Begin forwarded message:

From: Joel Templeman
Date: April 5, 2023 at 4:41:56 PM CDT
To: "Eadie, Ross"
Cc: Subject: Re: Motion to format for tomorrow

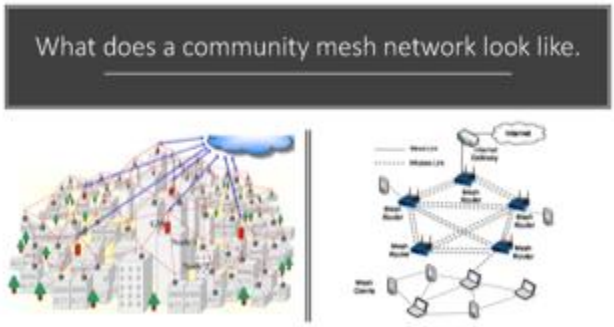
Councillor Eadie,

Please pass this information onto the members of the EPC as appropriate. As April 18, 2023 approaches, I wanted to provide a response to some of the questions that have been raised.

In short, the project is working to: 1) provide free computers (already happening), 2) providing digital literacy training (underway presently with classes starting in the next few weeks), and 3) building a wireless mesh network in the neighbourhood (pilot phase to start this Spring - backhaul antennas are being configured and installed in the next two weeks (adjust for storm delays)).

For this request, the focus is on the final bit where we are slowly building out a wireless, community owned wireless mesh network to provide connectivity to the internet at no/low cost to the users. The wireless part is simple. Residents will connect to the internet using wifi based technology which all connects back to the Manitoba Internet Exchange Point (IXP) where it travels over fibre optics to the rest of the world.

The mesh part just speaks to the routing style of how clients connect. In the past, networks used “hub and spoke” designs that were efficient, but with a single point of failure. Mesh networks allow for traffic to flow based on what is most available. This decreases congestion and helps avoid failures if a single node goes offline.



I have attached a diagram that depicts the type of layout that we will be utilizing. This diagram shows several apartment style residences, but it would be a similar set up for a single family dwelling. The old gear from the city is far from perfect, but since the majority of our target users have no connection now, anything will be an improvement at this point.

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[Here is the key message] = For us to connect 1 household, new wireless gear would cost retail approx $200 - $250. Getting access to the +/- 70 wireless access points that the city is disposing of would cut our costs in half and allow us to deploy twice as many connections for the trial.

Please let me know if you have any further questions or concerns,

Joel Templeman, CD, MPA, BEd
Executive Director
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