

NOISE EVALUATION

Roadway projects must follow state and federal guidelines for evaluating traffic noise.

Noise abatement in the form of a noise barrier, also known as a sound wall, can reduce impacts for receivers near the roadway.

Any proposed noise barrier must be studied to determine if it meets certain criteria.

- ❌ A noise barrier is **not** built if the **criteria are not met**
- ✅ A noise barrier **can** be built if the **criteria are met**

Follow along → to understand the process.

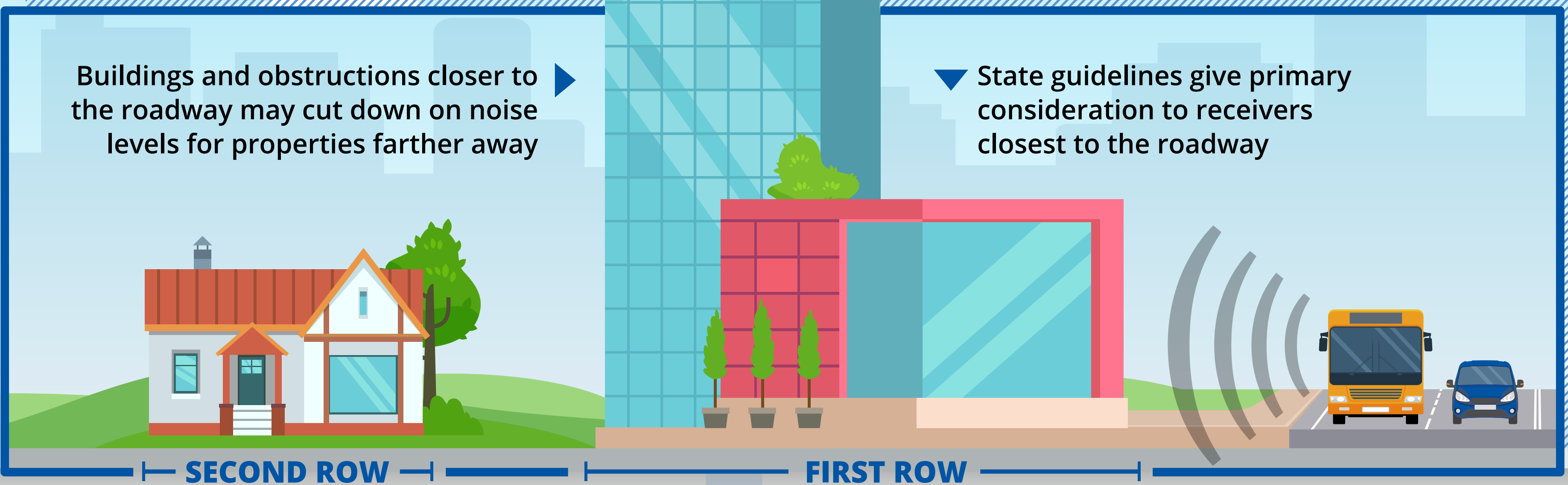
ILLUSTRATIONS ARE NOT TO SCALE.



START

Determine Receivers

Are there **noise sensitive land uses** along the corridor?

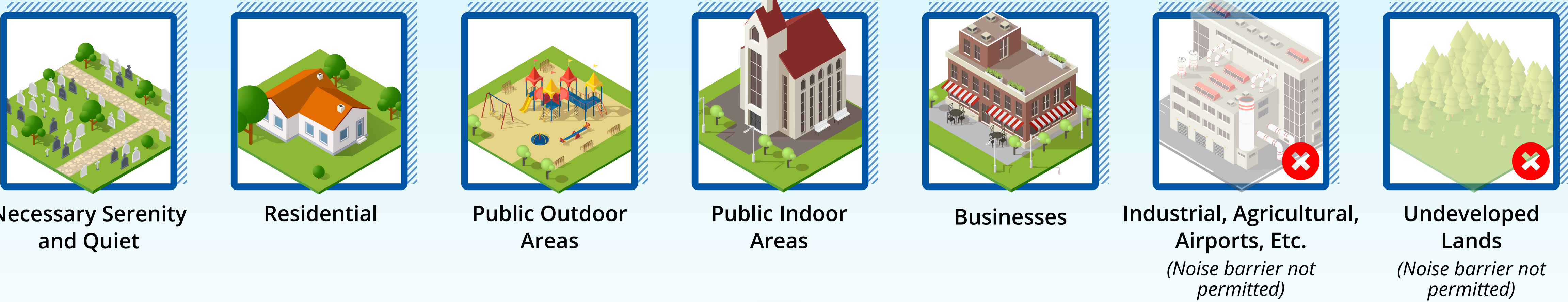


❌ **No** noise sensitive land uses are identified along the corridor; **noise barrier is not proposed**

Determine Receiver Activity Category

What is the **primary use of the specified property?**

Each category has noise guidelines specific to its use, known as Noise Abatement Criteria (NAC).



Noise barrier is considered based on land use NAC

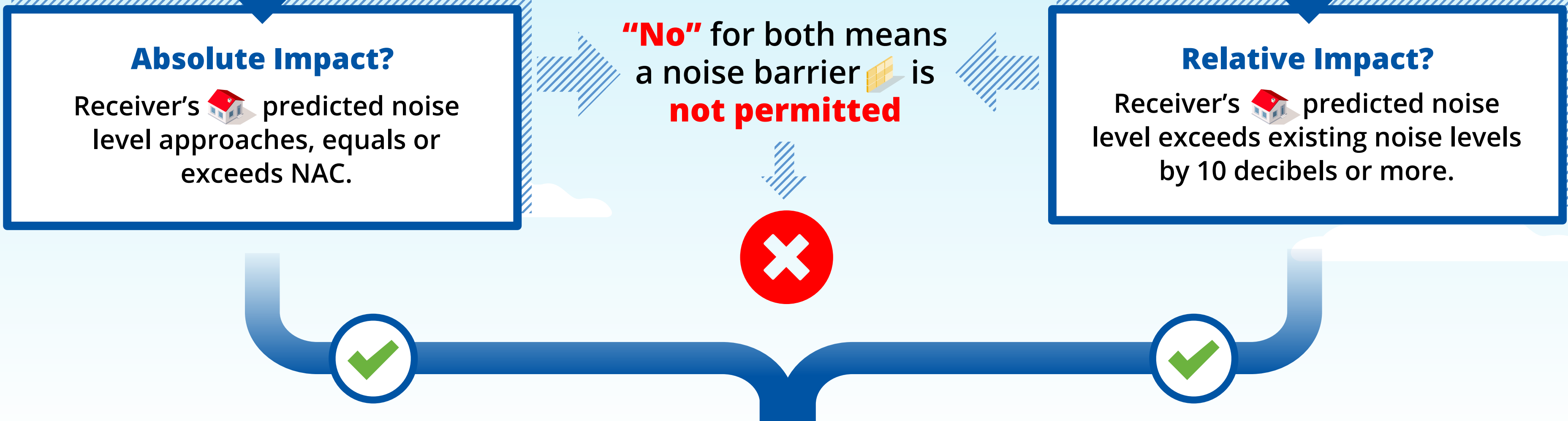
❌ Noise barrier is **not permitted** based on land use NAC

Measure Impact to Receivers

Is there a **noise level increase for receivers**?

Is the impact absolute, relative, or both?

Analysis is done using traffic counts and future projections.



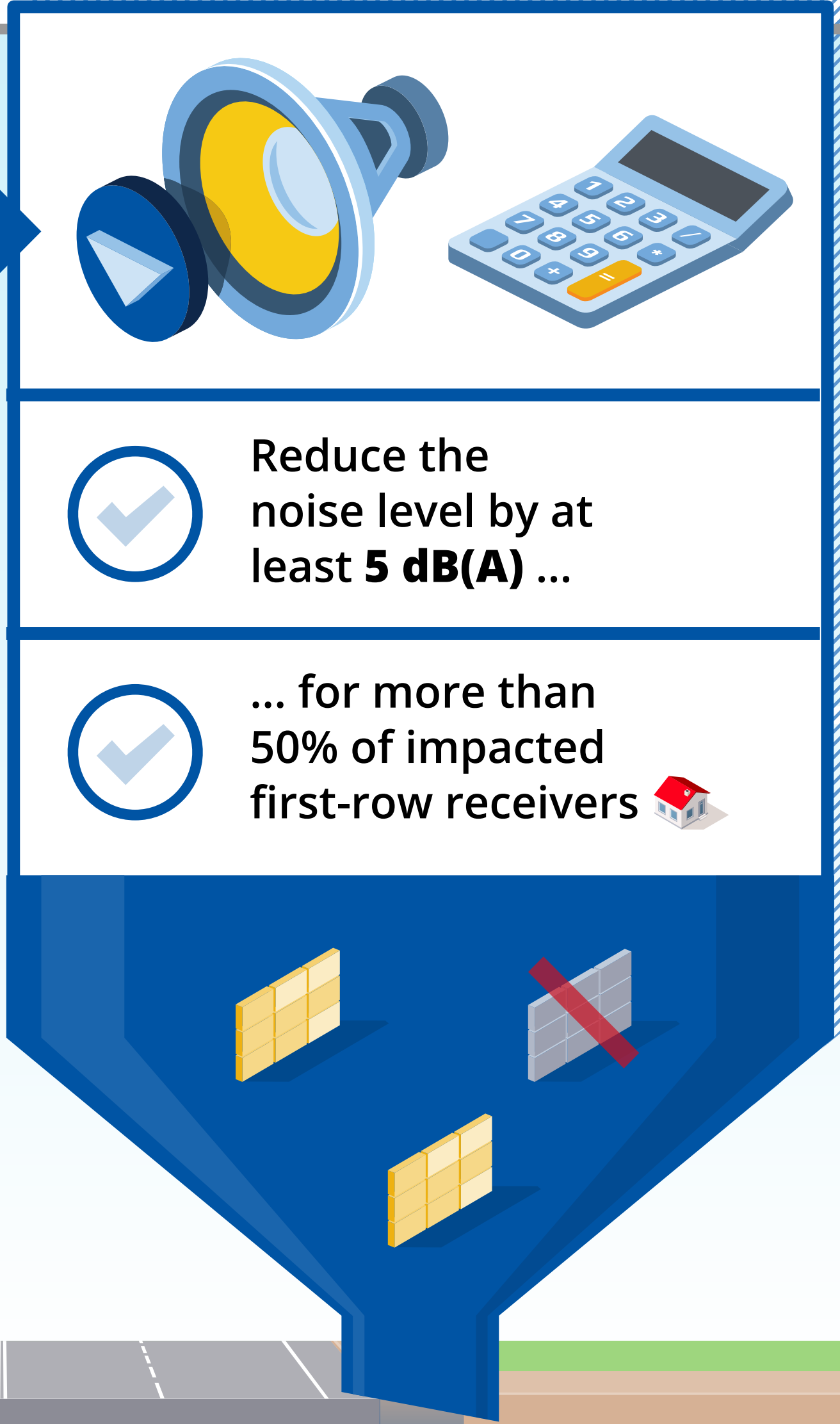
Evaluate Noise Barrier Feasibility

Can a noise barrier **adequately reduce the noise decibel level, or dB(A)?**

Blocking the line of sight between the source and receptor usually provides a **5 dB(A)** noise reduction



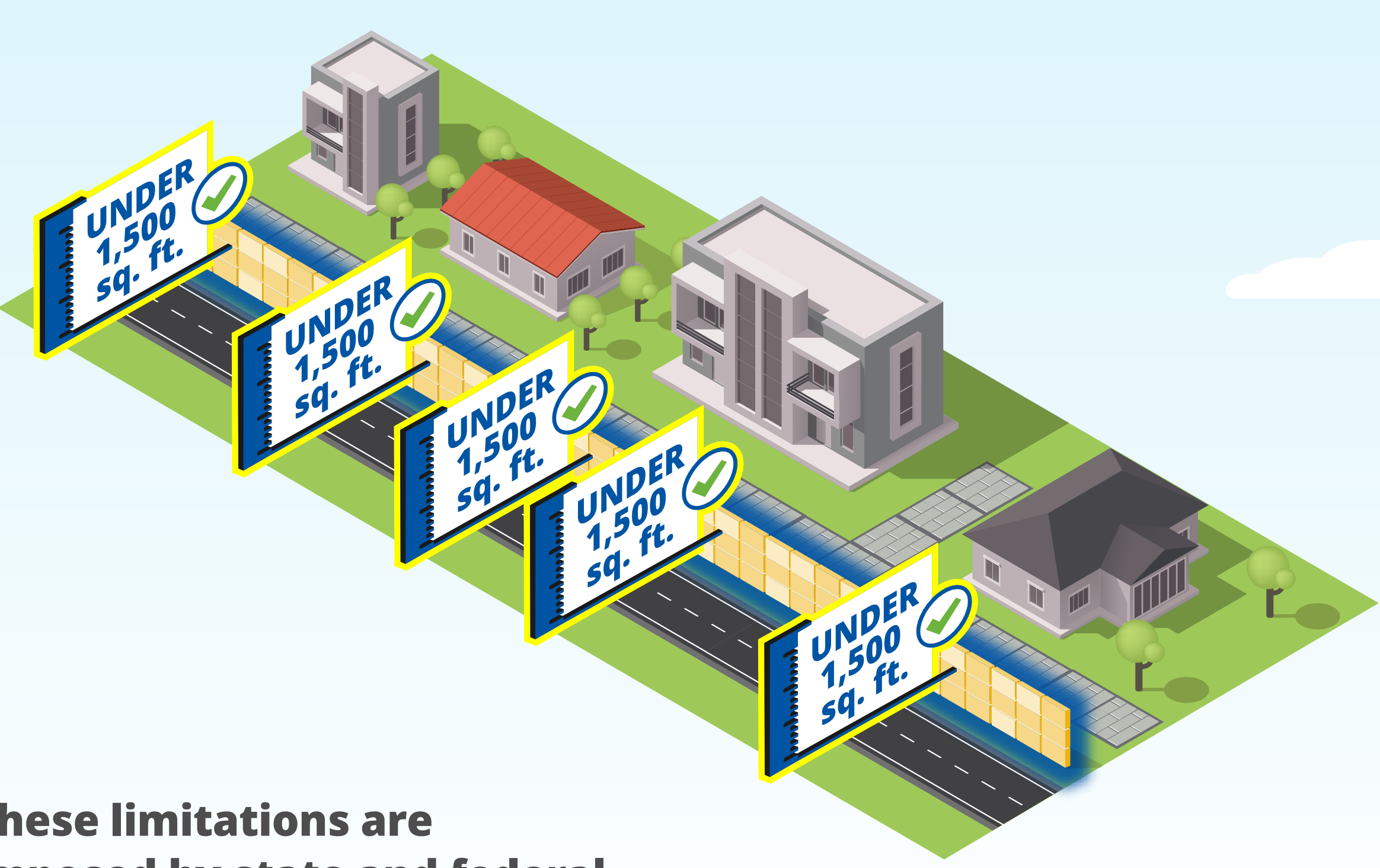
Receivers **300-500 ft.** away or more from the roadway would not see noise reduction even with the presence of a noise barrier



❌ Considered walls do **not** meet criteria, noise barrier is **not permitted**

Evaluate Abatement Reasonableness

Can receivers **get the minimum noise level reduction within the Standard Barrier Cost** limitations?



These limitations are imposed by state and federal guidelines to ensure fairness.



❌ Considered walls do **not** meet criteria, noise barrier is **not permitted**

Acquire Consensus

Do more than **50% of owners/residents** in the first row of properties agree to the construction of a noise barrier?

A majority vote determines whether a noise barrier is built.



Noise barrier is built

If a noise barrier is justified, affected property owners and residents will be given a voice during subsequent noise barrier workshops.

❌ Consensus is not reached, noise barrier is **not built**