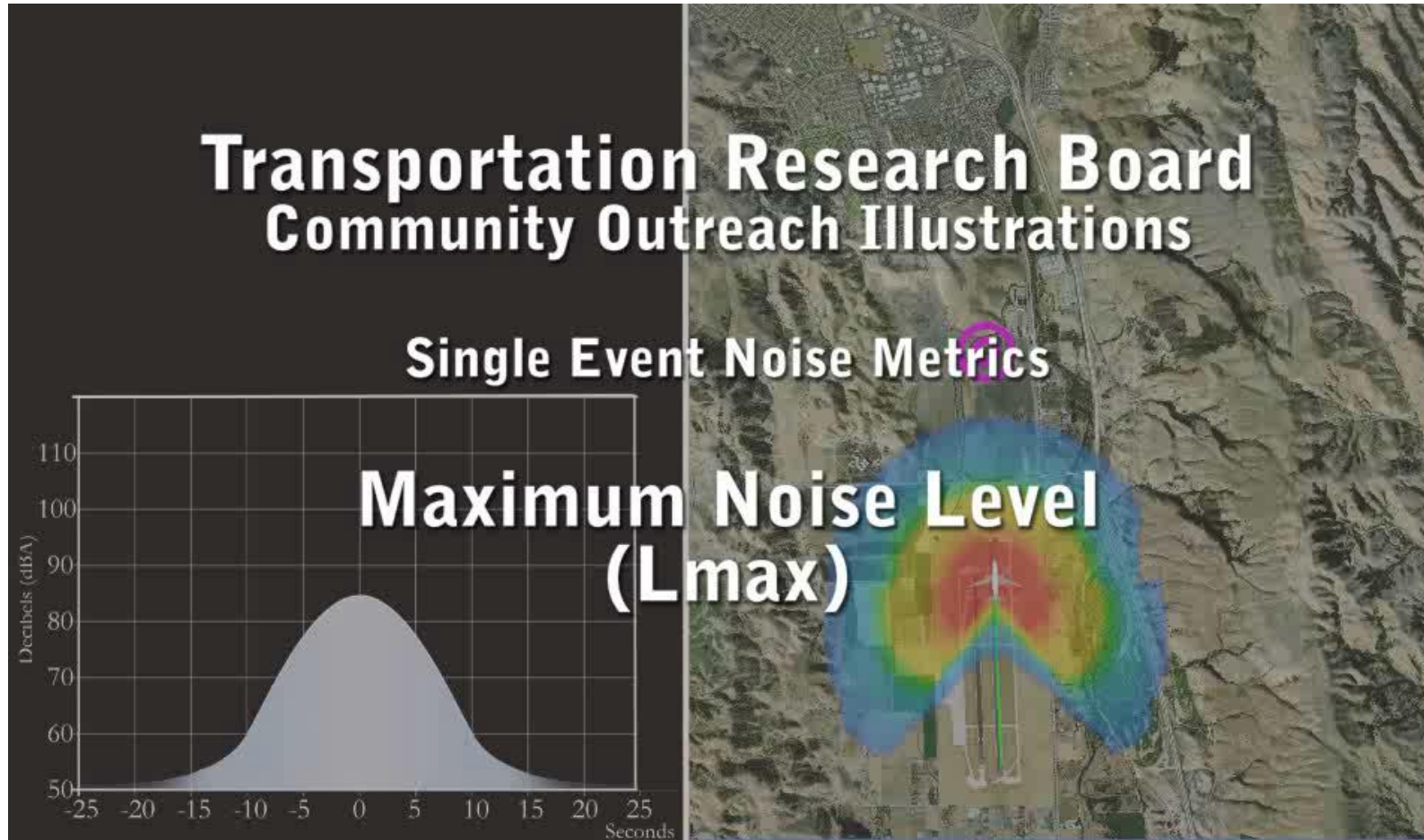


L_{\max} – Maximum Sound Level

L_{MAX} – MAXIMUM SOUND LEVEL



NOISE METRICS

- **L_{\max}** – Maximum noise level
- L_{eq} – Equivalent sound level
- SEL – Sound exposure Level
- DNL – Day-night average sound level
- CNEL – Community noise equivalent level
- L_n – Sound level exceeded for a percent of the time
- TA – Time above threshold
- NA – Number of events above

AVIATION ENVIRONMENTAL DESIGN TOOL (AEDT)

- Effective May 29, 2015, AEDT **is the required tool** for noise, fuel burn, and emissions modeling of FAA actions.
- AEDT is a software system that dynamically models aircraft performance in space and time to estimate:
 - Noise
 - Air Quality
 - Emissions
 - Fuel consumption
- AEDT is designed to model individual studies ranging in scope from a single flight at an airport to scenarios at the regional, national, and global levels.

FLY QUIET 21 DEPARTURE CONCEPT ASSUMPTIONS IN AEDT

- All concepts are draft, subject to change, and subject to ONCC and FAA approval
- One Departure; No Arrival
- Annual average weather day (based on NCEI 30 year-normals for wind speed, temp, pressure and relative humidity based on ASOS weather observations at ORD)
- Standard Departure Profile (Stage Length of 1)
- OMP Build-Out runway layout and lengths
- Full length runway departure
- Aircraft flies heading/procedure (this means it turns at runway threshold and does not deviate)
- Most frequent aircraft type in Fly Quiet Mode calendar year 2018 – Boeing 737-800
- 70 dB Lmax Single Event Departure Noise Contour