Table 7-6 Design Year 2029 Network-Wide Performance

	AM Peak			PM Peak		
	No-Build	**Build**	**% Change**	**No-Build**	**Build**	**% Change**
Total Delay (hr)	967	892	-8%	3,904	966	-75%
Latent Delay (hr)	3.69	2.32	-37%	6,401	0.50	-100%
Latent Demand	0.07	0.1	0%	4,102	0.0	-100%
Total Travel Time (hr)	6,637	6,563	-1%	9,966	7,390	-26%
Total Stops	47,952	43,291	-10%	181,787	42,127	-77%
Vehicles Arrived	39,838	39,853	0%	42,268	47,146	12%

Note: Network-wide output represents the performance of the study area over the entire 3-hour peak period.

7.5 Safety

Historical crash data was summarized in **Section 3.6**. The No-Build Alternative will not improve traffic operations or safety. Because the Build Alternative provides improved intersection operations and additional queue storage for critical left turn movements, the Build Alternative will help to reduce traffic congestion along Corkscrew Road during peak periods. The improvements will result in lower intersection delays, thereby reducing the likelihood of rear-end and sideswipe crashes that may be caused by excessive queuing and queue spillover into the Corkscrew Road through lanes. Additionally, improvements to ramp merge/diverge operations will also tend to reduce the likelihood of crashes along I-75 at the Corkscrew Road interchange ramp junctions by providing additional acceleration/deceleration lanes at all four interchange ramps. The extended acceleration lanes for the I-75 on-ramps will provide additional time and distance for drivers to accelerate to freeway speeds and to find acceptable gaps in I-75 traffic when merging.

7.6 Alternatives Comparison

The No-Build Alternative and the Build Alternative were compared and a summary is provided in the sections below.

7.6.1 *Planning and Environmental Comparison*

The No-Build Alternative will have no environmental impacts. Special considerations were taken in developing and evaluating the Build Alternative to avoid and minimize the environmental impacts associated with this project to the greatest extent practicable.

The Build Alternative will have no significant impacts to air quality. The Build Alternative is not expected to result in any significant environmental impacts. The Build Alternative will have no impact on schools and churches, or historical/archeological sites within the vicinity of the I-75/Corkscrew Road study interchange. Any environmental impacts will be identified during the project re-evaluation conducted during the design phase.

7.6.2 *Operational Comparisons*

This section compares the traffic operational performance of the No-Build and Build Alternatives. The proposed improvements at the I-75/Corkscrew Road interchange will provide significantly improved ramp terminal intersection operations with minimal negative impacts. The proposed modifications have no traffic or operational impacts to the adjacent interchanges.