

Table of Contents

Seattle Center Remote Questions & Answers Session (10/31/22) – Part 1	2
Conduit, Fiber, Power	2
Headend	2
Wireless Network Sample Design	2
Poles	3
Technical Requirements	3
Coverage	4
Existing Temporary Carrier Facilities	5
Revenue	6
Misc.	6

Seattle Center Remote Questions & Answers Session (10/31/22) – Part 1

Conduit, Fiber, Power

1. **Q: The Request for Proposal (RFP) notes the Wireless Infrastructure Provider (WIP) shall not have access to use Seattle Center's power distribution. Are WIPs expected to order a separate power meter from the City and build our own distribution on the property?**

A: Yes. In their Proposals, all Request for Proposal (RFP) Respondents should assume that the network will be built with independent, not Seattle Center or City-owned, systems (power, conduit, fiber). The selected Wireless Infrastructure Provider (WIP) may have some opportunities to collaborate on use of any extra capacity of Seattle Center infrastructure; however, that will be based on condition-specific reviews with successful WIP.

2. **Q: Are there any existing open conduits that could be used? Provide the existing conduit pathways and what might be available for our use?**

A: In their Proposals, all Request for Proposal (RFP) Respondents should assume that the network will be built with independent, not Seattle Center or City-owned, systems (power, conduit, fiber). The selected Wireless Infrastructure Provider (WIP) may have some opportunities to collaborate on use of any extra capacity of Seattle Center infrastructure; however, that will be based on condition-specific reviews with successful WIP.

Headend

3. **Q: Has the City designated a HUB/Headend space on the site that is available for the WIP & WSP's BTS equipment to be housed? If so, how much space is available? Provide the drawings?**

A: No, the City has not designated a HUB/Headend space on the site. Seattle Center is looking for creativity in Proposals. Some possibilities for headend locations discussed on the site walks included 5th Avenue North Garage, KOMO Plaza, and Armory. The selected Wireless Infrastructure Provider (WIP) may have some opportunities for ground leases at Seattle Center; however, that will be based on condition-specific reviews and contingent on negotiations for such leases with successful WIP.

Wireless Network Sample Design

4. **The end user throughput must deliver a minimum of 20 Mbps download and 4 Mpps upload to each user at all times based on an assumption of 50,000 simultaneous visitors to the campus. Are the 50k users to be considered evenly distributed? If not, is there a percentage to be assumed for each area?**

A: Please provide your best assumptions on oversubscription in a capacity model. Please document your assumptions.

Please use any information you have from previous deployments and past experience with Seattle Center. Please carefully document your assumptions.

5. Q: Can 2.5 GHz be modeled as 5G NR in the sample design?

A: Yes. 2.5 GHz N41 5G can be modeled in the design exercise.

6. Provide heat maps displaying bandwidth throughput across the campus. Is this maximum bandwidth for each channel?

A: Please use any information you have from previous deployments and past experience with Seattle Center. Please carefully document your assumptions.

Please also use your knowledge of what each wireless carrier typically deploys in this scenario. Please detail your assumptions.

7. Provide analysis showing the capacity of system and throughput delivered to end users. Is this an average?

A: Please use any information you have from previous deployments and past experience with Seattle Center. Please carefully document your assumptions.

Poles

8. Q: Are all of the campus poles, which are the same type as those listed, open for potential consideration?

A: Yes. All poles are owned by Seattle Center. Note that Seattle Center expects the WIP to try to work with existing pole locations and minimize placement of new pole locations.

Technical Requirements

9. Q: Where is Latency measured to? Is this on a 5G NR device?

A: The latency shall be measured to the wireless carriers core. The design should be using a 5G device.

10. Q: Does Live Stream mean upload (e.g., Facebook Live)?

A: Live stream can mean Facetime, Facebook Live, or any other live streaming media application specific to a handset.

Coverage

- 11. Q: For non-public areas, can coverage come from within the Seattle Center campus (e.g., Pacific Science Center)?**

A: Non-public areas are out of scope for this RFP. Please reference RFP document, Section 3, Page 7. Per RFP, *“Coverage needs to extend to the entirety of the Seattle Center-owned outdoor property (40 acres) as well as the inside of select Seattle Center-owned venues: Armory (Atrium and Loft spaces), Fisher Pavilion, Exhibition Hall, Mercer St. Garage (entry levels), and 5th Avenue North Garage (entry levels).”*

- 12. Q: For the 5th Avenue North Garage, do you require coverage throughout the lower levels?**

A: No. Required coverage for 5th Avenue North Garage is only for the entry levels. Please reference RFP document, Section 3, Page 7. Per RFP, *“Coverage needs to extend to the entirety of the Seattle Center-owned outdoor property (40 acres) as well as the inside of select Seattle Center-owned venues: Armory (Atrium and Loft spaces), Fisher Pavilion, Exhibition Hall, Mercer St. Garage (entry levels), and 5th Avenue North Garage (entry levels).”*

- 13. Q: On the Mercer St. Garage, are entry levels required to have coverage? If yes, are there specific locations, or do all need to be covered?**

A: Yes. For Mercer St. Garage, coverage is required for all entry levels, specifically all entrances and exits for the garage.

- 14. Q: For Skate Park, what level of coverage is required?**

A: The Skate Park is part of Seattle Center-owned outdoor property and will require coverage. Please reference RFP document, Section 3, Page 7. Per RFP, *“Coverage needs to extend to the entirety of the Seattle Center-owned outdoor property (40 acres) as well as the inside of select Seattle Center-owned venues: Armory (Atrium and Loft spaces), Fisher Pavilion, Exhibition Hall, Mercer St. Garage (entry levels), and 5th Avenue North Garage (entry levels).”*

- 15. Q: Do the lower levels of the Armory (below the Mezzanine) require coverage?**

A: No. The lower levels of the Armory (below the Mezzanine) are not required. Please reference RFP document, Section 3, Page 7. Per RFP, *“Coverage needs to extend to the entirety of the Seattle Center-owned outdoor property (40 acres) as well as the inside of select Seattle Center-owned venues: Armory (Atrium and Loft spaces), Fisher Pavilion, Exhibition Hall, Mercer St. Garage (entry levels), and 5th Avenue North Garage (entry levels).”*

- 16. Q: Are the side offices part of the Armory Lofts and will they require coverage?**

A: No. The side offices on Armory Floor 3 are not a part of the Armory Lofts and technically are not part of the areas that require coverage. The offices do run adjacent to the Armory Atrium and it would be ideal if the coverage for the Atrium also provides coverage for the offices. Please reference RFP document, Section 3, Page 7. Per RFP, *“Coverage needs to extend to the entirety of the Seattle Center-owned outdoor property (40 acres) as well as the inside of select Seattle Center-owned venues: Armory (Atrium and Loft spaces), Fisher Pavilion, Exhibition Hall, Mercer St. Garage (entry levels), and 5th Avenue North Garage (entry levels).”*

17. Q: Memorial Stadium appears to warrant dedicated coverage. Is there a possibility of including this in the RFP response?

A: Coverage for Memorial Stadium will not be included for this phase of Seattle Center’s wireless planning. Seattle Public Schools (SPS) owns the Stadium property and has passed a levy to renovate the site. SPS planning is expected to happen over the next 3-4 years. Wireless coverage would be considered once the stadium renovation project is determined/defined. So, it is possible that the successful WIP might be able to extend its network to this area in the future.

18. Q: Is this just for the Outdoor Campus area or does it include Seattle Center owned venues as well?

A: The new system must provide coverage for both outdoor and indoor locations. For specifics, please reference RFP document, Section 3, Page 7. Per RFP, *“Coverage needs to extend to the entirety of the Seattle Center-owned outdoor property (40 acres) as well as the inside of select Seattle Center-owned venues: Armory (Atrium and Loft spaces), Fisher Pavilion, Exhibition Hall, Mercer St. Garage (entry levels), and 5th Avenue North Garage (entry levels).”*

19. Q: Please provide the floor plans for each of the priority buildings (Seattle Center-owned venues) identified in the RFP?

A: Floor plans have been posted to the RFP web page: <https://seattlecenter.com/wireless-rfp>.

20. Q: For handoff between Climate Pledge Arena DAS to this proposed network, how best do we coordinate signal strength and signal levels to ensure compliance with this RFP? Especially if it comes to any existing coverage within the boundaries defined within this RFP.

A: Please provide your best plan and method for addressing this in your response.

Existing Temporary Carrier Facilities

21. Q: Can you provide information on the existing wireless networks and deployments from properties that operate on the Seattle Center Campus? Will all existing permanent or temporary wireless carrier radios and antennas be removed after the solution is deployed?

A: There are five existing temporary locations that are covered by annual license agreements with AT&T, T-Mobile, and Verizon. Four are rooftop deployments and the fifth is on the top floor of the Mercer St. Garage. The expectation is that all will be replaced with the new system. It is important to ensure a smooth transition for the coverage provided by the temporary sites to the new system and consistent service to campus visitors. Note that Seattle Center did not require the same aesthetic standards for current facilities because they are temporary; Seattle Center will expect more stealth/better visual integration for the permanent system.

Revenue

22. Q: What is the minimum annual guarantee that the City is targeting?

A: The City/Seattle Center has not established a minimum annual guarantee for the new system. We have noted in the Site Walk Q&A documentation that Seattle Center currently receives \$270,000 annually; rent for each of the three temporary licenses (AT&T, T-Mobile, and Verizon) is \$90,000 per year. These are overhead (antennas on buildings) and represent only a portion of the resources that Seattle Center expects the WIP to use for the new system.

Misc.

23. Q: Do we need to attend a site walk on both the 3rd and 7th?

A: No. Site walks are optional and provided to help respondents understand the campus and what might be possible for a system.

24. Q: Are 12 hard copies of the Proposal necessary?

A: Per the proposal submittal requirements, proposals may also be submitted electronically. Please reference RFP document, Section 6, Page 16, for Proposal Submittal Requirements.

25. Q: When noting page limitations, does this mean 1 sheet of paper both sides or just the front page (i.e., 6.4 – limit to 1 page)?

A: For page limitations, please use the front page only.

26. Q: When does the City expect to provide a final response to the questions posed as of 11/21? Considering it would be some date after 11/21 – this does not provide enough time for Respondents to finalize and prepare an extensive submittal over the Thanksgiving Holiday.

A: We have provided additional time for responses and finalization of submittals. As announced publicly and through various communication channels, the final RFP submission date has been extended from Wednesday, November 30 to Wednesday, December 14, 2022.

27. Q: Will the City consider an extension of at least 2 weeks of the Due Date (11/30) to provide enough time for the Respondents to receive the answers to questions to complete a comprehensive response.

A: Yes. We have provided additional time for responses and finalization of submittals, As announced publicly and through various communication channels, the final RFP submission date has been extended from Wednesday, November 30 to Wednesday, December 14, 2022.