

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

**Communications Division
Broadband, Policy and Analysis Branch**

**RESOLUTION T-17477
January 28, 2016**

R E S O L U T I O N

Resolution T- 17477: Approval of Funding for the Grant Application of Race Telecommunications Inc. (U-7060-C), from the California Advanced Services Fund (CASF) in the Amount of \$7,633,459 for the Gigafy Mono Underserved Broadband Project for a Fiber-to-the-premise project in Mono County and Rescinds funding for the Crowley Lake and Swall Meadows project in Resolution T-17350. (OPTION 2)

I. Summary

This Resolution approves funding in the amount of \$7,633,459 from the California Advanced Services Fund (CASF) for the CASF grant application of Race Telecommunications Inc., (Race) for installation of a fiber-to-the-premises (FTTP) system for its Gigafy Mono County Underserved Broadband Project (Gigafy Mono Project). The Gigafy Mono Project will extend high-speed Internet service to 541 households spread amongst 6.33 square miles covering South Chalfant, Benton, Benton Hot Springs, Swall Meadows, Lee Vining, and Mono City, in Mono County, California, at an average cost of \$11,887 per household.¹ This resolution approves the entire project area grant despite the availability of mobile wireless at served speeds in the Lee Vining area. The Eastern Sierra Connect Regional Broadband Consortium has identified the southern portion of the Swall Meadows section of this project as a priority area. Further, this project will provide communications facilities and voice services that meet battery backup, E911 data standards, and provide access to local Public Safety Answering

¹ Cost does not include Contribution of In Aid of Construction (CIAC), an uncertain cost that may not occur. CIAC represents potential funding in the event that the CASF grant award is subject to federal and/or state income taxes. If it occurs, the cost is \$14,110 per household.

Points (PSAPs). This resolution rescinds the grant of funds for the Verizon Crowley Lake and Swall Meadows project as authorized in Resolution T-17350.²

II. Background

On December 20, 2007, the California Public Utilities Commission (Commission) in Decision (D.) 07-12-054 established the CASF program as a two-year program to provide funds for the deployment of broadband infrastructure in unserved and underserved areas in California.

On September 25, 2010, Governor Schwarzenegger signed Senate Bill (SB) 1040,³ which codified the CASF program and expanded it to include three accounts: (1) the Infrastructure Grant Account, (2) the Consortia Grant Account, and (3) the Revolving Loan Account. The latter two accounts are intended to address the needs that were unmet under the original CASF program. Specifically, the purpose of the Revolving Loan Account is “to finance capital costs of broadband facilities not funded by a grant from the Broadband Infrastructure Grant Account.”⁴ SB 1040 also expanded the CASF fund from \$100 million to \$225 million with the addition of \$100 million to the Infrastructure Grant Account, and allocation of \$10 million and \$15 million to the Consortia Grant Account and the Revolving Loan Account, respectively.⁵

On February 1, 2012, the Commission approved D.12-02-015 to implement new guidelines for the Infrastructure Grant and Revolving Loan Accounts. Key provisions of the Decision include:

- A maximum CASF grant award of 70 percent of project costs for unserved areas and 60 percent for underserved areas; and,
- A definition of an underserved area, “where broadband is available, but no wireline or wireless facilities-based provider offers service at advertised speeds of at least 6 megabits per second (Mbps) downstream and 1.5 Mbps upstream (6 Mbps /1.5 Mbps).”

² Resolution T-17350, dated August 23, 2012.

³ Stats. 2010, c. 317, codified at Public Utilities (P.U.) Code § 281.

⁴ P.U. Code § 281(e).

⁵ P.U. Code § 281(b)(1).

Subsequently, on June 26, 2014, the Commission approved Resolution T-17443, which (relevant to this resolution) opened the CASF Broadband Infrastructure Grant Account to new applications as of December 1, 2014, and offered existing providers a “right of first refusal” to upgrade service in unserved and underserved areas.

On December 29, 2014, Race, a California Local Exchange Carrier (CLEC), submitted an application for CASF funding in the underserved areas of Mono County, covering South Chalfant, Benton, Benton Hot Springs, Swall Meadows, Lee Vining, and Mono City, California. No existing provider made a commitment to upgrade service in the project areas before the Nov. 1, 2014, the “right of first refusal” deadline, and the Mono area has been determined by CD staff to be “underserved.” Therefore, the Mono area is eligible for new applications.

III. Notice/Protests

On January 5, 2015, Communications Division (CD) staff posted the proposed area project map, census block groups (CBGs) and zip codes lists by county for the Gigafy Mono Project on the Commission’s CASF website page under “CASF Application Project Summaries” and also sent notice regarding the project to its electronic service list. CD received no challenges to the proposed project area.

IV. Discussion

This Resolution adopts CD’s recommended CASF funding award of \$7,633,459 for the Gigafy Mono Project. This grant amount includes \$1,202,575 for Contribution In Aid of Construction (CIAC). The non-CIAC grant amount of \$6,430,884 represents 60% of the total underserved project cost of \$11,920,715. Key project information and maps are shown in Appendix A.

A. Project Application Overview

Race has a Certificate of Public Convenience and Necessity (CPCN) (U-7060-C) and has been a fiber-based CLEC provider of next generation Voice Over Internet Protocol (VoIP)/Digital telephone and video via Internet Protocol television (IPTV) and traditional cable/satellite television for the past 12 years.

The proposed Gigafy Mono project is comprised of several discontinuous areas in Mono County including Benton, Benton Hot Springs, Lee Vining, Mono City, and South

Chalfant. The Gigafy Mono Project will extend high-speed Internet service over a 6.33 square mile area by deploying aerial FTTP last mile network. This expansion will bring high speed Internet access to 541 households in Mono County. The Census Block Groups (CBGs) impacted by the project are: 60510001011, 60510001013, and 60510001024, with median income of \$47,083, \$96,662, and \$43,359 respectively.⁶ The project will provide broadband access to households at speeds of 1 Gigabits per second (Gbps) download and 1 Gbps upload. Race filed its application with the knowledge of the broadband availability map indicating mobile served speeds in some of the project areas. The company argues that despite the map, mobile service does not meet the needs of the community and Race disputed the likelihood of quality mobile availability at served speeds.

Race's CASF grant request includes \$1,202,575 for CIAC, which is intended to fund any federal and/or state income taxes that may apply on the CASF grant award. The applicant will not receive the CIAC if the CASF grant is not taxed.

Race's current infrastructure in California consists of an end-to-end fiber optic network from the Internet source at One Wilshire in Los Angeles to the end-user premises. Race currently has no broadband infrastructure within five miles of the proposed project areas. The Race network is designed according to Open Systems Interconnection (OSI) standards, providing access to anyone who can comply with IEEE 802.3 Ethernet, IEEE 802.3u fast Ethernet, or IEEE 802.3z Gigabit Ethernet as well as dark fiber services on a non-discriminatory basis. Race currently provides digital voice service that meets all Federal Communications Commission (FCC) E-911 service and battery requirements.

Race will build the all new fiber network by deploying a complete FTTP network to the aforementioned 541 homes in Mono County. The proposed Race fiber optic network is designed using 100-Gigabit backbone infrastructure that will enable Race to offer IP-based products and services to residential and enterprise customers. According to Race, the Gigafy Mono Project will connect to its fiber network in multiple places: South Chalfant will utilize Digital 395 fiber from existing Chalfant to New South Chalfant; Benton will utilize Digital 395 fiber from existing Chalfant to Benton; Swall Meadows will connect to the existing Race node in Tom's Place;⁷ and Lee Vining will utilize Digital 395 fiber and

⁶ From the Interactive California Broadband Availability Map. Information is from the Census data as of 6/30/2014 at: <http://www.broadbandmap.ca.gov/map/>.

⁷ Tom's Place is a Resort located on Hwy 395, 25 miles North of Bishop, 8180 Crowley Lake Dr. Crowley Lake, California 93546. See Appendix A-5 for second mile connection from Swall Meadows to the existing Race's node in Tom's Place.

connect back to Boron. The use of fiber optics as the standard transmission medium should allow Race to accommodate the pace of new technology and innovation by upgrading the electronic equipment installed on each end without deploying new fiber. An FTTP network will substantially expand the reach of broadband in the region and improve existing communication capabilities.

In terms of its broadband pricing, Race has committed to a two-year plan starting from the initial date of service under the following terms:

Race Mono Project Monthly Recurring Rates		
Residential	Entry Level Speed 25 Mbps Down and 25 Mbps Up	\$25
	Mid-Level Speed 100 Mbps Down and 100 Mbps Up	\$65
	Other Optional Tier Speed 250 Mbps Down and 250 Mbps Up	\$85
	Max Level Speed 1000 Mbps Down and 1000 Mbps Up	\$100
Business	Entry Level Speed 25 Mbps Down and 25 Mbps Up	\$60
	Max Level Speed 1000 Mbps Down and 1000 Mbps Up	\$200
Setup Fees		\$0
Wireless Router (Optional) per month		\$10

According to Race, the pricing for business broadband service is more expensive than residential broadband service to account for a greater level of customer service support to businesses. An account executive is assigned to assist in identifying the needs of business customers. The account executive’s responsibility is to take as much time as required to supply the correct service form, provide the solution, and provide customer service at all times. Business customers may call the 24/7 customer service line to report issues or outages and the customer service group will take care of the problem. Business customers are flagged differently from residential customers in the system based on a Service Level Agreement, and issues may be escalated so that technicians will be dispatched

immediately to resolve issues. These service rates are very close to previous rates for four other Race projects that the Commission awarded CASF funding to in 2013 and 2014.⁸

B. Project Qualification

To qualify for the CASF program, an applicant is required to submit proof that the area is unserved or underserved by submitting shapefiles of the proposed project. CD staff review includes: Comparison of submitted shapefiles with United States 2010 Census data and the California Interactive Broadband Availability Map⁹ to determine whether the area is eligible either as an unserved or underserved area and determination that all other information submitted by the applicant meets the requirements outlined in D.12-02-015. Other information reviewed includes: proof of a CPCN from the Commission,¹⁰ descriptions of current and proposed broadband infrastructure; number of potential subscriber households and average income; project construction schedule; project budget; proposed pricing and commitment period for new subscribers; and financial viability of the applicant. Additionally, CD evaluates speed test data provided by the applicant and any filed challenge data provided by other service providers in the area.

CD's review of the map and project area CBG data confirmed that the project area households are not served by wireline facilities at served speeds (See Appendix A-3), and that the surrounding areas of Benton and Swall Meadows are "underserved" by the mobile provider Verizon Wireless.¹¹ However, Mono City and Lee Vining areas of the project show wireless broadband availability at served speeds.¹² (See Appendix A-4.) Subsequently, CD gave Race the opportunity to dispute the availability map by conducting additional speed tests. Race conducted tests on March 5, 2015, of the

⁸ The four previously approved resolutions for Race Telecommunications are: High Desert, T-17415, City of Boron, T-17416, Mono T-17433, and Gigafy Backus, T-17480.

⁹ California Interactive Broadband Availability data as of December 31st, 2014.

¹⁰ Alternatively, applicants may submit a document asserting that they are seeking funding as a non-telephone corporation per Commission Decision 14-02-018.

¹¹ CD also found broadband availability at served speeds by ViaSat Satellite provider. However, non-CASF satellite service is excluded from eligibility determinations for CASF per D. 12-02-015, based on the limited speed capabilities of satellite services, the cost to the consumer, high latency, and the service unreliability known at the time of the decision. (D. 12-02-015 at 13-15.)

¹² Mobile availability depicted on the Commission's broadband availability map is determined by the CalSPEED test project funded by the CASF program. The project contract utilizes teams to test at nearly 2,000 identified points around the state to measure mobile broadband service availability using smartphones and tablets. The data are interpolated and subject to quality verification measures before depicting availability throughout California on the map. More information is available at;

http://www.cpuc.ca.gov/PUC/Telco/bb_drivetest.htm

availability of Verizon Wireless service in the project areas where homes are present using the Commission's CalSpeed App. These test results both confirmed in part and contradicted in part the availability map. Tests results showed the Mono City project area as being underserved, with two of the three speed tests below 6 Mbps down/1.5 Mbps up. However, the two mobile wireless tests conducted by Race for Lee Vining confirmed mobile broadband availability at 23 Mbps down/4 Mbps up, which is well above served speeds. (See Appendix A-6 and A-7.)

The interactive map also shows Suddenlink using Cable Modem delivering Internet service to Swall Meadows at speed 10-25 Mbps down and 1.5-3 Mbps up; however, Suddenlink informed staff that it does not serve the area. The map also shows Verizon delivering aDSL Internet service to Swall Meadows at speed of 3-6 Mbps down and 768 Kbps-1.5 Mbps up and AT&T Mobility providing Mobile Wireless Internet at underserved speed to all areas except to Swall Meadows where it does not provide service.

The Swall Meadows section of the Gigafy Mono project overlaps a prior CASF grant to Verizon to partially serve the Crowley Lake/Swall Meadows area with 3 Mbps down and 1 Mbps up service. Race submitted a transcript of a conversation with a Verizon salesperson who said that additional service was currently not available at any location within this area. Further, though Verizon did provide the limited broadband service according to its CASF grant, it has not sought project reimbursement. Rescinding the grant of funds for the Verizon Crowley Lake and Swall Meadows Project would release these monies for other projects.¹³

Discussion of Existing Broadband Service Sufficiency

This resolution presents an opportunity to address the adequacy of mobile broadband service in general, and whether its purported presence in a particular location should disqualify an area from CASF funding. In particular, CASF eligibility maps published in January 2015 estimated that nearly 96% of California households received mobile

¹³ The Commission in Resolution T-17350, dated August 23, 2012, awarded Verizon \$286,398 CASF funding for the Crowley Lake and Swall Meadows Project in the Mono County which required Verizon to provide broadband speed of 3 Mbps down and 1 Mbps up. On April 2, 2013, the CD staff sent a letter to Verizon regarding its lack of timely provision of service in compliance with Resolutions T-17330 and T-17350 and explained that the Commission staff would reduce Verizon's CASF grant award by \$2,000 each day after January 28, 2013 that it did not provide broadband service to both communities, and \$3,000 each day after April 5, 2013. The total grant amount expired before Verizon provided service and Verizon did not seek grant reimbursement following infrastructure deployment.

broadband at served speeds 84% of the time.¹⁴ These maps identified as ineligible many of the “priority areas” previously identified by consortia and community members as having a need for broadband.¹⁵ The accuracy of the published maps regarding available service was questioned. In response to the concerns raised, on November 12, 2015, following CPUC comments to the FCC proposing a reliability standard for mobile availability, staff published new maps using criteria that required service tests to pass the “98%” availability standard, thereby reducing the areas indicated as having available broadband at served speeds.¹⁶ Following the application of the stricter reliability standard, the new map indicates that Mono City and Lee Vining having mobile broadband available at served speeds. However, subsequent tests in Mono City indicate below served speeds. These findings indicate discrepancies in the availability map despite use of the higher quality standard. Notwithstanding the finding that households in Lee Vining have mobile service at served speeds, as confirmed by the tests, the remaining issue is whether mobile wireless at the confirmed levels is adequate to assuring high-quality broadband speeds.

The current CASF rules provide that 6 Mbps downstream and 1.5 Mbps upstream is considered served; the rules, however, do not describe other service qualities that may significantly affect broadband service, nor how wireless service quality measures should be evaluated. These other measures include latency, jitter, packet-loss and their variation, determine whether the mobile service available will support the critical applications that are increasingly required to meet community needs.

These considerations noted, we must also keep in mind that the FCC defines “advanced telecommunications service” as 25 Mbps down/3 Mbps up, although the FCC does not itself use this benchmark for its Connect America Fund program.¹⁷ The two mobile tests in Lee Vining, at the 98% availability standard, indicate that service speed at 23 Mbps down/4 Mbps up is slightly less than the FCC advanced service definition, but is well above the CASF *speed* standard. However, the service quality of mobile broadband is

¹⁴ CD established this criterion using the methodology of one standard deviation below the mean which presumes served speeds be available at least 84% of the time during the test.

¹⁵ Priority Areas for CASF funding were established by regional stakeholders to identify communities with a high priority need for broadband infrastructure. These priority areas were recognized by the Commission in Resolution T-17443, adopted June 26, 2014, p. 10-14 and Appendix 4.

¹⁶ The application of two standard deviations below the mean presumes that a consumer would receive service at least that fast 98% of the time. Based on this standard, the map indicates 15% of California households receive broadband at served speeds.

¹⁷ 2015 Broadband Progress Report and Notice of Inquiry on Immediate Action to Accelerate Deployment, February 5, 2015, ¶¶ 24ff. The Connect America Fund requires a minimum of 10 Mbps down/1 Mbps upload speed for facilities to be program eligible.

problematic in the Mono area. CD's analysis of interactive video capabilities indicates that mobile services in the proposed project area do not support HD (high-definition) *video* which precludes real-time applications, such as telemedicine, nor do they support SD (standard-definition) video.¹⁸ Therefore, CD notes that such condition may warrant consideration of Lee Vining area as eligible because network service quality is insufficient to support critical broadband applications.¹⁹

In the case of the Mono Project, the applicant has purported that available broadband is insufficient. The communities and consortium members supporting the Gigafy Mono Project have voiced dissatisfaction with mobile broadband as a substitute for wired broadband. Reasons cited include: cost, data caps, lack of bandwidth and unreliability. The practical functional use for education, healthcare, economic competitiveness and public safety are also important considerations.

Letters from the Community

Race provided eight letters of support for its Gigafy Mono project. The Board of Supervisors of Mono County expressed concern that students in rural communities need reliable high speed Internet to receive access to equal educational opportunities and modern healthcare services. Their letter also points to a recent wildfire that caused loss of Verizon Wireless service and three days of communication collapse for the communities in Mono County. Only the network and Internet service from Digital 395 remained functional; with its own services down, Verizon Wireless connected to Digital 395 and first responders were provided with relief communication. The Supervisors cited this incident as evidence of the need for redundant and independent communication services as a matter of vital importance for the region. Additionally, a petition signed by eighty-six Mono County, Sierra Paradise Estates residents asks the Commission to ensure that their community "receives the same reliable, quality phone/Internet service as other rural California communities."²⁰

¹⁸ Interpolated test results for streaming interactive video in the Mono County area indicates only low-definition service (less than 360p) for access to the east-coast test server, and only standard definition (360p) for access to the west-coast server. (Spring 2015 CPUC mobile field test) The high-definition video industry standard is 720p.

¹⁹ P.U. Code Section 281(a) requires the CASF program to encourage "deployment of high-quality advanced communications services to all Californians". Video service capabilities are a component of "high quality" advanced communications.

²⁰ "SPE/PUC/Verizon Service Petition" e-mail sent to CD and Office of Senator Tom Berryhill, dated June 6, 2014.

The Mono Basin Regional Planning Advisory Committee (RPAC) expressed support for the project, including for Lee Vining and Mono City, because they lack high speed Internet access. Letters from individuals in Benton, and from around Swall Meadows, complained that their Internet service is slow during the peak hours. They complain that there are no other Internet providers that can provide fast Internet access.

Letters complain about the Verizon service in the Swall Meadows: the “this service daily slows to an unusable speed during peak traffic hours.” Other letters noted the slowness or lack of service in both Swall Meadows and Benton. One letter asks that “PUC not interpret mobile and wireless broadband as a substitution for physical connections but, instead, as a form of utilities infrastructure redundancy which make communications in small, dispersed, and isolated communities secure, reliable, and affordable.”²¹

Lastly, the Commission received eight additional letters of support from the residents of Lee Vining urging the Commission to include Lee Vining in the proposed project area. These letters indicate that the residential and business needs of the community require more robust broadband than can be provisioned by available mobile service, and contend further that the high price for mobile service and its limited bandwidth hamper the operation of the local businesses.

Wireless service has a usage cap and the prices for the mobile services are generally higher than for wireline broadband prices, and at slower speeds.²² Further, because of the community dissatisfaction with current services described above and because the project has not been challenged by any third party and no other carriers have come forward claiming to serve this area, it is reasonable to consider the applicants entire proposed project area despite the availability of mobile wireless broadband service in Lee Vining.

C. Project Evaluative Criteria and Recommendation for Funding

CD evaluated the application with respect to the scoring criteria defined in D.12-02-015, Appendix 1, Section VIII (Scoring Criteria). The Scoring Criteria includes: (i) Funds Requested per Potential Customer, (ii) Speed, (iii) Financial Viability, (iv) Pricing, (v) Total Number of Households in the Proposed Area, (vi) Timeliness of Completion of Project, (vii) Guaranteed Pricing Period, and (viii) Low-Income Areas. In addition, five bonus

²¹ Support letter dated May 9, 2015, sent to CD director, Ryan Dulin.

²² Verizon Wireless’s service for Lee Vining, at advertised speeds of 12 Mbps down and 5 Mbps up, costs \$60, including 10 GB of data. Recent offers of service are more expensive and require a \$20 per line charge in addition to data cap pricing of 1GB for \$30, 3GB for \$45, 6GB for \$60, 12GB for \$80, and 18GB for \$100.

points are added to the score of an applicant that is able to submit local government and community endorsements or letters of support.

Key Characteristics

CD found that the Gigafy Mono Project meets CASF funding requirements with respect to the following factors:

- *Speed* – the proposed speed offering of 25 mbps up to 1 Gbps download and 25 mbps up to 1 Gbps upload exceeds the benchmark set by the Commission;
- *Service Area* – covers 6.33 square miles and with the exception of Lee Vining having mobile wireless service at served speeds, the project area is underserved. However, based on community input about the insufficiency of mobile wireless as a broadband solution for the communities, staff recommends the entire project area to be considered underserved;
- *Matching Funds (40% of project cost)* – the applicant has certified that the matching funds will come from their capital budget; the submitted balance sheet, income and cash flow statements show that the applicant is financially viable and has the financial capability to match the funds;
- *Price Commitment Period* - the applicant has committed to a pricing plan of two years as required;
- *Deployment Schedule* – the project will be completed within 22 months, which is within the 24 month period construction timeline required.

This project ranks favorably as compared with previously funded CASF projects with regard to financial viability and low prices for the high speed of service. Race is ranked well financially compared to other applicants and since CASF funds are awarded on a reimbursement basis and Race will be funding 40% of the project costs from its existing capital up front, CD determines there is little risk of the applicant not completing the project. Race is offering maximum advertised speeds of 1 Gigabits per second (Gbps) download and 1 Gbps upload, which is one of the highest service speed compared to other applicants. Most importantly, the project will bring wireline services to areas where it largely does not exist.

The Eastern Sierra Connect Regional Broadband Consortium identified the southern portion of the Swall Meadows section of this project as a priority area.²³ There is also a consortia priority area 2.6 miles north of the South Chalfant section of this project.

Race explains that the justification for combining Benton, Benton Hot Springs, Lee Vining, Mono City, and South Chalfant areas into one application is based on the fact that it will use shared resources to complete the project, thereby benefiting from economic scalability. Race informed staff that the main interconnection to Digital 395 point of presence is in Lee Vining, which enables Race to deliver services to Mono City. Removal of Lee Vining from the project area would reduce project scalability and increase the average per household cost from \$11,887 to \$12,608.²⁴ Additionally, the incremental cost to serve the 142 households residing in Lee Vining is \$1.176 million.²⁵ The cost per household for serving Lee Vining is \$8,282, which is relatively low compared to the average per household cost for the project without Lee Vining. Race recognizes that the cost per home for building this project is significantly higher than for Races' other applications in the past. Race explained that to connect Swall Meadows to the existing Race node in Tom's Place, a second mile fiber connection must be constructed which adds to capital cost. (See Appendix A-5.) This second mile construction over difficult terrain is the main driver of the increased cost per home.

There are four anchor institutions in the project areas that are already served with broadband via fiber facilities, including two schools in Lee Vining and a school and a library in Benton. Connecting households in the unserved and underserved areas by fiber will be beneficial to the population as a whole, enabling improved access to Internet-based resources and enhancing emergency services for public safety.

As CD has recommended in earlier instances, and the Commission has followed CD's recommendations for earlier projects, we find it is reasonable to grant an exception in this case. This exception would approve this project as proposed by the applicant, including the provision of gigabit service to Lee Vining because:(i) facilities would transit Lee Vining from its point of presence to Mono City, regardless of whether Lee Vining households are included in the last mile project funding; (ii) the incremental cost to serve households in

²³ Priority Areas for CASF funding were established by regional stakeholders to identify communities with a high priority need of broadband infrastructure. These priority areas were recognized by the Commission in Resolution T-17443, adopted June 26, 2014, p. 10-14 and Appendix 4.

²⁴ Inclusive of CIAC, removal of Lee Vining from project area increases cost per household from \$14,110 to \$15,508.

²⁵ Inclusive of CIAC, it is \$1.446 million.

Lee Vining is reasonable; (iii) removal of Lee Vining increases total project average cost per household; and (iv) no third party has challenged the project; and (v) the existing mobile network service quality in the Mono County area is insufficient to support critical broadband applications.

CD staff finds that funding the Race's Gigafy Mono Project aligns well with CASF's legislatively-mandated goals of deploying high-quality advanced information and communications technologies to all Californians to promote economic growth, job creation, and substantial social benefits.

D. Safety Impact

The culmination of this project will improve connectivity within and to the surrounding areas and to a number of anchor institutions in the project area. In their letter of support for the Gigafy Mono project, the Board of Supervisors of Mono County cited a recent wildfire event that caused loss of Verizon Wireless service, leading to three days of communication collapse for communities in Mono County. Adding redundant communication services is of vital importance for ensuring safety. High speed Internet connections facilitate the transmission of data and communications among first responders and to the public. The anchor institutions in the area, such as the California Highway Patrol, sheriff's office and fire department, can benefit from the broadband project. Voice services provided as a part of this project would be required to meet all applicable safety standards, including battery backup, E911 data and access to local PSAPs.

V. Compliance Requirements

Race should comply with all the guidelines, requirements, and conditions associated with the granting of CASF funds as specified in D.12-02-015. Such compliance includes, but is not limited to:

A. California Environmental Quality Act (CEQA)

All CASF grants are subject to CEQA requirements unless the project is statutorily or categorically exempt pursuant to the CEQA Guidelines.

Race has provided the Commission with construction plans for the Gigafy Mono Project. In order to deliver last mile service to households in the area, Race intends to connect to its

existing fiber network in multiple places. South Chalfant will utilize Digital 395 fiber to get from Race's existing Chalfant to New South Chalfant. Benton will utilize Digital 395 fiber to get from Race's existing Chalfant to Benton. Swall Meadows will connect to the existing Race node in Tom's Place. Lee Vining will utilize Digital 395 fiber and connect back to Race's current facilities in Boron.

Race proposes to conduct all work in already disturbed land avoiding cultural resources during project implementation and to focus network design around existing rights of way, above ground and aerial construction, dark fiber leasing where available, and easements to lessen environmental impacts. The Gigafy Mono project is a last mile project intended to bring fiber to homes in already disturbed areas using a proven aerial design. This aerial design is based on existing utility poles in existing roadways and will comply with the pole loading requirements of General Order 95. Utilizing K&B Engineering, an engineering firm, Race will determine whether pole loading requirements pass or fail. All fiber will be placed in the appropriate space on the existing utility poles in compliance with the pole owner specifications.

Based on the above information, the project qualifies for the following categorical exemptions from CEQA: CEQA Guidelines Section 15301 – Existing Facilities, involving minor alterations to existing utility facilities, and CEQA Guidelines Section 15304 – Minor Alterations to Land, involving minor trenching and backfilling where the surface is restored.

B. Deployment Schedule

The Commission expects Race to complete the project in 22 months from the start date. If the applicant is unable to complete the proposed project within the 18-month timeframe identified in its application, Race must notify CD's Director as soon as it becomes aware of this prospect. If such notice is not provided, the Commission may reduce payment for failure to satisfy this requirement by timely notifying CD's Director.

C. Execution and Performance

CD staff and Race shall determine a project start date after Race has obtained all approvals. Should Race or the contractor fail to commence work at the agreed upon time, the Commission, upon five days written notice to Race, reserves the right to terminate the award.

In the event that Race fails to complete the project, in accordance with the terms of approval granted by the Commission, Race must reimburse some or all of the CASF funds that it has received.

Race must complete all performance under the award on or before the termination date of the award.

D. Performance Bond

The Commission does not require a Performance Bond if the applicant certifies that the percentage of the total project costs it is providing comes from its capital budget and is not obtained from outside financing. In its application, Race certified that the percentage of the total project costs it is providing will come from its existing capital budget. Therefore, a performance bond is not required for this project.

E. Price Commitment Period

The minimum required price commitment period for broadband service to all households within the project area is two years. Race guarantees the price of service offered in the project area for two years.

F. Project Audit

The Commission has the right to conduct any necessary audit, verification, and discovery during project implementation and construction to ensure that CASF funds are spent in accordance with Commission approval.

The recipient's invoices will be subject to a financial audit by the Commission at any time within three years of completion of the work.

G. Providing Voice Service

If the grantee is providing voice service in the project area, it must meet the Federal Communications Commission (FCC) standards for E-911 service and provide battery backup power.

H. Reporting

Grantees must submit quarterly progress reports on the status of the project irrespective of whether grantees request reimbursement or payment. Before full payment of the project, the CASF recipient must submit a project completion report. Progress reports shall use both the schedule for deployment; major construction milestones and costs submitted in the proposals, indicate the actual date of completion of each task/milestone as well as problems and issues encountered, and the actions taken to resolve these problems and issues during project implementation and construction; and identify future risks to the project. Recipients shall also include test results on the download speed and upload speed per CBG and per ZIP Code basis in the final completion report. Recipients must certify that each progress report is true and correct under penalty of perjury.

I. Submission of Form 477

The FCC currently requires broadband providers to submit Form 477 biannually and include speed data. While there is an imperfect match between the current reporting areas for the Form 477 and CASF, Form 477 information will be useful in documenting CASF deployment for the specific new service area(s) of the carrier. CASF recipients shall submit a copy of their Form 477 data directly to the Commission, under General Order 66-C, when they submit this data to the FCC for a five year period after completion of the project.²⁶

VI. Payments to CASF Recipients

Submission of invoices from and payments to Race shall be made at 25 percent completion intervals, in accordance with Section XI of Appendix 1 of D.12-02-015 and according to the guidelines and supporting documentation required in D.12-02-015.

Payment to Race shall follow the process adopted for funds created under P. U. Code §270. Payments are generally processed by the Commission, including CD and Administrative Services review time, within 20-25 business days. The State Controller's Office (SCO) requires an additional 14- 21 days to issue payment from the day that requests are received by SCO from Administrative Services.

²⁶ *Approval of the California Advanced Services Fund (CASF) Application Requirements and Scoring Criteria for Awarding CASF Funds (2008) Cal. P.U.C. Res. No. T-17143 at 4.*

VII. Comments on Draft Resolution

In compliance with P.U. Code § 311(g), a notice letter was emailed on October 30, 2015, informing all parties on the CASF Distribution List of the availability of the draft of this Resolution for public comments at the Commission's website <http://www.cpuc.ca.gov/PUC/documents>. This letter also informed parties that the final conformed Resolution adopted by the Commission will be posted and will be available at this same website.

CD received comments from Fred Stump, Mono County District Two Supervisor on December 26, 2015, requesting that the Commission place on the agenda "the original version of Resolution T-17477,²⁷ which includes the community of Lee Vining, California."²⁸ The letter stated that the community of Lee Vining is important to the area because it is located in the eastern entrance to Yosemite National Park. Moreover, Supervisor Stump explained that Lee Vining supports the offices of governmental agencies and nonprofit organizations involved in the active management of regional resources and the data needs of these entities cannot be met by relying on mobile provider. Supervisor Stump's letter also alluded to the Federal Communications Commission's (FCC) recent conclusion that mobile can be a full substitute for fixed wireline service. The letter notes that if FCC standards are revised upward, "there is no guarantee that a mobile network would follow whereas a fixed system utilizing the most state of the art backbone available in the United States would contain the capacity to comply with new standards."²⁹

CD also received one late-filed comment from Chris I. Lizza, CEO of Mono Markets Management. Lizza admits that Internet services are currently provided by a local company, but argues that the service slows down due to high demand by visitors' usage of ATMs for merchant transactions. The letter contends that the local Internet service in Lee Vining is inadequate to meet the demands of a modern business and requests that the Commission reconsider its decision and include the Lee Vining community.

These communications have been taken into consideration in revising this Resolution.

²⁷ On October 30, 2015, CD published the draft of original Resolution T-17477 which included Lee Vining, but on December 11, 2015, CD published the draft of this revised Resolution which excludes Lee Vining.

²⁸ Letter dated December 26, 2015, sent to CD Director, Ryan Dulin.

²⁹ Ibid.

VIII. Findings

1. Race filed an application for CASF funding for its Gigafy Mono Project on December 29, 2014. The Gigafy Mono Project is intended to extend high-speed Internet service over a 6.33 square mile area through the expansion of fiber-to-the-premises (FTTP) Last Mile network deployment into the remote area of designated rural exchanges in Mono County. This expansion will bring high speed Internet access to 541 households in the area covering South Chalfant, Benton, Benton Hot Springs, Swall Meadows, Lee Vining, and Mono City in Mono County. The CBGs impacted by the project are: 60510001011, 60510001013, and 60510001024.
2. CD posted the map, CBGs and zip codes lists by county for the Gigafy Mono Project on the Commission's CASF website page under "Pending New CASF Applications to Offer Broadband as of January 5, 2015." Communications Division did not receive any challenges.
3. CD reviewed and analyzed data submitted for the Race Gigafy Mono Project CASF grant application to determine the project's eligibility for CASF funding. This data includes, but is not limited to: proof of a CPCN from the Commission; descriptions of current and proposed broadband infrastructure; geographic information system (GIS) formatted shapefiles mapping the subject areas; assertion that the area is underserved; number of potential subscriber households and average incomes; project construction schedule; project budget; proposed pricing and commitment period for new subscribers; and financial viability of the applicant.
4. CD reviewed the submitted shapefiles which mapped the proposed broadband deployment using United States 2010, Census data and the California Broadband Availability Map, which contains broadband availability data as of June 30, 2014. The map indicated mobile availability at served speeds in one discrete portion of the project area. CD staff asked Race to perform mobile tests to validate Verizon Wireless' advertised speed in the project area and the tests showed Mono City as underserved and Lee Vining as served by mobile wireless.
5. Community letters represent that existing broadband Internet services are not sufficient to meet the needs of the communities.
6. Despite the availability of mobile broadband service above "served" speeds in Lee Vining, it is reasonable for an exception to the CASF program rules be provided in

this case because; (i) facilities would transit Lee Vining from its point of presence to Mono City regardless of whether Lee Vining households are included in the last mile project funding; (ii) the incremental cost to serve households in Lee Vining is reasonable; (iii) removal of Lee Vining increases total project average cost per household; (iv) no third party has challenged this project; and (v) the existing mobile network service quality in the Mono County area is insufficient to support critical broadband applications.

7. Based on its review, CD determined that the project qualifies for funding under D.12-02-015 and recommends Commission approval of CASF funding for Race Gigafy Mono Project.
8. Race is not required to post a performance bond because 40% of the total project cost will be financed through Race's existing capital budget.
9. Race is required to comply with all guidelines, requirements, and conditions associated with the granting of CASF funds as specified in D.12-02-015 and must submit the FCC Form 477, as specified in Resolution T-17143.
10. This project is categorically exempt from CEQA review pursuant to CEQA Guidelines Sections 15301 –Existing Facilities and 15304 – Minor Alterations to Land.
11. Race included funds for Contribution in Aid of Construction (CIAC) in its CASF grant request to pay for federal and/or state income taxes that may apply on the CASF grant award. The applicant will not receive the CIAC, if the CASF grant is not taxed.
12. The Commission in Resolution T-17350, dated August 23, 2012, awarded Verizon California \$286,398 CASF funding for the Crowley Lake and Swall Meadows Project in the Mono County which would have provided broadband speed of 3 Mbps down and 1 Mbps up. Pursuant to CD staff's grant reduction enforcement letter, the grant amount expired before Verizon provided service, and Verizon has not sought reimbursement. Rescinding the grant of funds as authorized in Resolution T-175350 for the Verizon Crowley Lake and Swall Meadows Project would release these monies for other projects.

13. A notice letter was emailed on October 30, 2015, informing all parties in the CASF distribution list of the availability of the draft of this Resolution for public comments at the Commission's website <http://www.cpuc.ca.gov/documents>. This letter also informed parties that the final conformed Resolution adopted by the Commission will be posted and available at this same website. CD did not receive any comments or reply comments on this resolution.
14. The Commission finds CD's recommendation to fund the Gigafy Mono Project of Race as summarized in Appendix A to be reasonable and consistent with Commission orders and therefore adopts such recommendation.

THEREFORE, IT IS ORDERED that:

1. The Commission shall award from the CASF to Race up to \$7,633,459 for the Race Gigafy Mono underserved area broadband project as described herein and summarized in Appendix A of this Resolution.
2. The program fund payment of up to \$7,633,459 for this underserved project shall be paid out of the CASF fund in accordance with the guidelines adopted in D.12-02-015 and in accordance with the compliance of avoidance measures described in this Resolution. This total CASF grant amount will be reduced by up to \$1,202,575 of Contribution in Aid to Construction if the CASF grant award is not subject to federal and/or state income taxes.
3. The Commission rescinds the grant of funds as authorized in Resolution T-17350, dated August 23, 2012. The amount of \$286,398.45 allocated pursuant to that resolution is no longer obligated.
4. Payments to the CASF recipient shall be in accordance with Section XI of Appendix 1 of D.12-02-015 and in accordance with the process defined in the "Payments to CASF Recipients" section of this Resolution.

The CASF fund recipient, Race, shall comply with all guidelines, requirements and conditions associated with the CASF funds award as specified in D.12-02-015 and must submit the FCC Form 477, as specified in Resolution T-17143. This Resolution is effective today.

I hereby certify that this Resolution was adopted by the Public Utilities Commission at its regular meeting on January 28, 2016. The following Commissioners approved it:

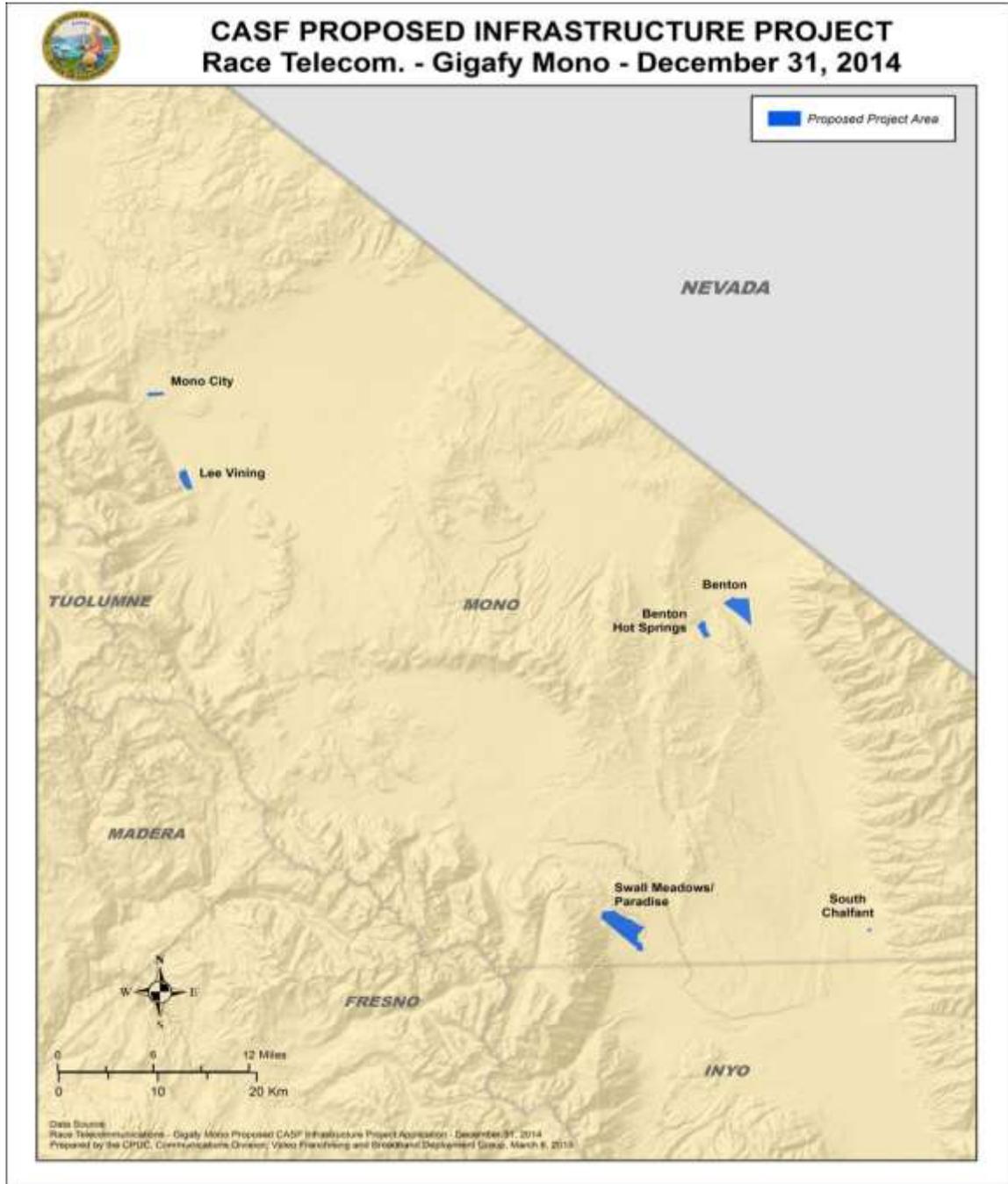
TIMOTHY J. SULLIVAN
Executive Director

APPENDIX

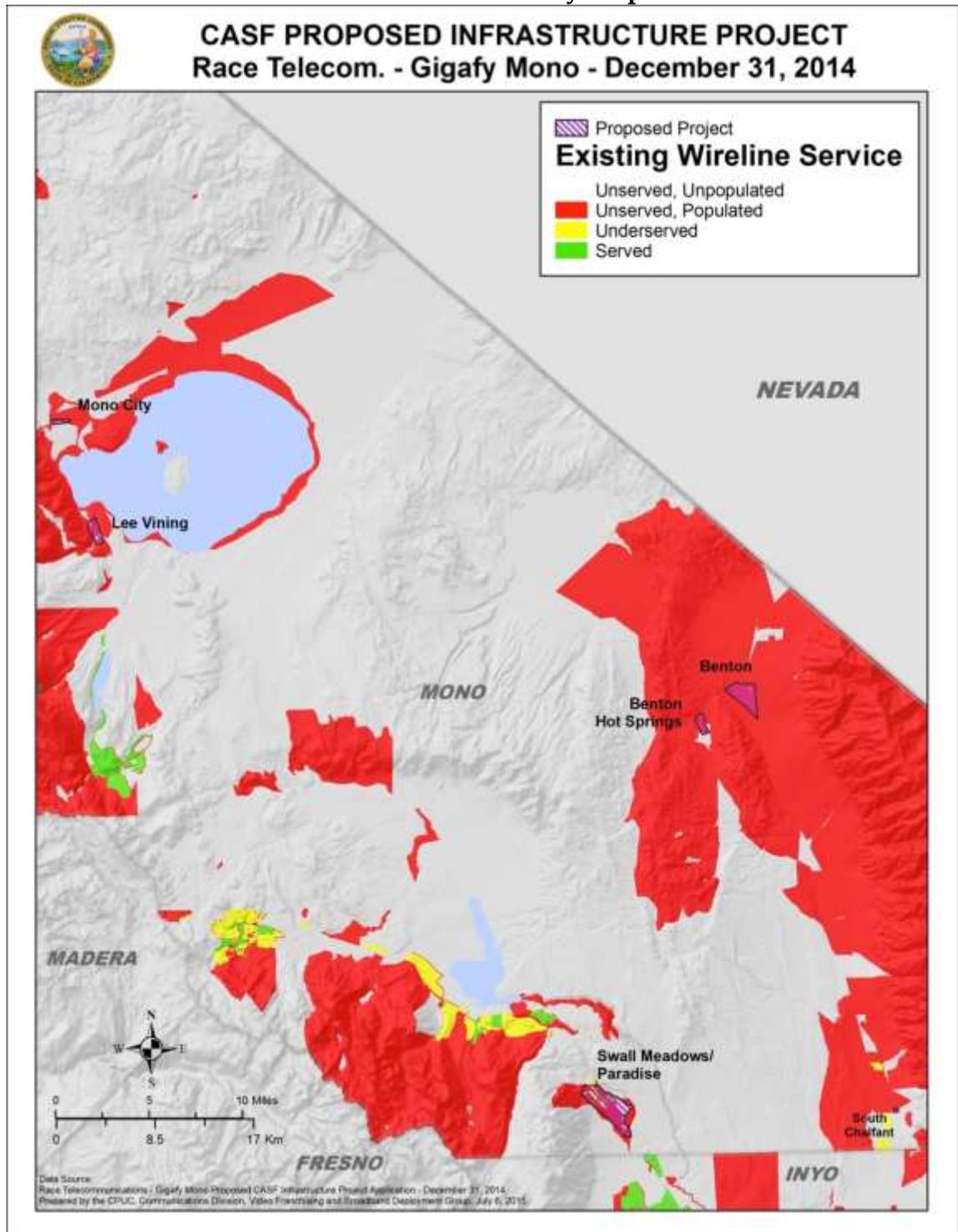
APPENDIX A
Resolution T- 17477
Race Telecommunication, Inc., Gigafy Mono Project
Key Information

Project Name	Race Telecommunication, Inc., Gigafy Mono Project	
Project Plan	To deploy fiber-to-the-premises (FTTP) Last Mile network to serve 100% of the homes in a defined service area that includes South Chalfant, Benton, Benton Hot Springs, Swall Meadows, Lee Vining, and Mono City, California. Fiber based Internet speeds will offer packages including 1Gbps down and 1Gbps up.	
Project Size (in square miles)	6.33	
Download / upload speed (in Mbps)	1Gbps/1Gbps	
Location	South Chalfant, Benton, Benton Hot Springs , Swall Meadows, Lee Vining, and Mono City	
Community Name	Mono County	
CBGs / Household Income/Zip Codes	60510001011 - 93512	\$47,083
	60510001013 - 93514	\$96,662
	60510001011 - 93514	\$47,083
	60510001024 - 93541	\$43,359
Estimated Potential Subscriber Size	541 Households	
Pricing Plan	Residential	
	Entry Level Speed 25 Mbps Down and 25 Mbps Up	\$25
	Mid-Level Speed 100 Mbps Down and 100 Mbps Up	\$65
	Other Optional Tier Speed 250 Mbps Down and 250 Mbps Up	\$85
	Max Level Speed 1Gbps Down and 1Gbps Up	\$100
	Business	
Entry Level Speed 25 Mbps Down and 25 Mbps Up	\$60	
Max Level Speed 1Gbps Down and 1Gbps Up	\$200	
Deployment Schedule (from Commission approval date)	22 months	
Cost Per Household	\$11,887	
Proposed Project Budget	\$11,920,715	
Amount of CASF Funds Requested (60% without CIAC)	\$ 6,430,884	
Internally funded (40%)	\$4,287,256	
CIAC (18.7% of CASF Funds Requested)	\$1,202,575 (intended for federal and/or state income taxes that may apply on the CASF grant award; will not be disbursed if grant is not taxed)	
Total Amount of CASF Award (includes CIAC)	\$7,633,459	

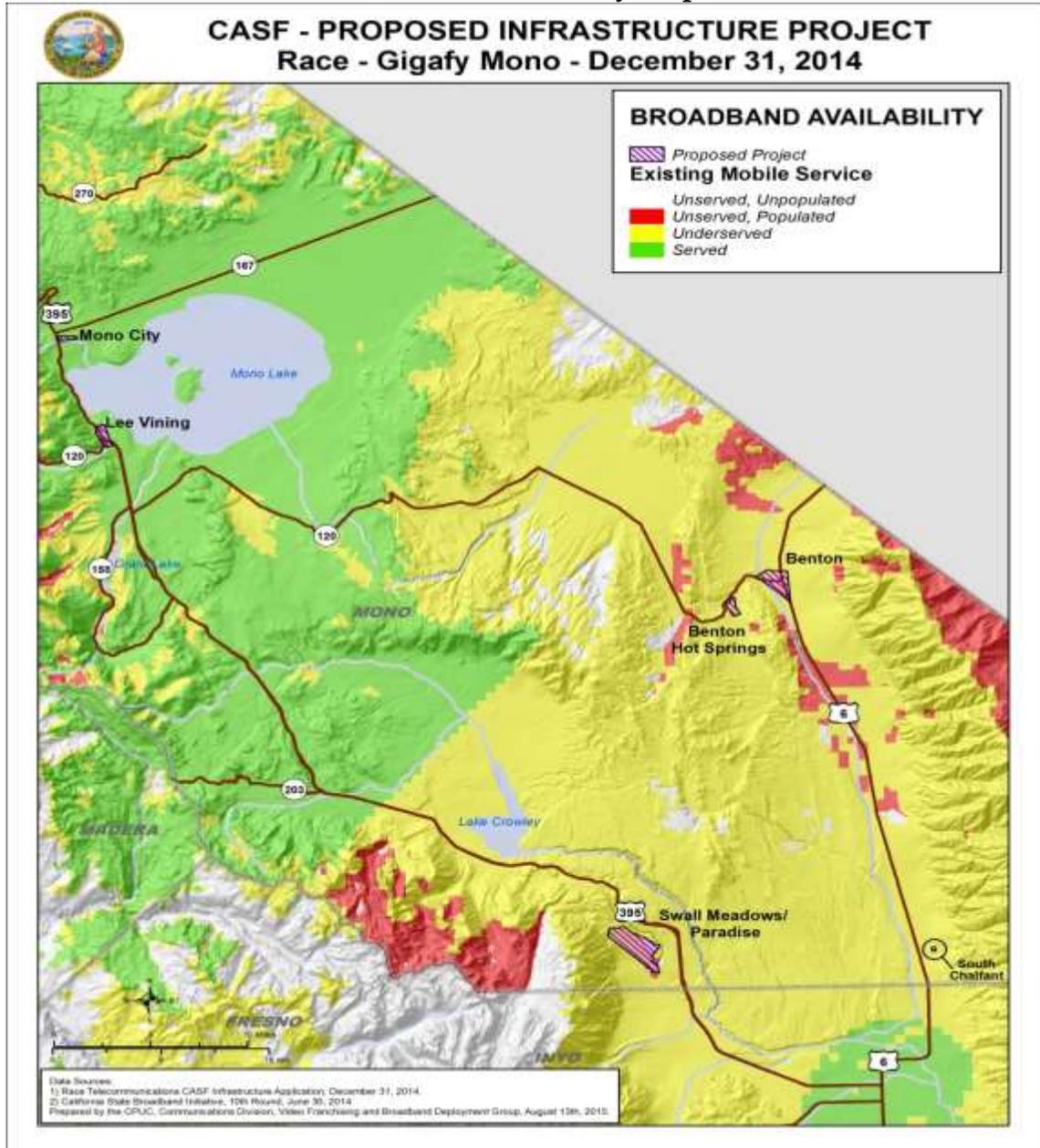
APPENDIX A
Resolution T-17477
Race Telecommunications Inc., Gigafy Mono Project Regional Map



APPENDIX A
Resolution T-17477
Race Telecommunications Inc., Gigafy Mono Project
Wireline Availability Map



APPENDIX A
Resolution T-17477
Race Telecommunications Inc., Gigafy Mono Project
Wireless Availability Map



APPENDIX A
Resolution T-17477
Race Telecommunications Inc., Gigafy Mono Project
Second Mile Connection to Swall Meadows



APPENDIX A
Resolution T- 17477
Race Telecommunications Inc., Gigafy Mono Project Shapefiles
Mobile Testing Results



APPENDIX A
Resolution T- 17477
Race Telecommunications Inc., Gigafy Mono Project

Speed Test Summary from Gigafy Mono, Race Telecommunications, Inc.

Verizon Wireless (Mbps Down / Mbps Up)

Mono City

CPUC Interpolated Test Results*	Race Project Area Test Results**	No. of Tests	Test 1	Test 2	Test 3
Served	Underserved	3	11.543 / 2.051	10.626 / 0.448	1.505 / 0.957

Lee Vining

CPUC Interpolated Test Results*	Race Project Area Test Results**	No. of Tests	Test 1	Test 2
Served	Served	2	23.664 / 4,372	23.067 / 7.858

*CPUC Field Test Results are based on test points located outside of the project area and are therefore estimates of availability.

**Race Field Test Results (March 2015)

END OF APPENDIX A