

**Nu-Metrics Traffic Analyzer Study
Computer Generated Summary Report
City: Chapel Hill
Street: Piney Mountain Rd.**

A study of vehicle traffic was conducted with HI-STAR unit number 9609. The study was done in the North - 1 lane on Piney Mountain Rd. in Chapel Hill, NC in Orange county. The study began on 08/30/2007 at 05:00 PM and concluded on 09/04/2007 at 12:00 PM, lasting a total of 115 hours. Data was recorded in 60 minute time periods. The total recorded volume of traffic showed 2,864 vehicles passed through the location with a peak volume of 89 on 09/04/2007 at 08:00 AM and a minimum volume of 0 on 08/31/2007 at 01:00 AM. The AADT Count for this study was 598.

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	19	27	34	95	300	916	881	407	111	40	11	11	4	4

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 40 mph with 83.3 percent exceeding the posted speed of 35 mph. The HI-STAR found 2.45 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 46.95 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 >
2829	20	10	0	1	0	0	0

Most of the vehicles classified during the study were Passenger Cars. The number of Passenger Cars in the study was 2,849 which represents 99.60 percent of the total classified vehicles. The number of Small Trucks in the study was 10 which represents 0.30 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 0.00 percent of the total classified vehicles.

HEADWAY

During the peak time period, on 09/04/2007 at 08:00 AM the average headway between the vehicles was 40.0 seconds. The slowest traffic period was on 08/31/2007 at 01:00 AM. During this slowest period, the average headway was 3600.0 seconds.

WEATHER

The roadway surface temperature over the period of the study varied between 76 and 121 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: Chapel Hill
Street: Piney Mountain Rd.**

A study of vehicle traffic was conducted with HI-STAR unit number 9560. The study was done in the South - 1 lane on Piney Mountain Rd. in Chapel Hill, NC in Orange county. The study began on 08/30/2007 at 05:00 PM and concluded on 09/04/2007 at 12:00 PM, lasting a total of 115 hours. Data was recorded in 60 minute time periods. The total recorded volume of traffic showed 2,861 vehicles passed through the location with a peak volume of 79 on 08/31/2007 at 06:00 PM and a minimum volume of 0 on 08/31/2007 at 03:00 AM. The AADT Count for this study was 597.

SPEED

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

Chart 1

0	10	15	20	25	30	35	40	45	50	55	60	65	70	75
to	to	to	to	to	to	to	to	to	to	to	to	to	to	>
9	14	19	24	29	34	39	44	49	54	59	64	69	74	
0	8	18	16	68	339	974	938	384	90	17	4	1	2	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 40 mph with 84.3 percent exceeding the posted speed of 35 mph. The HI-STAR found 0.84 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 45.90 mph.

CLASSIFICATION

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

Chart 2

0	21	28	40	50	60	70	80
to	to	to	to	to	to	to	>
20	27	39	49	59	69	79	
2823	21	14	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 2,844 which represents 99.50 percent of the total classified vehicles. The number of Small Trucks in the study was 14 which represents 0.50 percent of the total classified vehicles. The number of Trucks/Buses in the study was 1 which represents 0.00 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 08/31/2007 at 06:00 PM the average headway between the vehicles was 45.0 seconds. The slowest traffic period was on 08/31/2007 at 03:00 AM. During this slowest period, the average headway was 3600.0 seconds.

WEATHER

The roadway surface temperature over the period of the study varied between 76 and 125 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: Chapel Hill
Street: Piney Mountain Rd.**

A study of vehicle traffic was conducted with HI-STAR unit number 9626. The study was done in the North - 2 lane on Piney Mountain Rd. in Chapel Hill, NC in Orange county. The study began on 08/30/2007 at 05:00 PM and concluded on 09/04/2007 at 12:00 PM, lasting a total of 115 hours. Data was recorded in 60 minute time periods. The total recorded volume of traffic showed 4,993 vehicles passed through the location with a peak volume of 132 on 08/31/2007 at 05:00 PM and a minimum volume of 0 on 09/04/2007 at 03:00 AM. The AADT Count for this study was 1,042.

SPEED

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

Chart 1

0	10	15	20	25	30	35	40	45	50	55	60	65	70	75
to	to	to	to	to	to	to	to	to	to	to	to	to	to	>
9	14	19	24	29	34	39	44	49	54	59	64	69	74	
0	17	5	20	63	531	1724	1818	713	169	42	10	4	0	2

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 87.5 percent exceeding the posted speed of 35 mph. The HI-STAR found 1.13 percent of the total vehicles were traveling in excess of 55 mph. The mode speed for this traffic study was 40 mph and the 85th percentile was 46.21 mph.

CLASSIFICATION

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

Chart 2

0	21	28	40	50	60	70	80
to	to	to	to	to	to	to	>
20	27	39	49	59	69	79	
5084	17	16	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 5,101 which represents 99.70 percent of the total classified vehicles. The number of Small Trucks in the study was 16 which represents 0.30 percent of the total classified vehicles. The number of Trucks/Buses in the study was 1 which represents 0.00 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 08/31/2007 at 05:00 PM the average headway between the vehicles was 27.07 seconds. The slowest traffic period was on 09/04/2007 at 03:00 AM. During this slowest period, the average headway was 3600.0 seconds.

WEATHER

The roadway surface temperature over the period of the study varied between 76 and 128 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: Chapel Hill
Street: Piney Mountain Rd.**

A study of vehicle traffic was conducted with HI-STAR unit number 9608. The study was done in the South - 2 lane on Piney Mountain Rd. in Chapel Hill, NC in Orange county. The study began on 08/30/2007 at 05:00 PM and concluded on 09/04/2007 at 12:00 PM, lasting a total of 115 hours. Data was recorded in 60 minute time periods. The total recorded volume of traffic showed 5,195 vehicles passed through the location with a peak volume of 129 on 09/04/2007 at 08:00 AM and a minimum volume of 1 on 08/31/2007 at 03:00 AM. The AADT Count for this study was 1,084.

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 to >
0	11	7	8	28	122	677	1650	1681	798	240	54	11	6	1

At least half of the vehicles were traveling in the 45 - 49 mph range or a lower speed. The average speed for all classified vehicles was 45 mph with 96.6 percent exceeding the posted speed of 35 mph. The HI-STAR found 5.89 percent of the total vehicles were traveling in excess of 55 mph. The mode speed for this traffic study was 45 mph and the 85th percentile was 51.98 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 to >
5132	84	65	11	1	0	1	0

Most of the vehicles classified during the study were Passenger Cars. The number of Passenger Cars in the study was 5,216 which represents 98.50 percent of the total classified vehicles. The number of Small Trucks in the study was 65 which represents 1.20 percent of the total classified vehicles. The number of Trucks/Buses in the study was 11 which represents 0.20 percent of the total classified vehicles. The number of Tractor Trailers in the study was 2 which represents 0.00 percent of the total classified vehicles.

HEADWAY

During the peak time period, on 09/04/2007 at 08:00 AM the average headway between the vehicles was 27.69 seconds. The slowest traffic period was on 08/31/2007 at 03:00 AM. During this slowest period, the average headway was 1800.0 seconds.

WEATHER

The roadway surface temperature over the period of the study varied between 76 and 126 degrees Fahrenheit. The HI-STAR determined that the roadway surface was Dry 100.00 percent of the time