TRAFFIC IMPACT ANALYSIS FOR MDMC FOLSOM WELLNESS CENTER DALLAS, TEXAS

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Table 2: Trip Generation Characteristics for Proposed Wellness Center (Based on Existing Counts)

	Trip	Characte	ristics O	Existing	Fitness	Center				
Land Use	Variable	Average Weekday			AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out	Total	In	Out
Existing Fitness Center	5,316 ft ²	203	102	101	19	10	9	30	15	15
		Rates ¹								
Land Use		Average Weekday			AM Peak Hour			PM Peak Hour		
Existing Fitness Center		T = 38.19(X)			T = 3.57(X)			T = 5.64(X)		
		Directional Split ²								
Land Use		Average Weekday			AM Peak Hour			PM Peak Hour		
Existing Fitness Center		50 / 50			53 / 47			50 / 50		
Estimated Trips Generated by Proposed Wellness Center										
Land Use	Variable ⁴	Average Weekday			AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out	Total	In	Out
Wellness Center	35,000 ft ²	1,338	669	669	125	66	59	198	99	99
	TOTAL	1,338	669	669	125	66	59	198	99	99

The trip generation estimates based on the counts at the existing fitness center facility are higher than predicted by ITE's Trip Generation Manual. To provide a conservative scenario, this study uses the trip generation estimates based on the existing fitness center provided in Table 2.

¹ T = Trips Ends; X = 1,000 square feet ² XX / YY = % entering vehicles / % exiting vehicles

PARKING DEMAND ANALYSIS

Based on the vehicular count data collected at the exiting fitness center driveway, the peak 15-minute accumulation of vehicles in the parking lot was computed to be 15 vehicles during the AM peak and 14 vehicles during the PM peak. Using the peak parking demand of 15 occupied parking spaces and the existing 5,316 square foot fitness center, the existing peak parking demand ratio was calculated to be 1 parking space per 355 square feet. Therefore, using this observed peak parking demand ratio and the proposed 35,000 square foot Wellness Center, the resulting parking demand for the Wellness Center is estimated to be 99 spaces. Therefore, the amount of parking provided at the proposed Wellness Center (139 spaces) will exceed the predicted parking demand based on the parking demand at the existing fitness center. Additionally, the 105 parking spaces provided in front of the proposed Wellness Center would be able to accommodate the 99 predicted parked vehicles.

Based on our site observations and as a result of the higher utilization of Tilden Street west of Beckley Avenue by site generated traffic, it is anticipated that the parking that is currently allowed in both sides of Tilden Street will constrain the two-way flow of traffic on this roadway section. Therefore, it is recommended that parking on the north side of Tilden Street, west of Beckley Avenue, be prohibited to allow for efficient traffic flow on this section of Tilden Street.

CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis of the proposed site plan and characteristics of the Wellness Center facility, the following conclusions can be made:

- The proposed 35,000 square foot Wellness Center facility is predicted to generate 1,338 daily trips with 125 trips during the AM peak hour and 198 trips during the PM peak hour, based on the trip characteristics at the existing fitness center.
- The proposed Wellness Center is predicted to generate minimal traffic on Haines Avenue (less than on car every two minutes) and little to none traffic on Greenbriar Avenue (west of Beckley Avenue), except for residents in those neighborhoods who would use the proposed Wellness Center.
- The study area intersections and approaches currently operate at acceptable levels of service during the AM and PM peak hours and are predicted to continue operating at the same acceptable levels of service under Build-Out Year (2019) Background and Total conditions during the AM and PM peak hour.
- The number of parking spaces provided for the proposed Wellness Center (139) is predicted to exceed the parking demand (99 parking spaces) based on the parking characteristics at the existing fitness center.

As a result of this traffic study, the following recommendations are made:

- Install a northbound left turn lane on Beckley Avenue in the existing median at Tilden Street.
- To provide for efficient flow of traffic on Tilden Street, west of Beckley Avenue, it is recommended that parking on the north side of Tilden Street be prohibited.