## I-10 SYSTEMS INTERCHANGE MODIFICATION REPORT (SIMR)

## 6.2 NETWORK PERFORMANCE

Network performance is an important evaluation metric as it provides the relative number of vehicles that are being served and the extent of latent demand for the study area. Network-wide results comparing No-Build and Build are provided in Table 6–1 and Table 6–2.

The results indicate that the Build Alternative offers an improvement over the No-Build Alternative for almost every network performance parameter during both the AM and PM peaks. In 2046, the percent improvement becomes even greater than in 2026 due to the gridlock effect experienced in the No-Build condition.

In the 2046 AM peak, the average delay time per vehicle is reduced from 265 seconds to 74 seconds, for a 72% improvement. In the 2046 PM peak, the average delay time per vehicle is reduced from 431 seconds to 69 seconds, for an 84% improvement.

	AM Peak Hour							
Parameter	2026			2046				
	No-Build	Build	% Improved	No-Build	Build	% Improved		
Total Travel Time (hr)	2,004	1,766	12%	3,061	2,250	26%		
Total Delay Time (hr)	729	388	47%	1,539	452	71%		
Average Delay Time (s/veh)	151	79	47%	265	74	72%		
Latent Delay Time (hr)	29	1	98%	255	1	100%		
Vehicles Left the Network	15,077	15,770	5%	16,995	19,694	16%		
Latent Demand (veh)	124	1	99%	918	1	100%		
Vehicle Miles Traveled (mi)	74,003	78,337	6%	88,644	104,502	18%		

 Table 6-1. Future Year Network Results Summary – AM Peak

## Table 6-2. Future Year Network Results Summary – PM Peak

	PM Peak Hour							
Parameter	2026			2046				
	No-Build	Build	% Improved	No-Build	Build	% Improved		
Total Travel Time (hr)	3,078	1,702	45%	3,797	2,230	41%		
Total Delay Time (hr)	2,006	323	84%	2,442	426	83%		
Average Delay Time (s/veh)	428	65	85%	431	69	84%		
Latent Delay Time (hr)	626	5	99%	1,517	1	100%		
Vehicles Left the Network	13,472	16,163	20%	16,136	20,131	25%		
Latent Demand (veh)	1,659	3	100%	3,111	2	100%		
Vehicle Miles Traveled (mi)	61,696	79,032	28%	81,167	105,899	30%		

