

McBee Carwash Traffic Review

The McBee Carwash & Coffee development coming to the retail area of the Menards, QuikTrip development area, via access from Jackson Drive and Little Blue Parkway, will have a minor impact to the daily and peak hourly traffic volumes and function of the arterial intersection and proposed driveways along the private street access. The proposed land use will have a trip generation of 790 vehicles per day and a peak PM trip generation of 78 vehicles per hour, with 40% being pass-by trips. A pass-by trip is a secondary trip generated during the course of a trip for another primary purpose – in this case a primary trip may be to Menards for supplies and since they will pass by McBee it is convenient to make a secondary stop on the way to get a car wash which generates a pass-by trip but does not create additional impacts on the intersection of Jackson Drive and the Little Blue Parkway. Whereas a primary trip for the sole purpose of getting a car wash will create new trips to the development area and increase the traffic impacts to the area. The McBee development will generate 46 new trips and 32 pass by trips. New and existing development in the area will have both types of trips impacting Little Blue Parkway and Jackson Drive. Based on the information provided by McBee on the proposed development the impact to City infrastructure and the development area will be minimal.

The following comments are directed toward the overall impacts of the area with previous impact study conducted by Menards and the Eastgate development traffic study conducted early this year regarding existing and expected traffic conditions of the area:

A study was conducted in 2012 for the Menards, QuikTrip, and 'Shopping Center' lots on the east side of Little Blue Parkway north of I-70 to Jackson Drive with one signalized access point at Jackson Drive. The initial study indicated a current traffic volume of 24,748 vehicles per day Average Daily Traffic (ADT) with an AM peak hour intersection volume of 1,076 vph and a PM peak hour intersection volume of 2,398 vph. The full build scenario included Menards, QuikTrip, and an expected 150,000 sq ft of retail shopping center which would be expected to increase traffic on Little Blue Parkway to 29,386 ADT, AM peak intersection volume to 1,511 vph and the PM peak intersection volume to 3,335 vph. The developable area within the study area was 54.60 acres and the currently developed area (including Dutch Brothers Coffee and McBee Carwash) is 27.55 acres and 21,050 sq ft of store footprint will have been installed. This would leave an additional 128,950 retail shopping center remaining in the development proposed by the Menards Traffic Impact Study.

The following table highlights the Menard Study traffic volumes and the Eastgate study that was performed recently. The existing and full build conditions for Eastgate do not include the expected increase in traffic volume from the McBee Carwash or Dutch Bro's developments or remaining developable area in the Menards, QT, Shopping Center impact area. The Eastgate

study did not collect ADT data for Little Blue Pkwy – the number listed is an estimate based on the PM peak hour traffic volumes with a multiplier of 10. The reason I bring this up is to point out that the existing 2022 traffic impacts are below the full build scenario expected from the Menards Development, with several sites still remaining to be developed and without the impacts of the McBee or Dutch Brothers Coffee developments.

Menards Study (2012)	ADT	AM	Intersection LOS (AM)	PM	Intersection LOS (PM)
Existing	24,748	1,076	A	2,398	A
Full Build Scenario	29,386	1,511	B	3,335	C
Increase	4,638	435		937	
Eastgate Study (2022)	ADT	AM	Intersection LOS (AM)	PM	Intersection LOS (PM)
Existing	26790 (est.)	1,361	B	2,679	C
Full Build	35,250 (est.)	1,831	B	3,525	C

There are concerns that additional future development around Menards (with 128,950 additional retail shopping store footprint) in conjunction with the impacts of the Eastgate development or other area development will ultimately reduce the Level of Service of Jackson Drive and Little Blue Pkwy causing much congestion and increased traffic delays in the area without additional access points to Little Blue Parkway or significant capacity improvements to the corridor. The Eastgate development has proposed some capacity improvements to address current needs at the I-70 interchange and at the Jackson Drive traffic signal. These improvements may or may not be adequate in the future when the area has fully developed. The Menards development on the east side of Little Blue Parkway and/or the Hartman Heritage Center on the west side of Little Blue Parkway are the main contributors to the reduced Level of Service at Jackson Drive. Individual turning movements are the main deteriorating factor for the future levels of service.

Future considerations should be made for additional traffic impact reviews for any significant developments on the remaining lots in the Menards development.

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