



Civil Engineers  
 Structural Engineers  
 Traffic Engineers  
 Land Surveyors  
 Landscape Architects  
 Scientists

**TRAFFIC MEMORANDUM**

Date: March 29, 2024

To: Town of Amherst Community Development Office  
 Attn: Nic Strong  
 2 Main Street  
 Amherst, NH 03031

From: TFMoran, Inc.

Re: **Proposed Change of Use – Planet Fitness**  
**Former Bed Bath & Beyond at Amherst Plaza, 123 NH Route 101A**  
 TFM Project No. 76615.03

RECEIVED  
 APR 1 - 2024  
 AMHERST COMMUNITY  
 DEVELOPMENT OFFICE

**PROJECT:**

TFMoran has prepared this traffic memo to evaluate trip generation relative to a proposed change-of-use within the 123 NH Route 101A Amherst Plaza. The proposal is to change the vacant 20,462 sf Bed Bath & Beyond unit from a retail store to a fitness facility. This Planet Fitness Location will serve up to 185 members/employees per day with hours of operation 12am-10pm Monday – Friday and 6am – 9pm Saturday - Sunday.

The unit is within a commercial shopping center that includes a combination of national brand retailers and smaller retail tenants. The change of use from retail goods to fitness club is permitted under current zoning and the Town is reviewing this change in accordance with their site plan approval process.

The main access to the plaza is off NH101A at a signalized intersection controlled by NHDOT. A right-in/right-out access is also provided to the west of the signal.

**ANALYSIS:**

A health club is a common component of shopping centers and included within the ITE Shopping Plaza database (LUC 821). This land use code takes into consideration the substantial interaction that occurs between individual uses within the center. Using ITE (11<sup>th</sup> Edition) trip rates for the former retail unit and the proposed fitness center, the following table shows the change in site trips for the change of use. Additional calculations are attached as an appendix to this memo.

<b>New Trips due to Fitness Change-of-Use</b>	<b>In</b>	<b>Out</b>	<b>Total</b>
<b>Proposed 20,462 sf Planet Fitness (LUC 492)</b>			
Weekday AM Peak Hour of Adjacent Street	14	13	27
Weekday PM Peak Hour of Adjacent Street	40	31	71
Weekend SAT Peak Hour of Generator	32	33	65
<b>Existing 20,462 sf Retail (LUC 821)</b>			
Weekday AM Peak Hour of Adjacent Street	-22	-13	-35
Weekday PM Peak Hour of Adjacent Street	-52	-54	-106
Weekend SAT Peak Hour of Generator	-67	-61	-128
<b>New Trips due to Fitness Change-of-Use</b>			
Weekday AM Peak Hour of Adjacent Street	-8	0	-8
Weekday PM Peak Hour of Adjacent Street	-12	-23	-35
Weekend SAT Peak Hour of Generator	-35	-28	-63

**CONCLUSION**

As the foregoing table illustrates, the net change in peak hour traffic volumes associated with a change-of-use of the former Bed Bath & Beyond retail store to a Planet Fitness represents a decrease in trips to the site.

We therefore conclude that the traffic associated with this project will not adversely affect the adjacent roadway network.

Respectfully Submitted,  
TFMoran, Inc.



Robert Duval, PE  
Chief Engineer

Existing Trip Generation								
ITE LUC 821 - Shopping Plaza (40-150k) - Supermarket - No: 20,462 s.f. GFA								
Time Period	X	Rate	Rate/ Eq Used	Trip Ends	Directional Split		Directional Distribution	
					In	Out	In	Out
Weekday AM Peak Hour Adjacent Street	20.5	1.73	Rate	35	62%	38%	22	13
Weekday PM Peak Hour Adjacent Street	20.5	5.19	Rate	106	49%	51%	52	54
Weekend SAT Peak Hour of Generator	20.5	6.22	Rate	128	52%	48%	67	61

Proposed Trip Generation								
Proposed Use on Site								
ITE LUC 492 - Health/Fitness Club: 20,462 s.f. GFA								
Time Period	X	Rate	Used	Trip Ends	Directional Split		Directional Distribution	
					In	Out	In	Out
Weekday AM Peak Hour Adjacent Street	20.5	1.31	Rate	27	51%	49%	14	13
Weekday PM Peak Hour Adjacent Street	20.5	3.45	Rate	71	57%	43%	40	31
Weekend SAT Peak Hour of Generator	20.5	3.19	Rate	65	49%	51%	32	33

Proposed Change in Trips								
Time Period	X	Rate	Used	Trip Ends	Directional Split		Directional Distribution	
					In	Out	In	Out
Weekday AM Peak Hour Adjacent Street				-8			-8	0
Weekday PM Peak Hour Adjacent Street				-35			-12	-23
Weekend SAT Peak Hour of Generator				-63			-35	-28