Portland – Milwaukie
LIGHT RAIL PROJECT

Supplemental Draft Environmental Impact Statement

- Topics and Quick Summary -

SECTION: Social, Economic and Environmental	
Land Use and Economic Activity	This analysis evaluates the potential impacts to land use and economic activity. Includes overview of past land use and transportation planning and expectations for future planning.
Displacements and Relocation	This analysis assesses the impacts to residences and businesses of displacement due to partial or full property acquisitions that may be needed for the project.
Community Impact Assessment (including Environmental Justice)	This analysis identifies and evaluates impacts to neighborhood character, cohesion and livability that could result from project generated impacts. This assessment includes an environmental justice analysis to ensure that there are not disproportionate adverse impacts to minority or low-income populations.
Visual Quality and Aesthetic Impacts	This analysis assesses the visual and aesthetic environment of the project and to evaluate adverse and beneficial impacts.
Historic Resources	This analysis examines the potential project impacts to historic districts, sites, buildings, structures, objects, listed on, or eligible for inclusion in the National Register of Historic Places.
Archaeological and Cultural Resources	This analysis examines the potential project impacts to archaeological sites.
Parklands, Recreation Areas, Wildlife and Waterfowl Refuges (Section 4(f))	This analysis examines the potential impacts to publicly owned parklands for the project.
Geology, Soils and Earthquake Impacts	This analysis identifies potential hazardous conditions in the study area due to soil types, geologic conditions, and potential seismic events.
Ecosystems Impacts	This analysis identifies and categorizes the biological resources that might be affected. These resources include vegetation and wildlife, fishery resources, and wetlands. The analysis evaluates and determines the significance of the potential impacts based on state, local and federal regulatory guidelines, and consultation with resource agencies.
Hydrology and Water Quality	This analysis identifies and measures the impacts to water systems such as rivers, storm water hydrology, floodplains, and water quality for the project.

Noise and Vibration Impacts	This analysis estimates the noise and vibration output of the project, assesses the impacts on the surrounding areas and identifies mitigation methods.
Air Quality Analysis	This analysis compares the existing air quality conditions to the projected conditions of air quality that would be expected with implementation of the project.
Energy Analysis	This analysis estimates the variations in the type and amount of energy that would be consumed to build and operate the project.
Utilities Analysis	This analysis examines facilities, such as water and sanitary sewers that the project could impact.
Public Services	This analysis examines the project and services that it could impact including fire and emergency medical services (including hospitals), public schools, postal service and solid waste collection and disposal.
Hazardous Materials	This analysis identifies and assesses potential hazardous materials risks and impacts associated with the project.
Security and Safety	This analysis documents the work of the safety and security task force that includes issues and measures dealing with personal safety and security when using project facilities.

SECTION: Financial

Capital Costs	This is the analysis of developing the estimates of how much the project is expected to cost. These estimates are based on engineering (plan and profile drawings) and operations. TriMet prepares these estimates based on a breakdown of the project into smaller units. These units are priced based on recent bids from the Interstate MAX, I-205 MAX, Portland Mall, Streetcar and Commuter rail projects. Estimates include contingencies to reflect 5% to 15% level of engineering, the cost of design and administration. Finally, costs are adjusted to the projected year of expenditure in order to account for inflation.
Operation and Maintenance Costs	This is the analysis of developing the estimates for how much the project will cost to operate and maintain annually. These estimates take into consideration the train operators, security, cleaners, dispatchers, maintenance workers, and administrators. Estimates are based on past experience from the existing light rail projects.
Financial Analysis	This is the analysis that assesses the fiscal feasibility of construction and operations. Analysis considers project capital costs and system operation and maintenance costs. Current available revenues are then compared to the costs. Shortfalls over a 20-year period are also identified. A financial plan is developed to fill projected shortfalls with additional revenues from local, regional, state, and federal sources.

Cost Effectiveness	This is the analysis that calculates various cost-effectiveness measures using several methods including operating cost and operating subsidy per originating ride, annual boarding rides per revenue hour, and incremental cost per new ride.

SECTION: Transportation

Transportation Impacts (traffic and transit)	This is the analysis that assesses regional and local transit and roadway impacts associated with the transit project. Includes motorized and non-motorized vehicles impact such as pedestrians and bicycles. Estimates and summarizes future traffic and transit ridership projections for the year 2030.