Central Coast Broadband Consortium
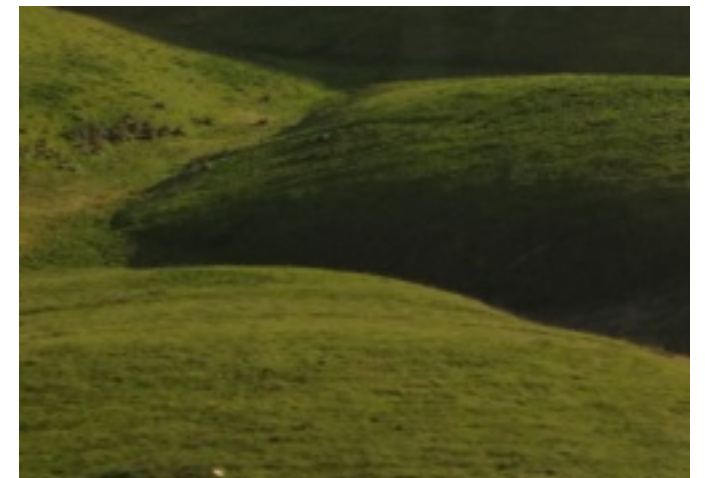
Broadband infrastructure means jobs and economic development
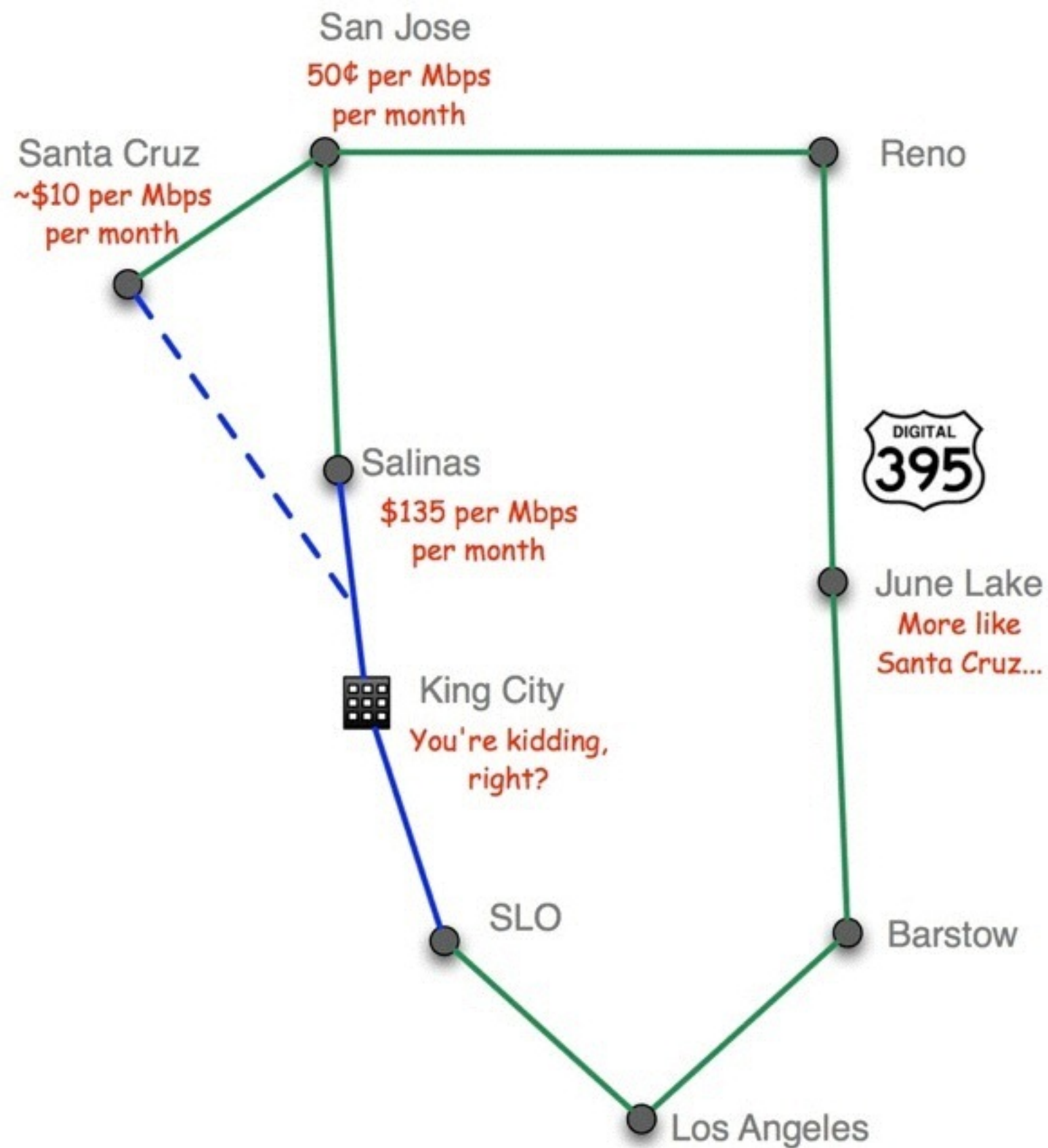
30 April 2013
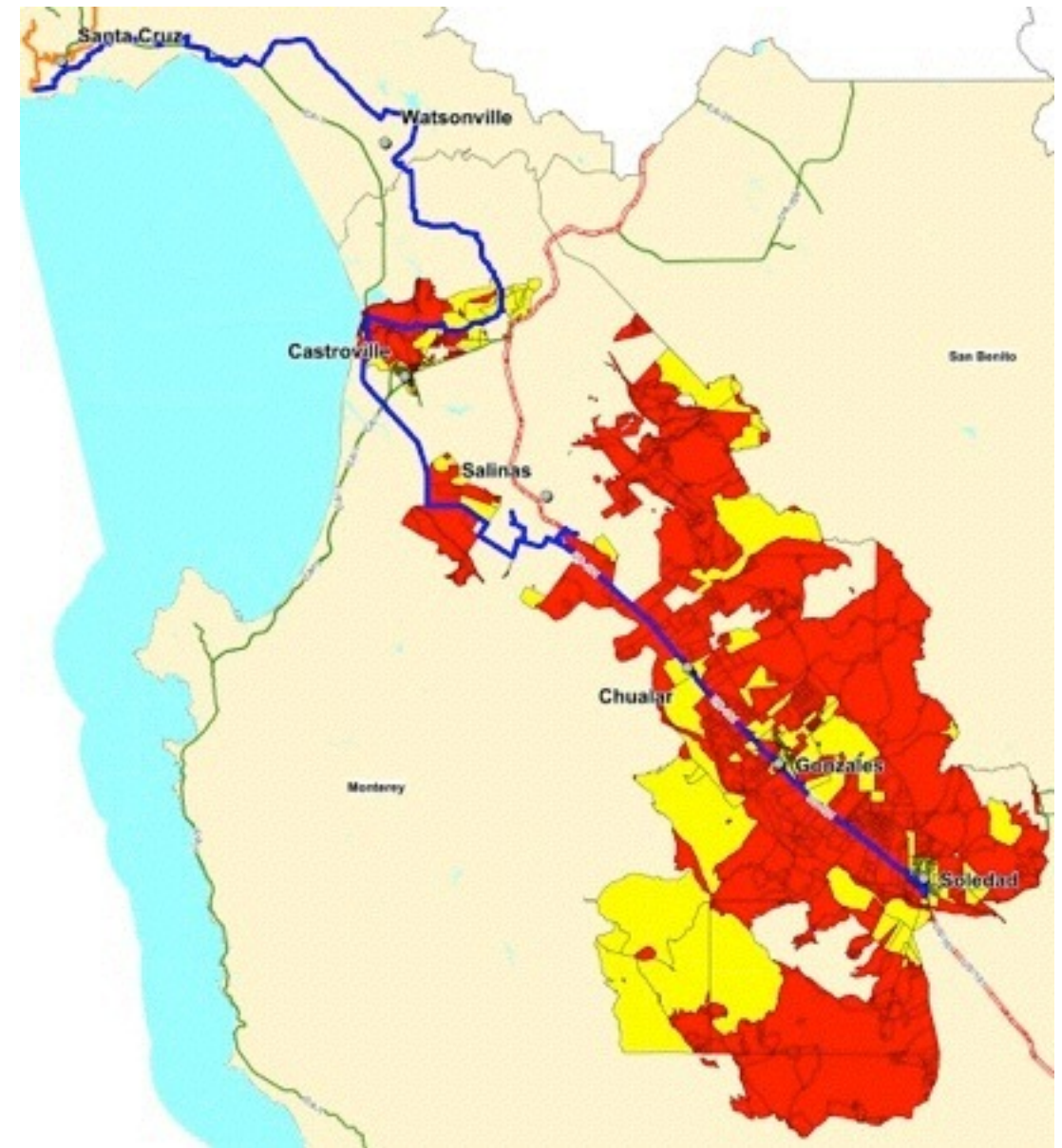Stephen Blum
Tellus Venture Associates

{Geek}

is the new

Sexy

A tale of two cities | San Leandro & King City

San Jose
50¢ per Mbps
per month

Santa Cruz
~$10 per Mbps
per month

Reno

DIGITAL
395

Salinas
$135 per Mbps
per month
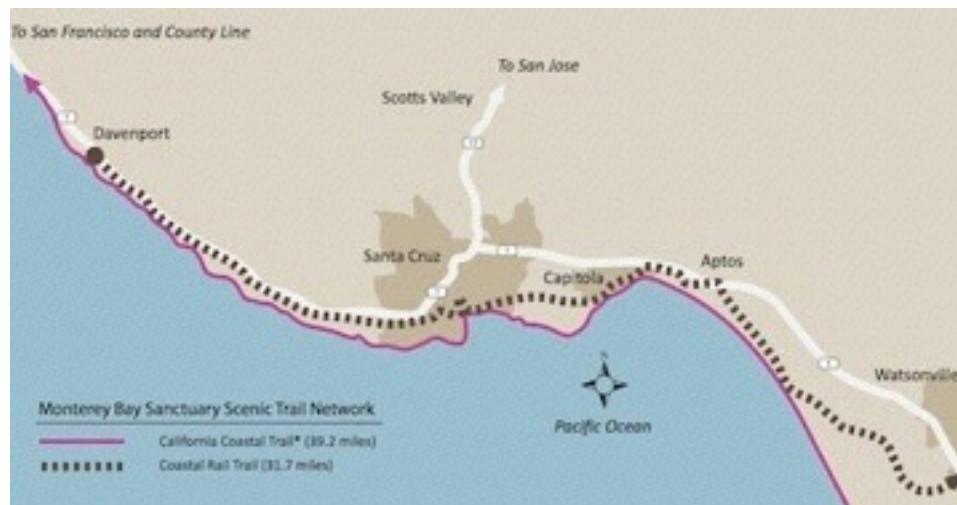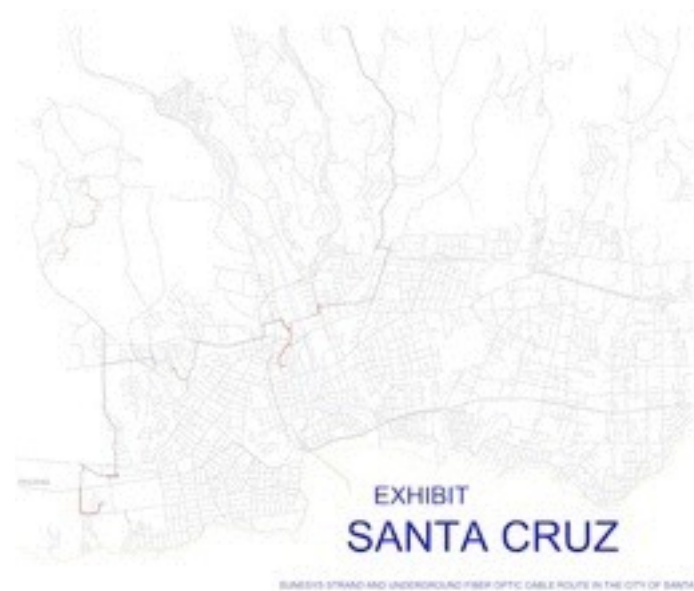
June Lake
More like
Santa Cruz...

King City
You're kidding,
right?

SLO

Barstow

Los Angeles

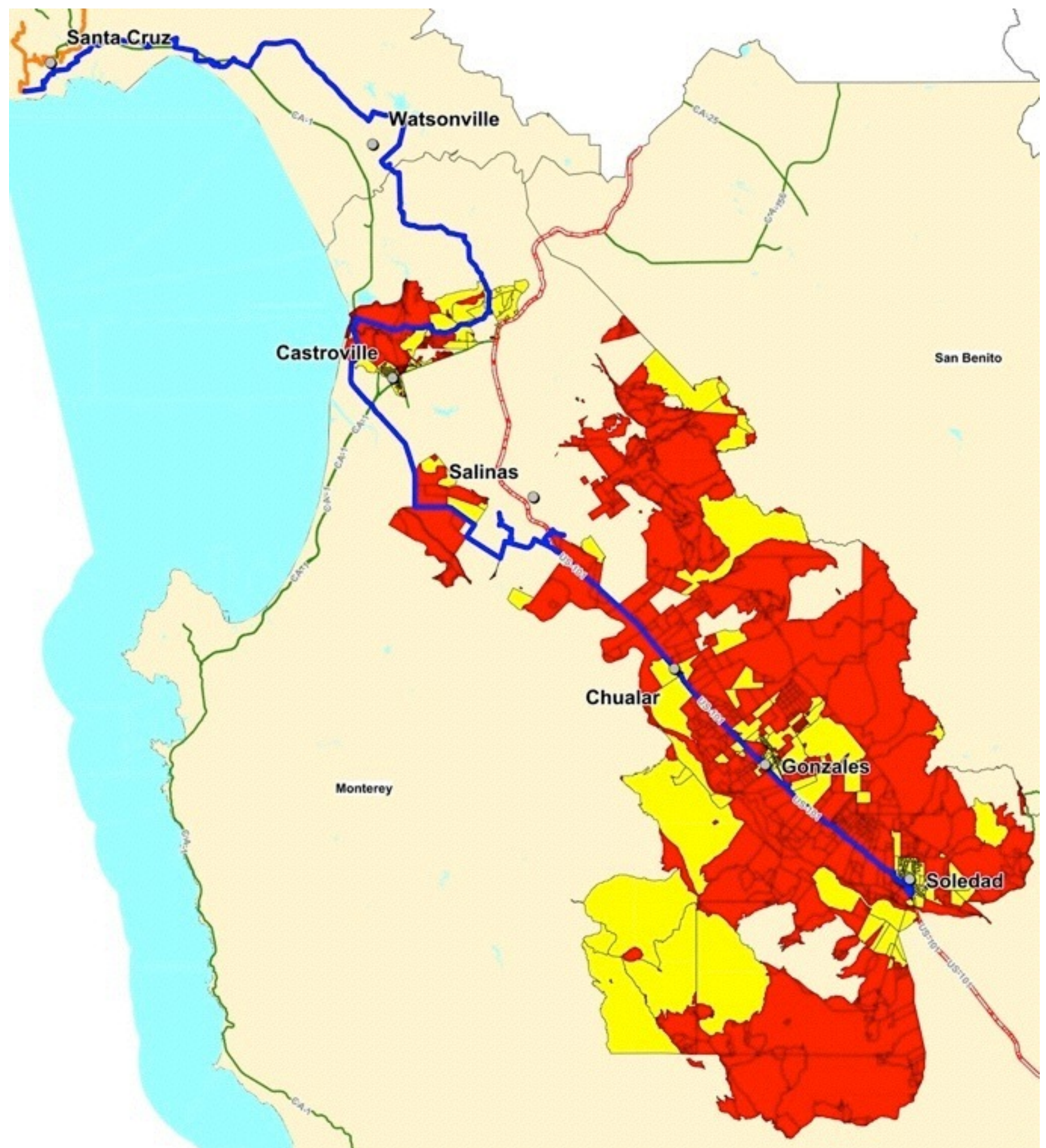Distance & location matter

UCSC project bringing fiber to
Santa Cruz pays dividends
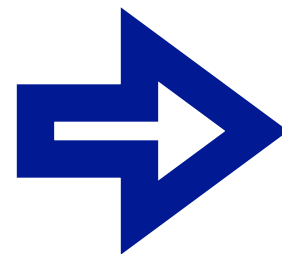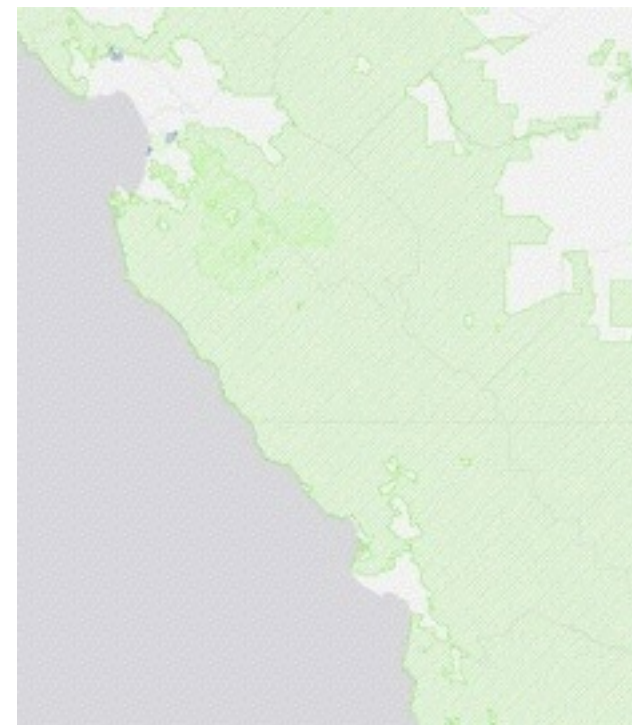
CCBC coordination, infrastructure inventory, policy

UCSC-led middle mile project
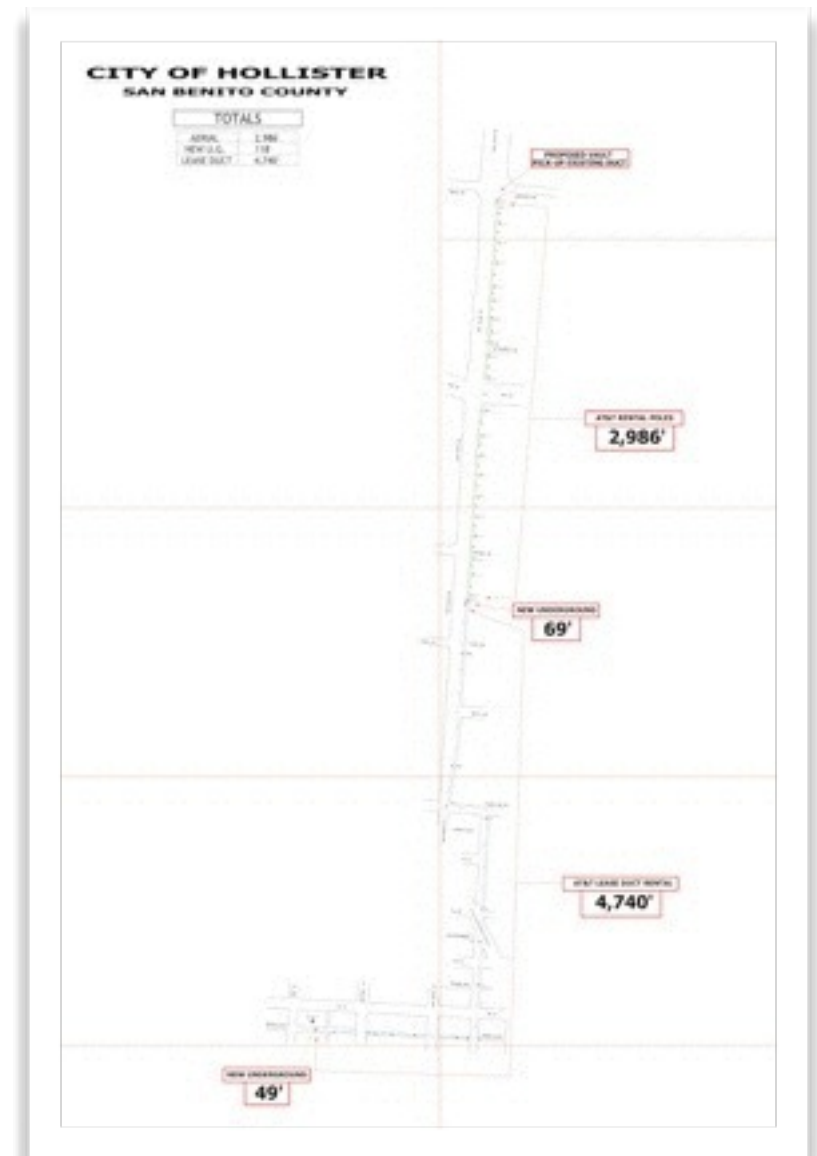
Industrial grade fiber route:
Santa Cruz -
Watsonville -
Castroville - Salinas -
Chualar - Gonzales -
Soledad

Five last mile projects for three counties

Surfnet in Santa Cruz & Monterey, Pinnacles Telephone in San Benito, Etheric wireless region-wide
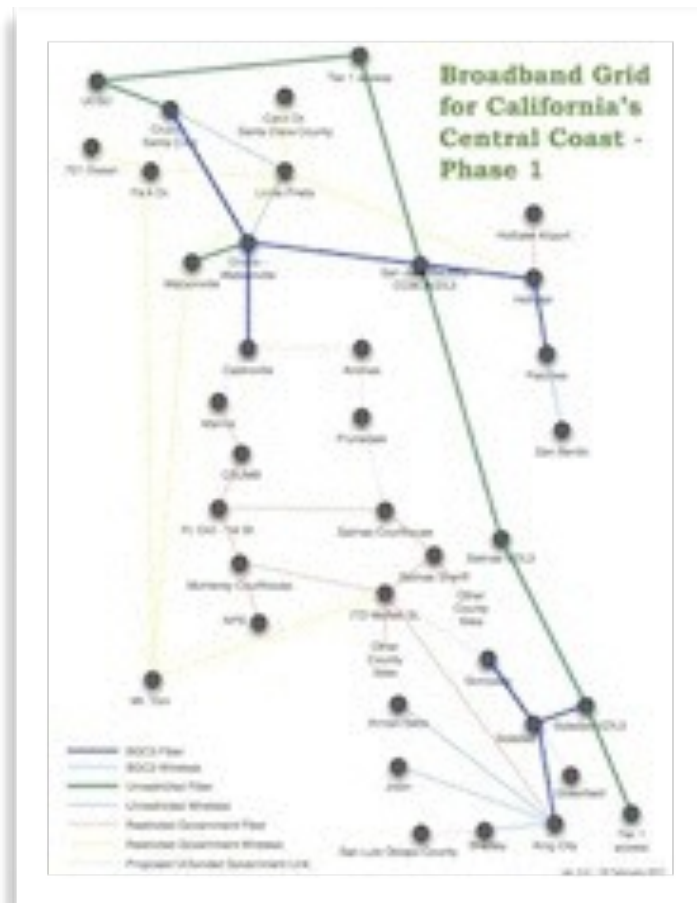
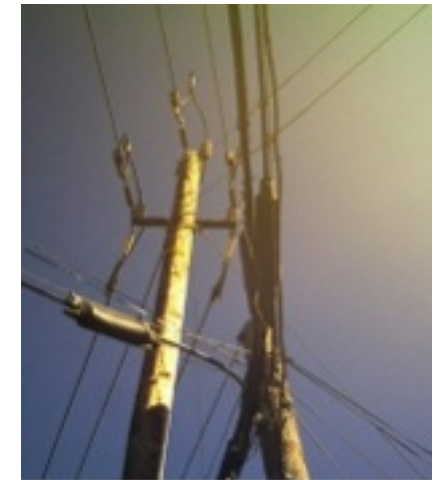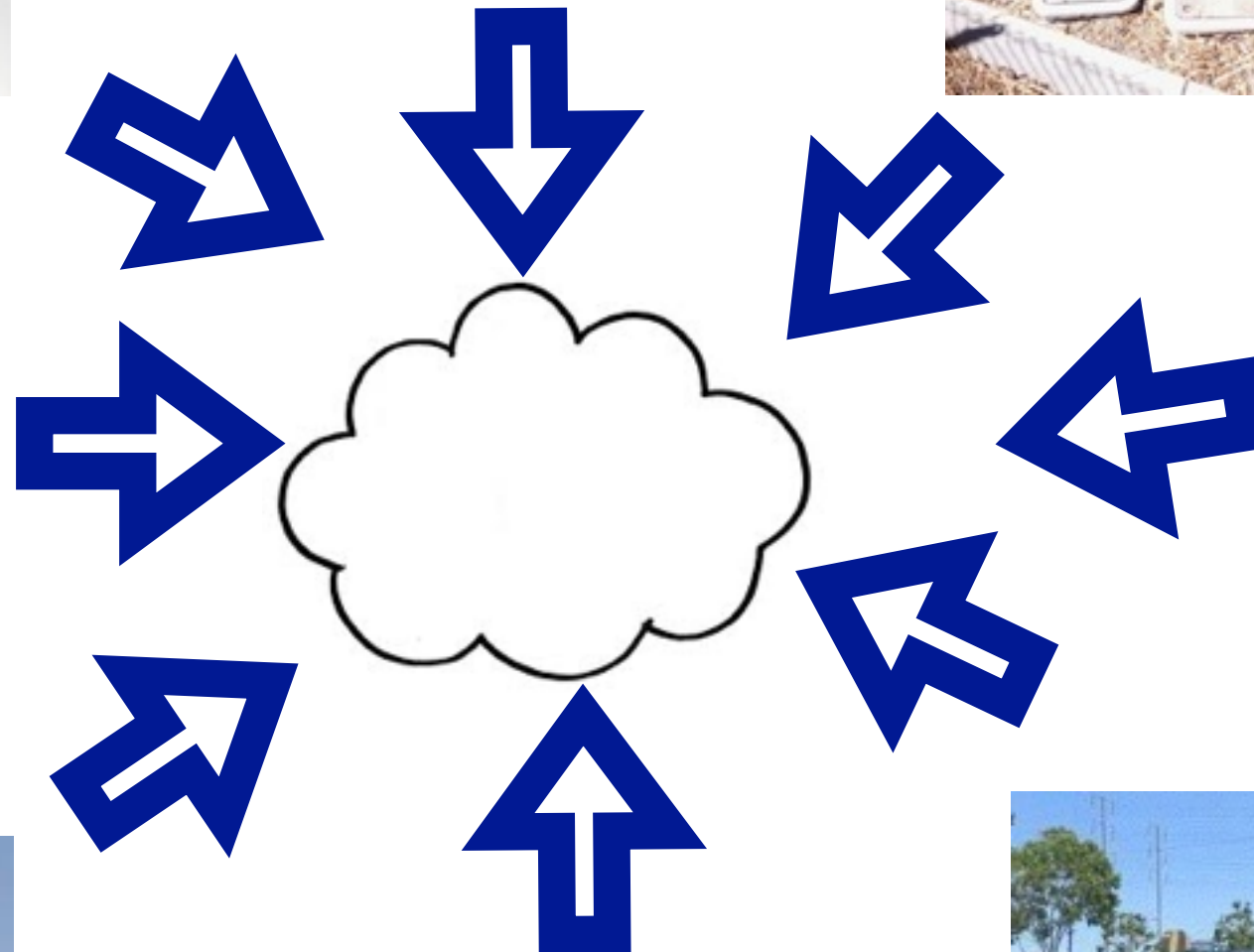# CCBC continuing vision, blueprint for broadband development

Developed locally, coordinated regionally, previously endorsed by CPUC

Back-up slides

Conduit is forever | Roman ductworks used for fiber optic lines
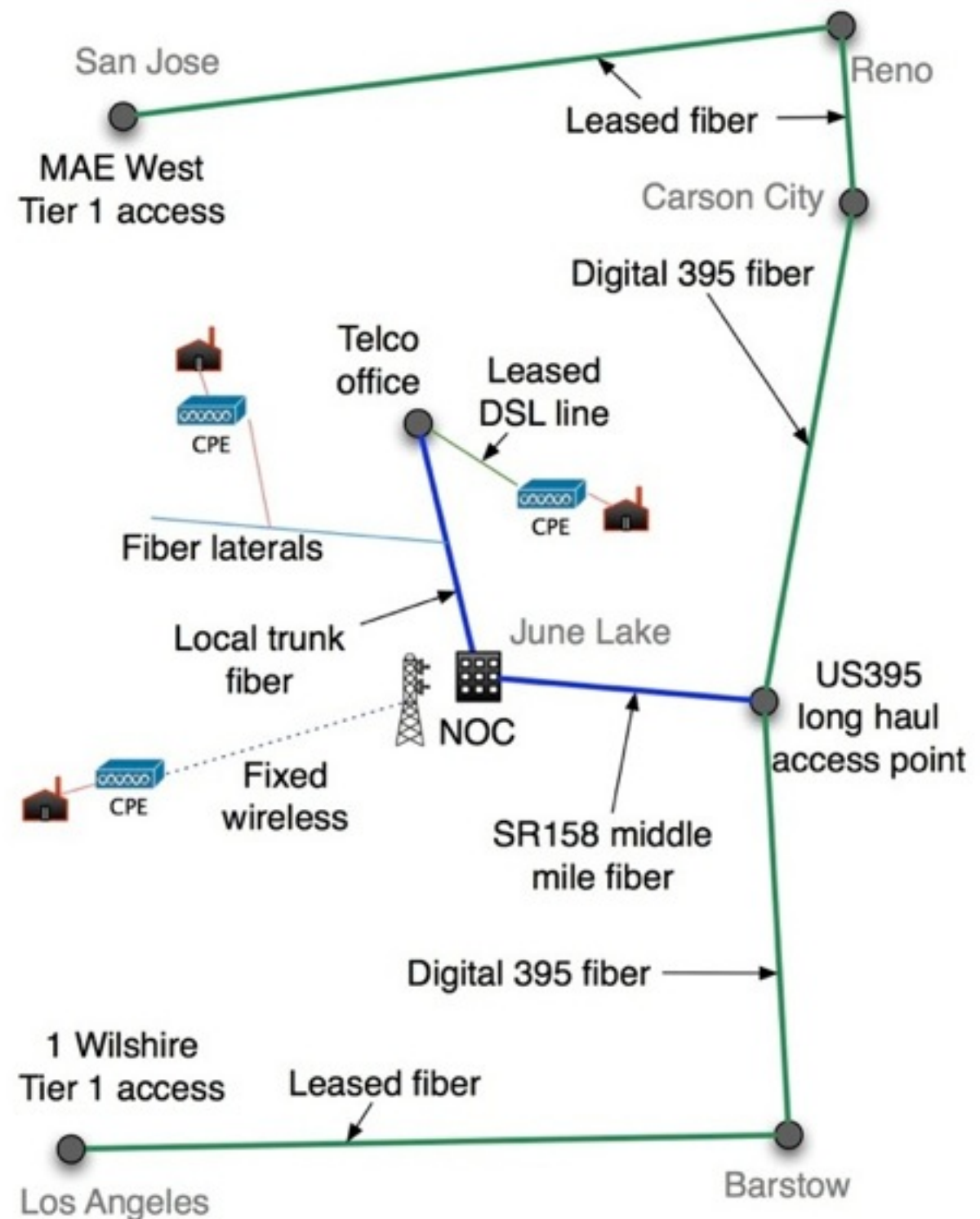
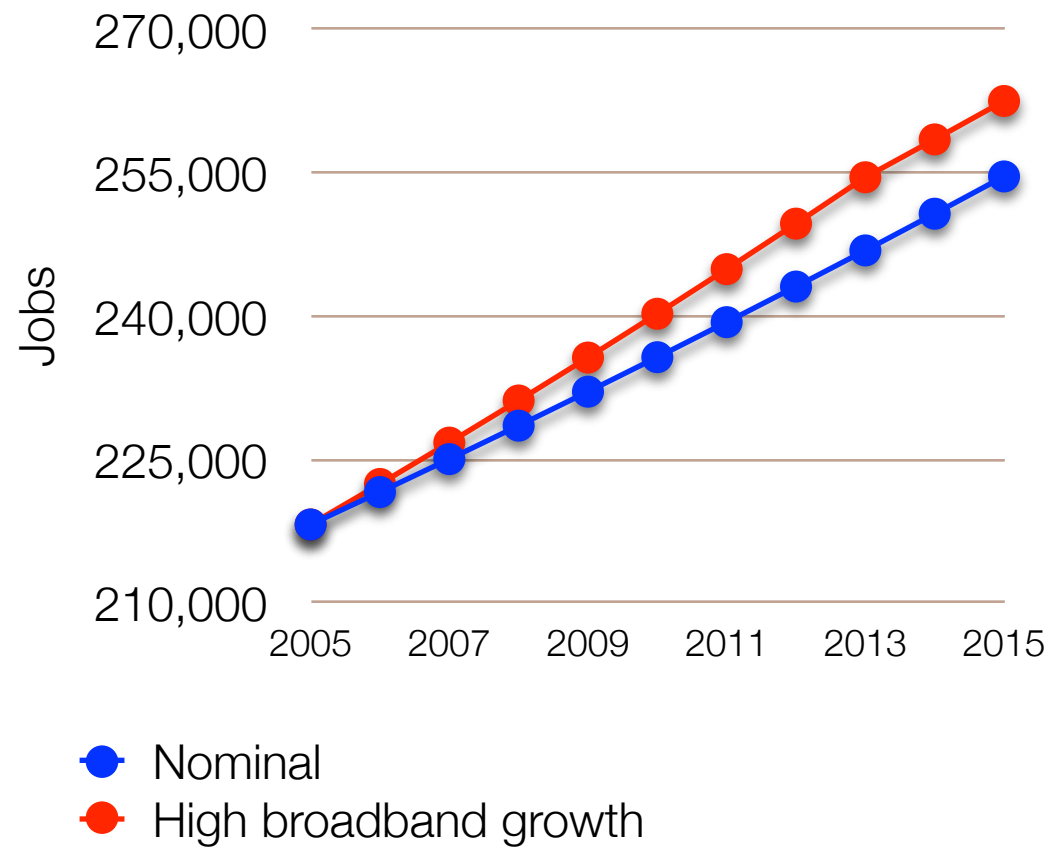# Broadband is digging and rigging

It's not rocket science

- Tier 1 Internet connection
  - Bandwidth
- Long haul fiber
  - Maybe several providers
- Long haul access point
- Middle mile fiber
- Central office/NOC
- Local trunk distribution fiber
- Lateral fiber
- Customer drop
- Customer premise equipment

Broadband value chain

Not a lot different from water, electricity

Broadband's Effect on San Joaquin County Employment

Jobs

270,000	
255,000	
240,000	
225,000	
210,000	

2005 2007 2009 2011 2013 2015

● Nominal
● High broadband growth

Source: Sacramento Regional Research Institute

Almost 50K job-years created by improved broadband access

Top U.S. Cities
Average Measured Connection Speed

| Rank	City	2Q11 Ave. Mbps
1	San Jose, CA	13.7
2	Fredericksburg, VA	8.5
3	Monterey Park, CA	8.2
4	Fremont, CA	8.2
5	Staten Island, NY	7.6
6	Columbia, MD	7.5
7	Jersey City, NJ	7.5
8	Riverside, CA	7.5
9	Oakland, CA	7.5
10	Fairfield, CA	7.3

Source: Akamai

Broadband attracts business, drives growth

Bandwidth is a basic requirement for business location decisions

Lit San Leandro venture investing $3 million in fiber loop for industrial, commercial customers
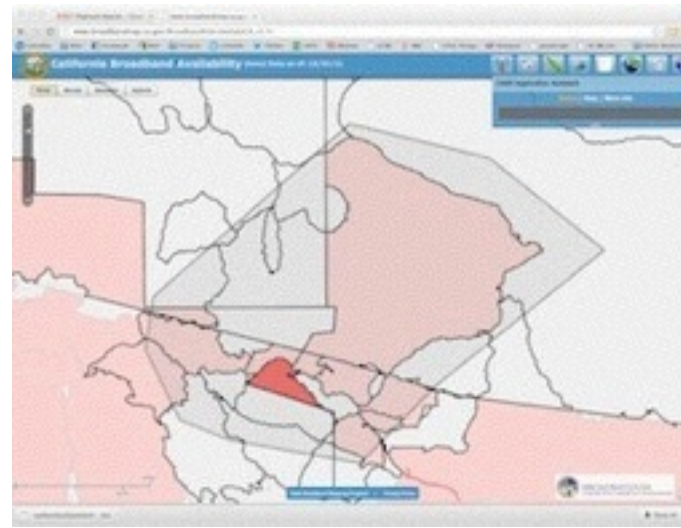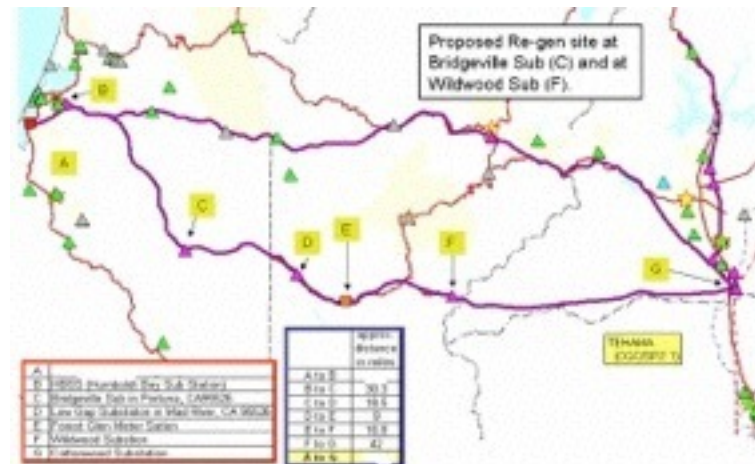

Rural telco builds fiber, wireless broadband links

Mountain ISPs look at FTTH & wireless service expansion

Private communities evaluate, partner on fiber systems

IP Networks, local groups partner on north coast fiber build

King City developer pursues major employer

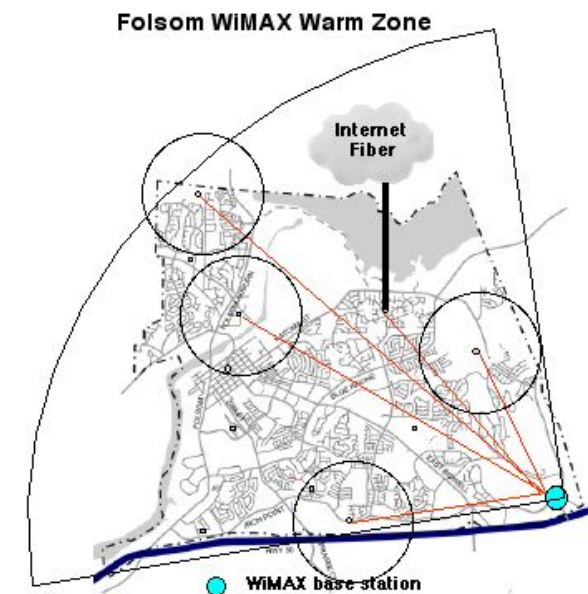# Private companies & communities are in it too

Building infrastructure where big incumbents won't

Cities of San Leandro, Palo Alto, Santa Clara in dark fiber business

City of Lompoc runs a wireless Internet utility

City of Folsom built a wireless backbone pilot project

Cities of Benicia, Brisbane lighting up industrial parks

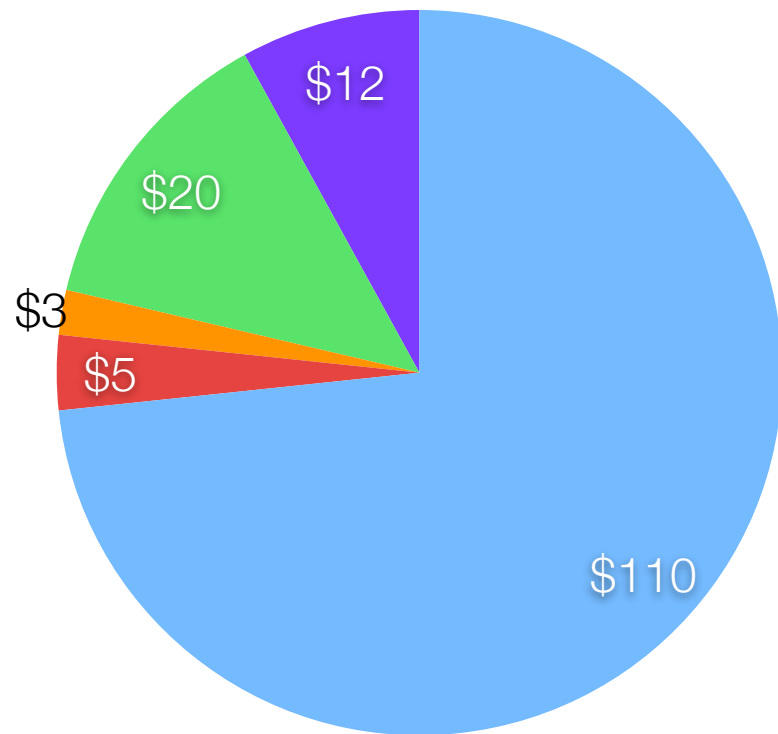Chattanooga building fiber to the home, offers Gigabit service

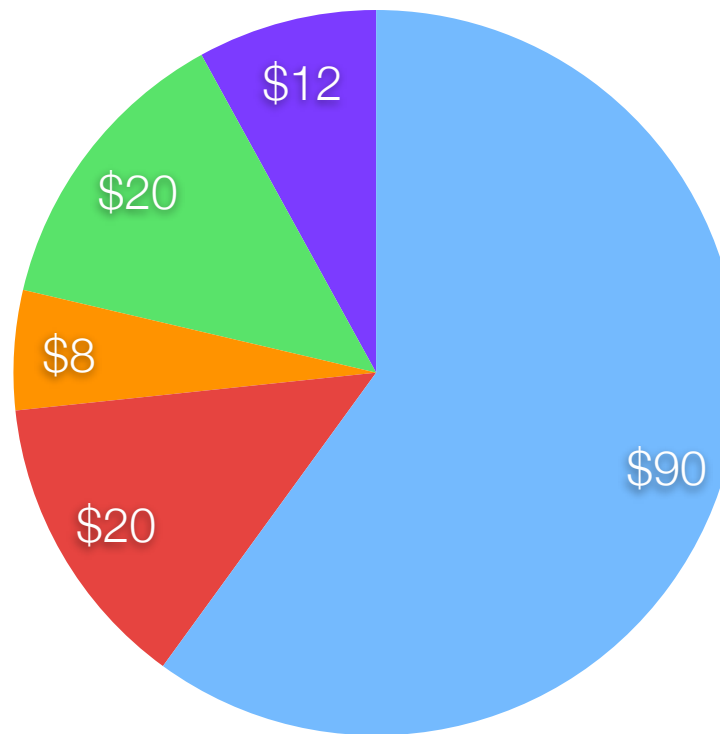Central coast counties developing 300 mile fiber network

Cities & counties are developing broadband

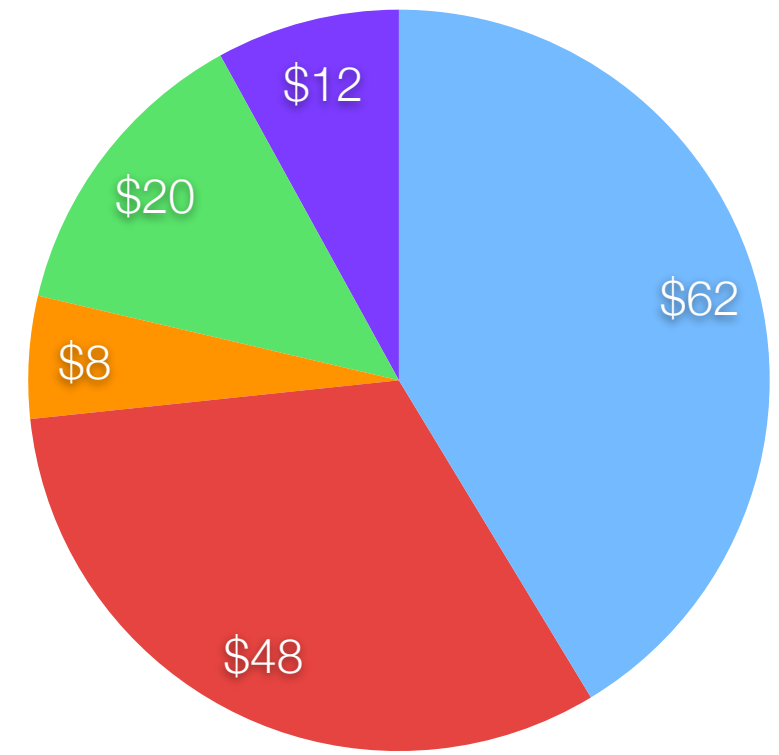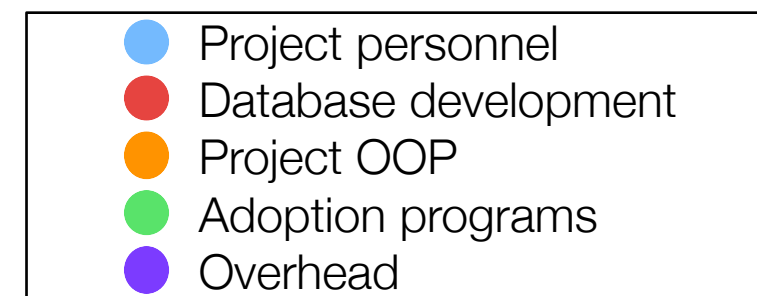Willing to invest in infrastructure & partner with private companies

Year 1 | Year 2 | Year 3

$12 | $20 | $3 | $5 | $110 (Year 1)

$12 | $20 | $8 | $20 | $90 (Year 2)

$12 | $20 | $8 | $48 | $62 (Year 3)

000's

Core grant-funded budget
$150K per year

- Project personnel
- Database development
- Project OOP
- Adoption programs
- Overhead

	Year 1	Year 2	Year 3	Total
CASF Consortia Grant	$150,000	$150,000	$150,000	$450,000
CASF summit travel supplement	$10,000	$10,000	$10,000	$30,000
CCBC member in-kind contributions	$57,250	$76,750	$76,750	$210,750
Total	$217,250	$236,750	$236,750	$690,750