Air Quality Fact Sheet

Air Quality Analysis?

Established regulatory procedures and requirements determine what air quality analysis must be completed for the I-5 Rose Quarter Improvement Project.

The Environmental Assessment for the project focused on analyzing existing and future air quality conditions and identified ways to minimize impacts to people and the environment in the project area. Climate change and environmental justice are also associated with the air quality analysis.

Key Environmental Assessment Takeaways

- Air quality and greenhouse gas emissions slightly improve in the project area.
- No long-term air quality impacts are expected, so no mitigation is required.
- Short-term, temporary air quality impacts from construction are likely, requiring mitigation measures.
- Environmental Peer Review supported the analysis and findings for air quality.

Partner Coordination

Partners, stakeholders and the public have been involved in both the environmental assessment process identifying air quality impacts and initial solutions and as part of the design process implementing and expanding on the initial solutions. During the Environmental Assessment, the City of Portland provided input on the air quality technical report as a participating agency. The City, Portland Public Schools and Metro also were invited to and actively participated in the Environmental Peer Review process. Technical teams currently working on project design to help identify air quality-related design elements include members from Metro, TriMet, Portland Public Schools, and ODOT.

Improved Air Quality

Reductions in air pollutants (air toxins from vehicles and pollutants identified in the National Ambient Air Quality Standards such as ozone, carbon monoxide, or particulate matter) are expected over the next 25 years, mostly due to increasingly tighter emissions standards and regional efforts to control emissions. This is a continuation of the trend over the past 40 years. Additionally, emissions are projected to be slightly better with the project, than without the project, due to higher speeds, less stop-and-go traffic, and less idling on I-5.

Carbon monoxide is one of the key pollutants that affects human health. Carbon monoxide levels were examined in the project area and results showed that the concentrations are currently (2017) well below nationally accepted standards for human health and will remain below that level both with and without the project in the future (2045).
Mitigation Measures

Some temporary, short-term air quality impacts are likely to occur from project construction. However, no short or long-term air quality impacts disproportionately affecting low-income populations or communities of color in the project area are expected to occur.

The Environmental Assessment included mitigation measures to minimize potential short-term, temporary air quality impacts. Based on the recommendations from the Environmental Peer Review Panel related to air quality, ODOT identified additional measures in the Revised Environmental Assessment issued with the Finding of No Significant Impact.

During construction, ODOT will take the following actions to minimize short-term air quality impacts:

1. Assist in monitoring construction contractors to control dust and exhaust emissions from construction equipment and vehicles.
   a. Require construction contractors to limit idling time of trucks and other diesel-powered equipment when not in use or in motion.
   b. Require truck staging areas to locate where emissions would have a minimum impact on sensitive populations (such as schools and residences).
   c. Require the removal of all loose dirt and debris from trucks prior to leaving construction areas.

2. Focus road and lane closures during non-peak traffic periods to reduce the impact of construction delays on traffic flow that can increase vehicle emissions from idling.

Actions Already Taken

ODOT has already taken additional actions towards minimizing impacts to air quality:

- Incorporating language in the contract for the Construction Management/General Contractor requiring the use of clean diesel fleet vehicles during construction.
- Coordinating with the Construction Management/General Contractor to limit construction haul activities through neighborhood streets.
- Scheduling construction activities near Harriet Tubman Middle School for summer months.
- Engaging with Portland Public Schools to maximize the effectiveness of a proposed noise wall along Harriet Tubman Middle School that will provide both air quality and noise benefits.
- Working to develop performance measures for measuring project success related to the project values, including measures for air quality and noise for Harriet Tubman Middle School in particular.