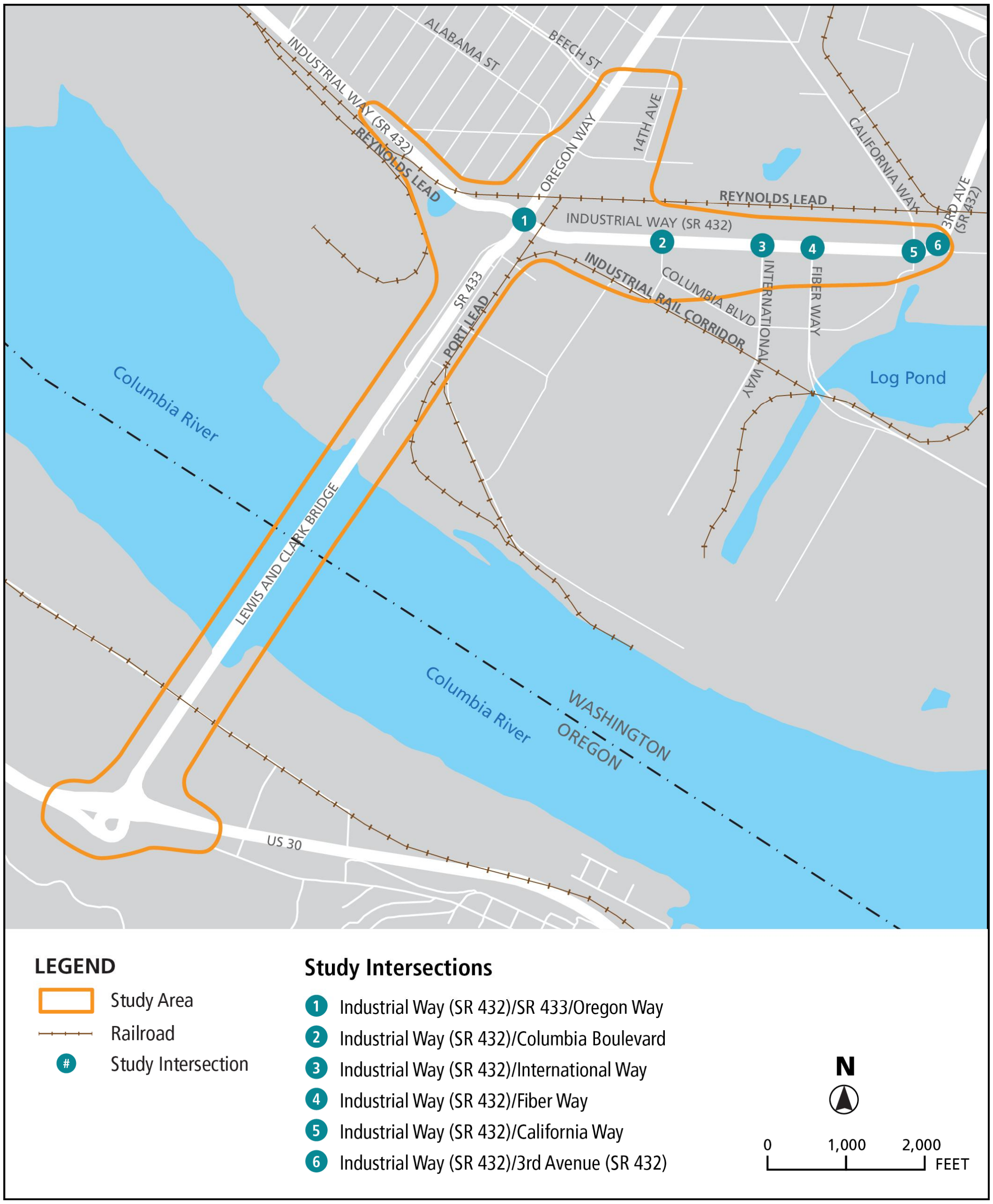


Source: EPA MOVES2014a model runs conducted by FHWA, 2016.

3.2 Study Area Characteristics

The Longview area has a mild climate with cool summers and mild, wet, and cloudy winters. The study area (Figure 2) is relatively developed and includes commercial, industrial and residential land uses.

Figure 2. Air Quality Study Area



3.3 Monitored Air Quality Concentrations

The study area is in attainment for all criteria pollutants and is therefore considered to have air quality as good as or better than specified by the NAAQS. As such, demonstration of compliance with the EPA's Final Conformity Rule is not required. Most of the Washington State Department of Ecology (Ecology) and its partners' monitoring network is dedicated to characterizing the two pollutants that have been shown to pose the greatest risk to public health: $PM_{2.5}$ and ozone (Ecology 2015). Though ozone has been monitored at over 50 different stations throughout Washington, many of these were exploratory in nature and only operated for a year or two. On average, there have been about 10 to 12 ozone stations operating in Washington during the ozone season (May to September). Ecology and its partners currently operate an extensive $PM_{2.5}$ monitoring network comprised of continuous monitors at stations throughout Washington. PM2. $PM_{2.5}$ is the only pollutant monitored in the city of Longview. Monitoring data show that $PM_{2.5}$ levels in Longview have remained below the NAAQS in recent years (Table 1).

Table 1. Monitored Ambient Air Quality Levels for Longview

Pollutant	Averaging Time	2014 Concentration	2015 Concentration	2016 Concentration	NAAQS
$PM_{2.5}$	Annual (annual mean)	5.8 µg/m^3	5.9 µg/m^3	5.0 µg/m^3	12 µg/m^3
	24-hour (98th percentile)	17.0 µg/m3	18.3 µg/m3	13.9 µg/m^3	35 µg/m3

Source: Washington State Department of Ecology 2017. Monitor located at 1234 30th Avenue, Longview, Washington
µg/m^3 = micrograms per cubic meter

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 No Build Alternative

4.1.1 Direct Effects

The No Build Alternative would not result in any direct effects to air quality. Emissions levels for CO, $PM_{2.5}$, and NO_x would be anticipated to remain below the NAAQS.

Future MSAT emissions likely would be lower than present levels as a result of EPA's national control programs that are projected to reduce MSAT emissions.

4.1.2 Indirect Effects

As a result of improved traffic operations and lower delays and travel times from the GSA and PGSB Alternatives, the No Build Alternative would not benefit from the relatively small reductions in pollutant emissions. There would be no other indirect effects from the No Build Alternative.

4.2 Grade-Separated Option A (GSA) Alternative

4.2.1 Effects during Construction

Construction-related air quality effects from building the GSA Alternative would result primarily due to emissions from heavy-duty construction equipment (e.g., cranes, dozers, loaders, forklifts, excavators, graders, dump and haul trucks, air compressors, concrete trucks), diesel-fueled mobile sources (e.g., trucks, brooms, and sweepers), diesel- and gasoline-fueled generators, and on-site and off-site project-related vehicles (e.g., worker trips, service trucks and pickups).

Particulate emissions (in the form of fugitive dust during construction activities) are regulated by the Southwest Clean Air Agency (SWCAA). As per SWCAA regulation, SWCAA 400-040, "the operator of a source of fugitive dust shall take reasonable precautions to prevent fugitive dust from becoming airborne and shall maintain and operate the source to minimize emissions." Construction of the GSA Alternative would require earthwork, which has the potential to create fugitive dust; therefore, the construction contractor would be required to utilize best management practices (BMPs) to control dust at project sites. PM_{10} emissions during project construction would be associated with land clearing and ground excavation to build the intersection. Particulate matter emissions due to fugitive dust would likely be greatest during the earthwork phase because these emissions would be associated with the movement of dirt on the site. PM_{10} emissions would vary from day to day, depending on the level of activity, specific operations, and weather conditions. Fugitive PM_{10} emissions from construction activities could be noticeable if uncontrolled. Mud and particulates from trucks could also be of concern if construction trucks are routed through streets near sensitive land uses (e.g., the Highlands Neighborhood and Highlands Trail).

Heavy trucks and construction equipment powered by gasoline and diesel engines would also generate $PM_{2.5}$, CO, and NO_x in exhaust emissions. If construction traffic and lane closures increase congestion and reduce the speed of other vehicles in the area, vehicle emissions could temporarily increase during delays. The effects would generally be limited to the immediate area in which the congestion occurs.

Some construction phases (particularly those involving paving operations using asphalt) could result in short-term odors, which could be detectable to people near the site and would be diluted as distance from the site increases.

4.2.2 Direct Effects

The Transportation Discipline Report finds that 2020 PM peak period delays for the primary Industrial Way/SR 433/Oregon Way intersection under the GSA Alternative would reduce vehicle delay by up to 60-70 percent compared to the No Build Alternative with unit train blockages. Delay reductions for other study intersections compared to the No Build Alternative would be modest for 2020. By the 2040 horizon, the reduction in delays would be even more significant compared to the No Build Alternative. 2040 PM peak period delay would decrease by approximately 40 percent. Some out-of-direction travel would be required for specific origin destination pairs under the GSA Alternative. The primary out-of-direction travel would apply to trips to/from the Port of Longview area located southwest of the intersection as well as parcels along Industrial Way east of Oregon Way.

As a result of improved traffic operations and lower delays and travel times compared to the No Build Alternative, the GSA Alternative would result in relatively small reductions in pollutant emissions as compared to the No Build Alternative. Because of the decrease in delays and travel times, emissions levels for CO, $PM_{2.5}$, and NO_x would be expected to remain below the NAAQS and there would be no direct effect. These small reductions in pollutant emissions would be a benefit.

Future MSAT emissions likely would be lower than present levels as a result of EPA's national control programs that are projected to reduce MSAT emissions. Reductions in delays and travel times could result in comparably small reductions in local MSAT emissions as compared to No Build Alternative. These small reductions in MSAT emissions could be a benefit.

The GSA Alternative is not predicted to affect regional vehicle miles traveled. As such, the project is not predicted to impact regional CO, $PM_{2.5}$, and NO_x levels. MSAT levels are predicted to decrease significantly in the future due to federally mandated programs. The project is not expected to impact this reduction.

4.2.3 Indirect Effects

The traffic analyses for the GSA Alternative considered the long-term traffic forecasted to operate within the study area. Indirect air quality benefits would occur because the GSA Alternative would help to reduce future delays, travel times and traffic-related air pollution over the long-term within the study area compared to the No Build Alternative. Adverse indirect air quality effects would be unlikely.

The air quality analysis for the project considers the long-term indirect effects of air pollutant emissions from all traffic forecasted to operate within the project area, given future population and employment growth. Therefore, the air quality analysis generally includes the indirect effects of the project and other traffic growth that would occur regionally and locally, with or without the project.

4.3 Partial Grade-Separated Option B (PGSB) Alternative

4.3.1 Effects during Construction

Although some construction staging and activities may differ in size and duration, the effects during construction of the PGSB Alternative would be the same as those discussed for the GSA Alternative in Section 4.2.1.

4.3.2 Direct Effects

The Draft Transportation Discipline Report finds that 2020 PM peak period delays for the primary Industrial Way/SR 433/Oregon intersection under the PGSB Alternative would be reduced by up to 80 percent compared to the No Build Alternative with unit train blockages. Delay reductions for other study intersections compared to the No Build Alternative would be modest for 2020. By the 2040 horizon, the reduction in delays would be even more significant compared to the No Build Alternative. 2040 PM peak period delay would decrease by approximately 60 percent. Train blockages may affect the roundabout serving eastbound and westbound through movements and could constrain access to the elevated intersection from eastbound Industrial Way. Some out-of-direction travel, though less than the GSA Alternative, would be required for specific origin destination pairs under the GSA Alternative. The primary out-of-direction travel would apply to trips to/from areas southwest and southeast of the elevated intersection.

Direct effects resulting from construction of the PGSB Alternative would be similar to those described for the GSA Alternative in Section 4.2.2 and would result in relatively small reductions in pollutant emissions from the PGSB Alternative as compared to the No Build Alternative. Because of the slight decrease in delays and travel times, emissions levels for CO, $PM_{2.5}$, and NO_x would remain below the NAAQS. These small reductions in pollutant emissions would be a benefit.

The PGSB Alternative and GSA Alternative are expected to have relatively similar reductions in pollutant emissions as compared to the No Build Alternative. These reductions from the PGSB Alternative would result in similar NAAQS and MSAT emissions as compared to the GSA Alternative, and emission levels for CO, $PM_{2.5}$, and NO_x would remain below the NAAQS.

Future MSAT emissions likely would be lower than present levels as a result of EPA's national control programs that are projected to reduce MSAT emissions. Relatively small reductions in delays and travel times could result in comparably small reductions in local MSAT emissions as compared to No Build Alternative.

The GSA Alternative and PGSB Alternative are not predicted to affect regional vehicle miles traveled. As such, the project is not predicted to impact regional CO, $PM_{2.5}$, and NO_x levels. MSAT levels are predicted to decrease significantly in the future due to federally mandated programs. The project is not expected to impact this reduction.

4.3.3 Indirect Effects

Indirect benefits to air quality resulting from the future traffic operations under the PGSB Alternative would be the same as those described for the GSA Alternative in Section 4.2.3.

5.0 MEASURES TO AVOID OR MINIMIZE PROJECT EFFECTS

The following measures could be taken to the extent practicable to avoid or minimize visual impacts.

5.1.1 Measures during Construction

- Reduce construction impacts by incorporating applicable measures from the Associated General Contractor of Washington Guidelines (AGC 1997) into the project's construction specifications.
- Spray exposed soil with water or other dust palliatives to reduce emissions of PM_{10} and deposition of particulate matter.
- Cover all trucks transporting materials, wetting materials in trucks, or providing adequate freeboard (space from the top of the material to the top of the truck) to reduce PM_{10} and deposition of particulates during transportation.
- Provide suitable construction entrances to remove particulate matter that vehicles will otherwise carry offsite to decrease deposition of particulate matter on area roadways.
- Remove particulate matter deposited on paved, public roads to reduce mud and resultant windblown dust on area roadways.
- Route and schedule construction trucks to reduce delays to traffic during peak travel times to reduce secondary air quality impacts caused by a reduction in traffic speeds while waiting for construction trucks.
- Place quarry spall aprons where trucks enter public roads to reduce mud track-out.
- Gravel or pave haul roads to reduce particulate emissions.
- Require appropriate emission-control devices on all construction equipment powered by gasoline or diesel fuel to reduce CO and NO_x emissions in vehicular exhaust.
- Use maintained equipment to reduce CO and NO_x emissions.
- Enforce WSDOT's no idle policy that directs employees to turn off engines when their vehicles are not in motion
- Plant vegetative cover as soon as possible after grading to reduce windblown particulates in the area.
- Route construction trucks away from residential areas to minimize annoyance from dust.

5.1.2 Measures for Direct or Indirect Effects

Because no long-term adverse air quality impacts are expected from either of the build alternatives, no mitigation measures would be necessary for direct or indirect effects.

6.0 REFERENCES

AGC. 1997. Guide to Handling Fugitive Dust from Construction Projects. http://www.theburlingtonhilltruth2013.com/Guide-to-Handling-Fugitive-Dust-from-Construction-Projects.pdf

Federal Highway Administration (FHWA). 2016. Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents. https://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/index.cfm

Southwest Clean Air Agency (SWCAA). 2016. General Regulations for Air Pollution Sources. http://www.swcleanair.org/docs/regs/SWCAA_400_Oct9_2016.pdf

Washington State Department of Ecology (Ecology). 2015. 2015 Washington State Ambient Air Monitoring Network Assessment. https://www3.epa.gov/ttnamti1/files/networkplans/WAAssess2015.pdf

Washington State Department of Ecology (Ecology). 2017. Washington's Air Monitoring Network, Multi Year Report. https://fortress.wa.gov/ecy/enviwa/ Retrieved from website April 4, 2017.

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Attachment A: Air Quality Impact Assessment Methodology Memorandum

Memorandum	
To:	Joanna Lowrey, PE, WSDOT Kelso Area Engineer Claude Sakr, Cowlitz County Project Manager
From:	Ginette Lalonde, WSP
Date:	April 1, 2016 Revised August 4, 2017
Subject:	Impact Assessment Methodology: Air Quality

1. Methodology Introduction

This memorandum presents the methodology used to analyze potential effects of the proposed Industrial Way/Oregon Way Intersection Project on air quality. This analysis is included in Appendix C (Air Quality Technical Analysis) of the environmental impact statement (EIS) prepared for the project.

2. Study Area

The study area for air quality is shown in Figure A-1 below. The study area encompasses the area of direct and indirect impacts to air quality resulting from the project.

Figure A-1. Study Area for Air Quality

3. Regulations, Standards, or Guidelines

Air quality in the study area is regulated by three agencies: the U.S. Environmental Protection Agency (EPA), the Washington State Department of Ecology (Ecology), and the Southwest Clean Air Agency (SWCAA).

Federal

- National Environmental Policy Act (NEPA) 42 USC 4321 and federal implementing regulations 23 CFR 771 (FHWA) and 40 CFR 1500.1-1500.8 (CEQ)
- Clean Air Act (CAA) 42 USC 7401-7431 et seq.
- Clean Air Act Amendments (CAAA) of 1990
- 40 CFR 93 Federal conformity regulations, including exempt projects in 40 CFR 93.126
- 23 CFR 450 FHWA regulations for statewide and metropolitan transportation planning and programming are defined in Planning Assistance and Standards
- FHWA Technical Advisory T 6640.8A for NEPA documents

State

- State Environmental Policy Act (SEPA) and state implementing regulations WAC 197-11 and WAC 468-12
- Clean Air Washington Act (CAWA) – RCW 70.94
- WAC 173-420 state conformity regulations, including exempt projects in WAC 173-420-110 and WAC 173-420-120
- WAC 173-400-040 state fugitive dust regulations

SWCAA and Ecology work together to monitor air quality within the region. EPA sets national air quality standards and has oversight authority over SWCAA and Ecology. EPA has developed National Ambient Air Quality Standards (NAAQS) for six criteria pollutants to protect the public health and welfare. Table A-1 provides a summary of the NAAQS. Areas that meet the NAAQS for pollutants of concern are deemed *attainment areas;* areas not in compliance with the NAAQS are deemed *nonattainment areas;* and areas that were formerly classified as nonattainment areas but have since demonstrated attainment with the NAAQS are classified as *maintenance areas*. Under federal and state air quality statutes and regulations, maintenance and nonattainment areas must demonstrate that proposed transportation activities—plans, programs, and projects—do not cause new, or contribute to existing, air quality problems. EPA also regulates mobile source air toxic (MSAT) pollutants.

Table A-1. National Ambient Air Quality Standard

Pollutant [final rule cite]		Primary/ Secondary	Averaging Time	Level	Form
Carbon Monoxide		primary	8-hour	9 ppm	Not to be exceeded more than once per year
			1-hour	35 ppm	
Lead		primary and secondary	Rolling 3-month average	0.15 µg/m^3	Not to be exceeded
Nitrogen Dioxide		primary	1-hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		primary and secondary	Annual	53 ppb	Annual Mean
Ozone		primary and secondary	8-hour	0.070ppm	Annual fourth-highest daily maximum 8-hr concentration, averaged over 3 years
Particle Pollution	$PM_{2.5}$	primary	Annual	12 µg/m^3	annual mean, averaged over 3 years
		secondary	Annual	15 µg/m^3	annual mean, averaged over 3 years
		primary and secondary	24-hour	35 µg/m^3	98th percentile, averaged over 3 years
	PM_{10}	primary and secondary	24-hour	150	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide		primary	1-hour	75 ppb	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		secondary	3-hour	0.5 ppm	Not to be exceeded more than once per year

Source: http://www3.epa.gov/ttn/naaqs/criteria.html. EPA 2015
PMXX = particulate matter size
µg/m^3= micrograms per cubic meter
ppm = parts per million
ppb = parts per billion

4. Sources of Existing Data

Ecology and SWCAA operate air quality monitoring stations to obtain data on actual ambient air quality concentrations. Information from these stations determines whether the region meets the NAAQS and assists in providing background level concentrations in the project vicinity. In addition to using data from these monitoring stations, a review of recent local projects was also performed to obtain any additional data that may assist with the project. Additional projects may be included as sources for this analysis following a review of the transportation study.

5. Data Gathering or Development

Traffic data gathered or developed for the transportation analysis was reviewed. The latest complete 3 years (2012, 2013, and 2014) of monitoring data from the Ecology and SWCAA operated air quality monitoring station at 1234 30th Avenue in Longview, Washington was gathered.

6. Analytical Techniques and Models

6.1. Construction Impacts

The potential for pollutant emissions from construction equipment and earth moving activities was qualitatively discussed.

6.2. Direct Impacts

The project is located in an area that meets the NAAQS for pollutants of concern and is deemed as being in *attainment.* Long-term NAAQS impacts were qualitatively discussed based on the traffic data developed for the transportation analysis. The build traffic conditions (2040) were compared to No Build (2040) and existing traffic conditions (2015) to evaluate air quality impacts.

Mobile Source Air Toxics (MSATs) include any one of seven priority volatile gases, or small particulate compounds, which are emitted from vehicles. The seven compounds are formaldehyde, 1,3-butadiene, acrolein, naphthalene, benzene, polycyclics, and diesel particulates. A review of potential MSATs was performed and follow the FHWA online Interim Guidance on Air Toxic Analysis in NEPA Documents.

6.3. Indirect Impacts

The traffic analyses for the project considers the long-term traffic forecasted to operate within the study area. The future air quality analysis includes the indirect traffic impacts.

7. Summary of Potential Impacts and Mitigation

The following is a brief summary of the types of benefits and adverse impacts that may result from the project. This section also includes mitigation measures that could be considered to reduce or eliminate adverse impacts.

7.1. Potential Benefits

Potential air quality benefits are qualitatively discussed. Any improvements in traffic operations would result in air quality benefits.

7.2. Potential Adverse Impacts

Because the project is located in an attainment area, no potential air quality impacts would occur. Future MSAT levels are predicted to decrease as a result of EPA's national control programs.

7.3. Potential Mitigation

Best management practices are discussed qualitatively to reduce temporary impacts from construction activities.

Because no long-term adverse air quality impacts are expected, no mitigation measures are necessary.

8. Limitations and Constraints

None.