CITY OF PALM DESERT
STAFF REPORT

MEETING DATE: April 11, 2024

PREPARED BY: Deborah Glickman, Economic Development Coordinator

REQUEST: ADOPT THE PALM DESERT BROADBAND FEASIBILITY AND MASTER PLAN STUDY AND APPROVE RELATED AMENDMENT

RECOMMENDATION:

1. Adopt the Palm Desert Broadband Feasibility and Master Plan Study.
2. Approve Amendment 10 to Contract No. C41690 with HR Green in the amount of $19,884 for management of Request for Proposals (RFP) and grant processes related to broadband.
3. Direct staff to pursue grant funding for implementation of the adopted Broadband Master Plan.
4. Direct staff to release a Request for Proposals (RFP) to identify any partner agencies to execute the adopted Broadband Master Plan Study and middle-mile network.

BACKGROUND/ANALYSIS:

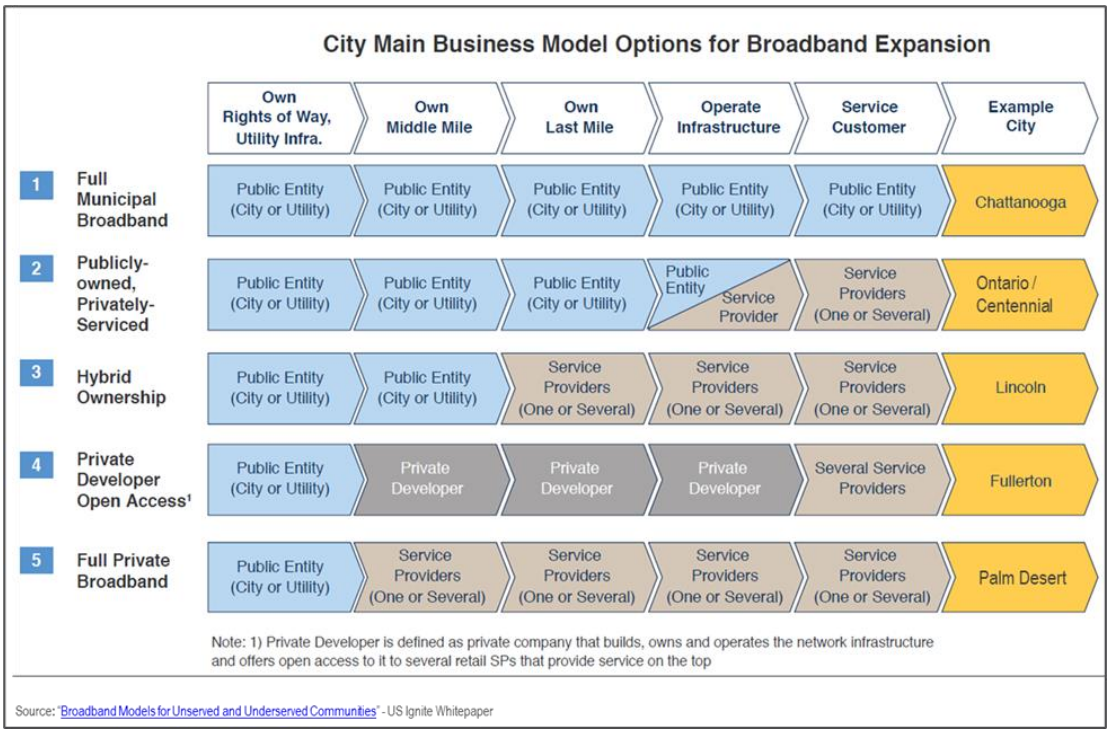
Since 2019, the City Council has identified the development of a Broadband Feasibility and Master Plan Study (Study) as a City Council goal. In September 2022, the City contracted with HR Green, a company specializing in Broadband and Fiber services to accomplish this goal. The parameters of the HR Green Study were to accomplish the following:

- Meet with community partners and existing service providers, conduct a community survey, and consult with the Coachella Valley Association of Governments (CVAG) on their regional efforts.
- Review the City's and other service providers current assets and facilities.
- Develop a preliminary design concept with cost estimates.
- Explore funding options for the implementation of a broadband network.
- Conduct a Request for Expression of Interest (RFEI) to identify potential partnerships to develop the network.
- Develop recommendations for the City's consideration for deployment of the network.

Based on these tasks, HR Green explored various broadband models and network options to achieve the City's vision for expanded broadband service to residents and business.

Broadband Models

As part of the Study, HR Green explored five (5) Broadband models, each with varying levels of City control and participation. The table below identifies the various models:



In the Study, and based on comments and feedback from the January 11, 2024, Study Session, HR Green recommends that the City partner with a broadband company to build a middle-mile network for City use and potentially lease it to internet service providers to bring broadband service to the community. This "Hybrid-Ownership" strategy allows the City to outsource the construction, maintenance, and day-to-day operations of the broadband program instead of having to generate the service in-house. It also allows for a variety of financing options including paying for the broadband all at once, over a period of time, or on terms agreed to by the City and a potential partner. The "Hybrid-Ownership" is beneficial for the following reasons:

- Increases the availability of broadband service throughout the community including the unserved and underserved areas.
- Encourages competition, which could reduce service fees, as multiple providers could lease the City's infrastructure rather than a single source.
- Improve cellular service, as carriers could lease dark fibers from the City to interconnect their cell phone facilities allowing carriers the opportunity to install facilities in areas of the community where they currently do not have or have poor coverage.
- Partnerships can assist the City with federal and state funding opportunities, which will assist in defraying the cost of building the network.

Adoption of the Study is necessary to identify potential partners. It is also important to point out that if the City is unable to establish a partnership with one or more private sector partners to own, design, construct, and manage the last mile connections to residents and businesses, then the City and its anchor institutions that are connected to the City-owned middle-mile network would be the only beneficiaries of the improvements in broadband services created by the

construction of the middle-mile fiber ring network. Also, without a private sector partner, the City would most likely not be able to qualify for many of the current federal and state last-mile broadband grant opportunities.

Based on the "hybrid-ownership" recommendation, an RFEI was released to identify potential broadband partners for the build-out of the City's Study and middle-mile network system. Only one (1) firm responded.

Cost for Build-Out of a Hybrid-Ownership

Utilizing the "Hybrid-Ownership" model, HR Green put together cost estimates to build-out the proposed middle-mile network. The middle-mile network consists of two rings, one that Cost estimates anticipate conduit capable of carrying 288-strands of fiber, which is an industry-standard and at a cost of approximately $12.1M. These costs can be offset by federal and state grants; however, the City's competitiveness for these funds is unknown at this time. Costs may be recouped through leases with carriers.

Category Description	Cost Estimate	Price per foot
Estimated 288ct Material Costs	$697,429	$6.24
Estimated Backbone Installation Cost (no splicing)	$9,803,606	$87.75
Estimated Design Engineering and PMO Labor Cost	$298,298	$2.67
Estimated 288ct Total Backbone Segment w/Splicing Cost	**$12,167,553**	**$108.91**

Middle Mile Network

Through its research, HR Green determined that the most efficient broadband fiber network design consists of two (2) middle-mile rings, one north from Highway 111 and one south from Highway 111. This design was selected to ensure coverage of the full city with a focus on City facilities such as fire stations, City Hall, and the library. Together, the rings will provide a backbone from which last-mile fiber connections can be built to reach the city's residents and businesses.

Funding Opportunities

To fund the future construction and implementation of the middle-mile, the following sources were identified in the Study:

- Bond and Loan Funding
- Broadband Equity Access and Deployment Program (BEAD)
- Broadband Loan Loss Reserve Fund
- California Advanced Services Fund
- California Last-Mile Federal Funding Account
- California Teleconnect Fund

Options

Recently, staff met with Netly/Ubiquity, a private utility provider licensed by the State Public Utilities Commission (PUC), which has built open-source fiber networks in San Diego County. Netly/Ubiquity plans to build an open-source fiber network in the Coachella Valley over the next several years and they would utilize the City's Broadband Master Plan as guidance for the build out of their network. The benefits of the open-source network is that it allows for increased competition between utility providers and choice for businesses and residence.

The Coachella Valley Association of Governments (CVAG) is also working with HR Green on a regional Broadband Strategic Plan that aims to boost regional broadband access in underserved areas through planning, design, and leveraging state infrastructure in Coachella Valley. It will identify needs, options, and challenges, and engage CVAG's member organizations and stakeholders to develop a clear vision and action plan. The intent of the plan is to identify last-mile projects that deliver 100 Mbps symmetrical speeds to benefit residents, institutions, and businesses. CVAG's goal is to complement the work of its member organizations, not to duplicate it. CVAG is still early in the study process and anticipates its completion next year.

Next Steps

HR Green recommends that the City release a formal RFP to identify and select a partner(s) for the potential build-out of the identified middle-mile network. Staff anticipates that the RFP can be released within two (2) months of execution of the proposed changes in the HR Green contract. The RFP will be open for thirty (30) days, after which staff will review responses and interview potential candidates. If a partner is found, an agreement would be brought back to City Council for approval.

HR Green also recommends starting the grant application process to absorb any potential City costs for the project. The timing of grant application deadlines vary. If HR Green is contracted, they will research, write, and oversee the submission of grant applications, and provide support and monitoring of grant awards for six (6) months after.

Legal Review:

This report has been reviewed by the City Attorney's office.

FINANCIAL IMPACT:

The total cost for HR Green to conduct the Broadband Study, inclusive of the RFEI, was $130,000. Staff is requesting an additional amendment in the amount of $19,884.00 to the contract for HR Green to develop and manage the RFP process and to write and submit grant proposals. Funds are available in the available in the Economic Development Professional Services Other Account No. 1104430-4309000.

Separately, implementation costs for the build-out of the middle-mile network are estimated to be $12,167,553. Funds are not currently allocated for the project and may impact the General Fund. Funding opportunities have been identified in the study.

ATTACHMENTS:

1. Broadband Feasibility and Master Plan Study
2. Middle Mile Network Map
3. Change Order 2 for RPF and Grant Applications
4. Amendment No. 10