

This Musical Highway Will Play You a Song

adapted from an article by Jennifer Nalewicki

- 1 The stretch of Route 66 that travels east out of Albuquerque, New Mexico is desolate at best. Besides a handful of gas stations and a spider web of power lines that cast their shadows onto the two-lane roadway, there's not a whole lot to see. But for one quarter-mile stretch, there's plenty to hear, because two years ago, the New Mexico Department of Transportation (NMDOT) had the idea to make a roadway that sings to bring a little excitement to an otherwise monotonous highway. NMDOT created a length of roadway between mile markers four and five that plays music whenever a vehicle drives over it. But there's a catch; the tune, in this case "America the Beautiful," only works when cars are traveling at exactly 45 mph to encourage drivers to stay within the speed limit.
- 2 "Route 66 is a very historical roadway and NMDOT thought it would be neat to do something like this on such a unique piece of highway," Matt Kennicott, director of communications for NMDOT, tells Smithsonian.com. "We chose this stretch for its historical and travel value. Albuquerque has several classic car clubs that date back to when Route 66 was in its heyday that like to cruise the roadway, so it seemed like a good fit."
- 3 At one time, the historic roadway was one of the main arteries linking Chicago to Los Angeles. After World War II, automobile ownership grew and Route 66 did too, becoming an icon of road trip freedom for cross-country travelers. Over the years, driving along the more than 2,400-mile "Mother Road" has remained a bucket-list item for road-weary travelers of all stripes, and the musical highway is just one more reason for drivers to keep this roadway on their GPS.
- 4 Exactly how does the musical highway work? "The road works by the simplest bit of science," Kennicott says. "All of the sounds and music notes that we hear in day-to-day life are just vibrations through the air. For instance, anything that vibrates 330 times in one second will produce an E note – a guitar string, a tuning fork or even a tire. To produce an E note with a car, we had to space rumble strips such that if driven at 45 mph for one second, the car would hit 330 strips. A bit of math tells us this is 2.4 inches between each rumble strip. After that, it's a case of breaking down the music into exact chunks of time and applying the same technique to each space depending on what note is needed and for how long."



- 5 Engineers welded metal bars together to make a template, heated up the asphalt in sections using massive blowtorches and pressed each template into the pavement. All told, it took about a day for workers to install the rumble strips into the highway and paint musical notes on the pavement.

- 6 Currently there are only a handful of rhythmic roadways around the world, including highways in Denmark (called the “Asphaltophone”) and Japan (“Melody Road”). Perhaps one day every highway will play a song. 24, what’s a road trip without an epic playlist?

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