

### Site Traffic

The number of vehicle-trips generated by the proposed day care center was forecasted based on the *Trip Generation, Institute of Transportation Engineers, Eighth Edition, 2008*. The trip rates, contained in the manual, are developed primarily through field observations of similar land uses throughout the nation. The data contained in the trip generation manual is nationally recognized and is typically used in Rapid City to determine the traffic impact of future developments.

Table 1 shows the trip generation estimates for the proposed daycare.

**Table 1 – Trip Generation Summary**

Land Use	Students	Daily Trip Rate	AM Trip Rate	PM Trip Rate	Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
Day Care Center	75	4.48	0.8	0.82	336	32	28	60	29	33	62

As shown, the proposed day care at full occupancy, would generate approximately 336 additional vehicle-trips per day, 60 additional vehicle trips in the AM Peak Hour and 62 additional vehicle trips in the PM Peak Hour. If 90% of the peak hour traffic arrived in a fifteen minute period, that would only equate to an additional 4 cars per minute (2 entering and 2 exiting).

The City of Rapid City typically only counts the arterial and collector roadways. Since all of the adjacent streets are local roads no traffic counts are available. To date the City has not received any complaints regarding traffic congestion or traffic control in the immediate area.