# COUNTY DEPARTMENT AGENDA REQUEST

| | | | |
|---|---|---|---|
| Department: | Planning & Zoning | Presenter(s): | Peter A. Frisina |
| Meeting Date: | Thursday, May 28, 2009 | Type of Request: | Consent |

Wording for the Agenda:

Consideration of staff's recommendation that the request that Mask Road be designated as an authorized street for motorized cart travel be denied.

Background/History/Details:

Approval by the Board of Commissioners is required to designate roadways for motorized cart travel, in accordance with Ordinance 95-10. A request has been made that Mask Road be designated for use by motorized carts. The request has been evaluated by a process that includes review by Planning & Zoning, Public Works, and the Sheriff's Department. Mask Road is classified as a County local street/road on the Fayette County Thoroughfare Plan; however, after applying established traffic/safety formulas, Mask Road is not being recommended for approval based on the following: Mask Road is only .40 miles long and does not connect with any other approved street and approval of this request could encourage someone traveling via a motorized cart on Mask Road to enter onto McBride Road or Harp Road, both of which are not approved for motorized cart travel.

What action are you seeking from the Board of Commissioners?

Vote to accept staff's recommendation not to approve the designation of Mask Road as an authorized street for motorized cart travel.

If this item requires funding, please describe:

Not Applicable.

| | | | |
|---|---|---|---|
| Has this issue come before the Commissioners in the past? | No | If so, when? | |
| Do you need audio-visual for the presentation? | No | Back-up Material Submitted? | Yes |

## STAFF USE ONLY

| | | | |
|---|---|---|---|
| Approved by Finance | Yes | Reviewed by Legal | Yes |
| Approved by Purchasing | Yes | Approved by County Clerk | Yes |
| Administrator's Approval | Yes | | |

Staff Notes:

Fayette County GEORGIA

*Where Quality Is A Lifestyle*

To: Fayette County Board of Commissioners

From: Pete Frisina, Planning and Zoning
Phil Mallon, Public Works
Brian Eubanks, Sheriff's Office

Date: May 7, 2009

Subject: Authorization of Mask Road for Motorized Carts

The purpose of this memo is to address the request for the authorization of Mask Road for motorized carts. The request is being made by Robert Jones of 676 McBride Road.

Section 10-42. (Street Authorization) of the Fayette County Code outlines issues that can be considered in the BOC's designation of authorized streets. Section 10-42 reads as follows:

> The Board of Commissioners may designate authorized streets upon its own initiative or by request from a private citizen for the use of motorized carts. The Board of Commissioners may consider issues including, but not limited to, the street classification, posted speed limit, speed characteristics of the street as determined by studies, maximum grade of the road, minimum visibility distance, or any other existing conditions particular to the street in their designation of an authorized street. The Board of Commissioners may condition approval of the designation subject to safety measures on the street including, but not limited to, the reduction of the posted speed limit, additional signage/markings, and traffic calming devices to improve safety.

Staff has found the following:

**Street Classification:** Mask Road is a County Local per the Fayette County Thoroughfare Plan

**Posted Speed Limit:** 35 mph

**Speed Characteristics:** The Sheriff's Office conducted a speed study from 04/16/2009 to 04/17/2009 on Mask Road. The study found that the 85$^{th}$ percentile was less than 16 mph over the posted speed limit (49.51 mph). The "85$^{th}$ percentile" is a statistic used in traffic engineering commonly used to help characterize vehicle speed on a given section of roadway. More specifically, it is the speed at which 85 percent of all vehicles on that road are traveling at or below.

According to the National Safety Council, the average un-impaired driver of a motor vehicle takes 1 and ¾ seconds to observe, process, and react to a hazard. The distance a vehicle travels during this time is referred to this as the perception and reaction distance. At velocities of 35 mph, the perception and reaction distance is 90 feet, at 49 mph the distance is 126. These distances are important when evaluated in conjunction with sight distance, described below.

**Visibility Distance:** In order to provide for a reasonable level of safety, we recommend that motorized carts only be allowed on streets that have characteristics that allow a driver adequate time and distance to identify a hazard (e.g., a golf cart) and react to it (i.e., stop their vehicle). Visibility distance indicates the minimum distance a driver can see given the road's horizontal and vertical curves, vegetation, and other obstructions.

On average, the braking distance for an automobile in good weather conditions, with a normally operating vehicle, is within a range of 100 to 160 feet. Adding the braking distance with the perception and reaction distance yields the minimum required visibility distance. For Mask Road this is a range of 226 to 286 feet (based on the 85$^{th}$ percentile). The Sheriff's Office has verified that Mask Road has a minimum sight distance of 286 feet of driver visibility over its entire length.

**Grade of the Road:** The primary method for reducing instances of excessive vehicle speed is the employment of speed detection devices (RADAR/Laser). The use of speed detection devices is strictly governed be state law. The Official Code of Georgia Tile 40, Chapter 14, Section 9, states in part "…No speed detection device shall be employed by county, municipal, or campus law enforcement officers on any portion of any highway which has a grade in excess of seven (7) percent." The grade of Mask Road does not exceed seven (7) percent.

**Recommendation:** While Mask Road meets the criterion as discussed above, it does not connect with any other street approved for motorized cart use as there are no subdivisions presently developed on Mask Road. Approval of Mask Road for motorized cart use could encourage someone traveling on Mask Road to access Harp Road or McBride Road, both of which are not approved for motorized cart use. Staff recommends that the **BOC not approve the designation of Mask Road** as an authorized street for motorized cart usage.

# Fayette County Sheriff's Office

## WAYNE HANNAH
## SHERIFF

Randall Johnson Law
Enforcement Center
155 Johnson Avenue
Fayetteville, Georgia 30214
(770) 461-6353
EMERGENCY: 9-1-1

April 28, 2009

To: Mr. Phil Mallon, Director
Fayette County Public Works Department

From: Captain Brian Eubanks
Field Operations Division
Traffic Enforcement Section

Re: Motorized Cart Recommendation for Mask Road

The Fayette County Sheriff's Office has received a request from the Fayette County Planning and Zoning Department for an assessment of Mask Road as an addition to the Fayette County Motorized Cart Ordinance. Although Mask Road meets the criterion for such requests, ***Mask Road is not recommended for inclusion*** in Fayette County ordinance 10-42 (Motorized Carts) as an authorized road for such uses.

Mask Road is .40 miles long and does not connect with any other approved street. Approval of this request could encourage someone traveling on Mask Road to enter onto McBride Road or Harp Road, neither of which are approved for motorized cart usage.

Mask Road is classified as a "local road" in the Fayette County transportation plan. The posted speed limit is 35 miles per hour. Mask Road is included as a street designated for speed detection device use in Fayette County Ordinance 407-113 as approved by the Fayette County Board of Commissioners on June 14, 2007.

The Field Operations Division, Traffic Enforcement Section conducted a speed study using Nu-Metric Hi-Star Traffic Counting Sensors beginning on April 16, 2209, at 2:00 p.m. and ending on April 17, 2009 at 2:00 p.m.. The study revealed that the 85$^{th}$ percentile for Mask Road during this period was 49.51 miles per hour which is 14.51 miles per hour over the posted speed limit.

Mask Road has a minimum of 286 feet of driver visibility over its entire length. Visibility is not an issue for this road. Mask Road also has no section of roadway where the grade exceeds 7%.

If you have any questions, please do not hesitate to let me know.

# Fayette County Sheriff's Office

**WAYNE HANNAH**
**SHERIFF**

Randall Johnson Law
Enforcement Center
155 Johnson Avenue
Fayetteville, Georgia 30214
(770) 461-6353
EMERGENCY: 9-1-1


cc: Sheriff Hannah
Major Woodie

enclosures

# Nu-Metrics Traffic Analyzer Study
# Computer Generated Summary Report
# City: Fayetteville
# Street: Mask Rd

A study of vehicle traffic was conducted with HI-STAR unit number 8164. The study was done in the S/B lane on Mask Rd in Fayetteville, Ga in Fayette county. The study began on 04/16/2009 at 02:00 PM and concluded on 04/17/2009 at 02:00 PM, lasting a total of 24 hours. Data was recorded in 15 minute time periods. The total recorded volume of traffic showed 145 vehicles passed through the location with a peak volume of 6 on 04/16/2009 at 03:15 PM and a minimum volume of 0 on 04/16/2009 at 04:15 PM. The AADT Count for this study was 145.

## SPEED

Chart 1 lists the values of the speed bins and the total traffic volume for each bin.

**Chart 1**

| 0 to 9 | 10 to 14 | 15 to 19 | 20 to 24 | 25 to 29 | 30 to 34 | 35 to 39 | 40 to 44 | 45 to 49 | 50 to 54 | 55 to 59 | 60 to 64 | 65 to 69 | 70 to 74 | 75 > |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 2 | 4 | 8 | 15 | 38 | 31 | 28 | 9 | 8 | 2 | 0 | 0 | 0 |

At least half of the vehicles were traveling in the 40 - 44 mph range or a lower speed. The average speed for all classified vehicles was 41 mph with 80.0 percent exceeding the posted speed of 35 mph. The HI-STAR found 6.90 percent of the total vehicles were traveling in excess of 55 mph. The mode speed for this traffic study was 35 mph and the 85th percentile was 49.51 mph.

## CLASSIFICATION

Chart 2 lists the values of the eight classification bins and the total traffic volume accumulated for each bin.

**Chart 2**

| 0 to 20 | 21 to 27 | 28 to 39 | 40 to 49 | 50 to 59 | 60 to 69 | 70 to 79 | 80 > |
|---|---|---|---|---|---|---|---|
| 120 | 21 | 3 | 0 | 0 | 1 | 0 | 0 |

Most of the vehicles classified during the study were Passenger Cars. The number of Passenger Cars in the study was 141 which represents 97.20 percent of the total classified vehicles. The number of Small Trucks in the study was 3 which represents 2.10 percent of the total classified vehicles. The number of Trucks/Buses in the study was 0 which represents 0.00 percent of the total classified vehicles. The number of Tractor Trailers in the study was 1 which represents 0.70 percent of the total classified vehicles.

## HEADWAY

During the peak time period, on 04/16/2009 at 03:15 PM the average headway between the vehicles was 128.57 seconds. The slowest traffic period was on 04/16/2009 at 04:15 PM. During this slowest period, the average headway was 900.0 seconds.

## WEATHER

The roadway surface temperature over the period of the study varied between 54 and 111 degrees Fahrenheit. The HI-STAR determined that the roadway surface was Dry 100.00 percent of the time.

# Nu-Metrics Traffic Analyzer Study
# Computer Generated Summary Report
# City: Fayetteville
# Street: Mask Rd

A study of vehicle traffic was conducted with HI-STAR unit number 2460. The study was done in the N/B lane on Mask Rd in Fayetteville, Ga in Fayette county. The study began on 04/16/2009 at 02:00 PM and concluded on 04/17/2009 at 02:00 PM, lasting a total of 24 hours. Data was recorded in 15 minute time periods. The total recorded volume of traffic showed 170 vehicles passed through the location with a peak volume of 10 on 04/16/2009 at 03:30 PM and a minimum volume of 0 on 04/16/2009 at 02:15 PM. The AADT Count for this study was 170.

## SPEED

Chart 1 lists the values of the speed bins and the total traffic volume for each bin.

**Chart 1**

| 0 to 9 | 10 to 14 | 15 to 19 | 20 to 24 | 25 to 29 | 30 to 34 | 35 to 39 | 40 to 44 | 45 to 49 | 50 to 54 | 55 to 59 | 60 to 64 | 65 to 69 | 70 to 74 | 75 > |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 2 | 5 | 10 | 39 | 72 | 29 | 9 | 2 | 1 | 1 | 0 | 0 | 0 |

At least half of the vehicles were traveling in the 35 - 39 mph range or a lower speed. The average speed for all classified vehicles was 37 mph with 67.0 percent exceeding the posted speed of 35 mph. The HI-STAR found 1.18 percent of the total vehicles were traveling in excess of 55 mph. The mode speed for this traffic study was 35 mph and the 85th percentile was 42.84 mph.

## CLASSIFICATION

Chart 2 lists the values of the eight classification bins and the total traffic volume accumulated for each bin.

**Chart 2**

| 0 to 20 | 21 to 27 | 28 to 39 | 40 to 49 | 50 to 59 | 60 to 69 | 70 to 79 | 80 > |
|---|---|---|---|---|---|---|---|
| 162 | 5 | 2 | 1 | 0 | 0 | 0 | 0 |

Most of the vehicles classified during the study were Passenger Cars. The number of Passenger Cars in the study was 167 which represents 98.20 percent of the total classified vehicles. The number of Small Trucks in the study was 2 which represents 1.20 percent of the total classified vehicles. The number of Trucks/Buses in the study was 1 which represents 0.60 percent of the total classified vehicles. The number of Tractor Trailers in the study was 0 which represents 0.00 percent of the total classified vehicles.

## HEADWAY

During the peak time period, on 04/16/2009 at 03:30 PM the average headway between the vehicles was 81.82 seconds. The slowest traffic period was on 04/16/2009 at 02:15 PM. During this slowest period, the average headway was 900.0 seconds.

## WEATHER

The roadway surface temperature over the period of the study varied between 56 and 113 degrees Fahrenheit. The HI-STAR determined that the roadway surface was Dry 100.00 percent of the time.