



ViaSat Project Summary

Access for Rural Monterey County

A Satellite Broadband Infrastructure Project

Topography and Other Challenges for Broadband Access

ViaSat, a satellite Internet service provider, will offer under the CASF program, customer-premises satellite broadband infrastructure to enable broadband Internet service for rural and remote regions of Monterey County, where there are large areas of unserved households scattered across a rugged, challenging topography. From the dirt roads that segue Monterey County's Highway 1 along the Pacific Coast and those that lace into Highway 101 which runs along the great Salinas Valley, there are homes, businesses and schools that have dial-up or no connectivity to the Internet. Schools in Big Sur report that parents live seven miles up a mountain trail, or deep in the Santa Lucia coastal canyons. For many, there are no true "physical addresses", with either mailboxes on the Highway or trips to the local post office. Snail mail is the way of life, with no email connection to children's schools, no online interaction for children with their teachers and peers, and in reality, no reliable high-speed connectivity for the school itself.

This is a way of life for many who choose to reside in rural and remote areas. In discussions with Monterey County organizations and residents, ViaSat learned that over the past few years, these residents and businesses have been trying to get high-speed, reliable telecommunications service. In one instance, according to discussions and the support letter from the Big Sur Charter School, it took eight months for the local telco company to provide a T1 connection, which is very expensive for the school, and when it falters can take days before service is restored.

ViaSat is familiar with these remote regions, because these are like many across the United States, where the Federal Communications Commission (FCC) reported that as of August 2012, 19 million Americans have limited Internet connectivity—of which 14.5 million of those live in rural America. In California, the Broadband Task Force reported that 96% of our state's residents have broadband access, and that 1.4 million residents living in rural and remote areas comprise 4% of the population who have no access. The situation for those living and conducting business in Big Sur and south Monterey County exemplify that without high-speed connectivity, the economic, educational, health, public safety and digital divide gaps continue to widen.

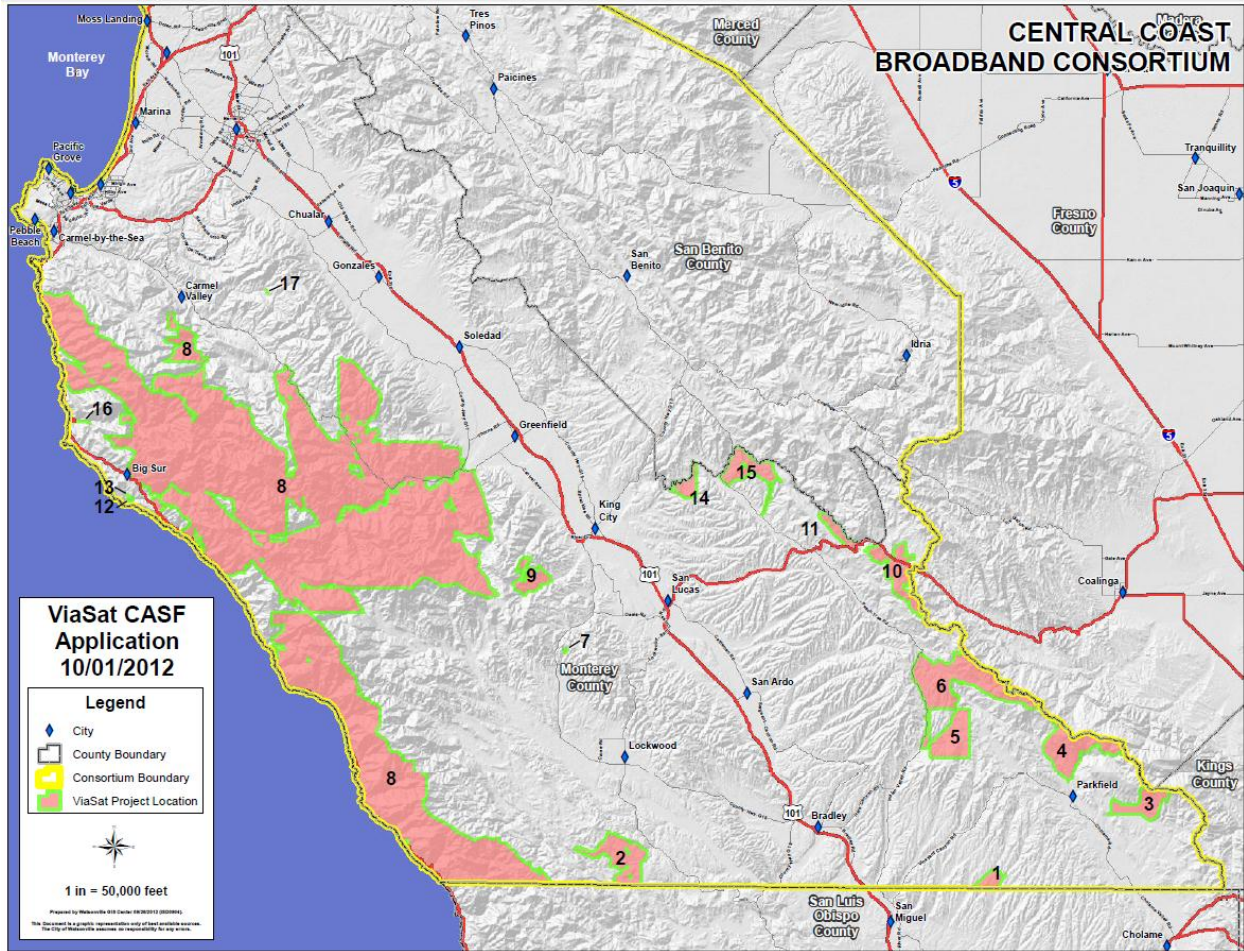
These areas of Monterey County share a rugged and challenging topography of mountains, canyons, redwood forests, creeks and beaches, of national, state and regional parks, as well as large areas of open spaces and the vast agricultural fields of the Salinas Valley, the county's primary economic driver. Many areas have been protected to preserve this natural beauty with oversight from the Coastal Commission, landowners' associations, and environmental regulations.

Members of the Central Coast Broadband Consortium (CCBC), with California State University, Monterey Bay (CSUMB) as the lead, contacted ViaSat, a satellite Internet service provider, to explore the possibilities of a satellite-based infrastructure as a potential solution to reach these challenging geographic areas where unserved households are located. CSUMB's Office of the CIO and its Wireless Education and Technology Center (WeTEC), have, since 2003, organized seminars, forums and conferences focused on a Connected Central Coast, and in 2008, CSUMB was selected as the host organization for the CCBC when it was formally organized with assistance from the California Emerging Technology Fund (CETF).

ViaSat learned that the CCBC applied for funds in two rounds of the NTIA's Recovery Act Program (from ARRA stimulus funds) to construct middle-mile infrastructure in the tri-county region (Monterey, San Benito and Santa Cruz counties) at an estimated cost of over \$49 million. Neither of these grant applications was successful. With this new CASF grant opportunity, ViaSat has partnered with CSUMB, the Monterey County IT Department, and the Monterey County Office of Education (MCOE) each of which is a member of the CCBC. Additionally, the CCBC's Regional Broadband Consortium project, funded by the CASF, provided GIS data, maps, and related information for this grant application.

ViaSat's successful launch of its ViaSat-1 satellite in October 2011 introduced the new "Exede" Internet service nationwide in January 2012. The service provides download speeds of 12Mbps and upload speeds of 3 Mbps, which are enabled by the next generation architecture of the ViaSat-1 satellite and associated ground network. When ViaSat-1 was launched, it more than doubled the bandwidth that was previously provided by all other two-way communications satellites over North America *combined!* ViaSat-1's innovative architecture provides unprecedented speeds over satellite, and the ground infrastructure provides latency mitigation. As one grateful subscriber states, "Exede has made it finally feel like we are part of the digital community again."

This ViaSat initiative focuses on those areas that are completely unserved, and will extend into some of the most remote areas of Big Sur and the southern parts of the county, as shown in the map below. These areas include those near Ft. Hunter Liggett, Parkfield, Jolon, Bradley and Pinnacles National Park. Along and inland from the Pacific Coast Highway, the project will address households and schools in the southern most parts of Big Sur near Gorda and Lucia, as well as mid-Big Sur from Garrapata Park into Palo Colorado Canyon where the Big Sur Mid-Coast Fire Department has facilities, as well as inland towards Tassajara and Cachagua and the Carmel Valley regions east of Piney Creek and Arroyo Seco.



There is no doubt as to the necessity and even urgency for this request for support. In 2009, during the Big Basin Wildfires, first responders in Big Sur did not even have cell phone coverage. Public safety officials and the public were severely hampered in their attempts to communicate amongst themselves and to those outside the region. Moreover, Big Sur hosts over 3 million tourists annually, and the necessity for reliable communications, not only for business and tourists, but also for public safety and health continues. ViaSat’s system, with equipment installation that generally takes a few hours, offers a cost-effective and agile solution for broadband connectivity for these rural and remote areas.

Working with these key community partnerships for outreach and dissemination, ViaSat will offer satellite broadband as a cost-effective solution for high-speed access to the Internet. This project aligns with California’s objective for 80% home connectivity statewide by 2015—a goal that all of us—the Monterey County community and ViaSat will strive ardently to fulfill.

The following table summarizes our proposed project:

Project Summary Table:

Applicant's name	ViaSat, Inc.
Contact person	Kristi Jaska
Project title	Access for Rural Monterey CTY
Proposed project area location	Monterey County unserved census blocks
Project type	Last mile
CASF funding request	\$362,122 grant / \$0 loan
Description of the project	See above
Map of the proposed project	See above
List of census block groups	060530110003 060530111011 060530113031 060530113041 060530114001 060530114002 060530115021
List of zip codes	93924 93960 93927 93930 93450 93928 93920