

Santa Barbara County Connectivity Preparation Project

1. Project Overview & Scope of Work

The Ask:

Santa Barbara County is requesting \$1,000,000 from the CPUC's Local Agency Technical Assistance Grant. The County will directly contract with the Santa Barbara County Association of Governments (SBCAG) to perform a robust scope of work that will prepare for a fiber network to unserved and underserved areas. This work will include an environmental impact report in preparation of the last-mile network, as well as high-level design engineering for unserved and underserved portions of the County. Funds will assist in the creation of a JPA as an arm of the Santa Barbara County Association of Governments and fund the employment of a SBCAG Broadband Project Manager. These efforts will ensure the County is well-equipped for upcoming funding opportunities. As numerous work products are required to ensure connectivity is properly addressed in the County, we are requesting funds above the standard amount.

The Need:

Santa Barbara County is located in Central California and spans over 3,789 square miles. While many associate Santa Barbara County with the beautiful and thriving city of Santa Barbara, this level of wealth and high quality of living is not the case for most of the other cities and communities in the County.

Most communities in Santa Barbara County have a high level of economic need and also lack access to reliable and affordable broadband. 10.5% of residents in Santa Barbara County live in poverty. When looking at individual cities and towns, the level of need can be more easily seen. In the city of Santa Maria, 12.7% of residents live in poverty, in the city of Lompoc the poverty rate is 17.5%, and in the city of Guadalupe the poverty rate is an alarming 24%. All three of these cities' poverty rates are higher than the poverty rates of the state of California and the United States. All three of these cities also contain areas that are considered Opportunity Zones by the US government, see map below for reference.



Source: Opportunity Zone Database

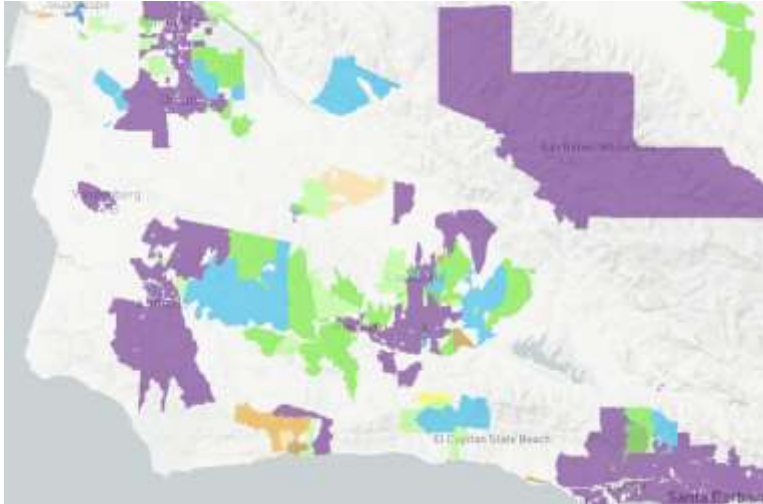
Poverty and low-income neighborhoods are in numerous places outside the opportunity zones. Los Alamos has a 19.6% poverty rate, and the unincorporated areas in the County face similar inequities.

According to 2021 Census data, the city of Lompoc only has 84% of households with a broadband internet subscription. In Santa Maria, the percentage of households with a broadband internet subscription is 88%. In Guadalupe, the percentage of households with a broadband internet subscription is 87%, and in Santa Barbara County overall the percentages of households with a broadband internet subscription is 89%. The below map from NTIA also demonstrates the critical need for access to broadband in Santa Barbara County. This map incorporates data from the FCC Form 477, Ookla Speed test, the American Community Survey, MLab speed tests, and Microsoft. The County and its partner SBCAG are continuously collecting data which provides greater detail into the actual and verifiable needs of Santa Barbara County.



Source: NTIA, US Department of Commerce

The map from the state below also shows this level of need on a more in depth level, with numerous areas receiving less than 50 Mbps download speeds.



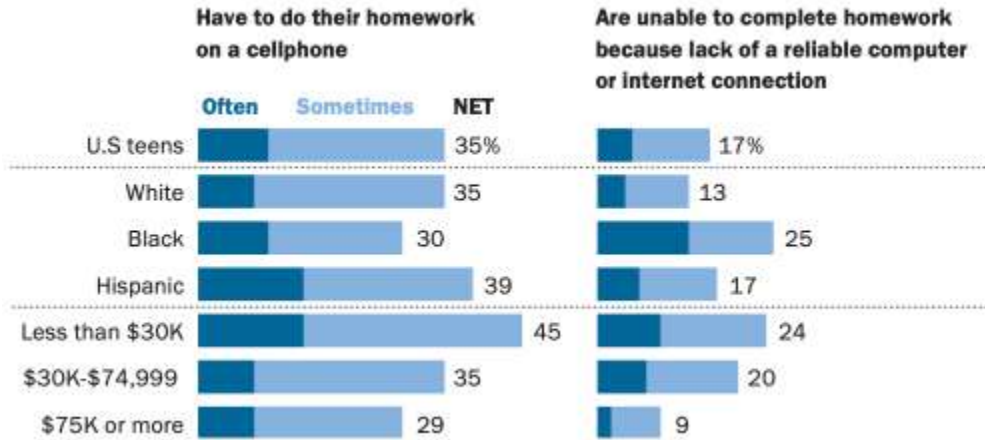
Source: California Public Utilities Commission Broadband Map

The communities in Santa Barbara County who do not have access to affordable and reliable internet have been left behind economically. Having access to reliable broadband today is as essential as electricity. Broadband allows for a plethora of economic opportunities that can help bring the County's low-income communities out of poverty and allow them to compete in the modern economy. With access to affordable and reliable broadband, community members will be able to have the opportunity to participate in remote work, bring their businesses online, access online banking and business management tools, take online college classes to allow for more job opportunities, and more.

There is also a high need in Santa Barbara County to improve education and healthcare access, both of which also have an impact on the overall economy as these institutions are all intertwined. Without good health and a strong education, it makes it very difficult for communities to advance economically. If students don't have the opportunity to receive a strong education, it can be hard for them to obtain high-paying jobs, which have the potential to lift them and their families out of poverty. They then often end up stuck in a cycle of poverty. In a similar vein, if a person is not healthy physically and mentally it is often difficult to hold a steady job. In these cases, income is often spent on healthcare and medical bills, which can pile up and easily put an individual in financial strain.

It is important to highlight the connectivity issue for students in Santa Barbara County. Many students in Santa Barbara County are without broadband. A study from the Pew Research Center (PRC) stated that students in low-income households are more likely to lack broadband access. In 2021, 61.6% of Santa Barbara County students qualified for free or reduced school lunches, meaning 61.1% of students come from families whose income falls below 185% of the federal poverty guidelines. According to the PRC study, up to one third of those students are without an internet subscription.

Race is also a large determining factor in computer and broadband connectivity. In the 2021 school year, 71.2% of students were Hispanic/Latino. A survey conducted by PRC in 2018 showed that Hispanic/Latino students were more often forced to do homework on a cell phone than their peers. 17% of Hispanic teens were unable to complete homework at home due to lack of broadband or computer access.



Source: Pew Research Center

Income and job loss during the pandemic was felt most severely by minorities, and particularly women of color according to the Bureau of Labor Statistics. Given this, and current severe inflation, there is little reason the above statistics would have drastically changed for minority students since 2018. Not having access to the internet has long lasting implications on students' education and further widens the achievement gap.

Outreach done in the community found that many cities had access challenges during the Covid-19 pandemic. In Guadalupe, schools had to rewire school networks to allow for the increased access, and 500 hotspots were given to students in need. In Buellton, families had to drive to libraries to get Wi-Fi access for students to participate in online learning. The outreach in Santa Ynez Valley reported that the hotspots provided were insufficient to reliably connect students to the curriculum. In Solvang, it was estimated that more than a quarter of students may not have access to the internet or devices. The more targeted outreach shows a need that matched the data from larger studies. In Carpinteria, many residents are without broadband as the cost of service is too high and they lack access to modern technology. In Lompoc, there is poor connectivity throughout town and a general lack of access at homes. Los Alamos faces both challenges, with a lack of infrastructure and a population that is 85% low-income and unable to afford the cost of satellite. While the connectivity issues vary in different areas, a unified approach is required to address the digital inequities in the County.

Data from GreatSchools.org also helps narrow the view from the County down to targeted communities. According to GreatSchools.org, the one school in Los Alamos, Olga Reed

Elementary School, ranks a 4/10 and 79% of students come from low-income families. 88% of Santa Maria Bonita School District schools rated below average for school quality, and 89% of their students are from low-income families. At Guadalupe Union Elementary School District, **100% of their schools are rated below average in school quality** and 76% of their students are from low-income families. These high percentages of low-income students and poor school quality, along with the earlier data on unconnected students, helps emphasize the large number of low-income students who are currently not being given an opportunity to succeed and the need for broadband in these school districts to improve the education being offered.

Much like with the economy and education, when it comes to healthcare in Santa Barbara County, there is also a high level of need. According to the Santa Barbara County Community Health Assessment of 2019, access to good healthcare in Santa Barbara County does not extend to all groups in the County, with Hispanic/Latinx residents, residents with low incomes, and those with less education suffering the most from health disparities. One of the top issues the assessment cited was access to care. County Health Rankings show the patient to primary care physician ratio in Santa Barbara County is 1,320:1 compared to the top performers in the country at 1,010:1.

Having access to broadband can help address these healthcare challenges that the communities in Santa Barbara County currently face. Patients will be able to utilize telemedicine to access all of their care needs, from specialized care, primary care, to using online platforms to help track and manage chronic conditions. It can also allow for psychiatric care and mental health care from the privacy of patients' homes. Utilizing telemedicine will also help save patients money by eliminating transportation expenses and removing the need to take time off work.

The Plan:

To address the pressing need for connectivity in Santa Barbara County, the region plans to build a last mile network to connect these unserved and underserved areas. Santa Barbara County and the cities within the county, led by the Santa Barbara County Association of Governments (SBCAG), have developed a regional strategy for Broadband for All. Considerable data was collected in 2022 related to broadband speeds and resident needs, and community engagement meetings have been conducted to begin development of local collaborative strategies. A major milestone in the regional strategy is the deployment of a county-wide fiber network, bringing connectivity to all areas.

Building this network will require a coordinated effort between Santa Barbara County and SBCAG, where the county will contract with SBCAG and/or serve as a pass-through entity. The new network will require a Broadband Joint Powers of Authority (JPA). Santa Barbara County will utilize \$198,000.00 of the County's requested funds to contract with SBCAG to

establish a broadband branch of the SBCAG. The County will serve as a pass-through entity to use \$301,836 to also cover the salary for a SBCAG Broadband Project Manager. This is a critical step in the path towards broadband deployment.

This development of the broadband JPA will be completed by the contracted Broadband Project Manager at SBCAG. This individual will work heavily with SBCAG external lawyers to create and design the responsibilities for the broadband JPA work. This work will state both the powers of the broadband arm of the JPA and the manner in which it will be exercised. As there is a board in place at SBCAG, this work will not necessitate the development of a new governing body.

The broadband arm of SBCAG will provide oversight, operations, and maintenance of public assets both within city jurisdictions and the unincorporated areas. The broadband arm of the JPA will allow for a central, neutral entity to manage and support the deployment of the last-mile and middle-mile infrastructure, and dedicate resources to the network as a whole. The broadband branch will be critical in providing technical support to smaller cities in the region.

The outside legal counsel will provide the service of ensuring the broadband branch of SBCAG is created legally and follows all regulations laid out in California's Government Code, Title 1, Division 7, Chapter 5, Section 6500 *et. seq.*

The scope of work for the creation of the broadband branch of SBCAG includes, but is not limited to, the development of the following:

- Purpose
 - Stated purpose of the broadband branch
 - Method by which the purpose will be accomplished
 - *Section 6503*
- Financial Accountability
 - Outline accountability for all funds, receipts, and disbursements
 - Establish annual audit within broader SBCAG audit
 - *Section 6505*
- Distribution of Assets
 - Provide for the disposition, division or distribution of any acquired broadband related property and infrastructure of SBCAG upon termination
 - *Section 6511*
- Authority and Functions
 - Determination of powers and authority needed to carry out the broadband branch's mission
 - *Section 6508*
- Liabilities, Debts, and Obligations
 - Clarify ownership of debts, liabilities, and obligations

- *Section 6508.1*
- Privileges and Immunities
 - *Section 6513*
- Bylaws and Rules

Careful analysis and delineation of the above are essential to ensure the new branch of SBCAG covers all the requisite powers to facilitate the established goals and functions.

The Broadband Project Manager at SBCAG will have additional responsibilities that tie in to the regional broadband strategy development and execution. Outlined below are the duties of this individual. These duties are critical to the success of the regional broadband strategy.

Tasks:

1. **Continue stakeholder outreach and engagement.** (Monthly)
 - SBCAG staff will continue to work to engage stakeholders at both the state, regional and local levels.
 - This includes participating in broadband task forces, as well as partnerships among state and regional agencies.
 - At the local level, it includes support for broadband committees and education of local stakeholders.
 - Develop and maintain relationships with private-sector internet service providers.
2. **Support SBCAG Board and committees to build on policy framework.** (Monthly)
 - SBCAG staff, with Board direction, will create and maintain a policy framework for broadband deployment by setting well-defined goals and a clear policy direction and/or tasking agencies to lead broadband programs.
 - Using the Broadband Strategy, SBCAG staff working with the local jurisdictions, will identify and address barriers to facilitate broadband deployment in unserved and underserved areas.
 - We will work to connect broadband to other policy priorities, including economic development, transportation, health care, and agriculture, to build partnerships and leverage more funding for expansion efforts.
3. **Form Joint Powers Authority for Broadband.**
 - Retain legal services to facilitate the negotiation of a Joint Powers Authority (JPA) for Broadband.
 - Facilitate the approval of the Broadband JPA by the member Jurisdictions.
4. **Provide support and capacity building for project implementation.** (Ongoing)
 - SBCAG will support local and regional planning efforts that help educate community members and build the local capacity necessary for successful broadband infrastructure projects.
 - SBCAG will provide the board with a yearly priority list of broadband projects, and if funded, work with the local jurisdictions to implement.
 - If a local entity doesn't have the capacity to take on the necessary broadband projects, SBCAG can provide the staffing with either in house staff or consultant services.
 - Provide technical assistance to local jurisdictions as they implement local projects.

5. **Obtain funding for project implementation and operations.** (Ongoing)
 - SBCAG will pursue funding to support broadband deployment in unserved and underserved areas through grant programs that fund a portion of the cost of deployment in these communities.
 - Working with the local jurisdictions, we will ensure accountability by requiring that providers demonstrate they are providing the service they were funded to deliver while also providing the region with the data needed to evaluate the program and progress toward defined goals.
6. **Coordinate education and outreach program to improve digital literacy.** (Ongoing)
 - SBCAG will work with partner agencies and non-profit agencies to implement a community-based outreach and education program to bridge the gap of digital equity.
 - SBCAG will pursue grant opportunities to fund these activities.
7. **Prepare yearly program evaluation and evolution.** (June)
 - SBCAG will ensure future planning efforts and infrastructure projects are evaluating the performance of these efforts and incorporating lessons learned via a year-end report.
 - We will continue to update program goals and activities as their programs mature, addressing broadband adoption and working to help communities make full use of their broadband infrastructure.

Products:

- Committee meeting agendas/minutes/staff reports Monthly
- Approved Joint Powers Authority Agreement June, 2023 (estimated)
- Yearly list of priority projects Yearly
- Funding grant applications As Needed
- Year-end report June of every year

Santa Barbara County will utilize \$500,000 of the funds to begin preliminary work on the development of the county-wide fiber network. The County will contract with SBCAG to find and sub-contract with a firm to conduct an environmental impact report of the County, and hire an engineering firm to perform high level design engineering. These work products will be complimentary to those being done by the Chumash Tribe, who secured funding through an EDA grant. This will ensure the region as a whole has a comprehensive connectivity strategy and broadband design plan.

Design Engineering Scope of Work:

The design, which will connect an estimated 160,000 to 170,000 end-points (e.g. households, anchor institutions and businesses) to a middle-mile network, will be performed by qualified engineers utilizing fiber design tools and data layers provided by the County and other publicly available sources. Other technologies such as Fixed Wireless Access or Satellite may

also be considered and integrated into the County-wide high-level design to address end points that are not feasible for FTTH.

The FTTH High Level Design (HLD) will provide a starting point to examine fiber construction feasibility, required network equipment, and associated network costs. The geographic scope of this effort is a design covering substantially all residential, anchor institutions, and businesses, thereby providing a design for broadband access with minimum speeds of 100 Mbps symmetrical to the unserved and underserved portions of the County.

The work for the HLD will involve:

1. Data Collection and Design Preparation

The engineering firm will collect and process the required GIS data to perform the fiber network and passive infrastructure design, allowing engineers to identify available network assets and Right of Ways (RoWs) as well as physical and financial constraints for the fiber design. The target data inputs to drive the design include, but are not limited to:

- Target Broadband End-Points: Location of the households, anchor institutions, and businesses to be covered with FTTH.
- Existing Infrastructure: Location of candidate infrastructure to be utilized in the design such as highways, roads, railroads, existing fiber and ducts, telephone poles, network interconnection sites, buildings, land, and towers, among others.
- Utility Infrastructure: Infrastructure that can be reused to deploy broadband, avoiding duplication of civil construction labor. Desired data sets include, among others, electric transmission lines, gas and water pipelines, hazardous liquids pipelines, and water towers
- Zoning and Permitting Regulations: Summary of regulations and other relevant ordinances that impact design, cost, and timelines.
- Environmental Constraints: Summary of NEPA related environmental factors in Santa Barbara County that impact and influence fiber route choice, construction methods, costs and timelines.

2. FTTH Last Mile High Level Design

A County-wide FTTH Last Mile High Level Design will be generated, informed by data collected in the previous phase. The starting point is establishing an optimal network architecture based on planned service offerings and bandwidth requirements. Then, available infrastructure and existing or required RoWs will be examined for deployment feasibility analysis. Based on the output of this phase, the technical solution is refined to a final HLD and cost estimate. The steps of this process are described below:

- High Level Network Architecture & Dimensioning: Based on Internet speed requirements (e.g., minimum of 100 Mb/s symmetrical), the firm will define relevant network elements (e.g., OLT - ISP endpoint) and calculate the supported capacity per element and its reachability (maximum reach distance and users per element). This analysis will result in the required network locations that will host equipment to route the optical signals to their destinations.
- Topology and Route Feasibility Assessment: The firm will identify the primary fiber routes and RoWs to be used for the fiber network deployment. The environmental conditions/restrictions are also evaluated to determine the feasibility of the fiber routes.
- Rough Fiber Route Design: Once demand, topology, and primary fiber routes are identified, the firm will determine the fiber route alternatives for the distribution network design, ensuring a proper and safe installation of the fiber cables. For each fiber route alternative, the construction method (e.g., aerial, underground, river crossing) will be proposed.
- FTTH Network Design Refinement: In this phase, the firm will compare the fiber route alternatives based on a detailed Bill of Materials (BoM) and associated costs. This process will allow selection of fiber routes that will comprise the final FTTH HLD, including all network and fiber infrastructure construction components, including the distribution network, drops, handholes location, poles, RoWs, and special crossings.

3. Deliverables

The FTTH HLD comprises the following deliverables:

- Data Collection and Design Preparation
 - The firm will provide a repository with the data layers used for the FTTH HLD.
- FTTH HLD
 - Network Architecture and Design Description (Word document) comprising a detailed description of the network components, specifications, schematics, and diagrams.
 - GIS layers of the final FTTH network design, including fiber routes, handholes, poles, and sites.
 - Detailed BoM with the civil and network infrastructure components: buildings (central offices), handholes, poles, conduits, fiber cable & construction, and network equipment (R&S) that provide user connectivity.

Environmental Impact Report Scope of Work:

1. Purpose and Need

In collaboration with the County and the engineering firm, the environmental study project lead will develop a purpose and need statement for the EIR report. EIR are a best practice for deploying broadband networks.

2. Data Collection

The environmental study project lead and their team will collect necessary environmental information using databases, studies, and field surveys, sampling, and exploration. The data collection will be carried out according to NEPA, federal, and state regulations and requirements. Data shall include, at a minimum:

- Land use and zoning
- Cultural and historic resources
- Navigable Waters
- Biotic Communities
- Endangered and threatened species
- Construction impacts
- Archaeological investigation
- Flood plains
- Wetlands and 404 permit requirements
- Coastal assessment and resource protection
- Fish and wildlife issues
- Hazardous waste and materials/contaminated soil investigation
- Noise analysis
- Air quality
- Erosion
- Indirect and cumulative impacts
- Earthquake awareness

All data will be provided to the County as part of the work product.

3. Assessment and Report

The environmental study project lead and their team will analyze the environment and the data collected and prepare the EIR. This report will include:

- Explanation of approach
- Summary of boundaries
- Identification and evaluation of impacts
 - Direction of impact
 - Geographic extent of impact
 - Magnitude of impact

- Duration of impact
- Reversibility
- Mitigation
- Scenarios

4. Presentation

The team will present the report and its findings to the County’s architectural review board and other relevant boards. They will assist in the preparation of materials for required departments within the County and state.

2. Detailed Budget

The total amount requested from the LATA grant is \$1,000,000. This money will go to two four work products, and include an administrative fee for the tasks associated with handling the LATA grant funds and project. A quote from an engineering firm was provided for the budget justification, with each task being calculated as a single billable event. The pricing for the environmental impact report was provided from internal County resources.

Design Engineering:

Task	Unit	Cost	Total
Data Collection	<i>Flat Amount</i>	\$10,000.00	\$10,000.00
Design Preparation	<i>Flat Amount</i>	\$5,000.00	\$5,000.00
FTTH High Level Design	<i>Flat Amount</i>	\$85,000.00	\$85,000.00
Total			\$100,000.00

Environmental Impact Report:

Task	Unit	Cost	Total
Data Collection	<i>Flat Amount</i>	\$175,000.00	\$175,000.00
EIR Creation	<i>Flat Amount</i>	\$175,000.00	\$175,000.00
Total			\$350,000.00

JPA Creation Services:

Employee	Number of hours worked	Pay rate (per hour)	Travel (driving & meals)	Total
Attorney	200	\$700	\$8,000	\$148,000
Paralegal 1	100	\$250	n/a	\$25,000
Paralegal 2	100	\$250	n/a	\$25,000

SBCAG Broadband Project Manager:

Employee	Monthly Salary	Monthly Benefits	Monthly Indirects	Total	Number of Months	Grand Total
SBCAG Staff	\$10,068	\$6,377	\$8,708	\$25,153	12	\$301,836

Administrative Fee (5% of total to be split for each work product)

Task	Unit	Cost	Total
~5%	<i>Flat Amount</i>	\$50,164.00	\$50,164.00
Total			\$50,164.00

3. Timeline

It is estimated that the HLD will take 18 weeks, and the EIR will take 16 weeks. This work will be conducted simultaneously.

HLD Timeline:

Task	Month 1				Month 2				Month 3				Month 4				Month 5			
	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20
Data Collection & Design Preparation	█																			
High Level Network Architecture & Dimensioning			█																	
Topology and Route Feasibility Assessment				█																
Rough Fiber Route Design							█													
FTTH Network Design Refinement											█									

Environment Impact Report Timeline:

Task	Month 1				Month 2				Month 3				Month 4			
	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16
Purpose and Need Development	█															
Data Collection			█													
EIR Creation									█							
Presentation																█

JPA Creation timeline and tasks:

Time Period	Tasks
Month 1	<ul style="list-style-type: none"> - Stakeholder outreach and engagement - Support SBCAG with policy framework - Support and capacity building for project implementation - Monitor funding opportunities and obtain funding - Coordinate on digital literacy outreach and programs - Work on JPA formation - Oversee & manage SB County LATA Scope of Work
Month 2	<ul style="list-style-type: none"> - Stakeholder outreach and engagement - Support SBCAG with policy framework - Support and capacity building for project implementation - Monitor funding opportunities and obtain funding - Coordinate on digital literacy outreach and programs - Work on JPA formation - Oversee & manage SB County LATA Scope of Work

Month 3	<ul style="list-style-type: none"> - Stakeholder outreach and engagement - Support SBCAG with policy framework - Support and capacity building for project implementation - Monitor funding opportunities and obtain funding - Coordinate on digital literacy outreach and programs - Work on JPA formation - Oversee & manage SB County LATA Scope of Work
Month 4	<ul style="list-style-type: none"> - Stakeholder outreach and engagement - Support SBCAG with policy framework - Support and capacity building for project implementation - Monitor funding opportunities and obtain funding - Coordinate on digital literacy outreach and programs - Work on JPA formation - Oversee & manage SB County LATA Scope of Work
Month 5	<ul style="list-style-type: none"> - Stakeholder outreach and engagement - Support SBCAG with policy framework - Support and capacity building for project implementation - Monitor funding opportunities and obtain funding - Coordinate on digital literacy outreach and programs - Work on JPA formation - Oversee & manage SB County LATA Scope of Work
Month 6	<ul style="list-style-type: none"> - Stakeholder outreach and engagement - Support SBCAG with policy framework - Support and capacity building for project implementation - Monitor funding opportunities and obtain funding - Coordinate on digital literacy outreach and programs - Work on JPA formation - Prepare yearly report evaluation and evolution (June) - Oversee & manage SB County LATA Scope of Work
Month 7	<ul style="list-style-type: none"> - Stakeholder outreach and engagement - Support SBCAG with policy framework - Support and capacity building for project implementation - Monitor funding opportunities and obtain funding

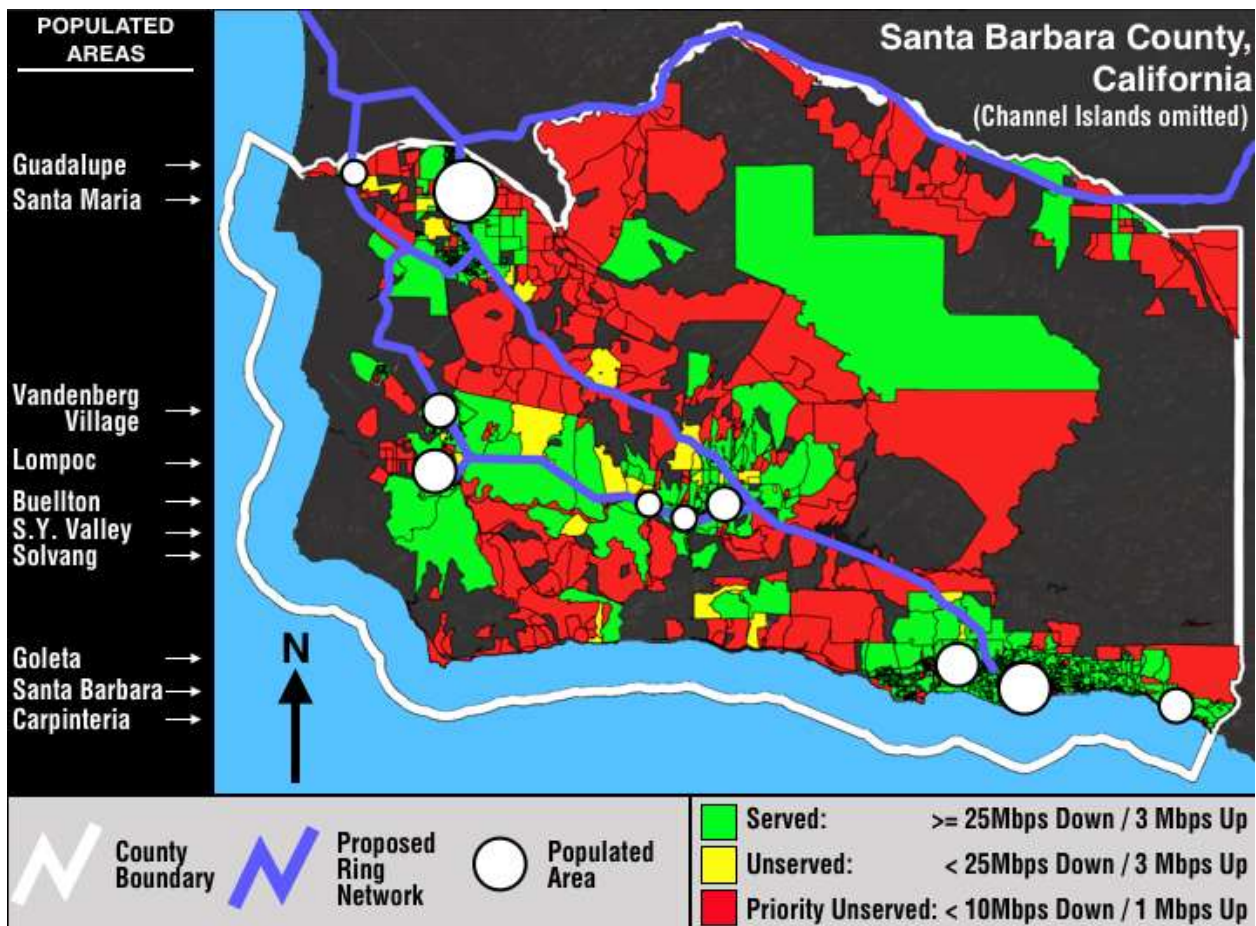
	<ul style="list-style-type: none"> - Coordinate on digital literacy outreach and programs - Work on JPA formation
Month 8	<ul style="list-style-type: none"> - Stakeholder outreach and engagement - Support SBCAG with policy framework - Support and capacity building for project implementation - Monitor funding opportunities and obtain funding - Coordinate on digital literacy outreach and programs - Work on JPA formation
Month 9	<ul style="list-style-type: none"> - Stakeholder outreach and engagement - Support SBCAG with policy framework - Support and capacity building for project implementation - Monitor funding opportunities and obtain funding - Coordinate on digital literacy outreach and programs - Work on JPA formation
Month 10	<ul style="list-style-type: none"> - Stakeholder outreach and engagement - Support SBCAG with policy framework - Support and capacity building for project implementation - Monitor funding opportunities and obtain funding - Coordinate on digital literacy outreach and programs - Work on JPA formation
Month 11	<ul style="list-style-type: none"> - Stakeholder outreach and engagement - Support SBCAG with policy framework - Support and capacity building for project implementation - Monitor funding opportunities and obtain funding - Coordinate on digital literacy outreach and programs - Work on JPA formation
Month 12	<ul style="list-style-type: none"> - Stakeholder outreach and engagement - Support SBCAG with policy framework - Support and capacity building for project implementation - Monitor funding opportunities and obtain funding

- Coordinate on digital literacy outreach and programs
- Work on JPA formation
- Year end report to CPUC

4. Geography

The environmental impact report that will be produced from this grant will encompass the County of Santa Barbara, focusing on the areas where buildout has been identified. The high level design for a last-mile network will also take place within the boundaries of the County. A shapefile outlining the area is included in the application.

The shapefile, a picture of which is provided below, shows speed test data from CPUC. This data is corroborated by the granular speed test data which has been collected by the County's partner SBCAG. The map clearly shows that the proposed work will be conducted along areas most in need, as well as along areas that complement the state's middle mile network.



Included also is the CPUC map of the project area designating the priority unserved/underserved areas in the county which will be included in this project.

