

Staff Report

INTERNET FEASIBILITY STUDY

September 24, 2019

BACKGROUND:

At the August 13, 2019 City Council meeting, the Council directed that City staff place on a future meeting agenda the topic of an internet service feasibility study.

In June, staff provided estimated costs of \$75,000 to \$125,000 to conduct a feasibility study for both retail and wholesale internet service. The Retail Model involves the City designing, constructing, and operating an internet infrastructure network and providing services directly to the end user in competition with the existing private sector providers. In the Wholesale Model, the municipality designs and constructs an internet network, then leases that infrastructure to one or more private providers. In this model, the end users obtain services from the private provider(s), not the City.

CONSULTING MODEL:

As staff previously reported to the City Council, a fiber-to-the-premises provider, MetroNet, has outlined plans to provide internet service to most of the residential properties within the community. MetroNet will join Mediacom, CenturyLink, and ICS as major providers of broadband internet service in the community. However, MetroNet will be the first of these providers to offer fiber-to-the-premises as its only product.

During conversations with internet providers and industry experts earlier this year, City staff heard on several occasions that fiber-to-the-premises services are not economical to provide in areas where there is an existing fiber-to-the-premises provider. Therefore, it is possible that a City fiber-to-the-premises network will not prove feasible if built alongside a competing private fiber-to-the-premises network. However, it is unclear to what extent the City Council's desired improvements (availability, reliability, speed, customer service, cost, and net neutrality) will be achieved by private providers in the Ames community.

Should the City Council decide to pursue a feasibility study, City staff would advise that a different approach be considered rather than focusing a study solely on the feasibility of a municipal internet utility. **Under this model, a feasibility study for municipal internet service would be one possible path evaluated to accomplish the Council's six goals related to internet service (availability, reliability, speed, customer service, cost, and net neutrality). However, other paths would also be evaluated to achieve the desired levels of service.**

Under a Consulting Model, data would be gathered to understand the level of internet service that exists in the community. Using this data, alternatives would be developed to create service improvements. These would range from filling gaps in the community to developing a City-operated utility. The City would then evaluate the alternatives and decide which approach to pursue to address internet service issues into the future. The scope of services proposed by staff would include three phases:

PHASE 1: UNDERSTANDING THE LANDSCAPE

- 1.1 Evaluate the existing network assets in the City, including publicly and privately owned infrastructure and its characteristics, and the endpoints in the community that have access to various providers. The end result of this exercise will be a map identifying areas of the community with little to no reliable access to high-speed internet and constraints to serving them.

The locations of infrastructure would be made available to the public through the City's geographic information systems. To staff's knowledge, such a mapping exercise has not previously occurred in Ames. This would be beneficial for internal City operations (such as intelligent traffic control projects or to create connections between City facilities), as well as for private providers, who would be able to better provide service where it does not currently exist. These maps could also be helpful in avoiding outages to public and private networks in areas where excavation is occurring.

- 1.2 Identification of potential strategies for the City to influence policy decisions made by private providers with regard to customer service and net neutrality. For example, if there are customer service initiatives used by in other communities to improve the response from private providers, this evaluation would identify how they could be implemented here.

PHASE 2: PRELIMINARY STUDY AND GAP-FILLING

- 2.1 Conduct a pre-feasibility analysis of a retail and wholesale model of City-provided internet service, including:
 - a. Assessment whether viable and interested partners exist for a wholesale internet model
 - b. An evaluation of communities in which municipal service has successfully operated where the existing provider base was similar (i.e., can a City-operated service be feasible in competition with four other providers?)
 - c. Identification of potential sources of financing
 - d. Conceptual-level cost estimates for City-owned infrastructure deployment, and estimated service costs and customer take rates to maintain viability
 - e. Local market evaluation and estimate of likely customer take rates at various price points

- 2.2 Using the mapping data, approach the private providers to identify remedies to close coverage gaps. Remedies explored could include coordination of a critical mass of customers in an area, installation of City-owned infrastructure leased for private use, financial incentives to providers, or other unique strategies utilized in other communities to address coverage gaps. Estimated costs should be provided with each prospective remedy.

PHASE 3: DECISION POINT AND PURSUIT OF LONG-TERM PATH

At the conclusion of Phase 2, the City would assess the anticipated costs and potential effectiveness of the different approaches identified and decide which long-term path to pursue:

1. City-owned retail internet solution, OR
2. City-owned wholesale internet solution, OR
3. Gap-filling to improve service

These alternatives would be mutually exclusive at this point; if the City wished to pursue a City-operated retail internet utility, it would not be advantageous to simultaneously assist private sector companies in filling their gaps in service. The pre-feasibility study required in Phase 2.1 would help avoid the higher costs associated with a detailed feasibility study if the initial evaluation was unfavorable. It would also assist with narrowing the focus to either the retail or wholesale model if further study was justified.

Once an approach has been selected, Phase 3 will follow. Phase 3 alternatives would consist of one of the following alternatives:

- 3.1 A detailed financial analysis of the **retail** model of service delivery, including:
 - a. Infrastructure design costs and construction costs
 - b. Operational costs, including staffing, facilities, equipment, supplies, vehicles, and maintenance
 - c. Revenue requirements to support the enterprise
 - d. Required customer take rates and price points

OR

- 3.2 A detailed financial analysis of the **wholesale** model of service delivery, including the same components described in 3.1

OR

- 3.3 **A gap-filling strategy.** This would involve a soliciting proposals for a separate contract for consulting services to assist the City in working with existing providers to address the gaps in service and quality.

OPTIONS:

- 1. Direct staff to prepare an RFP for an internet consulting contract with the three-phase scope outlined above for the Consulting Model.**

Staff estimates the cost for this Consulting Model to be between \$100,000 and \$175,000 to complete all three phases. The expected duration of the work is estimated to be at least 12 months from the award of the initial contract.

This phased approach provides for exploration of a variety of potential strategies to improve internet service. Some of the tasks outlined would also benefit City operations as technology is increasingly deployed by the City to serve the public. The approach allows a consultant to provide a fair assessment of the City's potential for an internet utility. It also provides for a deeper exploration of ways to achieve the City Council's goals in the event a City utility is deemed infeasible. Having an alternative task to the full feasibility study in phase three prevents the consultant from being incentivized to provide a favorable or inconclusive pre-feasibility result in phase two.

- 2. Direct staff to prepare an RFP for a standalone feasibility study for either retail or wholesale municipal internet service.**

Staff estimates the cost for this study to be between \$75,000 and \$125,000. The City Council would need to direct staff regarding whether to pursue a study of the wholesale model, retail model, or both.

If the City Council feels strongly that the only direction to pursue is a municipal internet solution, this option accomplishes that in the most direct manner. However, it could result in a dead-end if the study shows municipal internet to be infeasible.

- 3. Delay a decision regarding a feasibility study until further information is known about private sector services in 2020.**

Staff anticipates that the entrance of a new provider into the market will affect some or all of the six aspects of internet services identified by Council. However, it is unclear to what extent those areas will be impacted. MetroNet has indicated to staff that it has advanced its construction plans, now projecting completion of its system by fall 2020. The Council could wait to see how consumer satisfaction is affected by increased private sector competition for internet service, and then decide how best to proceed, if at all.

STAFF COMMENTS:

If the Council chooses to proceed with either Option 1 or Option 2, staff would prepare an RFP and draft submittal requirements and the evaluation criteria. These details would then be returned to the City Council for final approval before the RFP is issued, to ensure alignment with the Council's vision. City staff recommends the funding for any study come from the balance of the Hotel/Motel Tax Fund, which is used to finance economic development projects.

The Staff continues to emphasize that if a study is pursued, it is important to ensure that it be conducted in an independent manner. Therefore, staff's recommendation would be to disqualify firms from submitting proposals for the study if those firms also engage in the construction or operation of broadband networks. Additionally, it would be important to select a firm with a record of finding some proposals to be feasible and some to be infeasible.