

# North America



# The Mountain Deserts of California and Nevada

A satellite-style topographic map of California and Nevada. The map shows the state of California on the left, with the word "California" written in white text over its western coast. To the right of California is Nevada, with a large white letter "N" partially visible on its eastern edge. The terrain is color-coded by elevation: green for lowlands, brown for mid-elevations, and white for high mountain peaks. The map highlights the mountainous regions in both states, showing a complex network of mountain ranges and valleys. The Pacific Ocean is visible to the west of California.

California

# Nelson Bighorn Sheep (*Ovis canadensis nelsoni*)



- Live in the California and Nevada mountain deserts.
- They weigh ~ 300 lbs.
- Their horns weigh up to 30 lbs.

# Nelson Bighorn Sheep (*Ovis canadensis nelsoni*)



- Live in mountaintop populations of often less than 50 individuals.
- To mate, males travel through valleys to different mountaintops.





LAS VEGAS

LOS ANGELES



**LAS VEGAS**

**LOS ANGELES**





This map is just a slightly different representation of the same area.



What do the patterns and colors mean?



LAS VEGAS

Clark

Indian Spring

Piute Range

Wood

Hackberry

Old Dad

Providence

Cady

Granite

Clipper

Newberry

South Bristol

Marble

Cushenbury

San Gabriel

San Gorgonio

LOS ANGELES

Little San Bernardino

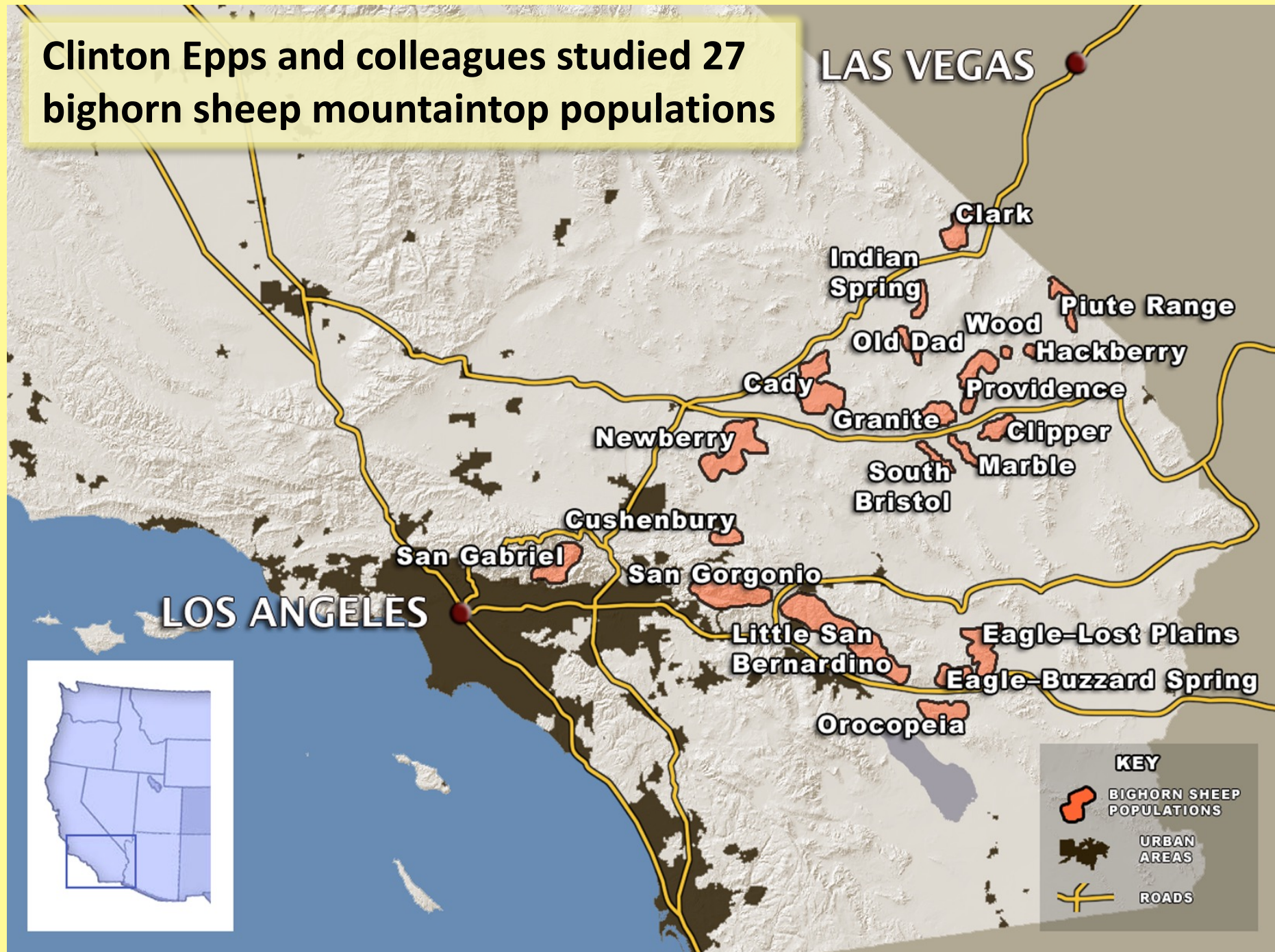
Eagle-Lost Plains

Eagle-Buzzard Spring

Orocopeia



Clinton Epps and colleagues studied 27 bighorn sheep mountaintop populations



They named each population for the mountain on which the population lives.



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KEY

 BIGHORN SHEEP POPULATIONS

 URBAN AREAS

 ROADS



# Major highways that connect Los Angeles and Las Vegas run through the bighorn sheep habitat.



# How are the highways important to Las Vegas?



# Importance

- Half of all visitors to Las Vegas arrive by car and most are from California.
- People visit for gambling, entertainment, and conventions
- Jobs for about 300,000 people
- Contribute billions of dollars to the economy that funds schools, museums, and city services.



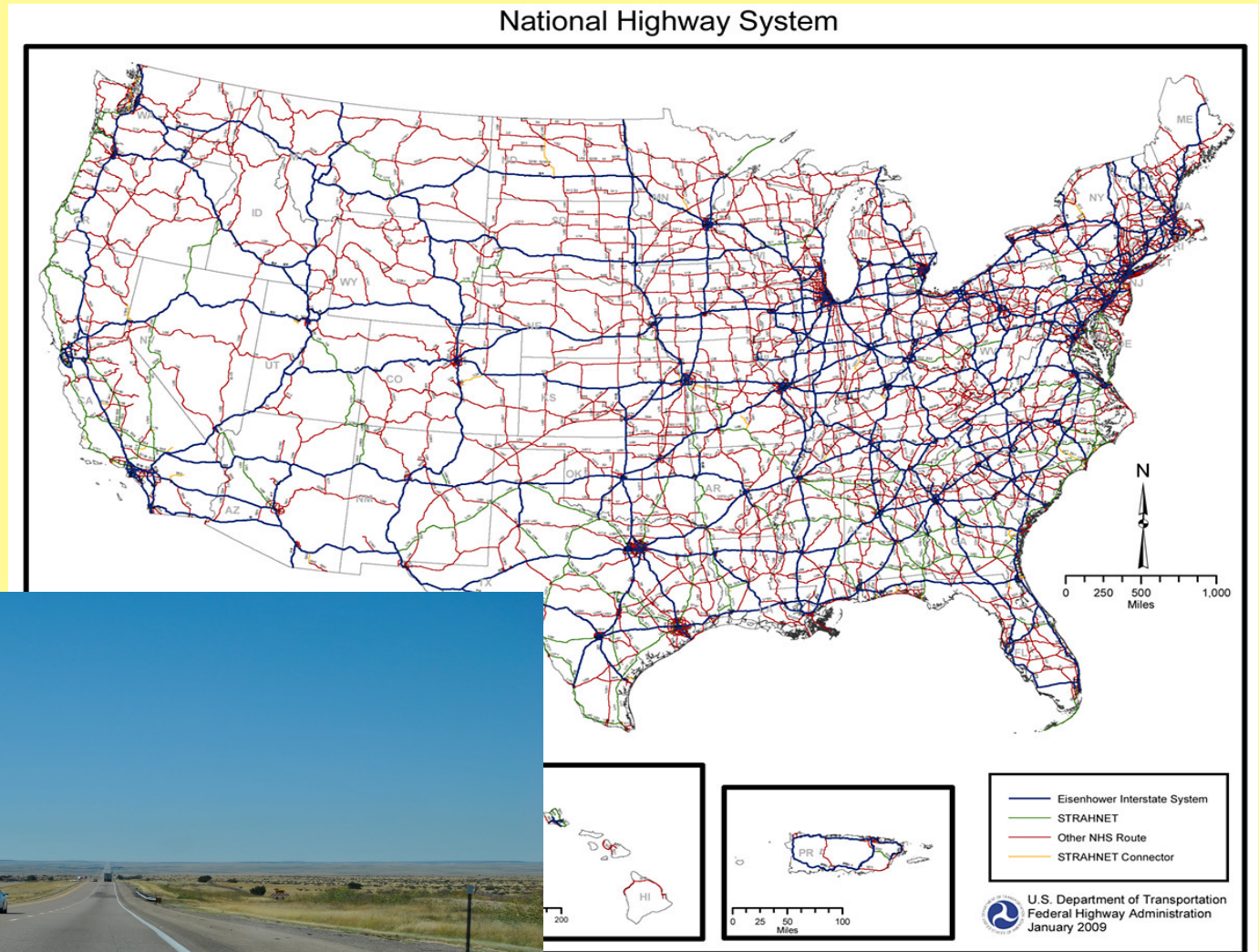


We know the highways are important, but one scientist wondered how they might affect the sheep.





# How might highways impact living things that live near them?



What do you notice about this picture?



# What do you notice about this picture?



Clinton Epps wondered if the fenced highways setup unnatural borders for wild bighorn sheep populations.

## Image Credits

13-14. Road Map LA/Vegas: CA Department of Transportation; Desert Road: Jimmy Hoofa;

Welcome to Las Vegas Sign: Las Vegas Convention & Visitors Authority

15. Interstate Sign, Las Vegas Seal, Slots, Skyline Las Vegas : Las Vegas Convention & Visitors Authority; Lion King: Photofest; Downtown Las Vegas: Ken Lund

16. Bighorn Sheep: Magnus Kjaergaard

Route 15: Stan Shebs

17. Highway Map: US Department of Transportation/Federal Highway Administration  
California Interstate 5: Thought Balloons Blog

18-19. Route 15: Stan Shebs