

# Caltrans' Role in Climate Change and Sustainability

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# Caltrans' Climate Action Program

## Complementary Strategies:

- Mitigation
- Adaptation

# Caltrans' Climate Action Program

## Mitigation:

Concerned with the impact of transportation on climate and mitigation measures



# Caltrans' Climate Action Program

## Adaptation:

Concerned with the vulnerability of transportation facilities and adaptation measures due to climate change



San Francisco and Oakland Airports – One meter sea level rise scenario



Landslide - Humboldt County, CA, State Highway 96

# Resource Conservation and Greening

5%-10% potential reduction in GHG emissions through greening and energy efficiency



- Cement Standard/  
Concrete Mix
- Highway Lighting
- Green Building
- Landscaping



# General Plan Participation

- Caltrans District staff
- Ahead of implementing individual transportation projects
- Balancing concerns



# Tools and Funding

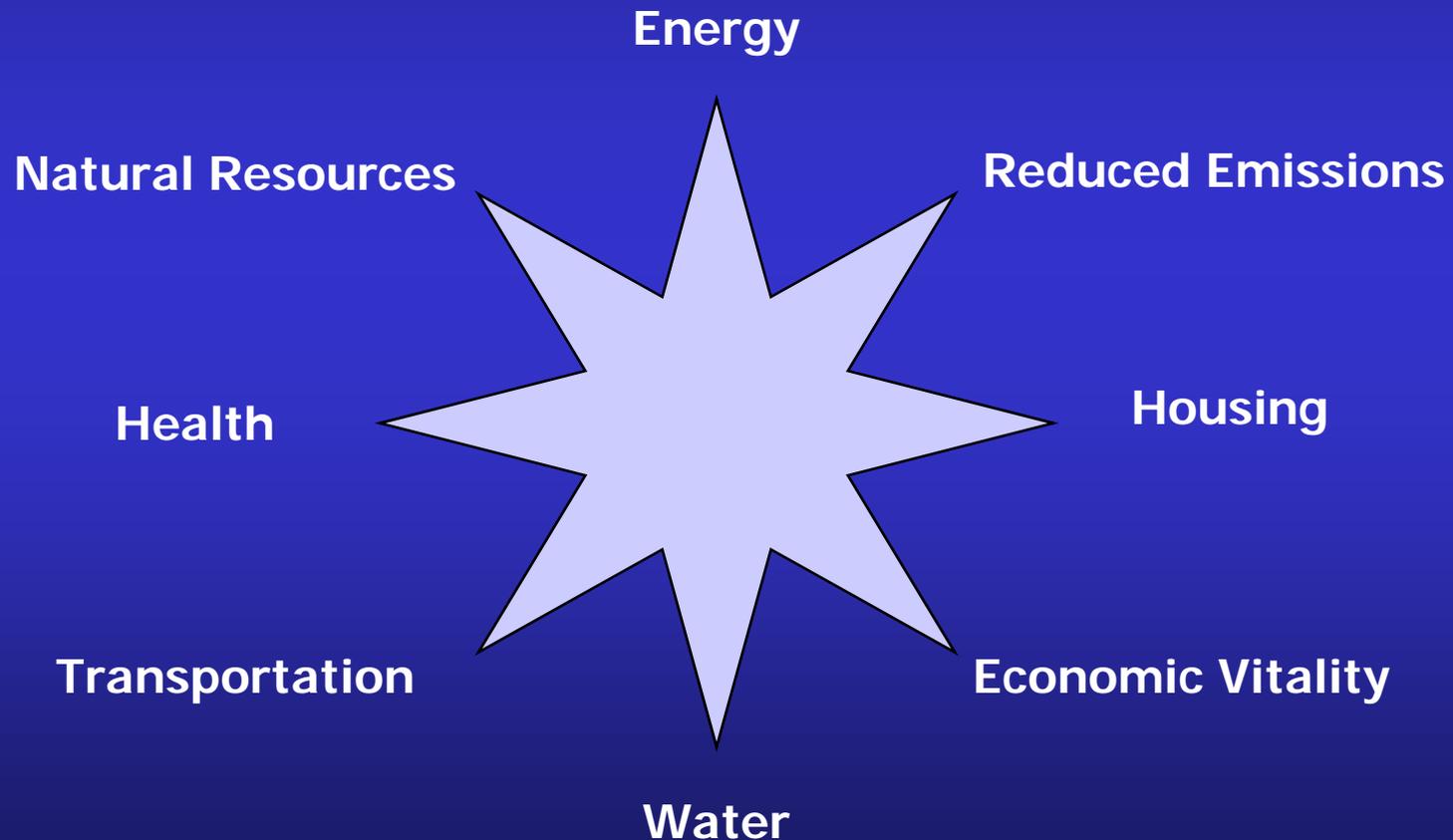
- Modeling Improvements
- Smart Mobility Framework
- Grants
  - Regional Blueprints
  - Environmental Justice
  - Community-Based Transportation
  - Partnership Planning
  - Transit Planning



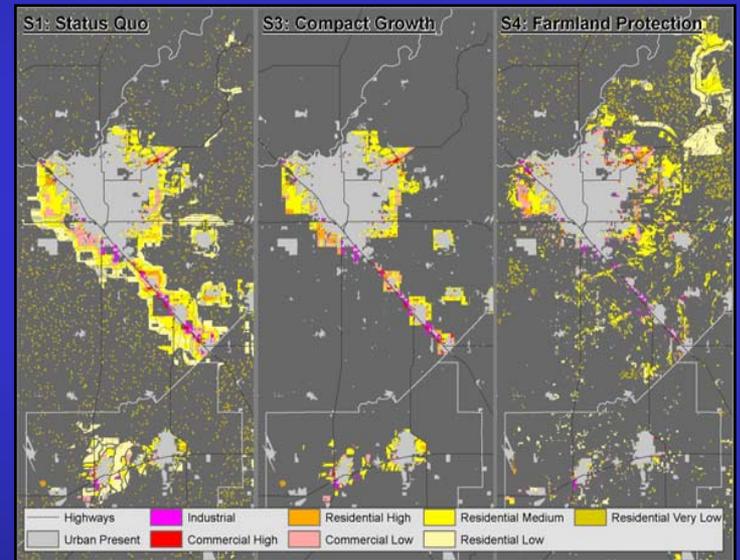
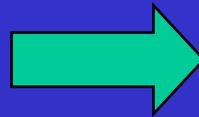
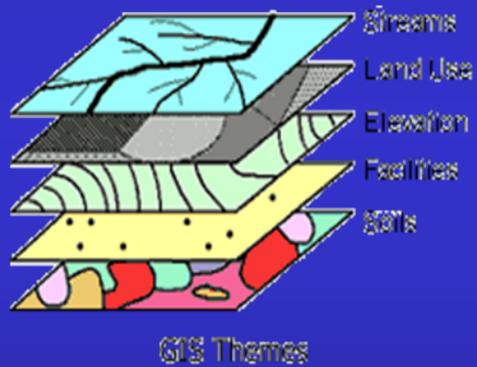
# SB 375, Transportation, and Regional Blueprints

- Regional GHG emission reduction targets
- Regional Transportation Plans
  - SCS part of RTP
  - APS not in RTP
  - RTP Guidelines being amended
- Regional Blueprints
  - More comprehensive than SB 375
  - Foundation for SB 375 compliance
  - Possible SCS

# Regional Blueprints: Community Issues Converge



# Scenario Planning



# Quality Decision-Making

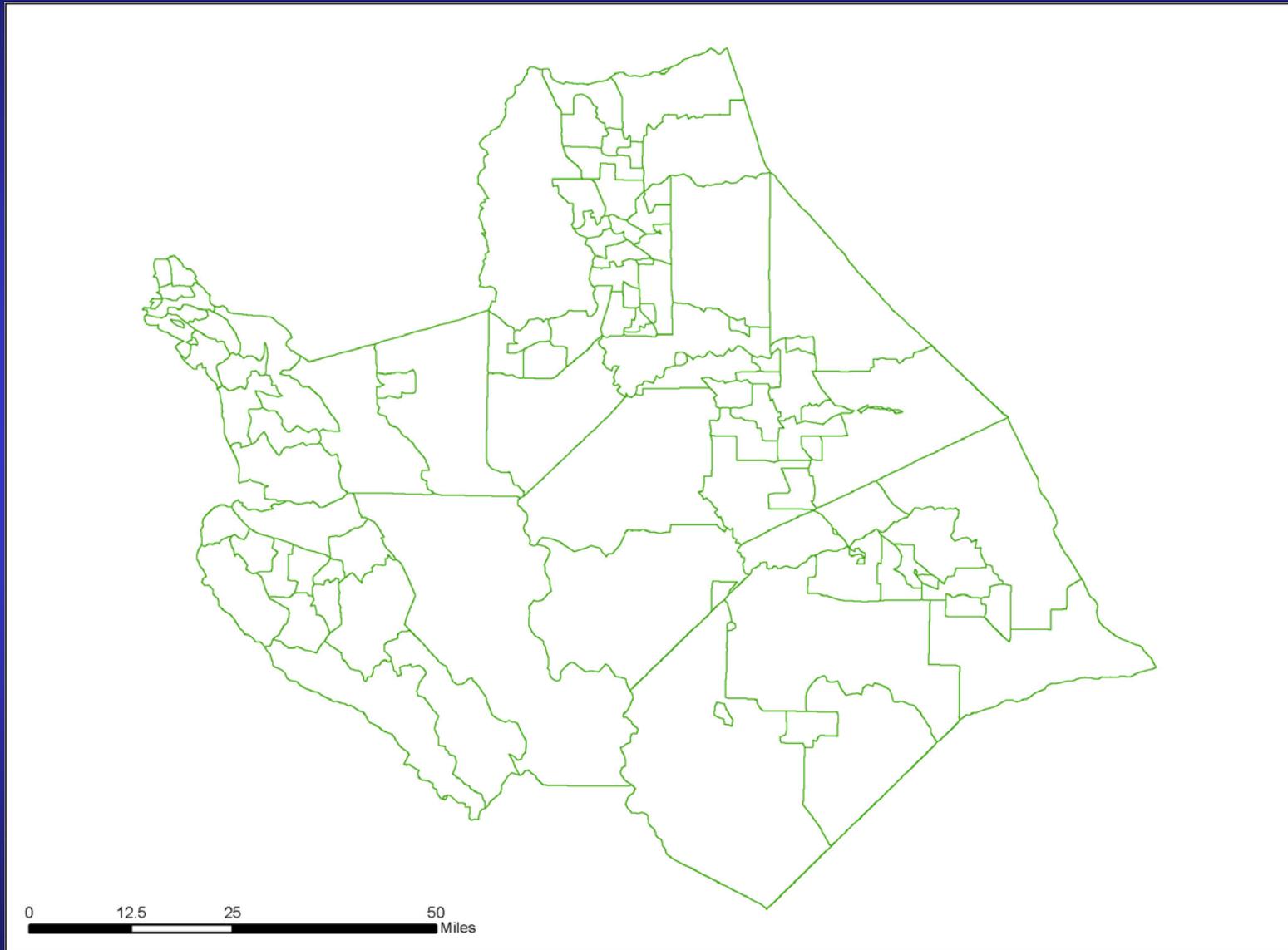
- Premise: knowledge improves decision-making
  - Assess alternatives before investing
  - Understand the impacts of our choices
- Today's decisions affect California's future

# Hypothetical California Example



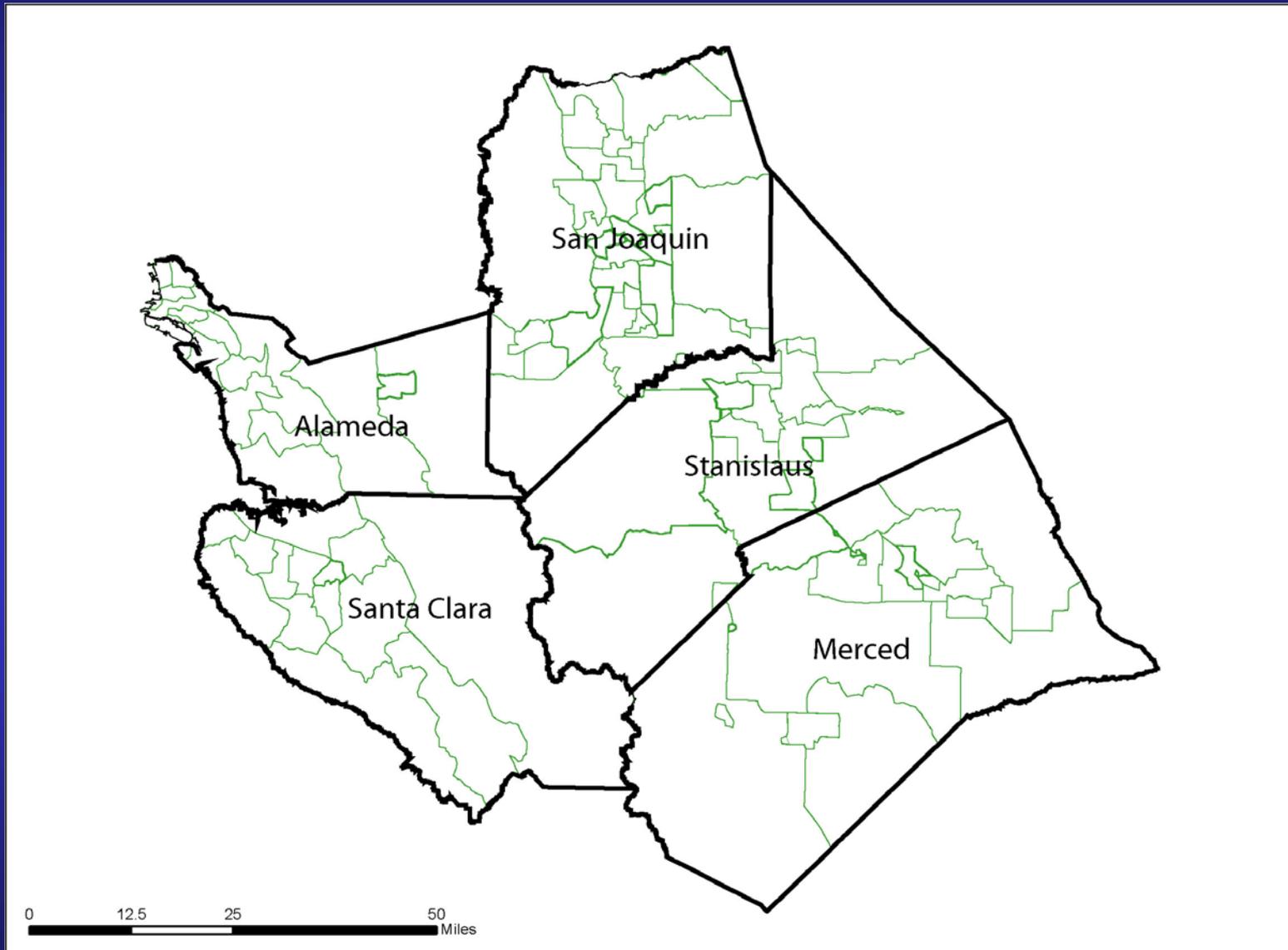
Source: UCD Information Center for the Environment.

# PECAS Zones



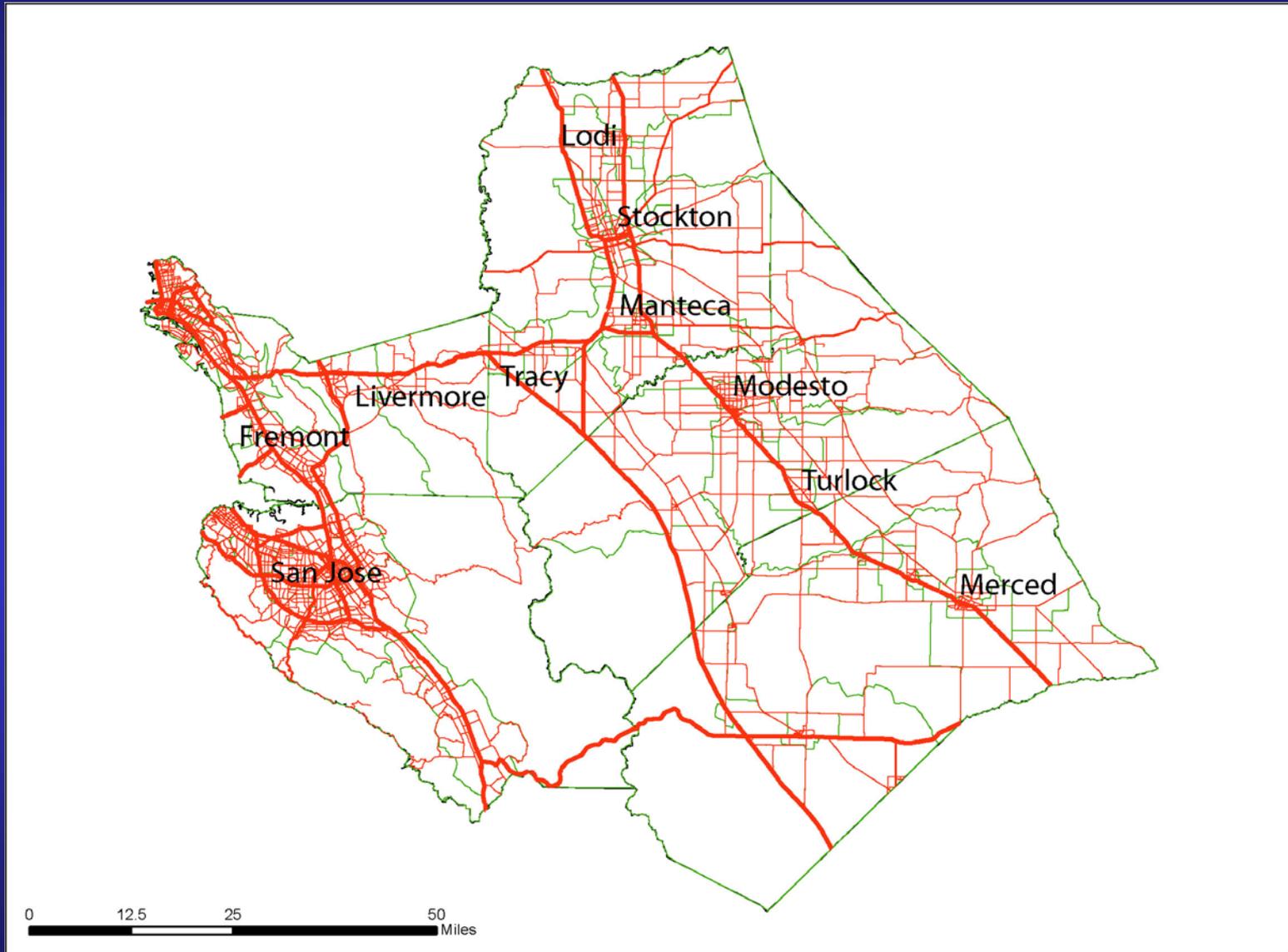
Source: UCD Information Center for the Environment.

# PECAS Zones & Counties



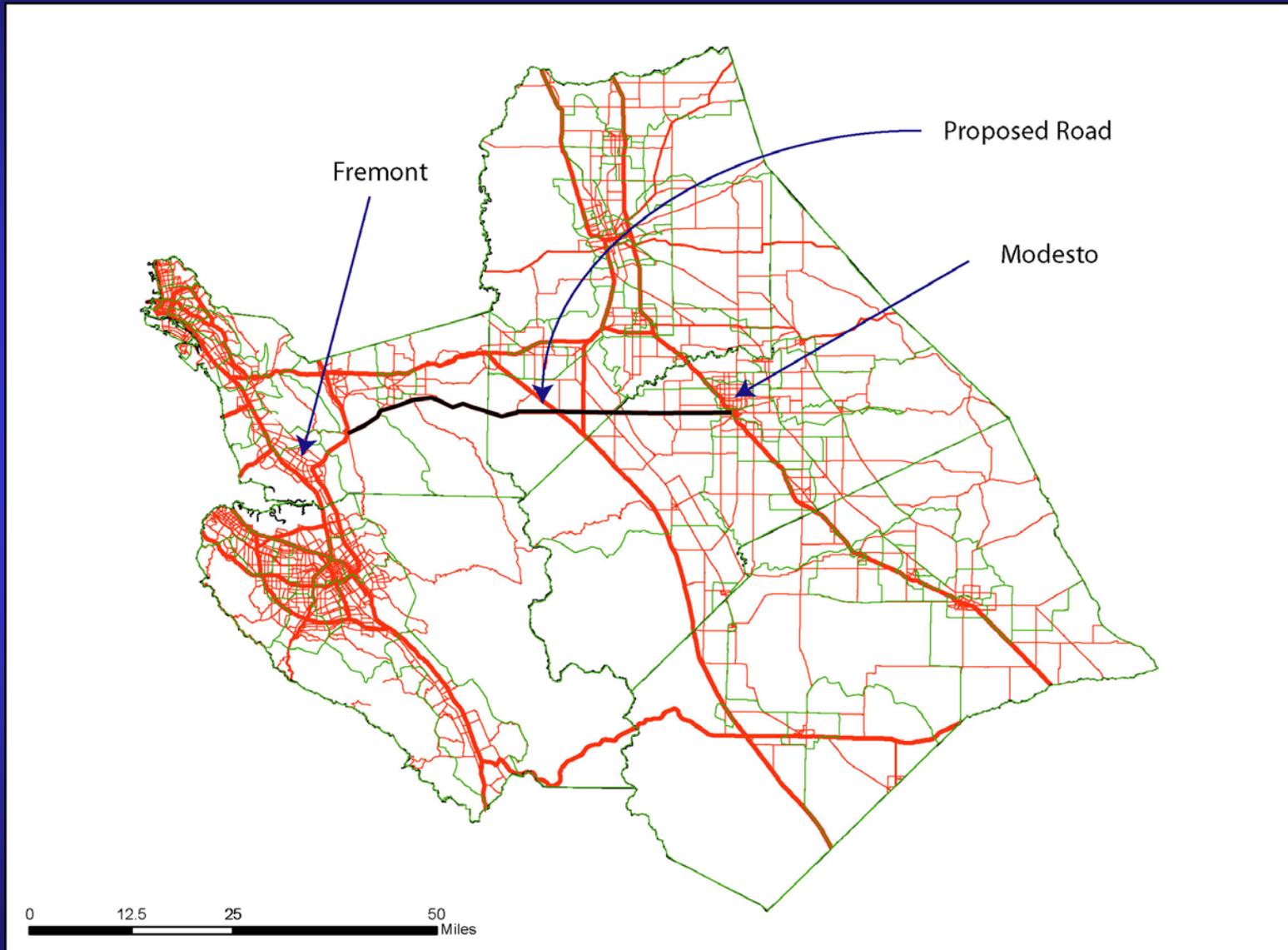
Source: UCD Information Center for the Environment.

# PECAS Zones with Roads



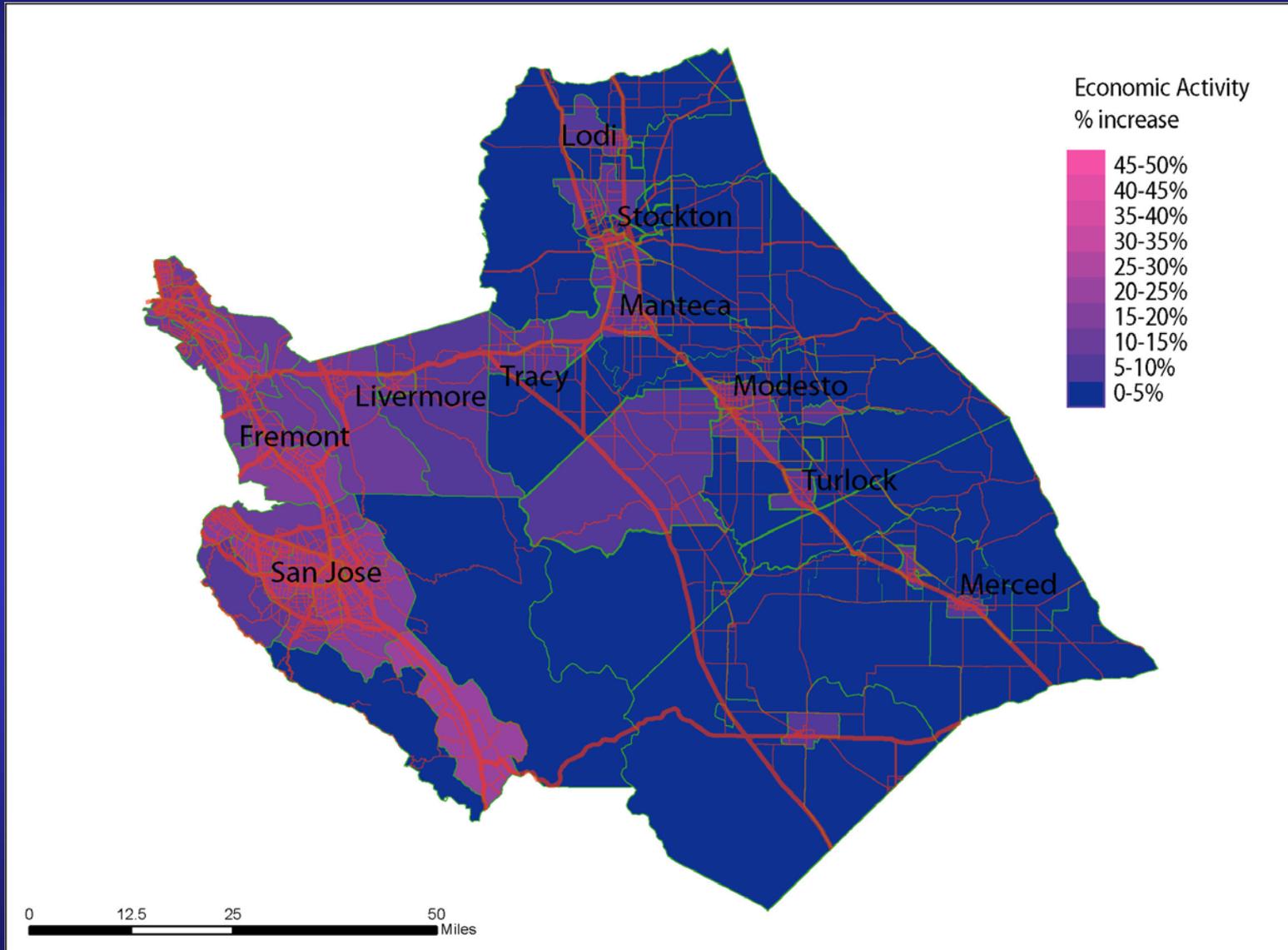
Source: UCD Information Center for the Environment.

# Hypothetical Proposed Road



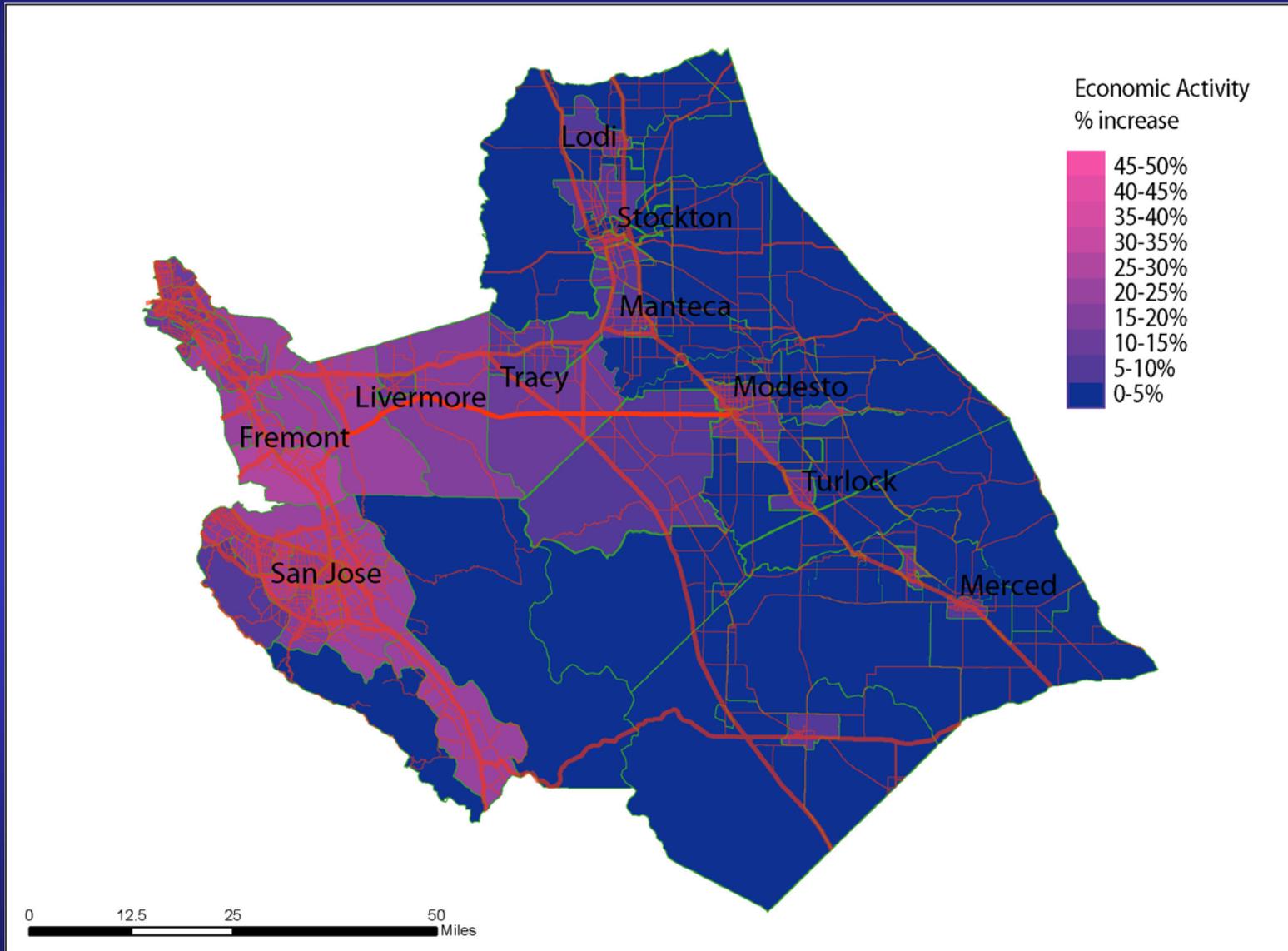
Source: UCD Information Center for the Environment.

# Without Road 2050 : Economic Activity per Zone % Increase



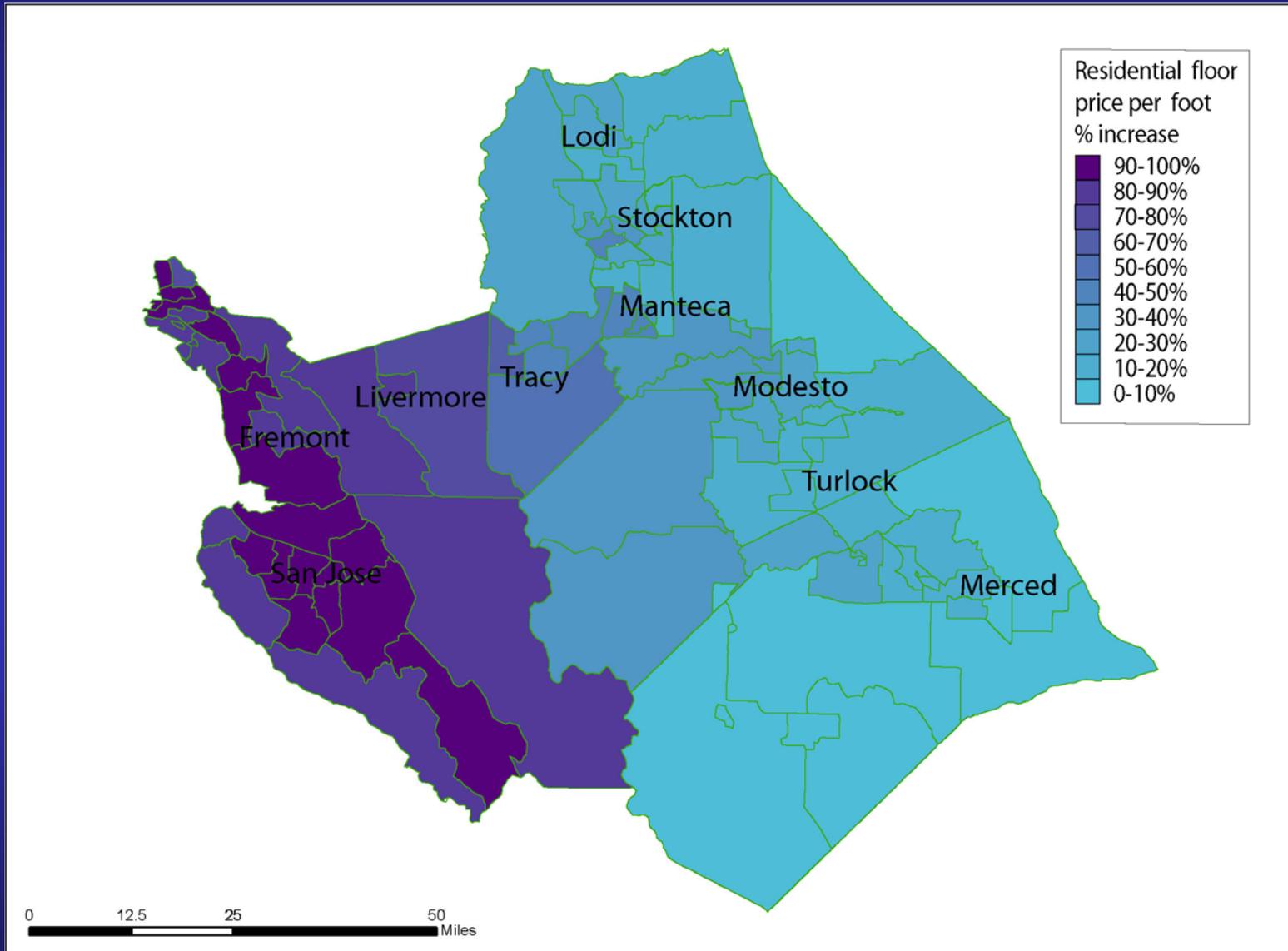
Source: UCD Information Center for the Environment.

# With Road 2050 : Economic Activity per Zone % Increase



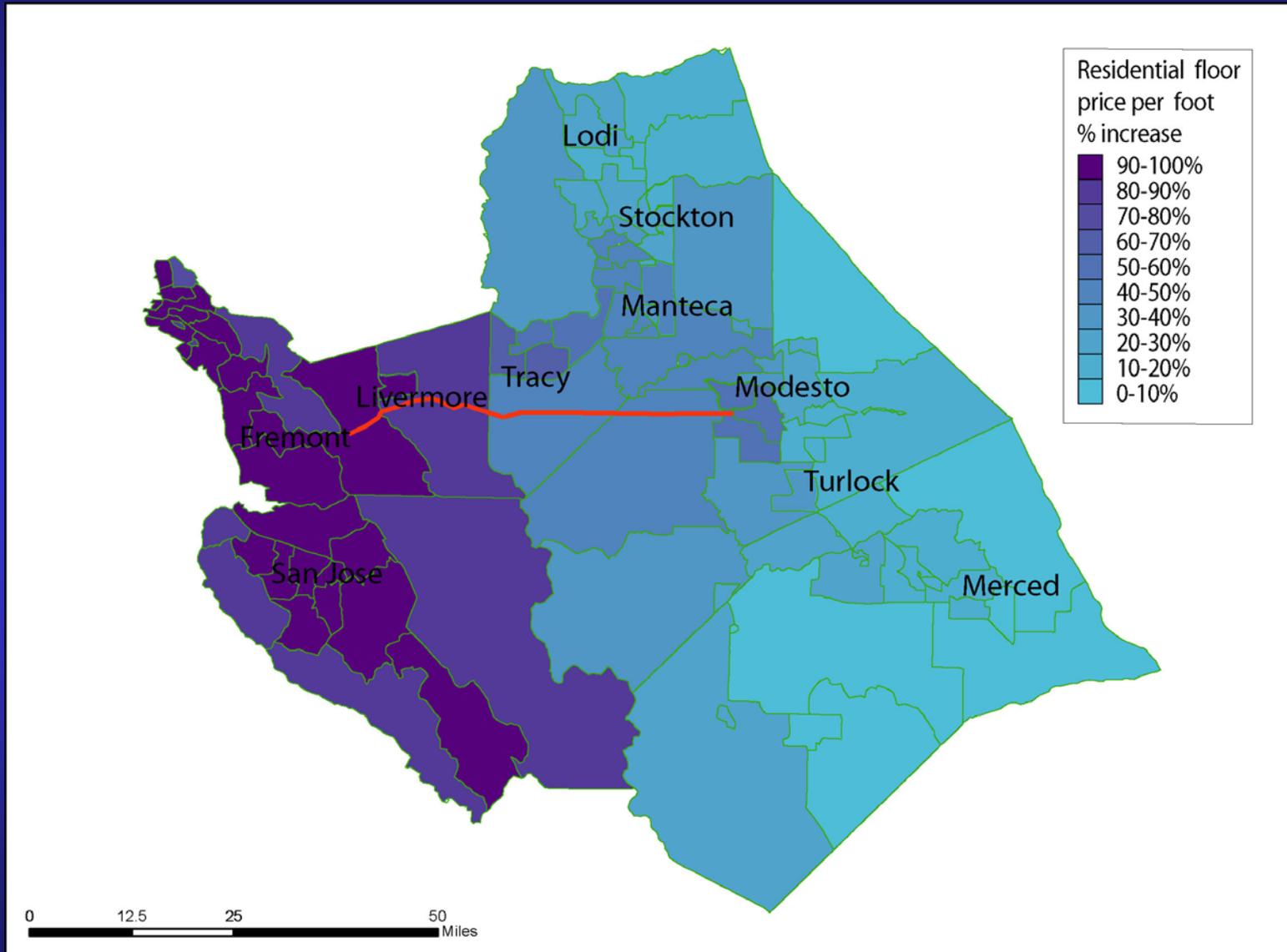
Source: UCD Information Center for the Environment.

# Without Road: Residential Floor Space price per square foot



Source: UCD Information Center for the Environment.

# With Road: Residential Floor Space price per square foot



Source: UCD Information Center for the Environment.