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Extension
UNIVERSITY OF WISCONSIN–MADISON
MARATHON COUNTY

August 17, 2020 Broadband Task Force Meeting

It may be beneficial to review the following resources and documents prior to the first Broadband Task Force meeting on August 17th.

Case Studies

- Design Nine Broadband Feasibility Study. Case studies and examples are contained in Chapter 7 of the Study
- Oneida County has had good luck in expanding access. They presented at the 2016 Legislative Council Study Committee on Rural Broadband. Their presentation and a great deal of other great information on broadband can be found at: https://docs.legis.wisconsin.gov/misc/lc/study/2016/1496 or to view their PowerPoint https://docs.legis.wisconsin.gov/misc/lc/study/2016/1496/020_september_7_2016_meeting_10_00_a_m_room_412_east/oneida_presentation

Internet Speed

One of the topics the Task Force will examine is the minimum download/upload speed Marathon County should support. The tables below provide very simple descriptions of the types of broadband connections and speed needs associated with different uses.

Types of Broadband Connections		
Faster	Fiber	A wired technology, generally viewed as the most preferred option for broadband. It uses fiber-optic cable to transmit large amounts of information. The infrastructure is relatively expensive to build.
	Cable	Cable uses the same coaxial cables, another wired technology, that deliver picture and sound to television sets to support broadband.
	DSL	Also a wired technology, DSL uses traditional copper telephone lines already connected to homes and businesses. Speed may vary with distance from the home to the nearest equipped telephone facility.
	Wireless	Wireless connections use a radio link to connect between residences or businesses and the provider's facility. Available to fixed locations as well as across broader regions via a cell phone, for example.
Slower	Satellite	A type of wireless broadband using the satellite technology used in for telephone and television service. It is viewed as useful for getting service to remote or low-density areas.

Source: (1) Federal Communication Commission. "Types of Broadband Connections." July, 23, 2014. Available at: https://www.fcc.gov/general/types-broadband-connections. (2) "Broadband Reference Guide: A Digital Resource for Stakeholders." Broadband & E-Commerce Education Center. University of Wisconsin Extension Madison. January, 2014. https://cced.ces.uwex.edu/files/2018/07/007.010.2014-Broadband-Reference-Guide.pdf, Slide courtesy of Tessa Conroy, Associate Professor UW-Madison Department of Agriculture & Applied Economics.

How Much Speed Do You Need?

0-5 Mbps	General browsing, email, social media, online radio.
5-40 Mbps	Videoconferencing, telecommuting, telemedicine, online gaming, streaming video, multiple device usage within a household
40-100 Mbps	Streaming ultra high-definition (Netflix 4K), multiple device usage within a household/business
100-500+ Mbps	Online education delivery (e.g. testing services and video streaming), database access, record storage and sharing characteristic of anchor institutions

Sources: (1) Federal Communication Commission. "Household Broadband Guide."February, 5, 2020. Available at: https://www.fcc.gov/consumers/guides/household-broadband-guide. (2) Federal Communication Commission. "Broadband Speed Guide."February, 5, 2020. Available at: https://www.fcc.gov/consumers/guides/broadband-speed-guide?fontsize=largeFont. (3) Kruger, Lennard. "Defining Broadband: Minimum Threshold Speeds and Broadband Policy." Congressional Research Service. December 4, 2017. Available at: https://fas.org/sgp/crs/misc/R45039.pdf. *Slide courtesy of Tessa Conroy, Associate Professor UW-Madison Department of Agriculture & Applied Economics.*

I look forward to the Task Force meeting on Monday. For reference, the WebEx meeting information is copied below:

Meeting number (access code): 146 215 0250

Meeting password: BroadbandTF

Monday, August 17, 2020

4:00 pm | (UTC-05:00) Central Time (US & Canada) | 1 hr 30 mins

Tap to join from a mobile device (attendees only)
+1-408-418-9388,,1462150250## United States Toll

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