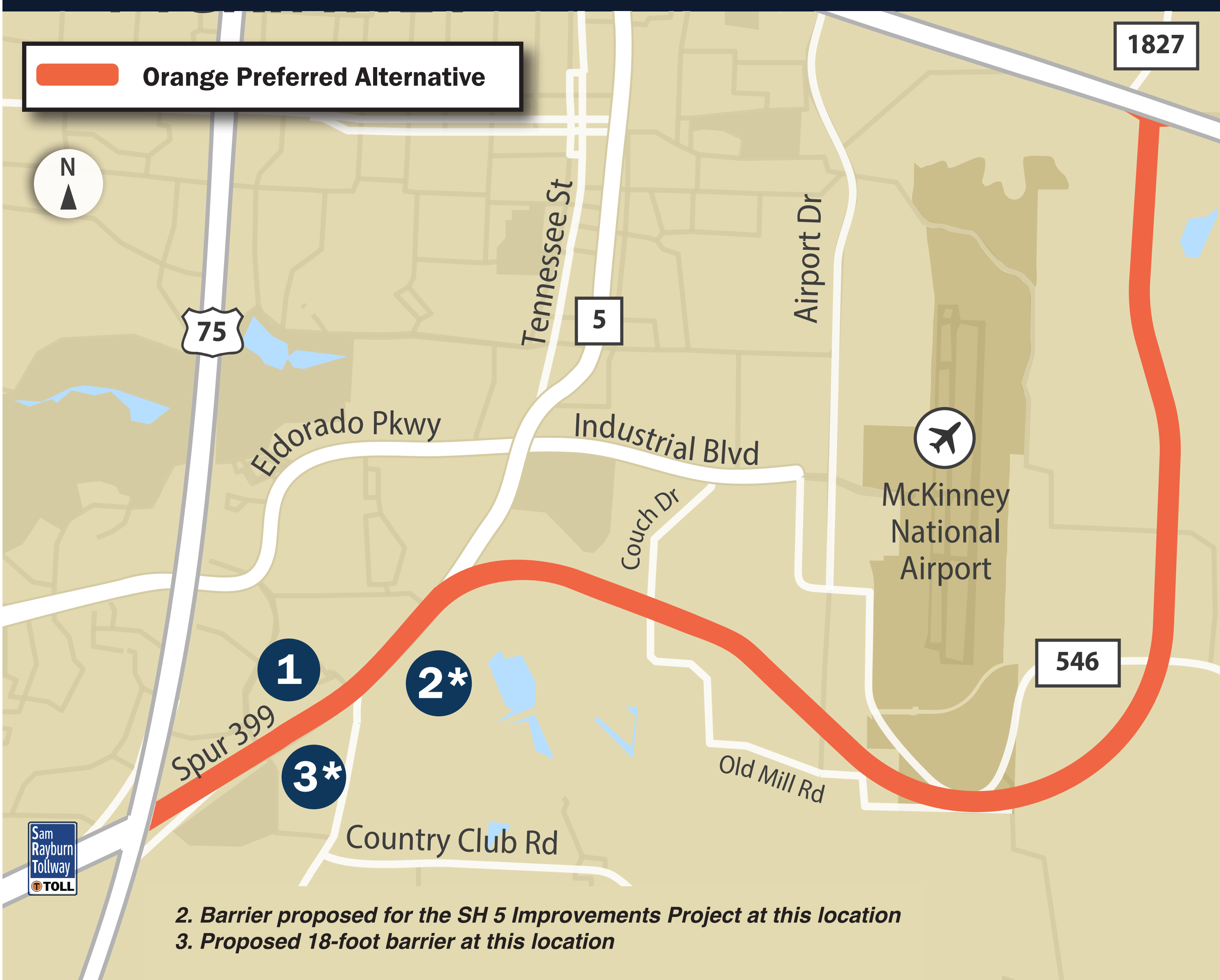




NOISE BARRIER ANALYSIS



TxDOT analyzed 256 receptors along the Preferred Alternative. Results showed:

- 164 receptors would be impacted
- 49 of the receptors would receive substantial noise increases
- 26 receptors would benefit from construction of a noise barrier

One noise barrier near the Magnolia Ranch Apartments was deemed reasonable, feasible, and cost effective as a part of this project. Another noise barrier being planned as a part of the SH 5 Improvement Project was also found to provide benefit.

Below are decibel [dB(A)] readings modeled near several neighborhoods.

2. Barrier proposed for the SH 5 Improvements Project at this location
3. Proposed 18-foot barrier at this location

Numbers below represent the average existing and future dB(A) of impacted receptors.

NEIGHBORHOODS	EXISTING dB(A) ^b	NAC LEVEL*	FUTURE BUILD dB(A)	NOISE BARRIER REASONABLE AND FEASIBLE?
1. Meridian at Southgate Townhomes - Medical Center Drive and near Spur 399	57	67	68	No
2. High Point Manufactured Home Community - along S McDonald Street/SH 5	66	67	68	Yes but not a part of this project
3. Future Magnolia Ranch Development - Spur 399 and SH 5	62	67	69	Yes. 18 foot barrier proposed.

*Noise Abatement Criteria (NAC) for residential areas established by FHWA.

COMMON SOUNDS AND CORRESPONDING SOUND LEVELS (DECIBELS)

