

# Appendix H

## **Construction Noise**

# **H1 RCNM Outputs for Construction Noise**



## **H2 Traffic Noise Model**

# TRAFFIC NOISE ANALYSIS TOOL



**Project Name: Watt EV**  
**Analysis Scenario: Baseline - Weekday AM Peak**  
**Source of Traffic Volumes: Kimley Horn 2024**

Roadway Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
Bayou Way between Airport Blvd. and Power Line Rd.	Hard	100	30	30	30	209	43	22	59.4	59.7
Bayou Way between Power Line Rd. and Mtro Air Pkwy.	Hard	100	30	30	30	124	26	13	57.1	57.4

**Model Notes:**

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998).  
 The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5.  
 Accuracy of the calculation is within ±0.1 dB when comparing to TNM results.  
 Noise propagation greater than 50 feet is based on the following assumptions:  
     For hard ground, the propagation rate is 3 dB per doubling the distance.  
     For soft ground, the propagation rate is 4.5 dB per doubling the distance.  
 Vehicles are assumed to be on a long straight roadway with cruise speed.  
 Roadway grade is less than 1.5%.  
 CNEL levels were obtained based on Figure 2-19, on page 2-58 Caltran's TeNS 2013.

# TRAFFIC NOISE ANALYSIS TOOL



**Project Name: Watt EV**  
**Analysis Scenario: Baseline + Project - Weekday AM Peak**  
**Source of Traffic Volumes: Kimley Horn 2024**

Roadway Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
Bayou Way between Airport Blvd. and Power Line Rd.	Hard	100	30	30	30	229	43	24	59.6	59.9
Bayou Way between Power Line Rd. and Mtro Air Pkwy.	Hard	100	30	30	30	144	26	15	57.5	57.8

**Model Notes:**

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998).  
 The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5.  
 Accuracy of the calculation is within ±0.1 dB when comparing to TNM results.  
 Noise propagation greater than 50 feet is based on the following assumptions:  
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 Vehicles are assumed to be on a long straight roadway with cruise speed.  
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 CNEL levels were obtained based on Figure 2-19, on page 2-58 Caltran's TeNS 2013.