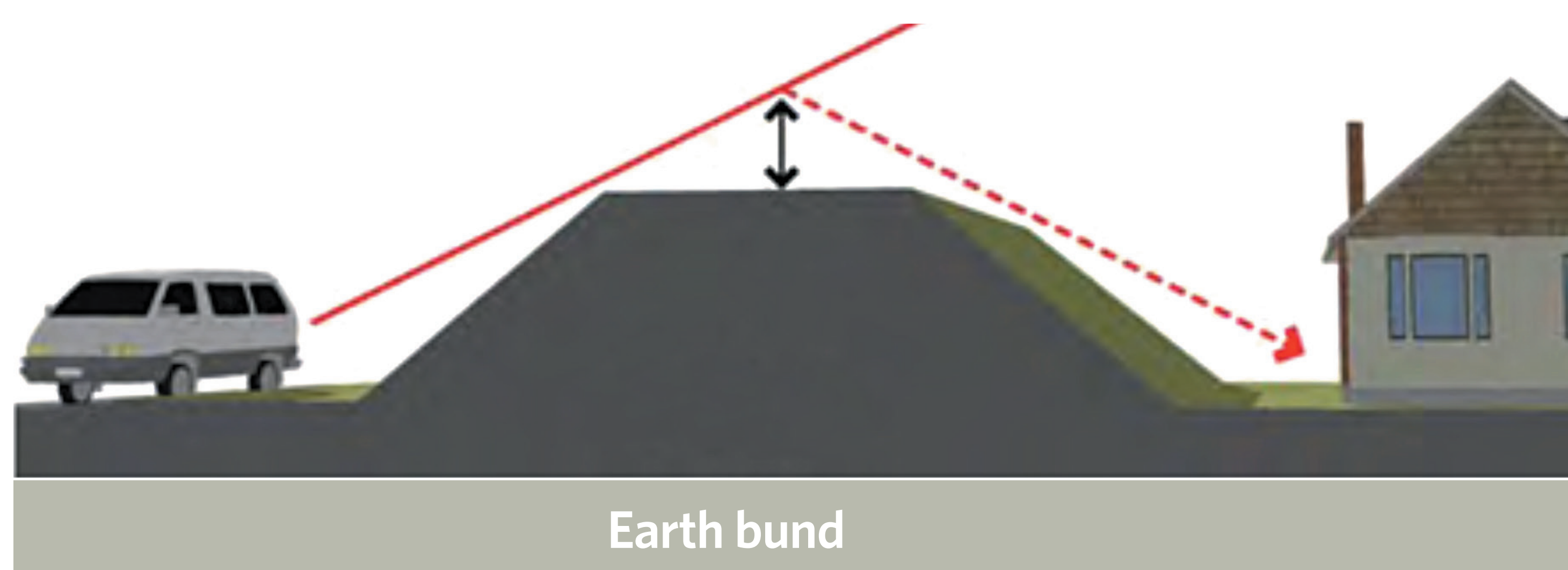
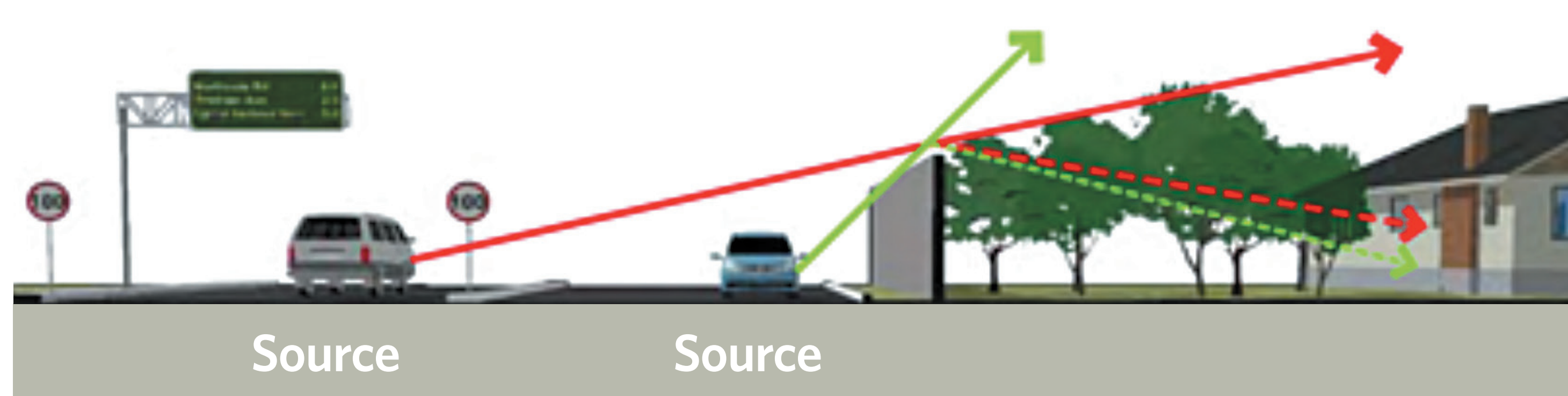
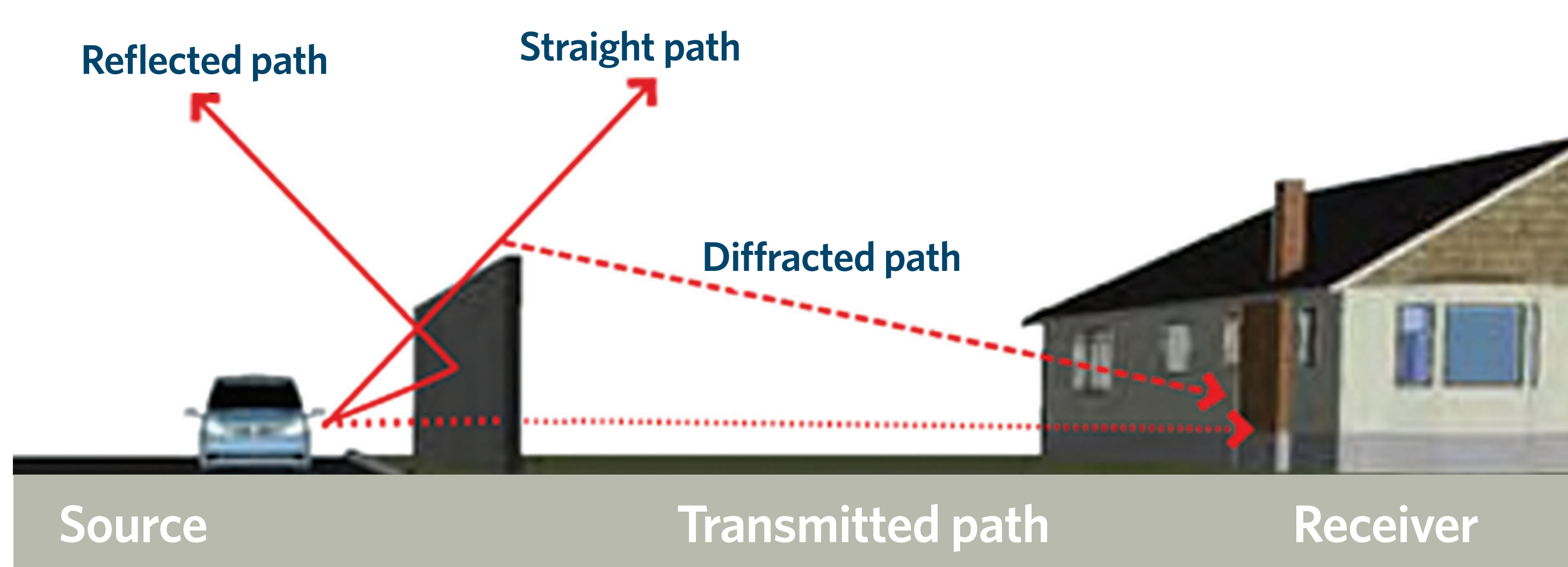
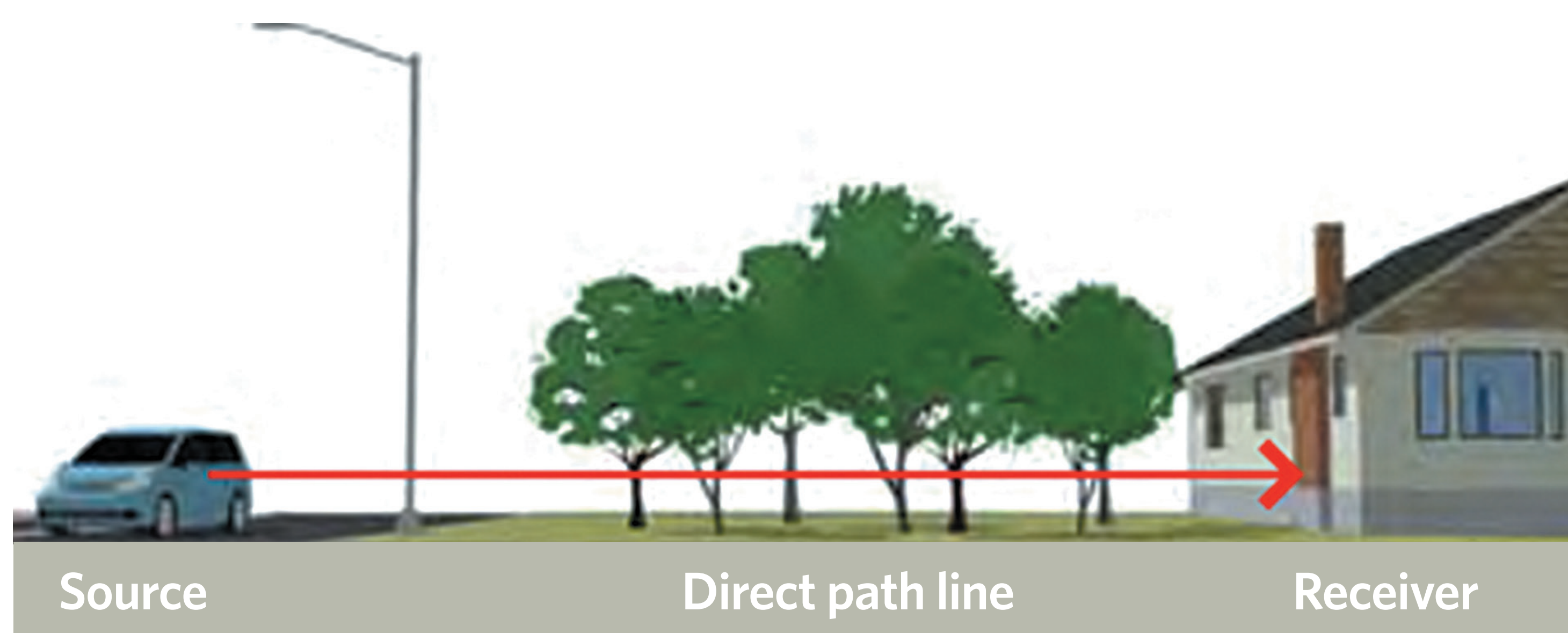


# Managing traffic noise - barriers

Noise barriers are probably the most widely recognised form of noise mitigation used by the NZ Transport Agency.



Sound can reach a listener either directly (in a straight line) or indirectly by reflection or diffraction, which can cause sound to “bend” around a corner. When a noise barrier is present the direct path is interrupted.

Introducing a barrier between the source and the receiver, the amount of sound reaching the receiver can be significantly reduced.

The height of a noise barrier is a key parameter. Generally the higher the barrier, the greater the level of noise reduction. As a general rule, a noise barrier should at least be high enough to block the line-of-sight from a house to the engines of vehicles on a road.

For multiple-lane roads, the noise from the furthest traffic lanes will not be reduced by a noise barrier as much as noise from the nearest lanes because of the different path angles.

Where space is available, bunds (which are a form of noise barrier) can be a more attractive solution, either on their own, with planting or a low wall type barrier on top of the bund.