

Deep East Texas Council of Governments and Economic Development District
Request for Proposals No. 2024-04 Network Operator

Questions and Responses to the RFP

Written Submissions:

1. Will DETCOG allow a buy-out option after the grant obligation period?
 - A. DETCOG is bound by long-term grant obligations to be the definitive owner of the network and will not have the option to allow a buyout. Alternatively, the contractual agreement between DETCOG and the selected Network Operator for their term of use of the network can support as lengthy a term as can be reasonably negotiated between parties.
2. Can we get a shape file of the DETCOG REGIONAL NETWORK?
 - A. All potential bidders that have signed the NDA template in the RFP and returned that signed copy to DETCOG at the “respond@detcog.gov” email address will be provided access to their own data room. In this data room, bidders will have access to this shape file and other information.
3. Is DETCOG covering the lease cost of using the Towers, so we can exclude Tower costs from our response?
 - A. Yes, using grant funding, DETCOG will be responsible for the cost of leasing tower space.
4. Is the Fiber Network currently in place to connect all Fiber connected Towers?
 - A. No, the fiber network construction will be followed by the construction RFP which will subsequently be created in conjunction with DETCOG and the Network Operator after the conclusion of this RFP.
5. Is the Microwave Network currently in place to connect all non-Fiber connected Towers?
 - A. While the towers that DETCOG will lease from currently exist, the procurement of equipment for the towers, as well as any other physical asset to procure will come after the selection of the construction RFP awardee.
6. Should we assume 4 90-degree Base Station Sectors per Tower for 360 deg coverage per Tower?
 - A. Per grant requirements, the tower selection and equipment are required to service areas containing at least 51% LMI households. This means that all households in Census Block Groups servicing at least 51% LMI will be served. Additionally, if wireless equipment needs to serve even one household in the overlap of the Census Block Group LMI criteria, all households in the coverage of that equipment will be eligible to be served. Specifications relating to “4 90-degree Base Station Sectors” are too specific to account for all towers in the network and which direction and at which degree the equipment can provide service.
7. If no to the “4 90-degree Base Station Sectors” question, can you provide household location information in a shape file or KMZ with household counts around each Tower site?
 - A. Household counts, as well as unserved and underserved households, are not required to be reported through this grant, only 51% LMI household estimates in each Census Block

Group geography. That being said, if an overlay showing FCC household locations would support the bidder's decision, DETCOG recommends that the bidder incorporate this overlay in their own file.

8. The proposal provides info on retail monthly pricing to the customer and cost sharing, but how do you want us to provide pricing for the design/installation of the wireless infrastructure? Do you want us to provide a cost for 360 coverage per Tower (e.g., 4 Base Stations w 90-deg antenna), provide a cost per Microwave Link, and a cost per Residence install?
 - A. None of these cost estimates will be necessary from the respondent of the RFP. Pricing of equipment and manufacturer selection will be potential components of the construction RFP and these costs will be covered by DETCOG through grant funding.
9. Is this RFP to award the construction of the Wireless network to the WISP? And then a second award for the construction of the Fiber network?
 - A. This RFP is only to select the Network Operator for the wireless network yet to be constructed. The Network Operator will have no responsibility to construct the network aside from assisting DETCOG in the creation of the construction RFP that will select the contractor responsible for construction. The Network Operator can also elect to assist DETCOG with the selection of grant-eligible equipment to procure.
10. Can the Operator in this RFP utilize its own resources to build out parts of this project, such as the wireless infrastructure? Or at least bid on the build-out RFP when released?
 - A. If the Network Operator selected through this RFP wishes to expand the grant-funded components of the network with their own resources, that can be negotiated between the Operator and DETCOG. DETCOG sees no issue with the selected Operator leveraging their own assets and resources for expansion of the network. Alternatively, the Network Operator will not be eligible to bid on the construction RFP if they have elected to support DETCOG in the creation of the construction RFP.
11. When will the construction RFP be available and what role will the network operator have?
 - A. The construction RFP will be contingent upon input from the selected operator. The network design provided in the RFP is specific to grant requirements of LMI household serviceability and cannot be altered. The network operator can offer input in the form of creation of the construction RFP to accommodate grant-eligible activities.
12. We are assuming that all build costs are excluded from the operating budget, but that the monthly subscription (dollars per gigabit) will be an operational cost. If this is true, do you have expected or confirmed bulk fiber pricing?
 - A. Yes, all initial build costs for construction of the network, as well as the procurement of tower lease space and CBRS equipment, are included in the grants supporting this project. Costs associated with the operation of the network outside of the grant and projected financial pro forma are contingent upon current market competition and the competitiveness of the selected construction RFP and associated vendors. The option of the Network Operator to claim responsibility for certain operational costs can be negotiated.

13. Is the fiber network to be built/owned by DETCOG? Where is the demark between the network operator and the bulk fiber provider (at the tower or some other locations)? We are trying to understand if the network operator is responsible for any, or all, of the fiber network.
 - A. Yes, the responsibility for construction and definitive ownership of the network is on DETCOG. The Network Operator selected through this RFP will have the option to propose either full operation and maintenance of the network or a reasonable cost share rate that allows DETCOG to properly maintain the network.
14. With regards to the 89 towers. Are these all existing assets or are some to be built? If the latter it would be good at this time to know roughly what the ratio is. Actual locations will impact the sales and marketing focus, but that is for a later date. For now I am just looking for an idea of the variables.
 - A. All tower locations are existing towers in which DETCOG is currently negotiating lease terms with the owners of the towers.
15. Is commercially available fiber present at any of the proposed microwave backhaul sites?
 - A. In many cases, it may be possible that commercially available fiber exists at microwave backhaul locations (to the tower). Our network propagation study, however, provides DETCOG with confidence that microwave to these locations is adequate.
16. Would DETCOG consider leveraging funds to utilize commercially available fiber in lieu of microwave backhaul?
 - A. This would need to be clarified for eligibility with our grant administrator. The likely answer is no, given that the funding need estimated for the current network build-out supports the current network design and proposed assets. A possible scenario is a lease negotiation with tower owners, but this should not be read as a confirmation to that end.
17. The technology chosen can have an impact on network design. How flexible is DETCOG in terms of adjustments to the preliminary network design?
 - A. The network design was completed with grant requirements that prove the network services at least 51% of all LMI households in the serviceable region. DETCOG is not able to alter the network design, as the specifications of this design is bound by grant eligibility. Alternatively, within grant eligibility, the selection of CBRS equipment for the towers can be guided by both DETCOG and the selected Network Operator.
18. RFP states the chosen WISP will have input into the fiber design. To what extent will changes be possible?
 - A. The RFP states that the chosen Network Operator will have input on the creation of the construction RFP. The design of the network is not eligible for input, as it follows strict grant requirements to service a geography containing at least 51% LMI households.
19. Section 6.1.1.a/p14 – The summary should be a maximum of 5 or 3 pages?
 - A. This was a grammatical error. The summary should be a maximum of 5 pages.
20. Can a recording of the Bidders Conference be provided?

- A. No. The participants of the Bidders Conference were made aware that the recording would not be shared and is strictly used for DETCOG internal coordination of questions and answers provided during the conference.
21. Will all questions and discussions from the Bidders Conference be included in the Answers to Questions Posting?
- A. The questions and answers posed during the conference are available in the “Conference Questions” section of this document.
22. Will an attendance list of Bidders Conference be included in the Answers to Questions Posting?
- A. No, the attendance list will not be posted.
23. Newton County was included in the BOOT II program and had 3 submissions for fiber to all unserved/underserved BSLs (see below). How will this affect the program and service locations in Newton County?
- A. The BOOT II program will have no affect on the eligibility of our network. Regarding the proposed services potentially offered through BOOT II to Newton County, DETCOG remains vigilant of all updates from the Broadband Development Office regarding the final selection of BOOT II awardees. Until the approval of the feasibility and reality of accomplishing “fiber to every unserved and underserved location” proposed by the three respondents to the NOFA, DETCOG realizes that current services are significantly unavailable to a large portion of the Newton County residents.
24. Is there a specific CBRS product planned for usage in the network? Has the cell site and user equipment already been selected? If so, what manufacturer has been selected? What manufacturers were considered?
- A. No manufacturers have been selected thus far. With the selection of the Network Operator, DETCOG will facilitate discussions with the Operator to determine which grant-eligible products will reasonably service the network.
25. The RFP specifically discusses a second RFP for the fiber construction; however, it does not mention how the Wireless equipment will be procured. Who, what and how will the wireless equipment be selected - who will procure the equipment, has the equipment manufacturer been selected? Who will be responsible for deploying the equipment on the towers? Who will validate the coverage and performance of the wireless network once deployed?
- A. As DETCOG is the only eligible direct recipient of grant funds, it will be DETCOG’s role to procure the wireless equipment that is allowed under the grant. DETCOG will complete this procurement with the support of input from the selected Network Operator, as long as the selection is grant eligible. The equipment manufacturer has not been selected at this time and will not be selected until input from the Network Operator has been given. DETCOG will be responsible, through the construction RFP, to deploy the equipment on the towers. Coverage validation and performance of the wireless network once deployed can be discussed with the selected Network Operator. If the Network Operator would like to provide DETCOG with their preferred option for validation of the network in their response to the RFP, this is acceptable.

26. The selected area has significant foliage and canopy coverage which is challenging for wireless CBRS technology. Who is responsibility for the wireless network design performance, SLA's, bandwidth capacity available to end user sites, and increased operation and support cost due to geographic environment? Who is responsible if the design does not perform up to specification? Will the contract engineer be responsible?
- A. Given the specifications that have been provided to bidders that have signed NDAs and accessed the propagation study, partnered with qualifying technical questions in this document, the bidder will determine their confidence of propagation to the best of their knowledge. If safeguards to the selected Network Operator need to be discussed, DETCOG will remain open to those negotiations.
27. Is licensed or unlicensed CBRS planned for the project? If unlicensed, these locations will remain "unserved" by the Texas Volume II BDO definition and then would be eligible for BEAD funding with fiber as the preferred technology. All these factors will have significant impact on the overall subscriber take rate and retention.
- A. The 3.5 GHz band (CBRS) is defined as an FCC-licensed share of wireless spectrum. If the question asked is pertaining to the tiered system of access to the licensed-by-rule CBRS spectrum including General Authorized Access (GAA), Priority Access License (PAL) and Incumbent Access, the proposed DETCOG Regional Network will be GAA. GAA, while not a Priority Access License, is still considered a licensed portion of spectrum per the FCC. Additionally, the Texas BDO BEAD Proposal Volume II has not yet been approved by the NTIA and therefore should not be cited as definitive.
28. The financial model states "A renewal and replacement (R&R) reserve has been set aside for depreciation, based on the lifetime of each capital asset in the network and economic lifetime (shown in rows 25-30). The model is showing this as a cost to the operator. If DETCOG maintains ownership of the assets, the operator would fund this reserve through payment to DETCOG. Alternatively, the operator would be responsible for all R&R costs directly." The RFP says that all equipment purchased with the grant must be owned by DETCOG. Please clarify. Would the network operator own the replacement equipment as it deploys replacement equipment? It seems difficult if some of the network is owned by DETCOG and some by the operator.
- A. The purpose of this initiative is to "hand over the keys" to a qualified Network Operator to operate the grant-funded network. Per grant requirements, DETCOG will be the sole owner of all assets procured with grant funding. Any asset that the Network Operator wishes to procure outside of grant funding will be theirs to manage as they wish. Alternatively, if the option that best fits the bidder is to ensure DETCOG remain the sole owner of all replacement equipment and mitigate confusion of ownership, this will be negotiable when discussing the contractual agreement between Operator and DETCOG. Understand that the financial pro forma provided to bidders with NDA's is only meant to be an estimation tool rather than a definitive financial model.
29. The financial case model includes amortization of equipment; however, because DETCOG will own all equipment; why is amortization included in the model? Typically, the repair and

replacement cost would be about 6-8% of infrastructure cost for these networks, which would be a lot less than the amortization cost as it is presented.

- A. To address the question of repair and replacement costs, the RFP proposes that the respondent elect to either take on the responsibility of network asset maintenance and replacement or provide a reasonable cost share to allow DETCOG to complete these activities. Regarding any component of the pro forma, including amortization, all projections are not finalized and responses to the RFP may propose alternative projections. The purpose of the pro forma is to offer a shorthand planning tool to potential respondents.
30. The RFP describes that the network has been designed to service 51 percent LMI households? What percentage of these households are also underserved/unserved households? The 73K households covered by the network appears to be all the households within the area with 51% included in the grant for funding to connect - is this a correct assumption? This funded number of households is 32,700?
 - A. Percentage of underserved/unserved households does not pertain to the eligibility of these grants. These grants only require that 51% of LMI households be provided service availability. The estimated ~70,000 households are all serviceable households covered by the network. The mention of ~32,700 households estimation pertains to estimated LMI households within the total ~70,000 estimated household serviceable area.
 31. How was the frequency plan created? What is the assumption around channel width that would be used to meet the 100/20 Mbps service?
 - A. The propagation shown used 20 MHz channels with N=3. A 3 sector design was used with 90 degree (16dB) antenna at 0,120 and 240 degrees azimuth (channels 1,2,3). An LTE band 48 TDD model was used with 6DL/2UL slots. 4x4 MIMO base station equipment was assumed. EIRP of 47 dBm was used. CPE antenna was 20.5 dB gain.
 32. The canopy coverage in the area is dense and tall. Do you have the average height of the canopy? Do you have the height of the towers included in tower list? Do you have the height of the planned mounting poles for the homes?
 - A. Google network planner was used which has excellent tree canopy data. The modified tower list with heights will be included in the data room. Planned mounting in the KMZ shown was 26 ft for poles and 6 feet if mounted on a rooftop. These are the design parameters for the model. No specific homes are selected. Tower heights have not been confirmed with any tower rental vendor. That process is underway but not finalized.
 33. Was the heat map of the wireless network design done with a specific manufacturer product model?
 - A. No. See question 31. LTE Band 48 TDD 6DL/2UL 4x4 MIMO was used to generate the example throughput KMZ.
 34. What are the assumed RAD Centers used in the preliminary design by site?
 - A. The modified Tower file will be provided in DATA Room
 35. Has DETCOG anticipated any costs for potential tower modifications based on ANSI/TIA-222-i?
 - A. No. Crown/American tower and other providers towers were proposed to be leased.

36. For network management, we are assuming that the CPE will be a modem and Wi-Fi AP, which may be integrated. We assume that the modem/AP will provide local IP addresses to client devices. With this configuration we assume the Modem/AP will source its IP address from the network (thus being visible to us for monitoring and management).
- A. The network operator will be very involved in the oversight of activities pertaining to the procurement, implementation, configuration and setup of the completed network.
37. How much confidence do you have in the propagation models and what sort of fidelity do they have? We ask because we assume that this information will be required as part of the determination process (Can we serve a prospective customer?).
- A. Google Network Planner was utilized. It has excellent LIDAR data for tree, terrain and building cover. It is based on the Google gwave propagation engine.
38. Best case, we assume we have access to 50MHz of GAA CBRS spectrum. With 89 towers there will be an average of 329 customers per tower (pro forma model has 29,306 total). What is the basic radio configuration assumed to support this number?
- A. Radio configuration assumed 3 sector with 20 MHz channels available at each location.
39. Is your propagation model based on Category A (no CPI) or Category B CPE? We assume Category A, as 6-meter CPE height was mentioned on the call.
- A. The model used 2 heights. If pole mounted the CPE was 26ft, if roof mounted the CPE was 6 FT.
40. Can you provide the heights of the towers detailed on the RFP or the installation heights available per tower?
- A. Tower heights used for the example throughput KMZ will be provided. These heights have not been finalized with the tower vendors.
41. What is the planned/proposed capacity of the microwave linked towers? What oversubscription are you planning/proposing (in terms of number of subscribers with 100/20 service on a 1Gigabit link)?
- A. The microwave design for links has not been completed. 11 GHz links are likely to be used. The successful Operator will have input into this design.
42. Are all the links going to be symmetric or will they be biased towards the 100/20 service model?
- A. Likely to be symmetrical
43. Are any of the towers 'daisy chained' ?
- A. Several of the towers will be daisy-chained. Loops will be created when possible.
44. Is the Fiber Switching infrastructure for the Fiber network covered by DETCOG, or should we include Fiber switches in our response?
- A. Fiber switching infrastructure is covered by DETCOG.
45. What items did you include in the \$17/month/subscriber operating expense? (e.g., Help Desk, Billing/Invoicing, Marketing, Internet Circuit, etc)
- A. The \$17 figure was Opex per subscriber referencing truck rolls, churn, and utility expenses.

Conference Questions:

1. Have any propagation studies been completed?
 - A. Yes, and those are available to bidders that have signed an NDA.
2. When propagation was performed, what height was the CPE studied? Customer end?
 - A. 6 meters if standalone and 2 meters if at the rooftop.
3. Have studies been completed of qualifying towers between fiber and microwave connection? Line of sight?
 - A. We are qualifying towers with their owners. Our engineering consultants have run line of sight between locations and no significant issues have been observed.
4. Have you included the CBRS factored additional SAS charges and other related FCC fees into the pro forma?
 - A. Yes, all of them have been factored into the financial pro forma.
5. Is the goal to get to 100/20 Mbps or are there areas where less than minimal service is only available?
 - A. In the propagation study, bidders will see that large swaths of the geography are able to receive >100/20. In the areas that are not able to receive 100/20, but service speeds are still better and more affordable than what residents currently receive, other options are considerable.
6. What is the timeline for completion of the projects?
 - A. Phase One (North Newton) is due by December 2026. Phase Two (Remaining Counties) is aimed at completion in Spring of 2028.
7. The RFP states that the installation of LMI tech is on DETCOG. Is that right?
 - A. The procurement of LMI household receivers is a grant requirement of DETCOG. During the contract, this will be done by DETCOG through the contractor selected in the construction RFP using grant funding. After grant funding is expended, the agreement reached between DETCOG and the Network Operator will dictate renewed responsibilities.
8. Will the Network Operator have priority to use of the backhaul?
 - A. If the Network Operator would like to propose a reasonable scenario in which they have priority use of the backhaul, there are no restrictions preventing that. This will be left negotiable until the Network Operator and DETCOG have reached an agreement.
9. How is the operator tied to the construction RFP?
 - A. While the network design is a grant requirement for DETCOG to complete, the contents of the construction RFP will be created in consult with the selected Network Operator.
10. Is DETCOG marketing free installs for LMI before construction to help boost the take rate?
 - A. There will be opportunities to provide some marketing collateral detailing the free installation of household equipment for LMI residents. This will likely be disseminated through existing DETCOG channels and programs. All other marketing will be at the preference of the Network Operator.
11. Is DETCOG pursuing Digital Equity for service rate mitigation?

- A. Digital Equity funding programs are on DETCOG's radar and we are building regional partnerships to address them. Specific deliverables, like service rate mitigation, are being considered as part of the regional plan.
12. What are the thoughts of middle backbone access for additional uses?
- A. This will remain negotiable with the potential network operator before an agreement is reached. Given the strength in the count of fiber of the network backhaul, several additional uses can be discussed.