



**Request for Qualifications
for
Broadband Consultants
for a
Technical and Financial Feasibility Study
for High-Speed, High Bandwidth Broadband Network
(and additional related services)**

Issued on
September 25, 2020

<http://www.collegeofthedesert.edu/fs/fs/purchasing/Pages/rfp.aspx>

<http://codbond.maasco.com/rfps-and-rfq/>

Issued by
John O. White, Executive Director
Bond Program and Facilities Planning

DESERT COMMUNITY COLLEGE DISTRICT
43500 Monterey Avenue
Palm Desert, CA 92260
760.346.8041 | www.collegeofthedesert.edu

Responses Due
October 16, 2020, 4:00 pm PT
(See **REQUEST FOR QUALIFICATIONS PROCESS – RFQ Schedule** and **Response Submittal** sections)

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INTRODUCTION

The Desert Community College District (District) invites the submission of Statements of Qualifications and related documents from interested qualified information technology (IT) consultants to provide broadband technology consulting services related to developing the necessary network infrastructure for a very high-speed, high bandwidth broadband network for the College of the Desert – Palm Springs Development Project (Palm Springs Project) and other facilities of the District (the Broadband Infrastructure).

The District anticipates selecting one team to serve as the primary broadband feasibility consultant (Primary Consultant) to advise the District regarding the potential development of a high-speed broadband network capable of supporting Internet 2 for the Palm Springs Project and possibly for the surrounding region. In addition, the District may choose to retain additional qualified respondents as part of a pool of consultants (On-call Consultants) to assist with ancillary studies and/or subsequent phases of work, from analysis and procurement support to system implementation. The District expects to issue a contract to the Primary Consultant to provide services, as outlined below, for the purpose of assessing the business case for and advising the District on the feasibility of developing the necessary network infrastructure for a very high-speed, high bandwidth broadband network.

ENGAGEMENT OVERVIEW

The College seeks to execute a very high-speed, high bandwidth broadband network to develop a skilled workforce with the knowledge and 21st century technological skills needed to lead the information and creative economy. Workers from information technology and related sectors require job and professional development training to enhance their competencies, update their professional licenses, and learn skills to pursue new or advanced career opportunities. Businesses require high-speed broadband capacity along with digitally-skilled and knowledgeable employees who have the ability to think on their feet, communicate, collaborate, and quickly take advantage of evolving customer demands, technologies, and opportunities. These needs will only continue to grow in a more digitally-connected world, and College of the Desert has an increasingly integral role to play, broadening impact by serving as digital hubs for broadband access, digital services, and related training for the region.

The District is seeking firms with demonstrated expertise in advising public entities with regard to broadband and other complex technology assessments, procurements, and implementations. As part of the Palm Springs Development Project (described in detail below), the Broadband Infrastructure will help to create educational and training opportunities for high-tech jobs, careers, and entrepreneurship. In the initial phase of work, the District anticipates that the Primary Consultant will assist the District with a feasibility study to help the District determine how to proceed in developing the infrastructure necessary to support Internet 2 capability, including internet speeds up to 100 Gbps and beyond. After completing the first phase, the District may request that the Consultant perform additional consulting services, from additional analysis and procurement support to system implementation.

Vision

The “vision” for the College of the Desert’s district-wide very high-speed, high bandwidth broadband service is to prepare students and learners in the growing information technology fields, while, at the same time joining an emerging community IT infrastructure network in the Coachella Valley. COD would provide opportunities for students to gain the skills and knowledge to join a high-performance workforce. By having access to 100 Gbps service and access to Internet 2 and other platforms, COD would be positioned to prepare students to be competitive for employment.

The expectation is that students completing education at COD would be prepared for employment with noteworthy employers and projects, such as (e.g. Amazon web services, Microsoft cloud services) qualified to work on advanced information technology applications. COD students would be positioned to begin their careers in high-tech and information centered fields, such as:

- Cyber Security
- Network Engineering (maintenance and operations of Internet 2, etc.)
- Programming/ Software Developer
- Database Management/Administration
- Computer Systems Analysis/Large Scale Analytics
- Artificial Intelligence
- Digital Content
- Cloud Computing
- Smart Buildings - Technicians

College of the Desert Overview

College of the Desert is one of 117 community colleges in California. The governing body of College of the Desert is the Desert Community College District, which has five elected members on its Board of Trustees and a Student Trustee elected by the Student Body. The college was founded in 1958 and opened its doors for the first time in September 1962.

As a two-year college, the College offers transfer students an affordable option for starting college and transferring to a four-year institution. College of the Desert is the number one source of transfer students to California State University at San Bernardino. College of the Desert also offers several popular vocational and technical programs, including Nursing and Health Sciences, Digital Design and Production, Turf Grass Management & Ornamental Horticulture, Advanced Transportation Technologies, Culinary Arts, and a full range of Administration of Justice courses at the Public Safety Academy training facility.

The District extends from the San Gorgonio Pass to the Salton Sea in the eastern portion of Riverside County and is about 4,000 square miles of mostly low-density population.

The largest cities are: Cathedral City, Palm Springs, Palm Desert, Rancho Mirage, Indian Wells, Indio and Coachella. College of the Desert provides excellent educational programs in basic skills, career and technical education, certificate, transfer preparation, associate degrees, noncredit and distance education, which are continuously evaluated and improved. College of the Desert programs and services contribute to the success, learning and achievement of its diverse students and the vitality of the region and beyond. College of the Desert will be a center of collaborations and innovations for educational enrichment, economic development and quality of life in the Coachella Valley and surrounding communities.

College of the Desert Data	July 2020
Enrollment	16,100
In State Residents	97%
Part Time Status	62%
Students Living on Campus	0
Average Age of Student at COD	26
% Below 25 years old	68%
% female	56%
Student Faculty Ratio	24/1
% Students Receiving Financial Aid	72%
Annual Operating Budget \$	\$100,000,000
Annual Capital Budget \$	\$50,000,000
First Generation Students	73%
PELL Students	30%
Land Area	185 acres/ 600,000 gs
District	4,000 sq. mi.
Degrees	AA / AS / Certs; Credit and Non-Credit
<u>Ethnicity</u>	<u>(%) (rounded)</u>
Hispanic (Hispanic Serving Institution)	75%
White	14%
Asian/PI	4%
African American	3%
American Indian/Alaskan Native	less than 1%
Multi-Ethnic	2%
Other/Unreported	2%

About the Palm Desert Campus:

- The Palm Desert Campus occupies approximately 148 acres at the northeast corner of Fred Waring Drive and Monterey Avenue. The east edge of the campus is bounded by San Pablo Avenue. Magnesia Falls Avenue forms the north edge. Monterey Avenue and San Pablo Avenue extend one mile south to Highway 111 and in the direction of the City's primary retail / commercial district.
- Campus neighborhoods or precincts are established for: career and technical education; Athletics and Kinesiology; Science, Technology and Math (STEM); Student Services and Student Life; the historic campus core that includes the Hilb Library, Arts, Social Sciences, Communications and other academic programs; Maintenance and Operations, and a mixed-use zone on the southern edge of the campus.
- There are approximately 60 buildings housed in 525,000 gross square feet (350,000 assignable square feet).
- ***Current broadband: 10 Gbps service (CENIC)***

About the Indio Center:

- Located in downtown Indio, across from the Civic Center with frontage on Oasis Street.
- The Indio Center provides general education and instruction for students from the eastern Coachella Valley and surrounding areas and has grown rapidly since property was acquired and the first set of facilities were completed in 2014.
- An existing 40,000 gross square foot (gsf) instruction and academic building serving approximately 2,500 students is already at capacity.
- An Indio Expansion project (50,000 gsf) and partial renovation of the original instructional facility (10,000 gsf) is in the construction document phase. Additionally, a new child development center is in its design phase.
- The new and renovated facilities will be able to serve a combined total of about 5,000 students and doubles the space available today. The new construction and renovations are planned for completion in 2022-23. The several-acre site includes approximately 150 spaces that will increase modestly with new construction.
- ***Current broadband: 1 Gbps service with planned expansion to 10 Gbps service (CENIC)***

About the Palm Springs Development Project:

- The Project will be located on the Northwest corner of the intersection of S. Farrell Drive and E. Baristo Rd. in Palm Springs, CA. The site encompasses approximately 27 acres and was formerly occupied by a commercial mall which has been demolished.
- Consistent with its Facilities Master Plan (September 2019), the District is engaged in the capital development of the Palm Springs Development Project. The District plans to build new facilities that will provide a regional workforce innovation center that will educate and train students for 21st century jobs and careers.
- The Project will provide a collaborative, living and learning environment featuring a variety of teaching and learning opportunities.

- Innovative spaces are planned to include open and flexible environments (such as experiential labs, student commons, and special event space), and a high-tech digital accelerator space that will enhance student success.
- The Project will embody a sustainable campus philosophy that can feature best practice technologies, energy production, energy management and monitoring and stewardship of scarce resources. As a center of innovation and collaboration, the Project will offer continuing and custom education responsive to all ages.
- Collaborations with local, regional and national partners will expand offerings and opportunities for students as well as expand and extend the reach and impact of District programs and services. These industry partnerships will, in part, drive the need for high speed, high volume data infrastructure, allowing innovative, technology-based collaboration across multiple disciplines.
- The development will include major site development and infrastructure, maker spaces, and multiple signature programs: A) Hospitality & Tourism (including Hotel, Restaurant, and Event Space), B) Digital Media and Broadcasting, C) Healthcare (Wellness, Fitness, and Nutrition) and D) Sustainability.
- The Project will make use of Measure CC Bond funding and other resources for special programs, activities, and facilities.
- Completion of the first Phase of on-site improvements for public use is planned for late 2023 with remaining phases of development becoming available subsequently.
- Total buildout is expected to be about 310,000 gsf.
- ***Planned broadband: 10 Gbps service with expansion to 100 Gbps service (CENIC)***

About Other District Sites and Locations:

- Desert Hot Springs (2,700 gsf): the learning site is an outreach facility with space provided for general education learning and offices in modular units.
- Temporary Palm Springs Campus (11,000 gsf) is located at 1300 Barista Road in the City of Palm Springs that provide instruction and services and is the precursor to the future Palm Springs Development Project (PSDP). It encompasses 4.15 acres of leased property. Its temporary facilities (modular units) provide classroom, computer laboratory, office, support space and parking. It is located less than ½ mile from PSDP.
- Mecca/Thermal (19,000 gsf): located centrally between the towns of Mecca and Thermal, the College of the Desert serves the rural, sparsely populated southern portion of the district. On this small site, there are facilities and improvements that provide space for classrooms, offices, support services, and parking. An observatory with a 40-inch telescope is housed on the site.
- Cathedral City – Roadrunner Motors (30,000 gsf planned). In 2019, College of the Desert acquired approximately four acres of property on the south edge of Cathedral City near the Cathedral City Auto Park to construct a replacement facility for the Roadrunner Motors automobile and advanced transportation program and with capacity for other future programs. The Roadrunner facility is currently in design and is scheduled for completion during 2023.

PRIMARY CONSULTANT ROLE AND SCOPE OF WORK

The Primary Consultant will work with the District, its partners, and stakeholders to develop a technical and financial feasibility study for very high-speed, high bandwidth broadband infrastructure to serve the District and possibly other partners in the Coachella Valley. The Primary Consultant's Proposed Scope of Work is summarized below (see also Attachment A).

ACTIVITIES	COMMENTS
Undertake a Technical and Financial Feasibility Study, including a current inventory and gap analysis	See suggested study topics in Appendix A, as a guide. Respondents are encouraged to demonstrate their expertise by suggesting refinements to the suggested topics and describing their suggested approach to completing the scope of work. The final scope of work will be developed in collaboration between District and Consultant.
Coordinate and collaborate with District team	Consultant will be expected to work closely with District team members and other advisors, as needed, to ensure mutual understanding of District priorities and expectations, as well as to ensure smooth functioning of the project and related communications.
Participate in stakeholder meetings, as requested by District	Participate in interviews and/or informational meetings with stakeholders or subject matter experts, as requested by the District; may include presentation of findings upon conclusion of Study
Provide a written report to the District	A draft report shall be provided, with opportunity for review and comment by District, and a final report shall be prepared following completion of review and comment by District
Document study methods, assumptions, inputs and analyses	May be provided as a technical appendix or within study deliverable
Present study findings and recommendations to District leadership	Provide executive summary or presentation appropriate for discussion with District senior leadership. This documentation also may be shared with key regional stakeholders, at discretion of the District.
Provide Additional Services, as requested	The District anticipates that selected Consultant(s) may be asked to provide additional consulting services to assist the District in implementing and refining the Strategic Roadmap created. Such additional services will be on an as requested basis by the District and are anticipated to include such services as owner's representation work on behalf of the District, to assist the District and other advisors with the development of various scopes of work, specifications, evaluation criteria, review of Proposals, and support for District's high-speed broadband infrastructure projects, which may include oversight of implementations performed by third parties.

Service Delivery Schedule

The targeted duration of Primary Consultant’s initial Scope of Work for the feasibility study is 60-90 days from commencement to delivery of a draft deliverable. At the District’s discretion, this period may be extended depending on project needs. The schedule will be determined in collaboration between the District and the selected Consultant. The duration of additional services may be from one (1) to three (3) years, at the discretion of the District, based on its needs, budget, and satisfaction with prior services.

In the event that the District selects additional respondents as On-call Consultants, the duration of the services also may be from one (1) to three (3) years, at the discretion of the District, based on its needs, budget, and satisfaction with prior services, as applicable.

Form of Contract

A draft form of the agreement will be provided at the commencement of negotiations with the selected consultant.

REQUEST FOR QUALIFICATIONS PROCESS

RFQ Schedule

The RFQ is available (in electronic format only) on September 25, 2020. Responses must be received on or before 4:00 PM, Pacific Time (“PT”) on the date shown below, in the form and manner specified in “**Submittal**” and “**RFQ Requirements**,” below. The schedule of important dates is below.

Activity	Schedule*
Release of RFQ	Sept 25
Deadline for questions about RFQ**	October 2
Posting of responses to RFQ questions**	October 7
Deadline for Responses	October 16, 4:00 pm PT
Qualified Respondent Interviews (if needed)	Week of October 26 - 30
Selection of Short List/Pool	Week of November 2 - 6

* RFQ Schedule is subject to change, with written notice posted to the District website at <http://www.collegeofthedesert.edu/fs/fs/purchasing/Pages/rfp.aspx>; and <http://codbond.maasco.com/rfps-and-rfgs/>.

** The District reserves the right, but is not obligated, to provide an additional period for clarification questions following release of its responses.

Questions

Questions must be submitted via email to jowhite@collegeofthedesert.edu at any time prior to the deadline above; earlier submittal is encouraged. Questions submitted by potential respondents will only be viewable by the District. A summary of question topics of a broadly applicable nature and District responses will be posted by the District on the site as soon as practical after receipt of questions, and not later than the date shown above for questions received by the stated deadline. **It is the responsibility of the respondents to periodically check the website for any update to the procurement process or content.**

Response Submittal

Statements of Qualifications will be due to the District via electronic submission per the schedule above. Responses must be submitted by email to jowhite@collegeofthedesert.edu. Respondents must submit all SOQs in a single, zipped file specifying the firm's name (not to exceed 10 MB). **It is the responsibility of Respondents to ensure their ability to submit a response in this manner on a timely basis.** Respondents are encouraged to submit a response well in advance of the 4:00 pm PT deadline. **At its sole discretion**, the District reserves the right to waive minor irregularities or allow for additional time to address technical difficulties but is under no obligation to do so.

The District further reserves the right, at its sole discretion, to accept or reject any and all responses and qualifications received as a result of this RFQ and to waive any informalities or irregularities in any response received. All costs associated with any response to the RFQ are the sole responsibility of the Respondent.

Experience Requirements

The Respondent's primary staff proposed to provide the requested services will be required to demonstrate knowledge and experience with comparable assessments for large-scale technology infrastructure development for public entities. The ideal consultant team will have a sufficient depth of resources with appropriate levels of experience to accomplish the scope of work, including creation and submission of all deliverables, within a limited timeframe.

Critical areas of experience include:

- Ten (10) or more years of experience with broadband and other complex technology projects of similar size and scope
- Familiarity with public contracts, public procurement and approval processes
- Experience collaborating with subject matter experts, District administrators, public agencies and other stakeholders
- Familiarity with all applicable codes and regulations relevant to design, construction, and implementation of large information technology infrastructure
- Ability to recognize and assess local and regional factors impacting information technology infrastructure development

- Experience with developing and/or implementing frameworks for network security, resiliency and sustainability
- Ability to develop and articulate project performance criteria and establish clear goals, strategies, timelines, milestones and metrics applicable to the scope of work and to future District strategies related to the future high-speed broadband infrastructure.

Evaluation Process

Upon receipt, the District Screening Committee will conduct an initial review of the Statements of Qualifications for completeness and responsiveness. To satisfy this initial review, Responses shall clearly demonstrate satisfaction of the Experience Requirements and should address all elements requested below. In addition, the Responses must contain sufficient detail to enable the District to determine the merits of the firm or team.

The Screening Committee will provide the results of its reviews to the District's Selection Committee. The Selection Committee may schedule virtual interviews with a select number of responding firms (but is under no obligation to do so).

The District will apply the following evaluation criteria in making its determinations:

1. Quality of Respondent's applicable qualifications, experience and references
2. Qualifications and experience of assigned Key Personnel, including direct experience playing comparable roles with successful projects of similar scope and scale, and other relevant experience and information
3. Respondent's approach, including demonstrated understanding of the District's needs
4. Respondent's responses to required disclosures

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STATEMENT OF QUALIFICATIONS (SOQ) REQUIREMENTS

Letter of Introduction. A short Letter of Introduction on company letterhead should introduce the team and identify the person or persons who will be responsible in an oversight capacity for the work and identify the person or persons who will be responsible for specific roles in the scope of work. The Letter also should summarize your firm's familiarity with the type of consulting services required (preferably referencing relevant experience of team members). The Letter also shall include the name, address, email address and phone number of the authorized team representative to be contacted in response to the SOQ. The letter should not exceed two pages.

Table of Contents. Provide a clear listing of the elements of the SOQ and their order / placement in the document.

Required Information. *(Please limit your SOQ submittal to 20 pages, not including the letter of introduction, table of contents, dividers and permitted appendices listed in the RFQ.)*

- 1. Firm Information.** For each company on the team, provide the following:
 - a. Company name (both legal name and business name(s) commonly used)
 - b. Legal structure, state of incorporation (as applicable), and company or corporation number
 - c. Company headquarters office address, phone number(s), local office address and phone numbers, and website address
 - d. Number of years in business (under current or prior names, with explanations, as needed)
 - e. Full name and contact information for the primary company representative for the Project
 - f. Company's role(s) on the team and relevant service philosophy and processes
 - g. Capacity and capability of the firm, including relevant available services and the ability to manage a feasibility study of comparable scope, complexity, and duration.
 - h. Information regarding the firm's certification(s) as a small, disadvantaged, minority-owned, or disabled veteran business enterprise, or other similar category of business enterprise. (Copies of certifications are not required at this time.)

- 2. Project Team.** Please submit the following covering all key team members:
 - a. Organizational chart with explanation of the project management processes and responsible parties
 - b. Names and positions of key team members, proposed roles, and summaries of relevant experience (Team Resumes should be provided as Appendix A.)

- c. Examples of team members' experience in analyzing and planning similar technology development projects, particularly for public entities. Provide at least three (3) examples, making clear which team members participated in the examples. At Respondents' option, samples of prior work may be provided in Appendix C. Links to such prior work are preferred.

Note that the District expects the proposed team members to be employed for the duration of the work. Substitutions will not be permitted without District consent.

- 3. **Approach.** Discuss methods to be employed in undertaking the scope of work and describe how these methods will ensure the success of the work. Reference the Scope of Work in Attachment A and specifically address the firm's approach to completing the following elements **in the 60-90 day timeframe desired by the District:**
 - a. Preparing comprehensive technical and financial feasibility studies for IT infrastructure projects, particularly high-speed broadband infrastructure
 - b. Identifying and evaluating obstacles and risks and recommending options for management and mitigation
 - c. Evaluating costs, including capital and operating and maintenance costs
 - d. Evaluating fiscal and economic impacts and other benefits of proposed IT infrastructure projects
 - e. Providing cost-benefit analysis of proposed IT infrastructure projects
 - f. Providing other services relevant to the District's planned broadband infrastructure initiatives (specify any additional recommended activities or scope of work)
 - g. Working as an integrated project team with the District and other parties, including collaboration with other professionals, consultants, and stakeholders
 - h. Presenting interim/draft documents to the District and collection and implementation of District comments and responses. This includes developing and ensuring quality of deliverables and documents, both hardcopy and digital
 - i. Managing the scope of work to provide on-time, on-budget delivery
- 4. **References.** Provide at least five (5) references from projects of similar nature within the last five (5) years. At least three (3) of these references should be from Public Agencies that can attest to the quality and responsiveness of your firm and its services. Include the following:
 - a. Name, Organization, Title, Email Address, and Phone Number of references
 - b. Project Description and Status of Project
- 5. **Litigation, Claims, Conflicts and Insurance.** Provide a statement that outlines all items listed below as relates to your firm:
 - a. Litigation filed either by an owner or an owner's consultant or contractor which names the firm, firm's employees, direct consultants or consultant's employees as

- defendants of any tier. State the nature of the complaint, the beginning and end date, or anticipated end date of each lawsuit, case number of proceeding and the judgement or resolution or anticipated judgement or resolution
- b. Termination for default or cause during firm's existence
 - c. Information concerning any convictions for filing false claims
 - d. Bankruptcy and the date the petition was filed and the county in which the petition was filed, if applicable
 - e. Identify any other names or businesses that the firm has used in the past and the reason that the name or business is no longer being used
 - f. Any recent, current, or anticipated obligations that relate in any way to similar work, the Project, or the District that may have a potential to conflict with the firm's ability to provide the services described herein
 - g. Direct or indirect business, financial, or any other connection with any official, employee, or consultant of the District

SOQ Appendices

- A. Team Resumes.** Provide profession bios/resumes of proposed project team members, including key sub-consultants. Identify their qualifications relevant to this Project, including, at a minimum, the following:
 - Proposed role
 - Number of years employed by the firm
 - Number of years in comparable roles
 - Experience on similar engagements
 - Education and any professional certifications
 - As applicable, prior experience working with other proposed team members
- B. Fees.** No fee proposal is requested at this time. However, the District requests a schedule of hourly rates for each key team member to be provided in Appendix B.
- C. Sample Prior Work.** At Respondents' option, examples of prior work products may be provided in Appendix C. Links to such prior work is preferred.



DESERT COMMUNITY COLLEGE DISTRICT
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District Attachments

A. Proposed Scope of Work for Primary Consultant

**District Attachment A - Proposed Scope of Work for Primary Consultant
 Technical and Financial Feasibility Study for High-Speed, High Bandwidth Broadband Network**

SUMMARY OF WORK REQUESTED

ACTIVITIES *	COMMENTS
Undertake a Technical and Financial Feasibility Study, including an inventory and gap analysis	See suggested study topics, below, as a guide. Respondents are encouraged to demonstrate their expertise by suggesting refinements to the suggested topics and describing their suggested approach to completing the scope of work. The final scope of work will be developed in collaboration between District and Consultant.
Coordinate and collaborate with District team	Consultant will be expected to work closely with District team members and other advisors, as needed, to ensure mutual understanding of District priorities and expectations, as well as to ensure smooth functioning of the project and related communications.
Participate in stakeholder meetings, as requested by District	Participate in interviews and/or informational meetings with stakeholders or subject matter experts, as requested by the District; may include presentation of findings upon conclusion of Study
Provide a written report to the District	A draft report shall be provided, with opportunity for review and comment by District, and a final report shall be prepared following completion of review and comment by District
Document study methods, assumptions, inputs and	May be provided as a technical appendix or within study deliverable
Present study findings and recommendations to District leadership	Provide executive summary or presentation appropriate for discussion with District senior leadership. This documentation also may be shared with key regional stakeholders, at discretion of the District.
Provide Additional Services, as requested	The District may elect to request additional services (See "Potential Additional Services" below)

** Preliminary, subject to change based on responses received and needs of the District*

TECHNICAL AND FINANCIAL FEASIBILITY STUDY TOPICS *

TOPICS	COMMENTS
Inventory and gap analysis	Provide information about existing broadband network infrastructure in the District's region, and gaps to be addressed to meet District objectives for high-speed broadband infrastructure
Opportunities / Benefits for the District/Regional partners	Provide information to support the District's "business case" for high-speed broadband infrastructure, including short- and long-term programmatic, fiscal and economic impacts, including economic development, academic achievement, workforce training, and related benefits
Obstacles & Risks	Describe key obstacles and risks that would need to be identified and mitigated to proceed with the District's planned high-speed broadband infrastructure initiative, including at each phase of development, from planning and funding through implementation and operation
High-Level Design / Specifications	Provide preliminary design and specifications assumptions for the required infrastructure scope, including fiber and conduit specifications, security requirements, etc.
Cost to the District/Regional partners	Provide estimates for Capital Costs (labor, materials, program, etc.), Equipment, O&M, and other, as relevant to planning, design, implementation and operation of the District's planned high-speed broadband infrastructure
Cost-Benefit Analysis	Provide a cost-benefit analysis for the District's plans for high-speed broadband infrastructure
Institutional Capacity and Capabilities Required	Describe institutional policies or resources the District would need to develop/acquire to support the initiative (e.g., personnel, documentation, contracts, training, management systems or policies, or other)
Precedents and Case Studies	Identify comparable efforts to develop high-speed, high bandwidth broadband infrastructure and identify applicable lessons for District's initiative
Strategic Roadmap	Provide key milestones and suggested schedules for additional steps, including planning, design, funding, procurement, construction, implementation and operation. The Strategic Roadmap should show how the District can achieve the plan, with phases, timelines and potential business models clearly identified.

** Preliminary, subject to change based on responses received and needs of the District*

POTENTIAL TOPICS FOR DETAILED RECOMMENDATIONS *	
TOPICS	COMMENTS
Necessary processes and procedures	Include key steps required and recommended approaches for navigating important internal and external processes
Technology strategies roadmap	Include recommendations for integration of broadband strategies with other technology strategies (e.g., wireless 5G, Cloud, networks, etc.)
Organizational framework	Include recommendations for internal District organizational considerations as well as key interfaces both internally that will be needed with external organizations
Frameworks for security, resiliency and sustainability	Include security, resiliency and sustainability concerns / risks and relevant management and mitigation strategies
Policy considerations	Include policy issues and related recommendations for working with private entities, other public entities, funding providers, etc.
Initial and future investments	Describe potential phasing of investments
Partnerships	Describe potential partnerships for implementation and related economic development and growth that may be catalyzed by the project
Legal landscape	Describe legal considerations
Funding options	Describe funding options for consideration, including criteria and process for securing non-District funding sources; include potential economic capture ("charge-back") strategies
Suggested approach to manage development	Compare alternative approaches, including business models (e.g., CENIC partnership, commercial partnerships, leasing, P3, etc.); may include associated costs for development, expansion, maintenance and operations, and strategies for long-term financial sustainability, solvency, and security
Future applications	Describe opportunities to leverage the new infrastructure for innovation, utilities, smart technologies, connectivity, etc.
Key Performance Indicators	Metrics, key performance indicators and milestones for overall strategy as well plans for implementation.
<i>* Preliminary, subject to change based on responses received and needs of the District</i>	
POTENTIAL ADDITIONAL	
SERVICES *	COMMENTS
Planning, developing, and implementing the strategic "roadmap" for 100Gbps infrastructure	The District anticipates that selected Consultant(s) may be asked to provide additional consulting services to assist the District in implementing and refining the Roadmap created. Such additional services will be on an as requested basis by the District and are anticipated to include such services as owner’s representation work on behalf of the District, to assist the District and other advisors with the development of various scopes of work, specifications, evaluation criteria, review of Proposals, and support for District's high-speed broadband infrastructure projects, which may include oversight of implementations performed by third parties.
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District Attachments

B. Vision Statement

College of the Desert
Vision for High-Speed, High Bandwidth Broadband Infrastructure
The Foundation for Student and Community Success

Overview – High-speed Broadband is an Essential Public Service

More and more the future belongs to those with access to high-speed, high bandwidth broadband. High-speed internet access has become a basic utility, like electricity or water - highlighted only when it's missing. Factors showing the essentiality of high-speed broadband to the College and its community are summarized below.

- The Desert Community College District (College of the Desert or the College) needs a very high-speed, high bandwidth broadband network to develop a skilled workforce with the knowledge and 21st century technological skills needed to lead the information and creative economy.
- Workers from all sectors need continual job and professional development training to enhance their competencies, update their professional licenses, and learn additional skills to pursue new or advanced career opportunities.
- Businesses require high-speed broadband capacity along with digitally-skilled and knowledgeable employees, who have the ability to think on their feet, communicate, collaborate, and quickly take advantage of evolving customer demands, technologies, and opportunities.
- The transition to online learning and mandatory telework during the pandemic illustrates that an in-home broadband connection is vital to the functioning of the 21st century economy, demonstrating that digital connectivity, including telework, is a valuable tool that makes places stronger and more resilient.
- These needs will only continue to grow in a more digitally-connected world. Equity is also a challenge, as less affluent communities remain underserved and therefore face obstacles to educational and economic success.
- The Federal Communications Commission defines high-speed internet as a connection that reaches 25 megabits per second download and three megabits per second upload. However, not all internet and broadband access types are equal. In some areas, one resident may have access to full gigabit internet speeds, while their neighbor a few miles down the road struggles with speeds less than 10 megabit.

Our Region is Underserved

- Beyond the classrooms and parking lots of the College of the Desert campuses, the internet service available to the communities that ring the campus are too often comparatively slow and inadequate. The coronavirus pandemic has illuminated both the need for access as well as the digital divide that exists in the Coachella Valley.

- For some internet users - including Coachella Valley farmers, healthcare providers, creative workers and small business owners - having reliable broadband access is a challenge. Precision agriculture, hospitals, television, hotels and e-sports all depend on reliable and quick data transmission.
- Currently, many of the places in the valley with high concentrations of school age populations are generally underserved and have some of the lowest numbers of households with internet service and/or broadband service, a considerable obstacle for the realities of online learning.
- Even in our more affluent communities the typical maximum transmission speed is 100 Mbps, which is a factor of 10 away from Amazon's site selection requirements from 3 years ago. The good news is that some service has improved but the bad news is that it is still not adequate to serve the needs of our students, growing companies and entrepreneurs, and telecommuters.
- Large corporations that make up the bulk of internet service providers (ISPs), including Spectrum and Frontier, that almost exclusively serve the Coachella Valley, are sometimes reluctant to invest in high-speed internet accessibility in smaller, rural communities like ours. (Note: Google is not offering service in the desert – at least not yet.) The cost of startup infrastructure and equipment is steep and prices for service are high. As a result, it takes a long time to recoup those investments with lower potential customer uptake than can be achieved in markets the ISPs prioritize more highly.

A New Vision for Prosperity

Bringing community members together to develop a cohesive vision that identifies specific priorities and growth potential for internet use is an important first step to addressing the long-term infrastructure challenge. Along with providing internet access, one of the hurdles facing widespread broadband internet use in the Valley is technology and digital literacy.

As part of the College of the Desert campus under development in Palm Springs, a new Center for Digital Arts and Media program is expected to play an important role in educating and training students in digital skills to increase proficiency and better prepare them for the 21st Century workforce. Highlights include:

- The program will expand access to new courses and classes, remote labs, seminars and workshops, expanded certificate courses with access to Internet of Things (IoT) lab and participation in early college capstone courses working directly with industry partners learning practical advanced digital and media skills.
- The program hopes to increase the percentage of community college students gaining employment.
- In addition, the cross-institutional sharing of STEAM and related lectures, labs and industry engagements will better equip students and expand the workforce with the necessary skills to fully compete in the 21st Century economy.
- By investing in broadband access and digital literacy across the Coachella Valley and beyond, COD is preparing the next generation of emerging innovators to be competitive.

The College's Need for Speed

As a leader in higher education, College of the Desert has a vested interest in bringing high-speed broadband infrastructure to serve students as well as the broader community. College of the Desert campuses have an increasingly integral role to play, broadening impact by serving as digital hubs for broadband access, digital services, and related training.

In today's highly competitive environment, broadband is essential to the creation of a strong workforce and a huge driver of innovation. To help ease the current access barriers, College of the Desert and community partners are exploring innovative new ways to provide expandable broadband infrastructure and access to a greater number of Coachella Valley residents.

The College is interested in studying the potential to create a world-class backbone network infrastructure to expand access and connectivity to serve students and the broader community. College of the Desert is exploring expanding its broadband network capacity to plan for its own needs as well as those of the broader community because the future of the community and the college are intimately intertwined. The health of one is codependent on the other.

Current Capacity and Relationships

The College of the Desert's district headquarters and Palm Desert campus has an impressive existing 10 Gbps broadband connection through the Corporation for Education Network Initiatives in California (CENIC) <https://cenic.org/network/connectivity>.

The COD Indio Center has 1 Gbps service with a pending upgrade to 10 Gbps. The new COD site under development in Palm Springs is pursuing a new 10 Gbps connection, expandable to 100 Gbps, through its membership in CENIC. The new Palm Springs connection and its expandability will be critical to COD's planned curriculum and organizational strategy for the new site.

College of the Desert is a member of CENIC. This nonprofit consortium of research universities and others is leading efforts to expand broadband access. CENIC operates the California Research and Education Network (CalREN), a high-capacity network designed to meet the unique requirements of over 20 million users, including the vast majority of K-20 students together with educators, researchers, and others at vital public-serving institutions.

Charter institutions connected to the CENIC backbone include all 10 campuses of the University of California system, all UC medical centers, all 23 campuses of the California State University system, all 114 campuses of the California Community College system and off-site centers, all County Offices of Education in California's K-12 system and via those offices, over 8,000 K-12 schools.

Initial Assessments of Regional Broadband Needs and Capacity

Broadband infrastructure deployment – typically via fiber optic cable – needs comprehensive assessment, and planning is essential to fulfill the College’s dual missions to promote student success and economic vitality in our community. The possibility for building a backbone network for the College and turning it into a Coachella Valley-wide asset would enable a broader blueprint for the future of the greater Palm Springs area.

A critical first step already being undertaken is identifying and understanding existing local assets along with an assessment of opportunities and barriers to advancement. Such analysis will be important to demonstrate the level of demand for next-generation infrastructure in order to properly plan, size and scale installation, operations and capital investment in the future.

In the near term, the College is joining the Coachella Valley Economic Partnership (CVEP) and local partners in efforts to gather and analyze the current infrastructure assets and state of network connectivity in the valley. The near term goal is to better understand the connectivity needs for serving education, workforce and economic development goals, including the potential to develop a shared backbone network.

In planning for and addressing its own infrastructure needs, the College hopes to play an important role in strengthening the local broadband landscape, facilitating, creating and supporting shared solutions to bridge the digital divide for the community as a whole.

Key Next Step – Technical and Financial Feasibility Analyses

The College will be seeking qualifications for IT Consultants to perform technical and financial feasibility analyses to guide the College’s planning and decision-making for high-speed broadband infrastructure for the Palm Springs site. We also will be exploring fiscal and economic impacts, as well as the multi-phase roadmap for planning, funding, design, approval, implementation and operations.

This effort is intended to dovetail with the above-referenced CVEP initial assessments of regional needs and capacity. The work of the IT Consultant is envisioned to commence with an initial 60- to 90-day phase of analysis, and may be followed by increasingly “deeper dives” into the steps needed for COD and our regional and statewide partners to achieve our objectives. The resulting implementation plans are intended to align with completion of design and construction of the College’s Palm Springs development project, as noted above.