TALLAHASSEE, Fla.—One summer day in 2000, Matt Aresco was driving along a stretch of U.S. Highway 27 in northwestern Florida when several smashed turtle shells on the pavement caught his eye. Aresco slammed on the brakes and leaped out of the car. He picked up one dead turtle, then another and another and another—90 in all on just half a kilometer (one-third of a mile) of road.

The carnage appalled Aresco, who was then a graduate student in herpetology, the study of reptiles and amphibians, at Florida State University. He stacked the carcasses in a pile and photographed them. He also began a one-man rescue mission, returning to the road for several hours every day, picking up turtles, dodging traffic, and carrying them to the other side. Turtles cross that stretch of four-lane highway because it splits a lake—Lake Jackson—in two. More than 22,000 cars travel across the lake every day.

Aresco also built a temporary 1,200-meter (4,000-foot) fence from nylon and silt that keeps smaller turtles from entering the highway and steers them to a culvert that runs under the road. But the fence doesn’t stop larger turtles or alligators or otters. So Aresco launched a campaign to pressure the government into building an “ecopassage” — a large concrete barrier on each side of the highway—with more culverts underneath it. Aresco’s solution is modeled on an ecopassage built along U.S. 441 south of Gainesville, Fla., where wildlife biologists had documented 34,354 animal deaths, 95 percent of them frogs, in a five-and-a-half-year period. Roadkill has dropped to almost zero since the ecopassage was built there.

So far, government authorities have moved as slowly as turtles on Aresco’s idea. Aresco was even called an “ecoterrorist” by an aspiring politician. But the state recently agreed to spend $125,000 to investigate how well an ecopassage might work on the highway. Meanwhile, Aresco continues his daily patrols, carrying turtles to safety—9,050 to date.

“Through this project, I have found that one person can do a lot to solve a serious roadkill problem,” Aresco told Current Science. “My hope is that the Lake Jackson Ecopassage project will be constructed and will become a model for others to solve similar problems in other areas, saving thousands of animals in the future.”