



Localized CO Impacts

While overall CO emissions are similar between the future build and No-Build scenarios, specific intersections near stations may show an increase in localized emissions. Within an urban setting, vehicle exhaust is the primary source of CO and its localized concentrations. To assess the potential for CO hot-spots, microscale analysis was performed to estimate CO concentrations in the immediate vicinity of the proposed stations and associated park-and-ride lots that are located within sensitive receptors areas. The highest CO concentrations are generally found within close proximity to congested intersection locations. Under typical meteorological conditions, CO concentrations tend to decrease as distance from the emissions source (i.e., congested intersection) increase. For purposes of providing a conservative, impact analysis, CO concentrations are typically analyzed at congested intersection locations, because if impacts are less than significant in close proximity of the congested intersections, impacts will also be less than significant at more distant sensitive receptor locations.

The proposed project’s CO concentrations for 1 and 8-hour CO levels during the peak travel period (the higher of A.M. or P.M. values) are presented in **Table 5-5**. As shown, the CO concentration predicted for both scenarios would be either similar or would increase slightly by a maximum of 0.1 ppm for the Build scenario compared to the No-Build scenario. As such, the proposed project would not have a significant impact upon 1-hour or 8-hour local CO concentrations due to mobile source emissions.

Table 5-5 YEAR 2025 CARBON MONOXIDE CONCENTRATIONS								
Intersection	1-hour Concentration (ppm)				8-hour Concentration (ppm)			
	No-Build		Build		No-Build		Build	
	Model Value	Ambient Conc.	Model Value	Ambient Conc.	Model Value	Ambient Conc.	Model Value	Ambient Conc.
Belt Line Road and Valley View Lane	1.4	5.6	1.5	5.7	1.0	4.7	1.1	4.8
Walnut Hill Lane and Brangus Drive	0.9	5.1	1.0	5.2	0.6	4.3	0.7	4.4
Mac Arthur Boulevard and Hidden Ridge	1.0	5.2	1.1	5.3	0.7	4.4	0.8	4.5
Riverside Drive and Spur 348 (NW Hwy)	1.4	5.6	1.5	5.7	1.0	4.7	1.1	4.8
Federal Standard	35				9.0			
CO concentrations include 1–hour and 8–hour concentrations of 4.2 and 3.7 ppm, respectively, based on three year average monitoring data at Hinton Street monitoring station.								

Source: Parsons, 2006.

As significant impacts would not occur at the intersections with the highest traffic volumes that are located adjacent to sensitive receptors, no significant impacts are anticipated to occur at any other locations in the study area as the conditions yielding CO hotspots would not be worse than those occurring at the analyzed intersections. Consequently, nearby sensitive receptors would not be significantly affected by CO emissions generated by the net increase in traffic which would occur under the proposed project.

5.3.2 Project Conformity Assessment

According to USEPA Transportation Conformity Rule 40 CFR Part 93.102, conformity determinations are required for projects that require the approval, funding, or implementation of FHWA/FTA projects. Since the Project needs to be approved by FTA, it would be required to conform with the EPA Transportation rules. A project-level conformity determination is also required for the Project because it is a nonexempt project in a non-attainment area for ozone. FTA cannot approve funding for project activities beyond preliminary engineering unless the Project