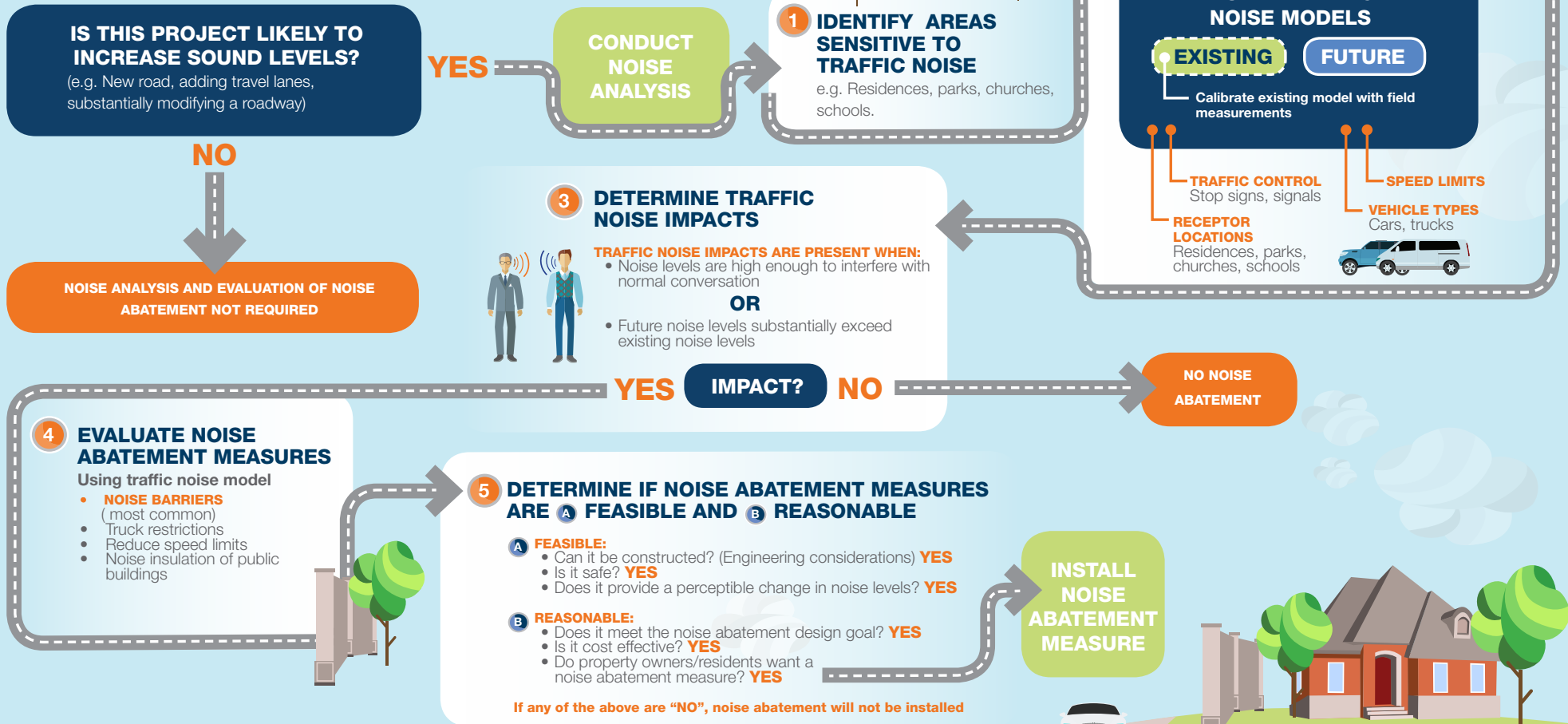


UNDERSTANDING TRAFFIC NOISE

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



IS THIS PROJECT LIKELY TO INCREASE SOUND LEVELS?

(e.g. New road, adding travel lanes, substantially modifying a roadway)

YES

CONDUCT NOISE ANALYSIS

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

TRAFFIC VOLUMES
Amount of traffic on road

ROADWAY
Alignment, number of lanes, elevation

BUILD TRAFFIC NOISE MODELS

EXISTING

FUTURE

Calibrate existing model with field measurements

TRAFFIC CONTROL
Stop signs, signals

SPEED LIMITS

RECEPTOR LOCATIONS
Residences, parks, churches, schools

VEHICLE TYPES
Cars, trucks

NOISE ANALYSIS AND EVALUATION OF NOISE ABATEMENT NOT REQUIRED

3 DETERMINE TRAFFIC NOISE IMPACTS

TRAFFIC NOISE IMPACTS ARE PRESENT WHEN:

- Noise levels are high enough to interfere with normal conversation
- OR
- Future noise levels substantially exceed existing noise levels

YES IMPACT? NO

NO NOISE ABATEMENT

4 EVALUATE NOISE ABATEMENT MEASURES

Using traffic noise model

- **NOISE BARRIERS** (most common)
- Truck restrictions
- Reduce speed limits
- Noise insulation of public buildings

5 DETERMINE IF NOISE ABATEMENT MEASURES ARE A FEASIBLE AND B REASONABLE

- A FEASIBLE:**
- Can it be constructed? (Engineering considerations) **YES**
 - Is it safe? **YES**
 - Does it provide a perceptible change in noise levels? **YES**
- B REASONABLE:**
- Does it meet the noise abatement design goal? **YES**
 - Is it cost effective? **YES**
 - Do property owners/residents want a noise abatement measure? **YES**

If any of the above are "NO", noise abatement will not be installed

INSTALL NOISE ABATEMENT MEASURE