



A Tradition of Stewardship
A Commitment to Service

Agenda Date: 12/17/2019

Agenda Placement: 10B

NAPA COUNTY BOARD OF SUPERVISORS Board Agenda Letter

TO: Board of Supervisors

FROM: Jon Gjestvang - Chief Information Officer
Information Technology Services

REPORT BY: Shawn Smith, Supervising Staff Services Analyst - 707.259.8665

SUBJECT: Update on broadband work, communications assessment, NBNCBC consortium workplan

RECOMMENDATION

Chief Information Officer and Director of Library Services and Community Outreach request the Board receive an update on the North Bay/North Coast Broadband Consortium work, communications assessment, and the consortium work plan for the 2019-2022 work years.

EXECUTIVE SUMMARY

Fire events and recent PG&E Public Safety Power Shutoffs (PSPS) in Napa County and surrounding areas have cast a spotlight on the crucial importance of broadband communications infrastructure particularly as it supports public safety communications. During the October 2017 fire event, cellular communications virtually stopped in many areas and some lost service completely. From earlier assessments, Napa County has identified numerous underserved and unserved focus areas throughout the County, which could greatly benefit from the availability of new fiber and cellular infrastructure. However, Napa County also requires an infrastructure and engineering assessment of its broadband and cellular communications that will include options to increase network redundancy and planning for communications during emergencies.

Napa County, since 2014, has been a part of a four-county consortium - North Bay/North Coast Broadband Consortium (NBNCBC) - with Sonoma, Marin and Mendocino counties to work towards securing grant funding to expand and integrate broadband internet access to unserved and/or underserved areas within each county. The consortium applies for California Emerging Technology Fund (CETF) grants through the California Public Utilities Commission (CPUC).

In 2018, the focus was, through direction of Supervisors Diane Dillon and Belia Ramos as the NBNCBC representatives, turned to find ways to combine efforts at the Consortium with our emergency preparedness planning with the goal of expanding service in areas that are unserved/underserved and/or building more resilient

telecommunications infrastructure to support our emergency planning and preparedness. After the CPUC approved the workplan changes, in November, 2018, Napa County approved a combination of grant and local County funds to contract the services of Magellan Advisors for a fiber infrastructure engineering assessment. Subsequently, Magellan advisors completed an assessment of telecommunications infrastructure and system damages from the 2017 fires.

In 2019, after staff rearranged tasks to allow for more time to apply/recieve grant funds, Magellan completed all field work associated with the remaining tasks. Work plans were paused in the fall of 2019 pending approval of the CPUC consortium grant funding.

CPUC approved funding in October 2019 for the 2019 - 2022 grant with a November 1, 2019 start date.

FISCAL & STRATEGIC PLAN IMPACT

Is there a Fiscal Impact?	No
County Strategic Plan pillar addressed:	Collaborative and Engaged Community Effective and Open Government

ENVIRONMENTAL IMPACT

ENVIRONMENTAL DETERMINATION: The proposed action is not a project as defined by 14 California Code of Regulations 15378 (State CEQA Guidelines) and therefore CEQA is not applicable.

BACKGROUND AND DISCUSSION

About North Bay/North Coast Broadband Consortium & previous work

On January 7, 2014, the Board approved a resolution endorsing Napa County's membership in the North Bay/North Coast Broadband Consortium (NBNCBC), which seeks to secure grant funding, to expand and integrate broadband internet access to underserved communities in the counties of Mendocino, Sonoma, Marin and Napa. Supervisor Diane Dillon has been the representative for Napa County since then, however, in 2018 the Consortium voted to allow alternates to join and Supervisor Belia Ramos was appointed by the Board. The consortium jointly submits a grant application to the California Public Utilities Commission (CPUC) California Advanced Services Fund ("CASF") Rural and Urban Regional Broadband Grant Program, as the Consortium, to obtain grant funds to: (1) identify immediate and future broadband needs and demands of residents and entities that are located in the North Bay/-Coast Region; (2) assess reliability and accuracy of the regional broadband data compiled by CPUC and National Telecommunications and Information Administration (NTIA).

2015 and 2016 Work

Napa County worked to identify unserved and underserved areas and create "priority areas" to focus on and assess reliability and accuracy of broadband data compiled by the CPUC. Staff conducted a ground truth wireless testing and came up with nine priority areas: Angwin, Pope Valley, Oakville area, Calistoga (unincorporated areas), Monticello, Rim Rock, Wild Horse Valley Road, Browns Valley, and some areas in American Canyon. Ground truth testing involved surveying areas and using the resulting data to validate or refute claims of advertised download and upload speeds reported to the CPUC by the providers.

2017 and 2018 Work

In 2017, efforts remained around assessing reliability and accuracy of broadband data, however, this time focused on wired and landline service. According to the CPUC 2018 annual report, "Under existing statute, households in census blocks offered wireline and/or fixed wireless service broadband Internet service at speeds of 6 Mbps downstream and 1 Mbps upstream or greater are considered served." This could mean cellular connectivity, wired connectivity or fixed wireless. Companies that provide wireless connectivity are sometimes referred to as a WISP – Wireless Internet Service Provider.

Following the October 2017 wildfires, the Consortium saw a need to survey the impact that the telecommunications service disruption and failures had on the public. Of the 3,705 that responded, Napa County had the most with 54% or 2,018. The report found that 67% lost landline service, 87% lost cellular service, and 73% lost internet service during the fires. In the entire wildfires' footprint - including Sonoma and Mendocino - it is estimated that 160,000 wireline and 85,000 wireless customers lost service, including 11-15 public safety points losing service. Over 340 cell sites were destroyed or damaged.

In 2018, Supervisor Ramos was appointed as an alternate and through the direction of both Supervisors Dillon and Ramos, staff began to find ways to combine Consortium work with emergency preparedness work. In order to utilize grant funds, a revised work plan was submitted and approved by CPUC for Year 2 (2018). The revised work plan included:

- Task 1 - Assessment of telecommunications infrastructure and system damages from the 2017 fires
- Task 2 - Assessment of fire impacted areas emergency telecommunications systems resiliency
- Task 3 - Identify priority areas with opportunities to improve telecommunications infrastructure to increase service
- Task 4 - Provide recommendations and identify funding opportunities

Following the approval from the CPUC, on November 11, 2018, the Board approved a Professional Service Agreement with Magellan Advisors for a maximum of \$100,250 to assist with the completion of the work plan. The Board directed staff to utilize the grant funds before using County resources. Below is a break down of how staff has utilized grant and county dollars.

2018 (revised work plan)

In late 2018, Magellan completed task 1 – assessment of the telecommunications infrastructure and system damages from the 2017 fires and provided a draft report to staff and the CPUC to comply with grant administrative requirements. This report will be utilized for the final report that will be completed and provided to the Board in late 2020.

2019 Work

Because CPUC was in the middle of implementing new rules for the grant program, staff was not able to submit an application until April. To continue work, with this in mind, staff revised the County's work plan to allow Magellan to do field work for all tasks, paid by County general fund, to provide time to hear back from CPUC. The revised work plan rearranged the tasks only. The scope remained the same:

- Task 1 – No change
- Task 2 – Field work for Task 3 and 4
- Task 3 – Assess countywide emergency telecommunications systems resiliency
- Task 4 – Identify priority areas with opportunities to improve telecommunications infrastructure to increase service
- Task 5 – Complete report with recommendations to increase service, enhance systems resiliency and provide

funding opportunities outside of CPUC funding for broadband

In Summer 2019, Magellan completed field work (Task 2) and met with over 50 members from several organizations across the County. This included stakeholders who are dependent on broadband services for community outreach and included organizations handling public safety, emergency services, hospital services, public works, transportation, radio communications, and veteran affairs. This helped gather information on how these organizations were impacted by broadband service outages during the recent disasters.

Staff had to pause work in August because CPUC did not approve the grant until October 24.

2019 - 2022 Work Plan

The approved work plan for 2019 – 2022 includes the following for Napa County:

Year 1 – 11/1/2019 – 11/1/2020 – Completion of the Assessment by Magellan (Tasks 1-5, above) - \$35,000

Year 2 – 11/1/2020 – 11/1/2021 – Identify opportunities to expand or make service more resilient - \$30,000

Year 3 – 11/1/2021 – 11/1/2022 – Work with a local or national service provider on a project - \$32,500

Staff anticipates Magellan completing the report to Napa County in early Spring 2020, with Napa County broadband consortium staff submitting the report to the CPUC and the Napa County Board of Supervisors later in the year. The funding provided by the CPUC is limited to identifying gaps in broadband service and providing this information back to the CPUC. Funding does not cover work that is needed to expand broadband service or enhance broadband resiliency.

SUPPORTING DOCUMENTS

None

CEO Recommendation: Approve

Reviewed By: Helene Franchi