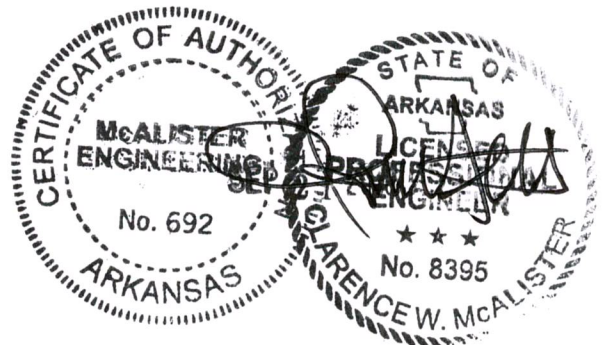


TRAFFIC IMPACT STUDY  
FOR  
CRAIGHEAD COMMONS

SOUTH CARAWAY ROAD AND  
CAPRICE PARKWAY  
JONESBORO, AR 72404

September 20, 2016

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On Friday, September 16, 2016, from the hours of 6:00 a.m. to 6:00 p.m., McAlister Engineering observed the traffic patterns at the intersection of South Caraway Road and Caprice Parkway (the shared entrance to Craighead Commons and Caraway Commons).

Traffic was observed using the following criteria:

- Northbound Traffic** - Vehicular traffic traveling in the northbound lane.
- Cars Entering Right** - Vehicular traffic turning into Caraway Commons from the northbound lane.
- Southbound Traffic** - Vehicular traffic traveling in the southbound lane.
- Cars Entering Left** - Vehicular traffic turning into Caraway Commons from the southbound turning lane.
- Cars in Storage** - The maximum number of vehicles waiting behind a vehicle in the turning lane.
- Cars Leaving Right** - The number of vehicles exiting Caraway Commons into the northbound lane.
- Cars Leaving Left** - The number of vehicles exiting Caraway Commons into the southbound lane.
- Longest Wait Time** - The maximum observed time a vehicle was required to wait to complete the turn.

The Planning and Research Division of the Arkansas State Highway and Transportation Department, in cooperation with the U.S. Department of Transportation Federal Highway Administration has published a Daily Traffic Estimate information drawing that estimates the volume of vehicular traffic on many major roads and highways in Craighead County, and Caraway Road is on this map. According to their findings, South Caraway Road sees approximately 13,000 vehicles per day. (see Attachment A)

Using a 12-hour observation dataset, 11,967 vehicles were counted on South Caraway Road at the observed location. This correlates with the AHTD data of ~13,000 vehicles in a 24-hour period, given that between the hours of 6 p.m. and 6 a.m., one could reasonably assume the ~1,000 unaccounted for vehicles are traveling on this road during the late night hours, when vehicular traffic is exponentially decreased. Of the 11,967 vehicles, this includes 5,250 southbound vehicles, 6,205 northbound vehicles, 512 vehicles entering South Caraway Road from Caraway Commons/Craighead Commons, and 421 vehicles exiting South Caraway Road into Caraway Commons/Craighead Commons.

Of the 512 vehicles entering South Caraway Road from the two developments, 403 made a right turn into the northbound lane of South Caraway Road, and 109 made a left turn into the southbound lane of South Caraway Road. Of the 421 vehicles turning into the two developments, 92 made a right hand turn from the northbound lane, while 329 used a dedicated turning lane for southbound traffic. The turning lane has a capacity to store four cars while waiting to turn across the northbound lane into the developments. Of the observed vehicles making this turn from the turning lane, a maximum of two cars were in the turning lane at any given time, leaving storage for two more cars.

When observing the longest time spent waiting to complete a turn, all turning movements described above were timed to determine the maximum amount of time a driver would have to wait after approaching the intersection to complete their turn. The longest wait observed was at 5:20 p.m., and lasted for 1 minute, 29 seconds. This turn was a left turn out of the developments into the southbound lane of South Caraway Road.

There are a total of 228 units presently in the Caraway Commons/Craighead Commons developments combined. Using the count of vehicles leaving and the number of units, it was determined that for each unit, the vehicular count on South Caraway Road increases by 2.25 vehicles.

The proposed addition of 38 units at 2.25 vehicles per unit yields an estimated 86 additional vehicles entering South Caraway Road. This causes a 0.71% increase in vehicular traffic on South Caraway Road. Using weighted calculations to spread the 86 additional cars across the 12-hour period, it is found that during the peak time of 7:30 a.m., a projected 4 additional cars would be added to South Caraway Road. Looking at the busiest part of the day, from 7:00 a.m. to 8:00 a.m., only 17 additional vehicles would be added to South Caraway Road. (see Attachment B)

#### Technical Data

Northbound Traffic - 6,205 Vehicles  
Cars Entering Right - 92 Vehicles  
Southbound Traffic - 5,250 Vehicles  
Cars Entering Left - 329 Vehicles  
Cars in Storage - 2 (Out of 4 available spots)  
Cars Leaving Right - 403 Vehicles  
Cars Leaving Left - 109 Vehicles  
Longest Wait Time - 1 min. 29 sec.

For a detailed breakdown of the data, see Attachment C.