

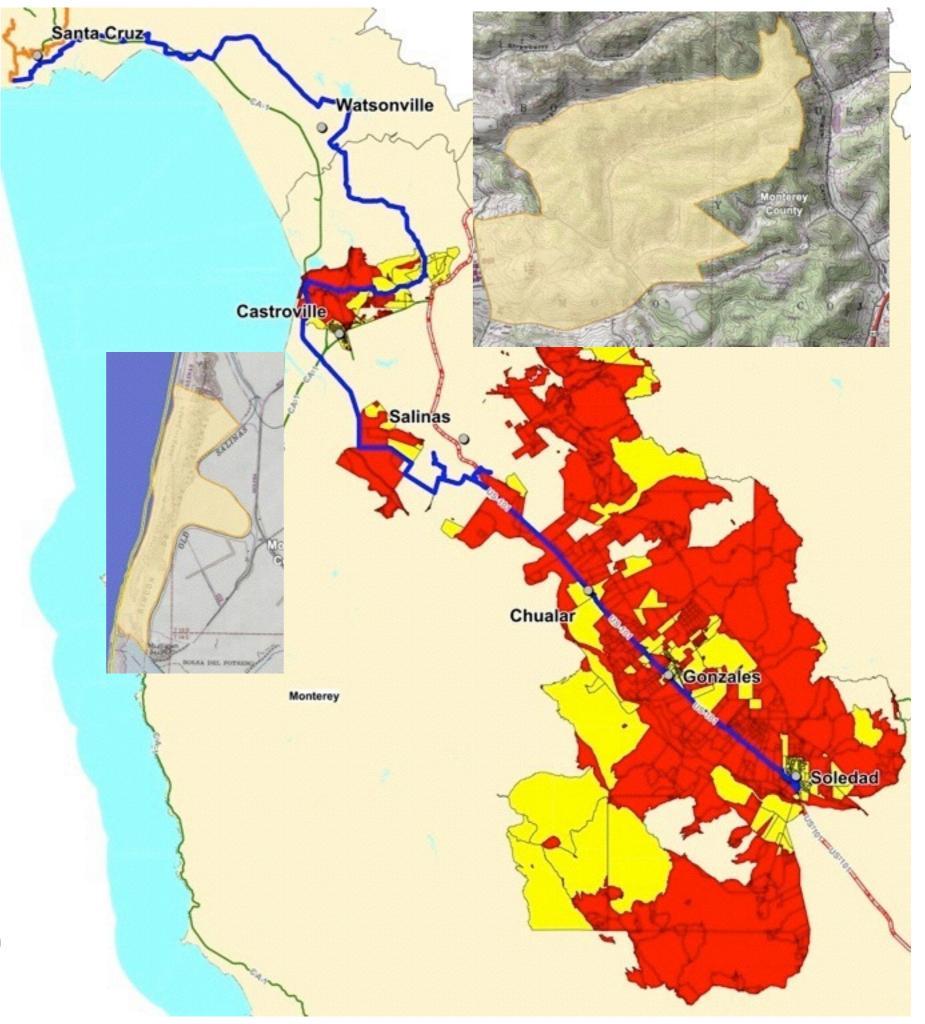
Broadband Projects

UCSC-led middle mile project

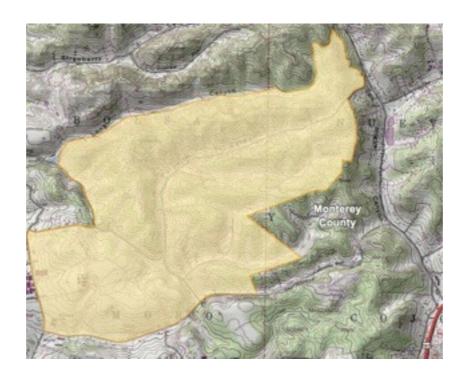
Industrial grade fiber route:

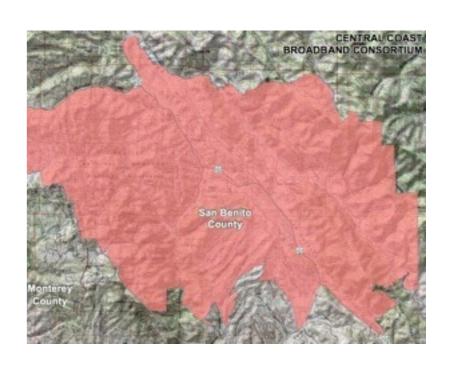
Santa Cruz -Watsonville - Castrovill - Salinas - Chualar -Gonzales - Soledad

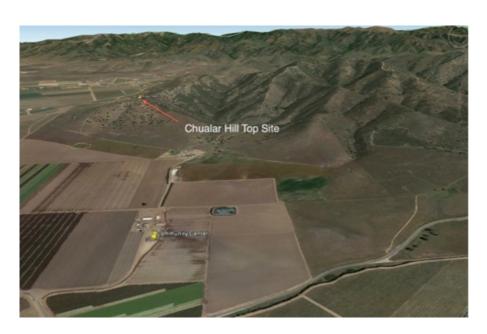
Plus, last mile fiber projects by Surfnet in north Monterey County















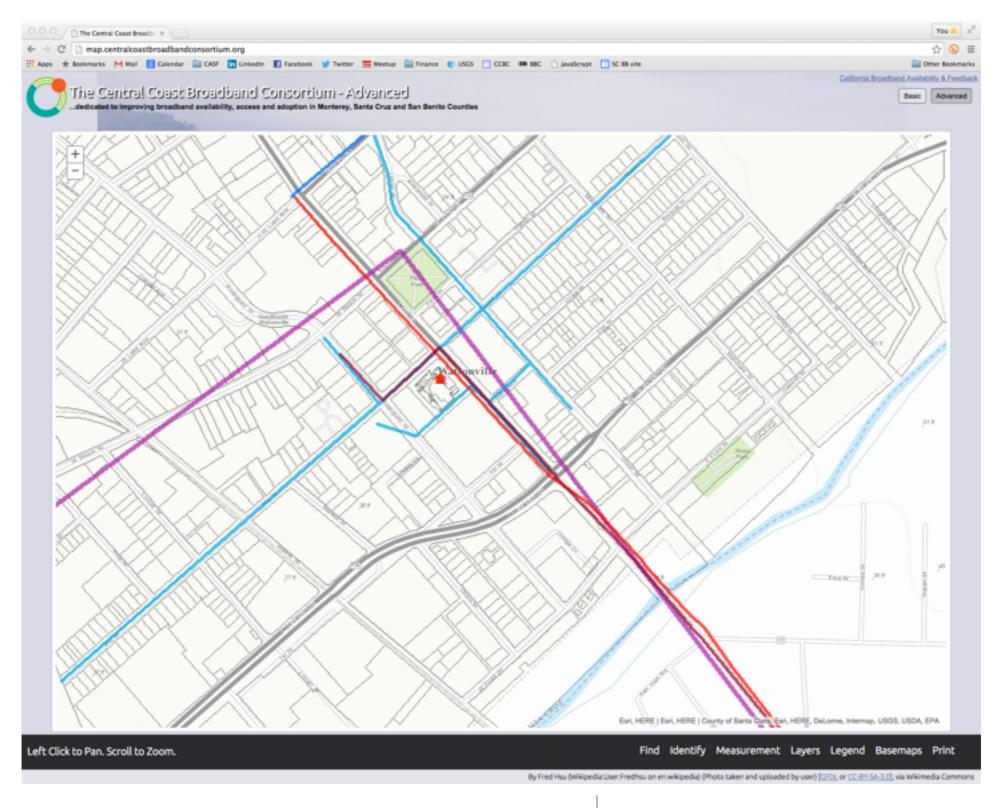
Grant funding sought for 8 last mile projects in 3 counties

Redshift, DeNovo in Salinas Valley, Surfnet in Santa Cruz & Monterey, Pinnacles Telephone in San Benito, Etheric region-wide



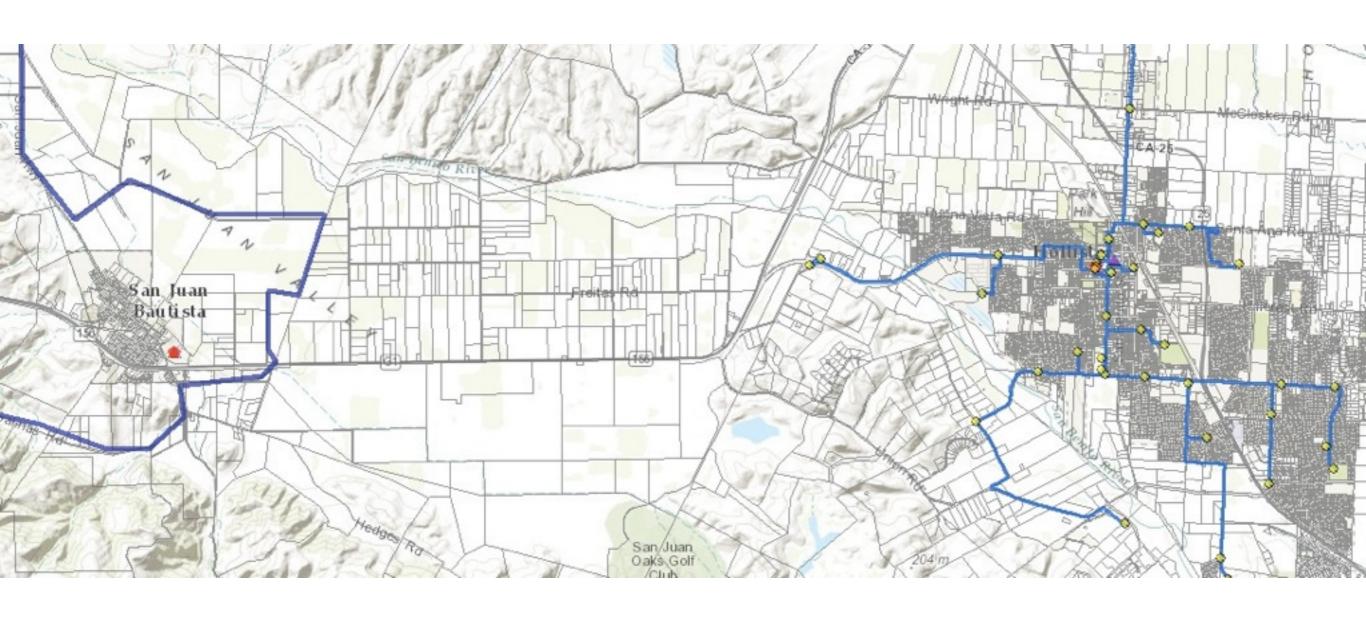
Santa Cruz County has a county fiber development plan

Targets economic development priority areas



Watsonville built a municipal dark fiber network

Similar to projects in Palo Alto, San Leandro and Santa Clara



Hollister & San Benito County co-op fiber & conduit build

Initially for institutional use but available for economic development



City of Santa Cruz might back fiber to the home system

City council scheduled to vote on negotiating agreement next Tuesday



Broadband Policy

- Santa Cruz City and County requiring inclusion of telecoms facilities in public works projects
- Salinas including conduit in street projects
- Hollister has muni fiber/conduit system
- San Francisco has comprehensive draft policy for notification of potential interested utilities, including broadband
- Berkeley requires regular coordination among utilities, city and others doing excavation work



Open trench policies

Two approaches: notification & inclusion

- Representative Anna Eshoo carrying a bill requiring federal highway projects include conduit
- Central Coast Broadband Consortium has developed draft policies for local and state consideration
- Watsonville has muni dark fiber network
- Hollister has muni fiber/conduit system
- GIS logging is vital
 - Lots of lost conduit in the ground
 - Watsonville built muni fiber network out of bits & pieces
 - Lit San Leandro was sparked by serendipity, but luck is a bad basis for planning
- Require electronic submission of plans & as-builts



Shadow conduit & GIS

Local agency installs conduit prospectively

- Santa Cruz County giving sole control over telecoms projects to public works department, eliminating planning department from process.
- Allow the installation within public right of ways, subject only to "time, place and manner' of access, through encroachment permit process
 - Conforms to state, federal law
- Work on standards and practice is key to securing buy in from civil engineers
- Engagement of public works people is vital
- Big projects bring permit surges



Permitting

Public works departments starting to take ownership of fiber & conduit projects

- City of Brentwood started requiring conduit 15 years ago
 - Now has an independent fiber-to-thehome project underway
- City of Loma Linda has 70-page spec for structured wiring in new construction and major remodels
 - Requires connections to city's fiber network
 - No requirement to buy service from city
- City of San Leandro has similar policy for commercial property

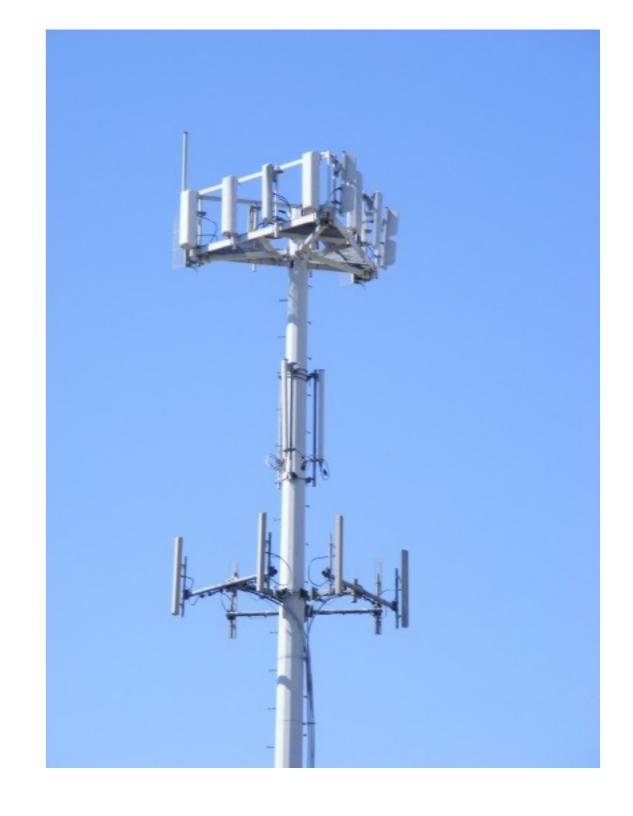


Construction standards

Treats broadband connections like other utilities

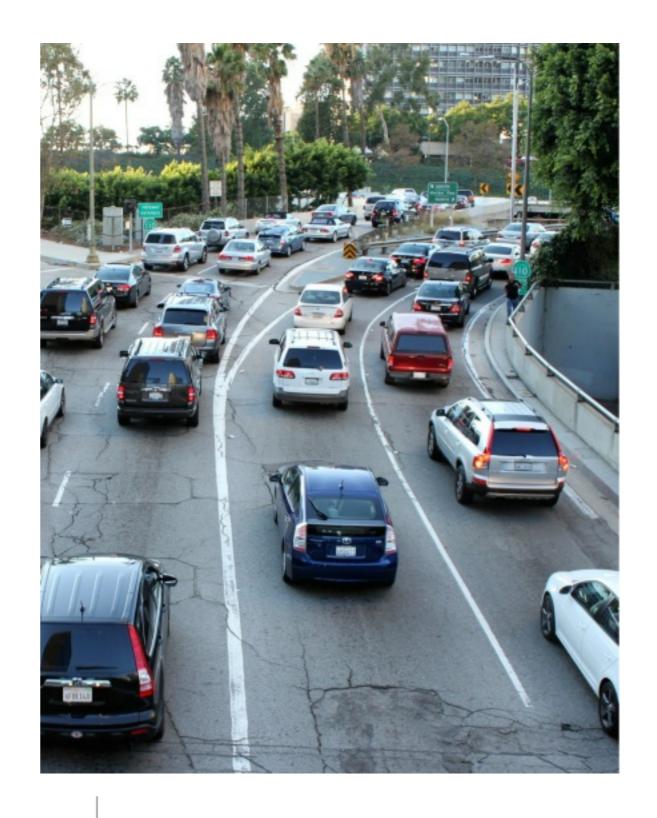
- Local agencies have some leeway in managing tower and antenna sites, but not much power to say "no"
- FCC "shot clock" gives local government 3 to 5 months to approve applications
- AB57 would add deemed granted presumption
- FCC rules require local government to approve modifications, within certain limits.
- Local agencies cannot regulate wireless facilities on the basis of tin foil hat fears.
- Clear, written policies are the best foundation for exercising what local control is possible

State, FCC squeezing local role in wireless planning & approval



Best way to increase wireless capacity is to build more fiber

- Telecommuting
- Public services and digital inclusion
- Digital literacy and workforce development
- Systems interoperability, open data programs



Other policy options

Demand-side considerations

Questions?

Maps make the case

CentralCoastBroadbandConsortium.org



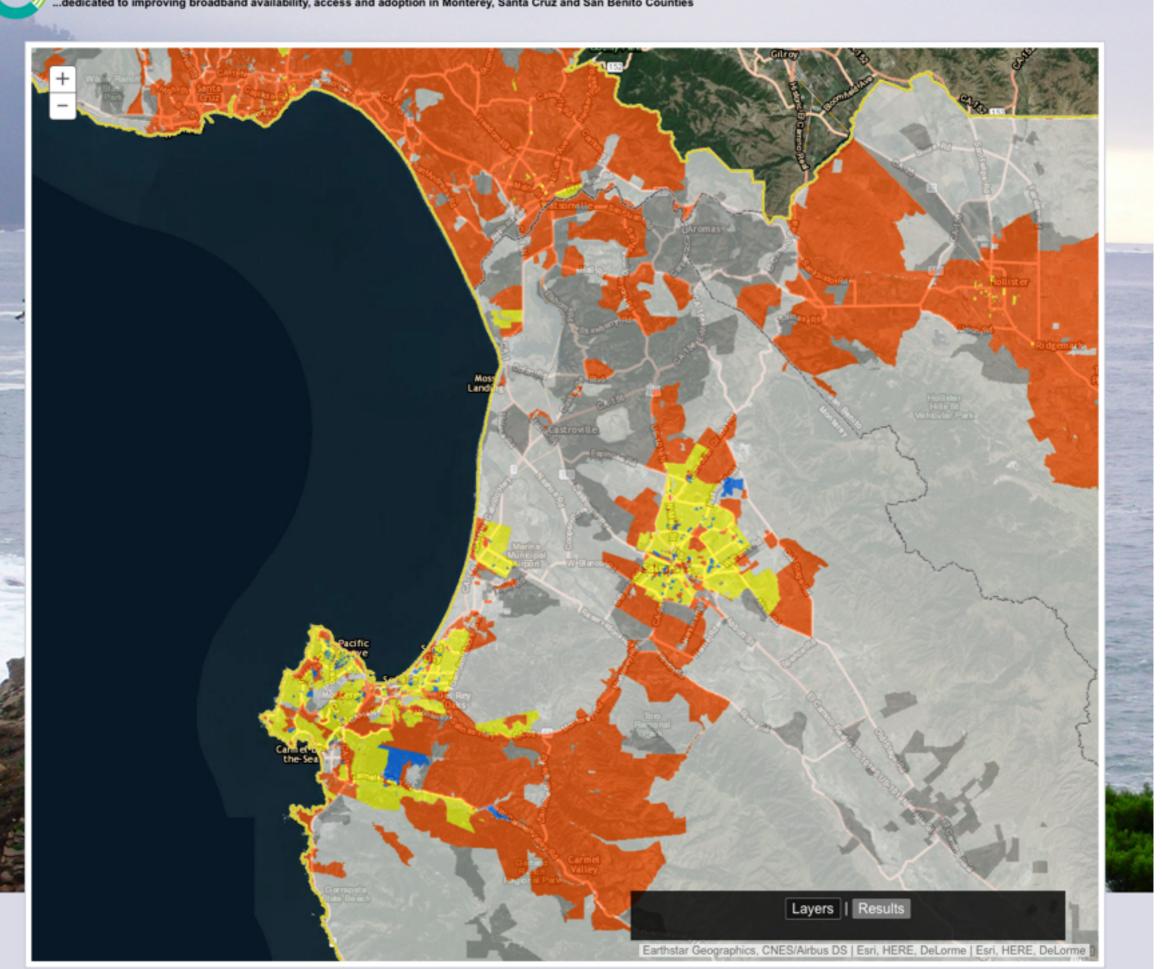


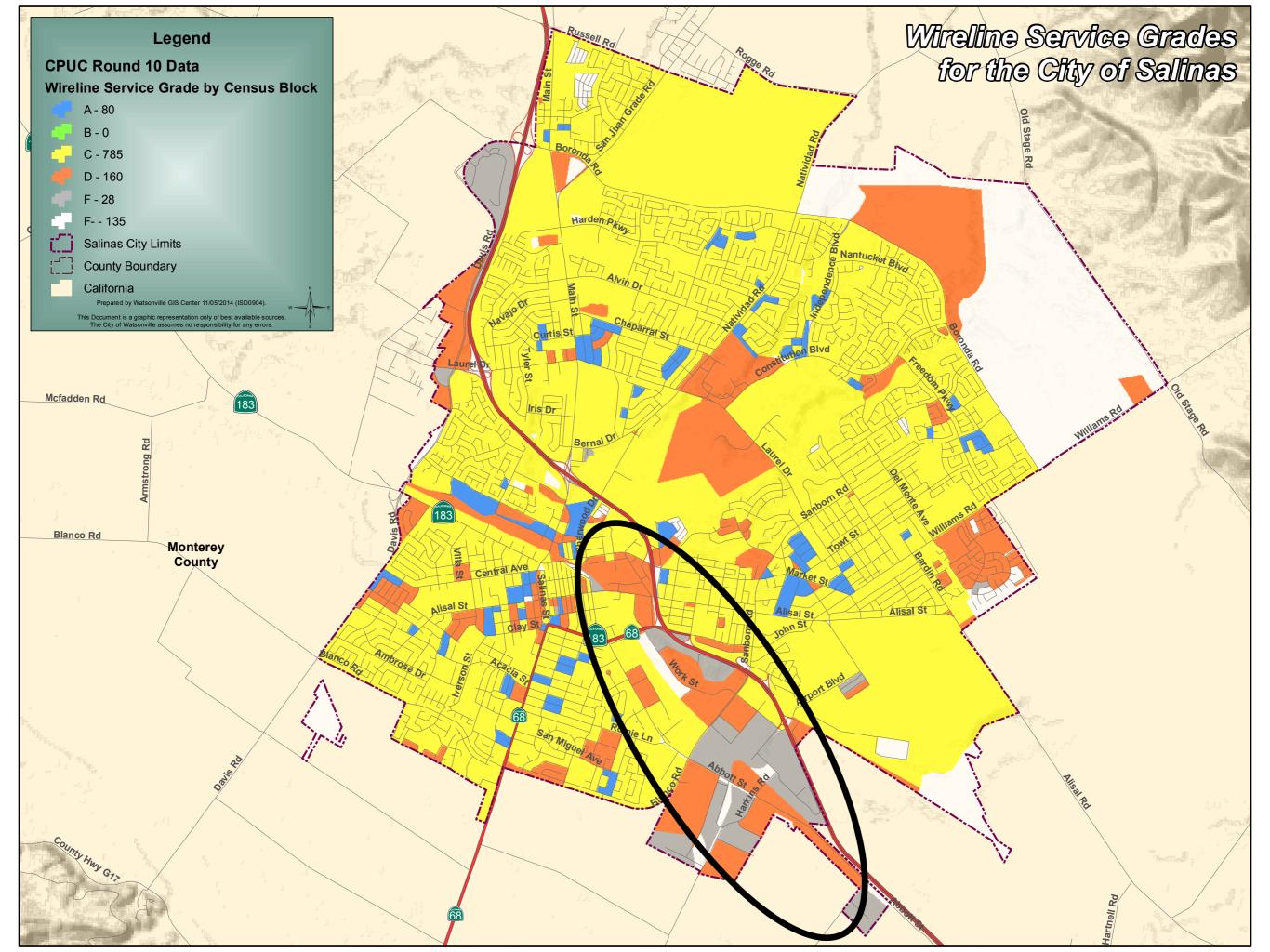


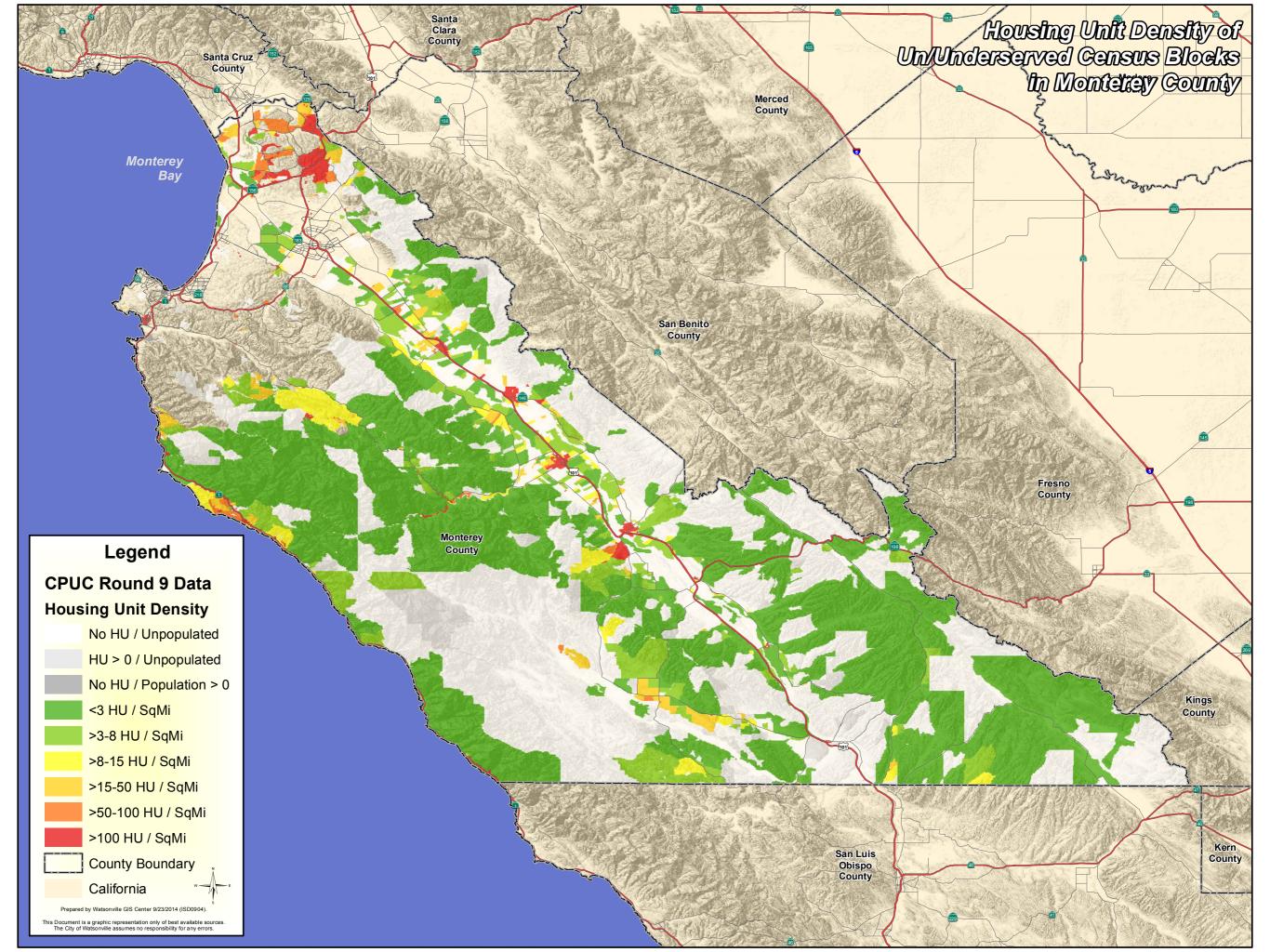
Back up slides

Basic

Advanced







Monterey County

- 1. Greenfield
- 2. King City
- 3. Gonzales

Regional Wild Cards

- 1. Soledad
- 2. Castroville
- 3. Chualar

Santa Cruz County

- 1. Pleasure Point/Twin Lakes
- 2. Soquel
- 3. Brookdale

San Benito County

- 1. Aromas area
- 2. Airport/Northeast area
- 3. Cienega Road area

CCBC priority areas

100,000 people total70,000 people CASF eligible12 feasible projects

