The Darbo Digital Divide

Worthington Park
~Neighborhood Association~
worthingtonpark.org

Sponsored by Worthington Park Neighborhood Association
Prepared by Alfonso Flores V, President
May 4, 2014

Before the news of a pilot program to fund tech initiatives broke to the public, myself and other proactive residents discussed how to effectively and economically operate free Wi-Fi and a computer library for neighbors in need. Understanding Internet access and computers were two components of a three-part problem we included education to make a complete solution. We know this is an ambitious plan but our group contains the experience and resources to pull it off. Several Worthington Park residents have extensive computer backgrounds, from systems and network administration to programming and graphic design, and across PC, Apple and Linux platforms. *When* the project can bear fruit is another issue, and this is where an injection of funds makes a critical difference. As mentioned, our project has three components:

Internet Access – Estimated Cost $15,000—$25,000
- Install a wireless mesh network
  - Currently consulting with Ross Tennent of Union Technology Cooperative
  - Analyze neighborhood for optimal node locations
  - Shop for and purchase node hardware (open-mesh.com, ubnt.com), cabling, conduit and mounting hardware
  - Solicit participation from homeowners to install nodes on their private property
  - Work with CDA and Meridian Group (Eastpointe) to permit installing nodes
- Seek partnership with local Internet provider, such as 5NINES, to bring service to gateways
- Develop access Terms of Service, etc

Hardware – Estimated Cost $8,100
- Acquire through donation or purchase ten Windows laptops and ten Chromebooks, plus two tablets or eReaders, and preferably store at a community center. Available for temporary use on free checkout.

Training – Offered for free by volunteers, possible stipends
- Basic training could include:
  - Hardware overview; Installing/Removing software; Online threats: viruses, spyware, spam, phishing; Security software; Cloud storage and backup
- Web and E-mail
  - Etiquette; Online training resources; Social networking
- Music and Video
  - Digital music sequencing; Video editing; Burning CDs and DVDs
- Introduction to programming languages
- MS Office (Windows), Google Docs

Of the +200 households in Worthington Park, we speculate needing up to 150 nodes (indoor) to provide full neighborhood coverage, including 7-10 high power outdoor APs requiring their own Internet connection. We would like to work with UW-Madison's MERIT program and MMSD to assist with youth integration and education development, plus reach out to existing job training programs to maximize efforts to our adult population.

As a way to encourage community placemaking and involvement, access to Worthington Wi-Fi may be offered as a perk for joining Worthington Park Neighborhood Association, which will soon adopt very affordable (~$5/year) membership dues. Administration may be both cloud-based and local, and offered by volunteer IT professionals. Access will likely be limited to participating devices or MAC addresses and bandwidth usage limits determined by strength of WLAN. These points and more would be decided on by our governing group and put into Terms of Service agreements.

In closing, this is a work in progress, there are many more details to uncover and address. Thank you for your time.

Sincerely,
Alfonso Flores V
President, WPNA
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From:	Alfonso Flores [alfonso.flores@nettechnology.com]
Sent:	Monday, May 05, 2014 12:28 PM
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Cc:	Faust, Dave; Resnick, Scott; Rummel, Marsha; info@worthingtonpark.org
Subject:	Addressing the Digital Divide - WPNA - Darbo/Worthington Neighborhood
Attachments:	Darbo-Digital-Divide.pdf

Paul,

Attached is an outline of what we in the Worthington Park neighborhood are working on for our community. I hope this project will be considered by the Digital Technology Committee for funding support. There's a good chance I can attend the meeting on May 8th to discuss this in person. If there's any information I can provide before then, please call or e-mail.

Take care.

Alfonso Flores
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