

ARKANSAS STATE HIGHWAY COMMISSION

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September 18, 2008

The Honorable Hank Wilkins
State Senator
Co-Chairman
Arkansas Legislative Council
717 W. 2nd Avenue
Pine Bluff 71601

The Honorable Scott Sullivan
State Representative
Co-Chairman
Arkansas Legislative Council
1833 N. 9th Street
DeQueen, AR 71832

Dear Senator Wilkins and Representative Sullivan:

In accordance with Act 242 of 2007, please find enclosed a summary of the Department's study regarding increasing speed limits on the Arkansas Primary Highway Network.

The study does not recommend increasing speed limits on Arkansas highways at this time. However, this matter will be further reviewed as conditions warrant.

Should you have questions or need additional information, please advise.

Sincerely,

A handwritten signature in cursive script that reads "Dan Flowers".

Dan Flowers
Director of Highways
and Transportation

Enclosure (1)

c: Highway Commission
Deputy Director and Chief Engineer
Assistant to the Director
Assistant Chief Engineer-Planning
Chief Counsel

STUDY OF INCREASING SPEED LIMITS

on the

ARKANSAS PRIMARY HIGHWAY NETWORK



SUMMARY

Conducted By

THE ARKANSAS STATE HIGHWAY COMMISSION

In Accordance With

ACT 242 OF 2007

September 2008

Introduction

Act 242 of 2007 (Attachment 1) directed the Arkansas State Highway Commission to study raising the speed limits on the Arkansas Primary Highway Network (APHN) to 65 miles per hour (mph). The APHN is shown in Attachment 2. The portions of the APHN that are inside cities or are less than two miles in length were excluded from the study. A minimum of two miles is needed for proper signing of speed limit changes. This leaves 6,310 miles of the highway system.

The existing speed limits on the routes under study are as follows:

- Interstates and Freeways (754 miles)
 - Rural – 70 mph for cars; 65 mph for trucks.
 - Suburban – 65 mph.
 - Urban – 60 mph.
- Rural, Multi-lane, Divided Highways (284 miles)
 - 65 mph.
- Rural, Multi-lane, Undivided Highways (228 miles)
 - 55 mph.
- Rural, Two-lane Highways, including passing lanes (5,044 miles)
 - 55 mph.

The study analyzed the impacts of increasing speed limits on the following areas: costs of increased speed limits, including increased fuel costs from reduced fuel economy; possibility of implementing a national maximum speed limit; cost of increased signing needs; safety, including effects on fatalities; and effect on driver expectation.

Speed limits for the routes under study are shown in Attachment 3.

Study Analysis

According to the United States Department of Energy, gas mileage decreases rapidly at speeds above 60 mph, and that each 5 mph driven over 60 mph reduces fuel economy by at least 7%, which is equivalent to paying an additional \$0.26 per gallon for gasoline (based on an average fuel price per gallon of \$3.74). This equates to an additional fuel cost of over \$290,000 for all vehicles statewide in one day, or over \$106 million in one year. (NOTE: "All vehicles" include all vehicles on the non-Interstate, non-freeway, rural APHN highways under study.)

A bill was introduced in the U.S. House of Representatives to establish a National Maximum Speed Limit of 60 mph on highways and 65 mph on portions of the National Highway System outside of urbanized areas. The goal of this proposed law is to decrease fuel usage by lowering the speeds of vehicles. There have also been discussions of again introducing the previous National Maximum Speed Limit of 55 mph, which was repealed in the early 1990s. If either measure were to pass, it would have an impact on the proposal to raise speed limits in Arkansas.

Currently, the Department typically posts speed limits on rural highways when the speed limit is greater than 55 mph. Posting some rural highways at higher speed limits would result in the need for more speed limit signs, not only on the routes that might be increased to 65 mph, but on other 55 mph routes that connect to the 65 mph routes to adequately inform the motoring public of the posted speed limits. The cost of these new signs has been estimated to be approximately \$750,000-\$1,000,000.

Sixteen percent of all traffic fatalities in Arkansas in 2005 were in speed-related crashes. Arkansas' Strategic Highway Safety Plan has a goal to reduce the State's fatal crash rate by 14% by 2010. An increase in the speed limit could be contradictory to this goal. According to the National Cooperative Highway Research Program's (NCHRP) Research Results Digest 303, Safety Impacts and Other Implications of Raised Speed Limits on High-Speed Roads, a speed limit increase from 55 mph to 65 mph will lead to a 28% increase in the number of fatalities.

Driver expectation can also play a role in the safety of motorists. When speed limits differ on highways of the same type (e.g., rural, two-lane highways), drivers may not intuitively know what the speed limit is. They could drive too fast on a facility that is posted at a lower speed limit and thus have a higher probability of being involved in a crash.

Conclusion

Due to the impact of a possible National Maximum Speed Limit, the potential negative impact to highway safety, including a possible increase in fatal crashes, the increased costs to Arkansans because of reduced fuel economy, the costs due to the increased signing needs, and the possible negative effect on driver expectation, it would be premature to consider raising the speed limit on highways in Arkansas at this time. This matter will be further reviewed as conditions warrant.

Stricken language would be deleted from and underlined language would be added to the law as it existed prior to this session of the General Assembly.

Act 242 of the Regular Session

1 State of Arkansas
2 86th General Assembly
3 Regular Session, 2007

As Engrossed: H2/2/07 H2/21/07

A Bill

HOUSE BILL 1342

5 By: Representative Sullivan

For An Act To Be Entitled

AN ACT TO STUDY RAISING THE SPEED LIMITS ON
THE ARKANSAS PRIMARY HIGHWAY NETWORK; AND FOR
OTHER PURPOSES.

Subtitle

TO STUDY RAISING THE SPEED LIMITS ON THE
ARKANSAS PRIMARY HIGHWAY NETWORK.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS:

SECTION 1. Arkansas Code Title 27, Chapter 51, Subchapter 2 is amended to add an additional section to read as follows:

27-51-215. Arkansas Primary Highway Network study.

(a) The State Highway Commission shall conduct a study of the Arkansas Primary Highway Network to determine whether the minimum speed limits and maximum speed limits of the network can be raised in any locations on the network based on the engineering analysis, traffic analysis, and other analysis of characteristics of each location.

(b)(1) The study shall include an impact analysis of raising the minimum speed limit and maximum speed limit in regard to:

(A) Pleasure vehicles licensed under § 27-14-601 or similarly licensed vehicles from other states;

(B) Trucks with a gross loaded weight of twenty thousand pounds (20,000 lbs.) or less; and

(C) Trucks with a gross loaded weight of more than twenty thousand pounds (20,000 lbs.).





