

## Federal Highway Administration, DOT

## § 772.11

for informing local officials in this regulation constitute the noise standards mandated by 23 U.S.C. 109(i). All highway projects which are developed in conformance with this regulation shall be deemed to be in conformance with the Federal Highway Administration (FHWA) noise standards.

### § 772.5 Definitions.

(a) *Design year.* The future year used to estimate the probable traffic volume for which a highway is designed. A time, 10 to 20 years, from the start of construction is usually used.

(b) *Existing noise levels.* The noise, resulting from the natural and mechanical sources and human activity, considered to be usually present in a particular area.

(c)  $L_{10}$ . The sound level that is exceeded 10 percent of the time (the 90th percentile) for the period under consideration.

(d)  $L_{10}(h)$ . The hourly value of  $L_{10}$ .

(e) *Leq*—the equivalent steady-state sound level which in a stated period of time contains the same acoustic energy as the time-varying sound level during the same time period.

(f) *Leq(h)*. The hourly value of *Leq*.

(g) *Traffic noise impacts.* Impacts which occur when the predicted traffic noise levels approach or exceed the noise abatement criteria (Table 1), or when the predicted traffic noise levels substantially exceed the existing noise levels.

(h) *Type I projects.* A proposed Federal or Federal-aid highway project for the 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.

(i) *Type II projects.* A proposed Federal or Federal-aid highway project for noise abatement on an existing highway.

### § 772.7 Applicability.

(a) *Type I projects.* This regulation applies to all Type I projects unless it is specifically indicated that a section applies only to Type II projects.

(b) *Type II projects.* The development and implementation of Type II projects are not mandatory requirements of 23

U.S.C. 109(i) and are, therefore, not required by this regulation. When Type II projects are proposed for Federal-aid highway participation at the option of the highway agency, the provisions of §§ 772.9(c), 772.13, and 772.19 of this regulation shall apply.

### § 772.9 Analysis of traffic noise impacts and abatement measures.

(a) The highway agency shall determine and analyze expected traffic noise impacts and alternative noise abatement measures to mitigate these impacts, giving weight to the benefits and cost of abatement, and to the overall social, economic and environmental effects.

(b) The traffic noise analysis shall include the following for each alternative under detailed study:

(1) Identification of existing activities, developed lands, and undeveloped lands for which development is planned, designed and programmed, which may be affected by noise from the highway;

(2) Prediction of traffic noise levels;

(3) Determination of existing noise levels;

(4) Determination of traffic noise impacts; and

(5) Examination and evaluation of alternative noise abatement measures for reducing or eliminating the noise impacts.

(c) Highway agencies proposing to use Federal-aid highway funds for Type II projects shall perform a noise analysis of sufficient scope to provide information needed to make the determination required by § 772.13(a) of this chapter.

### § 772.11 Noise abatement.

(a) In determining and abating traffic noise impacts, primary consideration is to be given to exterior areas. Abatement will usually be necessary only where frequent human use occurs and a lowered noise level would be of benefit.

(b) In those situations where there are no exterior activities to be affected by the traffic noise, or where the exterior activities are far from or physically shielded from the roadway in a manner that prevents an impact on exterior activities, the interior criterion