Wildlife Undercrossing Location

- Santa Cruz County
- Highway 17
- At Laurel Road Postmile 9.5
  a.k.a Laurel Curve
Project Need

- High traffic volumes (61,500 vehicles per day)
- Concrete median barriers
- Inadequate culvert or bridge under crossings that provide safe passage for wildlife

Creating a barrier for mountain lions and other wildlife
Underneath the Highway Laurel Curve

Photo: Pathways for Wildlife
A Collaborative Partnership

- Land Trust of Santa Cruz County
- California Department of Transportation (Caltrans)
- Santa Cruz County Regional Transportation Commission
- California Department of Fish and Wildlife (CDFW)
- Pathways for Wildlife
- U.C. Santa Cruz Puma Study
Project Funding

Land Acquisition:

- **Land Trust of Santa Cruz County** purchased 463 acres through fee title or conservation easements—protecting wildlife habitat on both sides of Highway 17 at Laurel Curve.

Project Development:

- **Caltrans** -- $3.11 million from the 2016 SHOPP 240 Advanced Mitigation Program to complete the environmental document and design phase of the project.

Construction Cost -- over $5 million:

- **Santa Cruz County Regional Transportation Commission** -- $5 million for construction through the 2016 Santa Cruz County Tax Measure D.

- **Land Trust of Santa Cruz County** --- Raising additional funds for construction.
Methods for Identifying the Location to Improve Connectivity

The following data was used to identified a location where a new wildlife crossing would provide the greatest benefit for improving wildlife connectivity between protected open space and core habitat areas:

- Modeling
- Roadkill data: Caltrans and Pathways for Wildlife
- Camera monitoring data: Pathways for Wildlife
- GPS telemetry data: U.C. Santa Cruz Puma Study
Regional Linkage Map
Critical Linkages: Bay Area and Beyond
Colored dots show the different animals that have been hit on the highway.

Laurel Curve is an AVC hot spot where animals are hit on a consistent basis.
Laurel Curve Camera Data

- Green dots = Camera stations from Soquel Creek to Hwy 17.
- There have been several treks by individual mountain lion (s) towards Hwy 17 at Laurel Rd.
Other Wildlife Species Captured on Camera

- Coyote
- Gray Fox
- Buck
- Doe with Fawn
Laurel Curve Study Area
GPS Telemetry Data

- The majority of crossings in Santa Cruz County are at Laurel Curve
- Colored lines show pathways mountain lions used to cross Hwy 17
Summary: Laurel Curve Data

Data overlays include:

- Roadkill Data
- Camera Data
- UCSC Puma Project Telemetry Data
- Conservation Easements
Laurel Curve Wildlife Undercrossing

Preliminary Design:

Span Bridge 16’ x 12’ that is 60 feet in length with natural bottom
Similar Wildlife Undercrossing
Escape Ramps & Wildlife Guards

- Example of an escape ramp design
- Example of a wildlife guard design
Thanks to All of the Project Partners!

And a Special thanks to the following partners:

- Residents of Santa Cruz County who supported Tax Measure D and donated funds to the Land Trust for this project.

Nancy R. Siepel, Caltrans District 5
Environmental Stewardship Branch
San Luis Obispo, California
Nancy.Siepel@dot.ca.gov
805-549-3573

Morgan A. Robertson, Caltrans District 5
Central Coast Biology Branch—Central Region
San Luis Obispo, California
Morgan.Robertson@dot.ca.gov
805-542-4684