UNDERSTANDING TRAFFIC NOISE
The Utah Department of Transportation (UDOT) will install noise abatement measures according to the guidelines and requirements in the UDOT noise abatement policy. The noise analysis process is summarized below. For more information, review the full policy at www.udot.utah.gov/go/noisepolicy.

1. **IDENTIFY AREAS SENSITIVE TO TRAFFIC NOISE**
   - e.g. Residences, parks, churches, schools.

2. **DETERMINE EXISTING AND FUTURE NOISE LEVELS**
   - **FACTORS INCLUDED IN NOISE MODELS**
     - **TOPOGRAPHY**
     - **EXISTING BARRIERS**
       - Safety barrier, buildings
     - **ROADWAY**
       - Alignment, number of lanes, elevation
     - **TRAFFIC VOLUMES**
       - Amount of traffic on road
     - **TRAFFIC CONTROL**
       - Stop signs, signals
     - **SPEED LIMITS**
     - **VEHICLE TYPES**
     - Cars, trucks
     - **RECEPTOR LOCATIONS**
       - Residences, parks, churches, schools
   - Calibrate existing model with field measurements

3. **DETERMINE TRAFFIC NOISE IMPACTS**
   - **TRAFFIC NOISE IMPACTS ARE PRESENT WHEN:**
     - **• Noise levels are high enough to interfere with normal conversation**
     - **• Future noise levels substantially exceed existing noise levels**
   - **OR**

4. **EVALUATE NOISE ABATEMENT MEASURES**
   - Using traffic noise model
     - **NOISE BARRIERS**
       - (most common)
     - Truck restrictions
     - Reduce speed limits
     - Noise insulation of public buildings
   - **YES**
   - **NO**
     - Noise analysis and evaluation of noise abatement not required

5. **DETERMINE IF NOISE ABATEMENT MEASURES ARE FEASIBLE AND REASONABLE**
   - **FEASIBLE:**
     - Can it be constructed? (Engineering considerations) **YES**
     - Is it safe? **YES**
     - Does it provide a perceptible change in noise levels? **YES**
   - **REASONABLE:**
     - Does it meet the noise abatement design goal? **YES**
     - Do property owners/residents want a noise abatement measure? **YES**
   - If any of the above are “NO”, noise abatement will not be installed

6. **INSTALL NOISE ABATEMENT MEASURE**

IS THIS PROJECT LIKELY TO INCREASE SOUND LEVELS? (e.g. New road, adding travel lanes, substantially modifying a roadway)

If the project is likely to increase sound levels, noise analysis and evaluation of noise abatement are required.

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