

# Walmart Supercenter – Wyoming Mall (Northeastern Blvd. / Wyoming Blvd.) TRAFFIC IMPACT STUDY

## Executive Summary

The Traffic Impact Study for the proposed Walmart Supercenter located at the northeast corner of Northeastern Blvd. / Wyoming Blvd. was performed in accordance with the requirements of the City of Albuquerque defined at the June 23, 2004 scoping meeting held with Tony Loyd and Steele Nowak at the City of Albuquerque Transportation Development Section. The proposed Walmart Supercenter site plan contained in the Traffic Impact Study shows other retail development in addition to the Walmart Supercenter. The other retail development is either proposed new development or a relocated or existing retail facility on the site. This Traffic Impact Study considers the traffic generated by the proposed Walmart Supercenter and the existing, relocated, and new commercial development on the proposed site. The total number of trips generated by the Walmart Supercenter Commercial Center are summarized in the following table:

### *Walmart Supercenter (Northeastern Blvd. / Wyoming Blvd.)*

#### Trip Generation Data

COMMENT	USE (ITE CODE)		24 HR VOL	A. M. PEAK HR.		P. M. PEAK HR.	
	DESCRIPTION		GROSS	ENTER	EXIT	ENTER	EXIT
	Summary Sheet	Units					
Walmart - Lot 3	Free-Standing Discount Superstore (813)	225.00	12,700	211	203	438	456
Lot 1	Shopping Center (820)	12.00	1,712	27	17	74	81
Furrs - Lot 2	High Turnover (Sit-Down) Restaurant (832)	11.70	1,525	56	52	76	51
Petsmart - Lot 4	Electronics Superstore (863)	20.00	901	3	3	44	46
Black Angus	High Turnover (Sit-Down) Restaurant (832)	12.20	1,590	59	54	79	53
Lot 5	Shopping Center (820)	14.50	1,936	30	19	84	91
Bank	Walk-In Bank (911)	5.60	2,352	60	60	118	118
Village Inn	High Turnover (Sit-Down) Restaurant (832)	6.00	782	29	27	39	26
Existing Retail North	Shopping Center (820)	50.00	4,328	63	40	191	207
	Subtotal		27,826	538	475	1,143	1,129
	Trips Generated to Walmart Driveways		22,716	446	408	913	896
	Trips Generated to non-Walmart Driveways		5,110	92	67	230	233
	New Trips Generated to Walmart Driveway		17,249	271	242	640	674

The trip generation rates are based on ITE Trip Generation Manual (7<sup>th</sup> Edition) data and equations.

There are three scenarios to consider when evaluating the trip generation rates for this project. First of all are the number of trips that would be generated by the approved site plan in its optimum operation. That is, what traffic would the existing site generated under the approved site development plan if the site were fully occupied by active retail commercial operations. Secondly, what traffic is being generated by the center today. The center currently is largely vacant. Thirdly is the trip generation rate for the new Walmart Supercenter and the associated uses to the south and to the west of the new Walmart.

For the purpose of determining whether or not a full Traffic Impact Study is required for this project, the number of trips generated by the new Walmart Site is compared to the number of trips that would be generated by the approved site development plan for the

Wyoming Mall based on full occupancy. That comparison is summarized in the following table:

*Walmart @ Wyoming Mall (Northwestern Blvd. / Wyoming Blvd.)*

**Trip Generation Data**

COMMENT	USE (ITE CODE)	24 HR VOL	A. M. PEAK HR.			P. M. PEAK HR.	
	DESCRIPTION		GROSS	ENTER	EXIT	ENTER	EXIT
<b>Summary Sheet</b>		Units					
Furr's Supermarket	Supermarket (850)	50.00	4,739	114	73	275	264
Service Merchandise	Discount Club (861)	47.00	1,965	15	15	88	91
Health Club	Health Club (493)	40.00	1,720	6	6	105	67
Burger King	Fast Food Restaurant w/ Drive-Thru Window (834)	3.00	1,488	76	73	52	48
Furr's Cafeteria	High Turnover (Sit-Down) Restaurant (832)	10.00	1,303	48	44	65	43
Black Angus	High Turnover (Sit-Down) Restaurant (832)	12.20	1,590	59	54	79	53
Winchells	Fast Food Restaurant w/o Drive-Thru Window (833)	1.30	931	34	23	17	17
Misc. Shops	Specialty Retail Center (814)	93.50	4,038	252	321	108	138
<b>SUBTOTAL - WYOMING MALL APPROVED SITE PLAN</b>			<b>17,774</b>	<b>604</b>	<b>609</b>	<b>789</b>	<b>721</b>

The above Trip Generation Rate Table depicts the theoretical calculated trips for the Wyoming Mall (south half) which the proposed Walmart will replace.

Trips Generated by proposed Walmart Supercenter Site (south half of Wyoming Mall).

Walmart Supercenter	225.00	12,700	211	203	438	456
Shopping Center - Lot 1	12.00	1,712	27	17	74	81
Furr's - Lot 2	11.70	1,525	56	52	76	51
Petsmart - Lot 4	20.00	901	3	3	44	46
Black Angus	12.20	1,590	59	54	79	53
Shopping Center - Lot 5	14.50	1,936	30	19	84	91
		<b>20,364</b>	<b>386</b>	<b>348</b>	<b>795</b>	<b>778</b>
<b>Increase (Decrease) Trips</b>		<b>2,590</b>	<b>(218)</b>	<b>(261)</b>	<b>6</b>	<b>57</b>

There were approximately 257,000 S.F. of retail commercial space under the existing plan for the Wyoming Mall (south half) being replaced by the approximately 295,000 S.F. of retail commercial space under the Walmart Supercenter Plan. The comparison table above does not compare the entire center, but only the south half that will be modified by the Walmart plan. The north half of the existing Wyoming Mall Center will remain unchanged.

The comparison table above demonstrates that the new Walmart Plan will not generate enough additional traffic to warrant a full Traffic Impact Study. In order to warrant a full Traffic Impact Study under current City of Albuquerque criteria, the new center would need to generate an increase of 100 or more entering or exiting trips during the AM or PM Peak Hour. This project does not meet that criteria. Therefore, a full Traffic Impact Study is not required. An Access Study was performed to provide information to the City of Albuquerque for future consideration of improvements under the Capital Improvements Program. The Access Study is not intended to be a means of extracting offsite improvements from the developer, since the trip generation comparison demonstrates that the Wyoming Mall development (as approved) would generate about the same volume of traffic as the proposed Walmart Supercenter Plan does.

For the purpose of the Access Study, the assumption is made that virtually the entire south half of the site will be demolished and reconstructed. Since most of the south half of the site is vacant, the traffic generation rate is very low, and the access study assumes that the trips generated by the new Walmart Supercenter site will constitute the increase in trips to the system above what is currently being generated.

The new trips from this development were distributed onto the adjacent transportation system consistent with the population distribution in the market area. Key signalized intersections were analyzed for the projected 2006 AM and PM Peak Hour NO BUILD and BUILD Conditions and compared to determine the impact of implementing the new Walmart Supercenter project.

Background traffic growth rates were determined based on historic data obtained from the Mid-Region Council of Governments' Traffic Flow Maps. Volume data was considered for a five-year period to determine a mathematical trend that would approximate the most probable historic growth rate. That annual growth rate was applied to the most recent traffic counts to grow the background traffic volumes to the year 2006.

The intersections analyzed in the Traffic Impact Study are:

INTERSECTION	TYPE CONTROL	NO BUILD	BUILD
1) Indian School Rd. / Wyoming Blvd.	Traffic Signal	2006	2006
2) Northeastern Blvd. / Wyoming Blvd.	Traffic Signal	2006	2006
3) Menaul Blvd. / Wyoming Blvd.	Traffic Signal	2006	2006
4) Driveway "A" / Wyoming Blvd.	Stop Sign	N/A	2006
5) Menaul Blvd. / Lester Rd.	Stop Sign	2006	2006
6) Wyoming Pl. (Driveway "B") / Wyoming Blvd.	Stop Sign	N/A	2006
7) Apache Ave. (Driveway "C") / Wyoming Blvd.	Stop Sign	N/A	2006
8) Northeastern Blvd. / Driveway "D"	Stop Sign	N/A	2006
9) Northeastern Blvd. / Driveway "E"	Stop Sign	N/A	2002

The analysis considered the capacity for three local signalized intersections – Indian School Rd. / Wyoming Blvd., Northeastern Blvd. / Wyoming Blvd., and Menaul Blvd. / Wyoming Blvd. Both Indian School Rd. / Wyoming and Menaul Blvd. / Wyoming are experiencing capacity shortfalls for the 2004 Existing Conditions, the 2006 NO BUILD Conditions, and the 2006 BUILD Conditions, especially during the PM Peak Hour. Remedies to the capacity problems are difficult due to the fact that this is an established area in the City of Albuquerque, and there are right-of-way limitations and existing structures which preclude expansion of the intersection to solve capacity problems. The City of Albuquerque can consider the current and projected levels-of-service when reviewing and approving future redevelopment plans and incorporate right-of-way requirements and / or setback requirements which might allow needed improvements to be constructed at the intersections to increase the capacity.

Recommended improvements to the intersection of Indian School Rd. / Wyoming Blvd. consist of dual eastbound left turn lanes, an additional eastbound thru lane, a westbound right turn lane, and an additional northbound thru lane. It appears from existing aerial photographs that it is not feasible to construct any of these improvements.

Recommended improvements to the intersection of Menaul Blvd. / Wyoming Blvd. consists of one additional northbound thru lane and one additional southbound thru lane. It appears from existing aerial photographs that there is not sufficient right-of-way and room to construct any of these improvements.

There are six proposed driveways for access to the new site. Three driveways are proposed on Wyoming Blvd., two on Northeastern Blvd., and one on Lester St.

The southernmost driveway on Wyoming Blvd. (Driveway "A") is proposed to be a full access signalized intersection. The projected volumes at Driveway "A" meet the minimum volume warrant criteria for a new traffic signal based on the Peak Hour Volume Warrant established in the Manual on Uniform Traffic Control Devices (MUTCD). It is recommended that Driveway "A" be constructed as a signalized tee intersection with dual westbound left turn lanes so as to minimize the side street green time and maximize the green time on Wyoming Blvd. This being the case, the main street (Wyoming Blvd.) green time can be set to approximately 75% to 85%. A southbound permitted / protected left turn phase should be incorporated into the design of the signalized intersection.

Driveway "B" to the north of Driveway "A" (See attached Site Plan) is recommended to be a full access unsignalized intersection. The westbound left turn movements at Driveway "B" are expected to experience long delays. Therefore, Driveway "B" should be constructed to incorporate two exiting lanes (one for left turns and one for thru / right turns. Driveway "B" should align with the existing intersection of Wyoming Place across the street.

Driveway "C" to the north of Driveway "B" (See attached Site Plan) is recommended to be a full access unsignalized intersection. The westbound left turn movements at Driveway "C" are expected to experience long delays. Therefore, Driveway "C" should be constructed to incorporate two exiting lanes (one for left turns and one for thru / right turns. Driveway "C" should align with the existing intersection of Apache Ave. across the street.

Driveway "D" at the southeast corner of the site (See attached Site Plan) is recommended to be a full access unsignalized driveway. It can be constructed with a minimum of one exiting lane and one entering lane. Northeastern Blvd. should be striped to create a 100 feet long eastbound left turn lane at Driveway "D".

Driveway "E" to the west of Driveway "D" (See attached Site Plan) is recommended to be a full access unsignalized driveway. It can be constructed with a minimum of one exiting lane and one entering lane. Northeastern Blvd. should be striped to create a 100 feet long eastbound left turn lane at Driveway "E".

The driveway accessing Lester St. on the east side of this project should be designed as an unsignalized intersection with one exiting lane and one entering lane. The Lester St. driveway is expected to be a secondary low volume driveway. There should be an easterly-westerly driving aisle connecting the Lester St. driveway with the signalized driveway on Wyoming Blvd. In order to prevent cut-through traffic from Lester to Wyoming, the connection should be somewhat non-continuous as demonstrated by the site plan on Page A-3.

The intersection of Menaul Blvd. / Lester St. falls short of meeting the minimum warrant criteria for a new traffic signal.

In conclusion, the six proposed driveways associated with this project should provide adequate access to serve the site when fully developed.