

CITY OF ALEXANDRIA, VIRGINIA

**ANSWERS TO WRITTEN QUESTIONS REGARDING AN INVITATION TO
BID ON A FRANCHISE FOR A CITYWIDE WIRELESS NETWORK**

June 12, 2006

This and related documents are on file in the
Office of the Director of Information Technology Services,
123 N. Pitt Street, 2nd Floor, Alexandria, VA 22314, and available at
www.wirelessalexandria.com

Please read all documents carefully before bidding.

The preferred deadline to bid is Friday, June 23, 2006, at 3 p.m. Eastern Time.

The following questions were received through Monday, June 12.
Additional written questions may be submitted through Friday, June 16, at 12 noon.

**NOTE: Questions are quoted verbatim as received from prospective bidders.
Similar questions have been grouped.**

1. **“Since IPv6 is a mandated requirement and this RFP is for the VA area so close to DoD and Government, have you made provisions for IPv6 in the proposal and planning? Can we offer our IPv6 training services to both the requesting organization and the bidders themselves?”**

The specifications document does not mention IPv6. Bidders should propose whatever protocols are deemed appropriate for the project. The list of bidders will be made public at the City Council meeting and on www.wirelessalexandria.com, on June 27, 2006.

2. **“List of addresses for the all government buildings, schools, libraries, city utility buildings, and any other buildings with access rights. We need the number of floors on each building.”**

“Identify and locate city owned assests. Ex: tall buildings, water towers, communication towers etc.”

“You mention a GIS or electronic map of city-owned signalized intersections is avialable, how may I get that?”

Please see the reference maps now posted at www.wirelessalexandria.com for the locations of City-owned properties (with building heights), and signalized intersections. Note that these are properties that may be available for mounting, subject to the other specifications and conditions already published, and subject to the ultimate franchise agreement negotiated with the City. The City's primary communications site is located in the George Washington Masonic National Memorial, 101 Callahan Drive.

3. **“What buildings are required to be connected via the wireless networks? Is this replacing the City network or are there simply a few access locations? If so, what are they?”**

The City's use of the wireless network primarily will be for outdoor and vehicle use. The wireless network is not intended to connect buildings for City use or replace the City's existing Institutional Network (I-Net).

4. **“Will we be able to install a City Public Safety Network using the 4.9 Ghz range? Will the City provide us with the approval to support this use?”**

The City has no current preference for or against any particular solution. Bidders should propose the technologies they believe most appropriate for this project. If the City supports the installation of a 4.9 GHz network, it will provide the necessary approvals.

5. **“What is the number of City users that will have access to the city network?”**

“How many employees work for the City?”

“What is the bandwidth of the city cameras?”

“Do the vehicles have IP based security cameras on them?”

There are approximately 2,500 City employees, contractors, or other agents who may have occasion to use the network. It is unlikely that more than 500 of these individuals would use the network at any given time. The “City users” category also includes municipal devices, of which there may be several hundred over time. Some devices, such as traffic cameras, may transfer large volumes of data. The exact bandwidth of a camera depends on the equipment selected, and the application. The City does not have any IP cameras at the present time. Others, such as parking meters, would transfer very small amounts of data.

6. **“Is the network expected to transport the city cameras to a main location or only give them access to the camera networks?”**

Cameras, like any other City users, should have access to the Internet, to the City's part of the wireless network, and to the City's I-Net.

7. **“For mobility applications will the city be willing to purchase devices for the vehicles to make this possible? How many City vehicles require the mobility function? What equipment are they using now? Computer make/model and wireless make/model. Do they have GPS tracking devices on the vehicles?”**
8. **“Part 2, Paragraph C.4, Will the City be acquiring the ancillary devices and software to permit mobile use of this network?”**

The City does not expect the Grantee to supply any customer premise equipment for City users other than that supplied to any other users. In other words, the City will procure its own hardware and software to support the applications it develops for the wireless network. The City operates a fleet of approximately 800 vehicles, of which approximately 390 are public safety vehicles that may travel at higher speeds. Public safety vehicles currently use Panasonic Toughbook computers with CDPD or commercial cellular data cards. Most vehicles do not have GPS devices, and the City hopes to use the new wireless network to support automatic vehicle location (AVL), either with or without GPS.

9. **“The Student Users ACPS resources are they located on the Internet or only within the public school system? What are the locations of these servers? What is the amount of current bandwidth used by the student users? If the users want to have access to the internet as a paid customer, can they do so with school laptops?”**

“Part 2, Paragraph C.3.b, Is the requested network used in this application simply intended as a Wireless LAN? Or is this intended to permit students to access the ACPS network from remote locations (from home) etc.?”

Student traffic need only be transported to the Alexandria City Public Schools (ACPS) data center at 2000 N. Beauregard Street. From there, it will be filtered by ACPS and be connected to an existing Internet connection. In other words, students will access the network from anywhere in the City (including homes), but the Grantee will not be supplying student users with any Internet bandwidth. Student laptops do not currently have Internet access off school property other than dial-up, but bandwidth is expected to be similar to retail customers. Due to security and maintenance concerns, student laptops are not currently permitted to access any network connections other than those provided by ACPS.

10. **“How many residents are there in Public Housing who would require free access? Where are the public housing locations? Will we have free access to the buildings for wireless equipment? Will these free accounts require roaming capabilities or just access from public housing?”**

“Please provide more information on the residents of public housing developments. Where are they located? How many units are there? What is the occupancy rate?”

“Part 2, Paragraph A.2.c Please estimate the total numbering this classification.”

The reference to public housing was inadvertently carried over from a previous draft of the document. Low-income residents will receive free or reduced-price Internet access accounts (not to exceed \$10 per month for the duration of the license period, exclusive of taxes, third-party fees, and equipment rental) upon their request. Eligibility criteria (whether or not this includes public housing), ordering procedures, and other logistics will be determined through the negotiation process and included in the franchise agreement. Eligible households will not exceed 10% of the households in the City, or 7,000 households.

11. “Do you have a contact for Dominion Power for Alexandria.”

“Can you give me contact information for both Dominion Virginia Power and Comcast?”

“Part 2, Paragraph D.2, Has there been any input from Dominion Virginia Power regarding mounting or power issues with their vertical assets?”

“Does the city have any idea the number of street lights available that are photo-cell controlled versus gang-switched?”

“Will the City aid in negotiating any rights with Comcast Communications, who owns an extensive fiber-optic network that could be used in connection with the backhaul of the wireless network?”

“Part 2, Paragraph E.7, Has there been any input from Comcast regarding use of their assets for this project? If so, what?”

“Do you know if the Dominion Virginia Power Co. also uses decorative type light poles?”

Any detailed information about non-City resources should be obtained from the property owners directly. Any use of non-City resources must be coordinated directly between the Grantee and the non-City entity, without City participation, intervention, or remuneration.

The contact provided by Dominion Virginia Power is:
Mike Roberts, Joint Use Administrator
mike_roberts@dom.com
804-771-4459

The contact provided by Comcast Communications is:
Tim Willer, Business Services Manager
tim_willer@cable.comcast.com

- 12. “Is Dominion Virginia Power obligated to cooperate in granting easements and installation rights where appropriate? Is 24-hour electricity available on poles, traffic signals, and street lights? Are there mounting restrictions for different types of assets (e.g., decorative lamps)?”**

Dominion is not obligated to cooperate, although there is an established program for joint use of Dominion assets. Twenty-four hour electricity is available. Specific mounting restrictions are available from Dominion, but note that mounting will not be permitted on decorative-style street lights.

- 13. “What is the record of historic power outages in Alexandria?”**

Power outages in the City are rare, but do occur especially during severe storms. Specific historical records would have to be obtained from Dominion Virginia Power.

- 14. “If the successful vendor provides additional services such as T1’s, DS3’s, metropolitan Ethernet, public safety interconnection and even automated meter reading and SCADA controls, will the City be willing to contract for those services?”**

Bidders are free to propose any combination of services, although the City may choose to procure “extra” services under a separate contract.

- 15. “Would the City be willing or provide a preference to enter into a performance based contract?”**

The City does not prefer a performance-based contract. If a bidder proposes that certain payments and/or benefits would only accrue to the City under certain circumstances, the proposal must still provide for a guaranteed base level of payments and/or benefits.

- 16. “Who is the current Wi-Fi provider and what is their relationship to the City? What technology are they using? Will the City require the successful bidder to either integrate the wireless network into the current Wireless Alexandria coverage area and operate both, or construct and operate the wireless network outside the current Wireless Alexandria coverage area?”**

The Grantee will operate the free public wireless areas, including the area currently served by the Wireless Alexandria pilot project. The current project uses four Tropos MetroMesh 5210 wireless routers, connected through a surplus PC firewall, switch, and router to a T1 line. The City acts as the provider, and there are no third parties involved in operating the wireless service. Since there

has only been a small investment in the pilot project, the City expects the vendor to replace this equipment and service with its own.

- 17. “In addition to the registration statement in the RFP, are there any other licenses or registrations with the City or State authorities that are required in order to submit a response to the RFP, or to execute the work outlined in such a document?”**

“Will the successful bidder need to obtain any other licenses to install the equipment for the network?”

“Will the City provide a batch permitting process for the installation of equipment for the network?”

The Grantee must be licensed to do business with the City prior to franchise award, and an out-of-state Grantee must also be registered with the State Corporation Commission. The City is not aware of any other blanket requirements, although the Grantee will be solely responsible for determining whether any other licenses or registrations may be required based on the specific business model and technologies proposed. The City will do its best to expedite the process for installing equipment on City property.

- 18. “Does the city have the right to grant the successful bidder necessary access to I-Net in order to support and prevent interference with the I-Net connection?”**

Yes, although any access to the I-Net will be to ensure connectivity for City users only. The Grantee will not have access to the I-Net for wireless backhaul or other private purposes.

- 19. “Please provide more information about the I-Net including the number of municipal and school facilities that are connected.”**

Alexandria’s Institutional Network (I-Net), begun in 1994 and recently upgraded, is a citywide fiber optic backbone that provides a variety of data, voice, and video communications capabilities to city government facilities, libraries, recreation centers, and public schools. The network -- the first of its kind in Virginia -- now connects nearly 100 municipal and school facilities.

- 20. “The RFP states that any equipment installed in visible outdoor locations must conform to the aesthetics of the area in which it is installed; does the City have specific guidelines or zoning requirements for such areas?”**

“Please provide guidance as to what is an acceptable appearance.”

“Can you identify those areas in which zoning or historic preservation may be of concern?”

“Can you identify areas in which aesthetic considerations will be a factor?”

Aesthetic conformance will be judged on the basis of the proposed device, mounting technique, and mounting surface. Note that the four devices currently used to operate the Wireless Alexandria pilot project are located in a historic area and not deemed to be intrusive. There are no blanket rules that can be stated in advance. The City does not expect this to be an issue with the types of equipment usually used in these types of installations.

21. “Are there other assets the City can offer for mounting? How many poles does the City own?”

The City can offer more than 350 buildings, traffic signal mast arms, and other structures throughout the City.

22. “Are there restrictions or procedures required for installation and maintenance of Wi-Fi equipment on the mounting assets, including employees and contractors that perform the services?”

The City will offer guidance on installation issues for City mounting surfaces, based on the devices and mounting techniques proposed. Installation requirements for equipment mounted on non-City surfaces must be obtained from the property owner.

23. “Will the City give the successful bidder the right to engage in future expansions and improvements of the system?”

Language to this effect can be included in bidders’ proposals. Final language will be subject to negotiations between the City and the preferred bidder.

24. “Will the successful bidder be entitled to install the system throughout the City, or are there any geographic limitations for the system?”

There are no geographic limitations within the City’s boundaries, but equipment may only be installed with the permission of the property owner. The City encourages the use of public infrastructure to streamline obtaining permissions.

25. “The RFP states that the wireless network must provide a public safety communications component; will this wireless network be the only public safety communications network or supplement existing and future networks?”

This depends on the appropriateness of the solutions proposed by vendors, especially with regard to emergency backup power.

26. “Who can attend the City council meeting where bids will be read?”

Bids will be announced at the Alexandria City Council meeting on June 27, 2006, at 7 p.m., in the City Council Chambers at Alexandria City Hall, 301 King Street. The meeting is open to the public, and can be viewed live and in the archive after the meeting at www.alexandriava.gov/council .

27. “Can the City provide a copy of the City’s affirmative action program code?”

Section 12-4-3 of the City Code defines an affirmative action employment program as “a positive program designed to ensure that a good faith effort will be made to employ applicants without regard to race, color, sex or disability.”

**28. “Generally, stated in a percentage, what is the expectation of coverage?”
“Part 2, Paragraph C.1, There is always a percentage of residential and commercial facilities which for a variety of reasons will require CPE from any point inside the structure. Will this be a ‘deal breaker’?”**

The network should provide nearly 100% citywide coverage. If it is not practical to cover a given area, the proposal should explain why. The network should provide direct access to outdoor users or indoor users near building perimeters, and access to other indoor users through a customer premise device, such that each user receives reliable symmetrical throughput of at least 1Mbps (at least 150kbps for free public areas). The City expects that some bidders will propose that every indoor customer use a device to ensure reliable connectivity.

29. “Reference “Exhibit 3” The Ordinance: Section 3, paragraph 6, What content and services will be prohibited from being offered on this network?”

This question refers to the prohibition on providing “the functional equivalent of a cable system or cable service.” “Cable service” means “the one-way transmission to subscribers of video programming or other programming services.” “Cable system” mean “a facility consisting of a set of closed transmission paths and associated signal generation, reception and control equipment that is designed to provide cable service which includes video programming and is provided to multiple customers within the city.” The Grantee and its partners may not sell or otherwise provide video programming services to customers, but this does not preclude customers from independently accessing video content on the Internet.

30. “Section3, paragraph 9, If utilities are moved underground will the city provide replacement vertical assets?”

No. The Grantee will be responsible for relocating equipment if the mounting surface is removed. The City expects that most equipment will be mounted on assets that are not candidates for undergrounding, such as traffic signals, street lights, and buildings.

31. **“Part 2, A.1 – These networks intentionally preclude direct connection between subscribers for both bandwidth control, authentication and security reasons. Is this request a requirement?”**

This question refers to the requirement that the network enable users “to connect to each other, the Internet, or both.” The intent of this language was to account for network users who may not be accessing the Internet, such as student users and many City users. For example, a police officer may use the network to send a file to a commander’s vehicle; a parking meter may use the network to connect to its control server, or a student may use the network to access school resources. In each of these cases, users are connecting “to each other” without leaving the network or accessing the Internet. This requirement is not intended to avoid industry-standard configuration or security measures.

32. **“Part 2, Paragraph C.3.d, Please give some examples of restrictions the city might specify”**

This question refers to the requirement that “Internet access must not be restricted other than as specified by the City.” The intent of this language is to prevent the Grantee from filtering Internet content or placing time restrictions on public access, other than in a manner approved by the City as part of the franchise agreement or incorporated service level agreement. Free public access will be branded under the “Wireless Alexandria” project and advertised by the City as a major public amenity, so the City wants to insure that the service will be open and useful.

33. **“Part 2, Paragraph C.6, Does the city have a product or vendor in mind that meets this requirement?”**

This question refers to emergency backup power. The City does not have a solution in mind and is looking to bidders to propose appropriate solutions for this problem. Emergency backup power is a major challenge in terms of using the network for public safety applications and other mission-critical needs.

34. **“Part 2, Paragraph E.6, Is this requirement intended to cover the 5 year minimum term?”**

This question refers to the requirement that the Grantee “must plan for and implement upgrades to equipment, hardware, and software, such that no part of the network’s technology becomes obsolete or incompatible.” This requirement is intended to cover the entire length of the franchise, in order to ensure that the service remains useful for all customers. The City will be reasonable in its expectations, but bidders should address this issue in their proposals.

35. “Part 2, Paragraph G.1, How was this number determined? Is it negotiable?”

This question refers to the requirement that the monthly rate for a retail residential account not exceed \$20.00 during the first year of the franchise, exclusive of taxes, third-party fees, and equipment rental. This requirement, like all others, is negotiable. The number was determined from research into other similar projects.

36. “Part 2, Paragraph I, What is the anticipated size if a demonstration?”

The demonstration should be of sufficient size to clearly prove the proposed solution. The City recognizes the time and cost involved in setting up a new demonstration site and would be willing to visit an existing site. The City will also make use of references from other clients to determine the success of previous projects.

37. “Can you identify any gated communities in which we would not be allowed to place equipment?”

With the caveat that the City will review the exact placement of all equipment, the City is not aware of any particular areas in which gated communities would be an issue. However, there are a number of non-gated garden apartment and condominium communities whose grounds are private property. If the City does not have the right to control any mounting assets on a given area of private property, and if the private property owner is unwilling to negotiate with the Grantee for access, potential network users in that area may not be able to use the network.

38. “Are there any ‘county islands’ (areas within the city limits that are not incorporated)?”

No. Alexandria is an independent city. It is not part of any county, nor are there any towns, villages, otherwise incorporated areas, or unincorporated areas within it.

39. “What is the competitive climate? Are broadband services now available to all residents or a significant portion of the population? Who are the current service providers and what is their current pricing?”

Current pricing should be obtained from the providers.

Cable Internet service from Comcast Communications is generally available throughout the city.

DSL telephone service is available for many customers. Of the companies on file with the State Corporation Commission as providing telephone service in Alexandria, the following answered that they provide broadband Internet service in Alexandria:

AT&T	800-222-0400
Broadwing Communications	888-362-2522
Cavalier Telephone	800-683-3944
Granite Telecommunications	866-847-5500
Level 3 Communications	877-453-8353
Lightwave Communications	888-953-9300
McGraw Communications of Virginia	888-543-2000
Plan B Communications of Virginia	888-773-9722
Qwest Communications Corporation	800-860-1020
TalkingNets Holdings	877-375-6381
Verizon Virginia	800-621-9900
XO Virginia	888-575-6398
Xspedius Management Co of Virginia	800-831-0309

Additional Internet service providers may be found by using an online telephone directory.

40. **“Will the City of Alexandria consider a public/private partnership? The public / private partner will have the use of the City infrastructure (publicly-owned building rooftops, towers, street lights and other “hanging assets”) for the deployment of the system. The Public/Private Partnership model allows the City to continue to own all existing and new Fiber Optic network assets, contribute use of pole and City building hanging assets, facilitate the procurement process and serve as an anchor tenant for network services. The Private Partner will fund, build and operate the wholesale and retail wireless network, and coordinated required applications development and integration.”**

It is unclear how this description differs from the model described by the City. Please be sure to read the Procedures, Conditions, and Specifications document at www.wirelessalexandria.com, particularly Part 2, Section A. If there is a distinction between the two models, please submit another question and elaborate.

41. **“Will the franchise address the provision of wireless service from equipment mounted in Alexandria to customers located in adjacent jurisdictions?”**

No. Although the City generally cannot grant a franchise for operations that occur outside city limits, neither will the City seek to prohibit such operations through the franchise agreement. The Grantee will be free to sell service to any customer with sufficient access to the wireless signal, provided the Grantee observes all appropriate legal requirements in the jurisdiction where service is

provided. For example, if the Grantee sells service to a customer located in an adjacent locality, the Grantee may be required to obtain a business license from that locality.

42. “What are the water and gas companies in Alexandria?”

Water is provided by Virginia American Water (800-452-6863). Natural gas is provided by Washington Gas (703-750-1000).