



U.S. Department
of Transportation

**Federal Highway
Administration**

K. Armstrong
Memorandum

Subject: **INFORMATION:** Highway Traffic
Noise--Type I Projects

Date: **OCT 20 1998**

From: **Chief, Environmental Analysis Division**

Reply to
Attn of: **HEP-40**

To: **Mr. Donald J. West**
Division Administrator
Glastonbury, CT

This is in response to your inquiry regarding Type I projects contained in our noise regulations. The FHWA noise regulations require noise analyses for all Type I projects, defined as projects that involve construction of a highway on new location or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes. Such analyses must be done to meet FHWA and Title 23 requirements.

Identification of the construction of a highway on new location is self-explanatory. There is no highway before the construction, and there will be one afterwards. Identification of the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment requires the use of judgement. A small change in alignment in a densely developed urban area may be deemed to be significant, whereas a much greater change in alignment in a suburban or rural area may be deemed not to be significant. A halving of the distance between the highway and a receiver will produce a noise increase of 3-4.5 dB (a noticeable increase). A judgement must be made on whether or not an alignment change is deemed to be significant.

Identification of the physical alteration of an existing highway which increases the number of through-traffic lanes requires considering the through traveled way--that portion of the highway constructed for the movement of vehicles, exclusive of the shoulders and auxiliary lanes. The lane addition must include a full lane width, i.e., 12 feet, and must increase the capacity of the highway. The addition of a full lane to the mainline of a highway must be classified as a Type I project. The addition of an auxiliary lane should also be classified as a Type I project, if the auxiliary lane is long enough to function as a through-traffic lane and/or increase capacity. An auxiliary lane that is added between interchanges to improve operational efficiency should be classified as a Type I project, if the lane is at least 1.5 miles long or if the lane is made continuous through a series of successive interchanges.

Remember that the National Environmental Policy Act of 1969 may require that noise analysis be conducted, even though a project is not classified as Type I and 23 CFR Part 772 does not apply. This occurs in the extremely rare instance in which the project itself is expected to create a noise impact (e.g., sideslopes are flattened as part of a project to improve an intersection and the traffic noise levels rise from 64 dBA to 67 dBA, etc.). Normally, a project that is not classified as Type I does not create any new noise impacts.


James M. Shrouds

cc: Resource Center Directors
Division Administrators