



Broadband's Impact on Telemedicine, Education and Economic Development

Speaker Series Session
March 17, 2022



Speaker Series Overview

- Alliant Energy launched its speaker series in the Fall of 2021 in an effort to engage key stakeholders in a series of discussions on expanding access to broadband and digital opportunity in some of the Midwest's most digitally challenged rural communities.
- **Why it matters?**
 - On average, 67 percent of Alliant Energy customers in Wisconsin and 75 percent of customers in Iowa lack sufficient access to reliable and affordable high-speed internet service.
 - This digital divide is hindering our customers' ability to effectively engage in remote work, remote learning and telehealth due to gaps in infrastructure access, affordability, device ownership and digital literacy. The result: they are often disconnected from educational and economic opportunities in today's increasingly digital world.



Today's discussion

As part of this webinar series, today's speakers will discuss the impact of the digital divide and the importance of closing the digital divide. Our speakers will discuss the challenges they face in their respective industries as they strive to expand broadband access, especially in our communities.

Moderator: Lydia Angel, Federal Affairs Specialist DC

Panelists

- **David Schneider, MD**, is a tenured Associate Professor at University of Wisconsin Health in the Department of Surgery
- **Gene Dalhoff**, IOM, VP of Talent and Education at Madison Region Economic Partnership (MadREP)
- **Steve Goldberg**, Executive Director, WEA Member Benefits Foundation



MadREP

Broadband Speed Test



MadREP Broadband Speed Test

- MadREP began work in broadband space in early 2021.
- In speaking with communities across the region, it became apparent that communities that had mapped their broadband speeds had a clear advantage over those that hadn't when it came to accessing grant funds.
- Access to these grant funds created an even greater gulf between the “have” and “have not” communities when it came to broadband expansion.
- MadREP decided our broadband efforts would be best spent trying to level the playing field in terms of communities accessing grant funds. Step one is helping communities across our region to map their broadband speeds.



MadREP Broadband Speed Test

- We launched our speed test in early November 2021.
- Speed testing continues and anticipate it will likely go through late spring or early summer.
- Conferring with key individuals in each county about their outreach efforts.
- Outside of MadREP & New North, remainder of state will begin their outreach soon.

[Español](#)

Welcome to the MadREP crowd-sourced broadband project.

From this web site we can collect data about your broadband speed and create a map for your community that will help your community in efforts to get grants and other support to improve broadband for your community. Select below the action you wish to take.

Please make sure that no one in your household is streaming videos or gaming while you take this test. If you are connected to **school or work**, please turn off your **VPN** during this test. If you don't know what a VPN is, then you are ready to take the test.

Unless you enter an address with no available service, **the address that you enter should be the address where you are right now.**

click on choice

Enter my exact address

Enter my partial address (if you are concerned about privacy, choose this)

Enter an address with **NO AVAILABLE SERVICE**

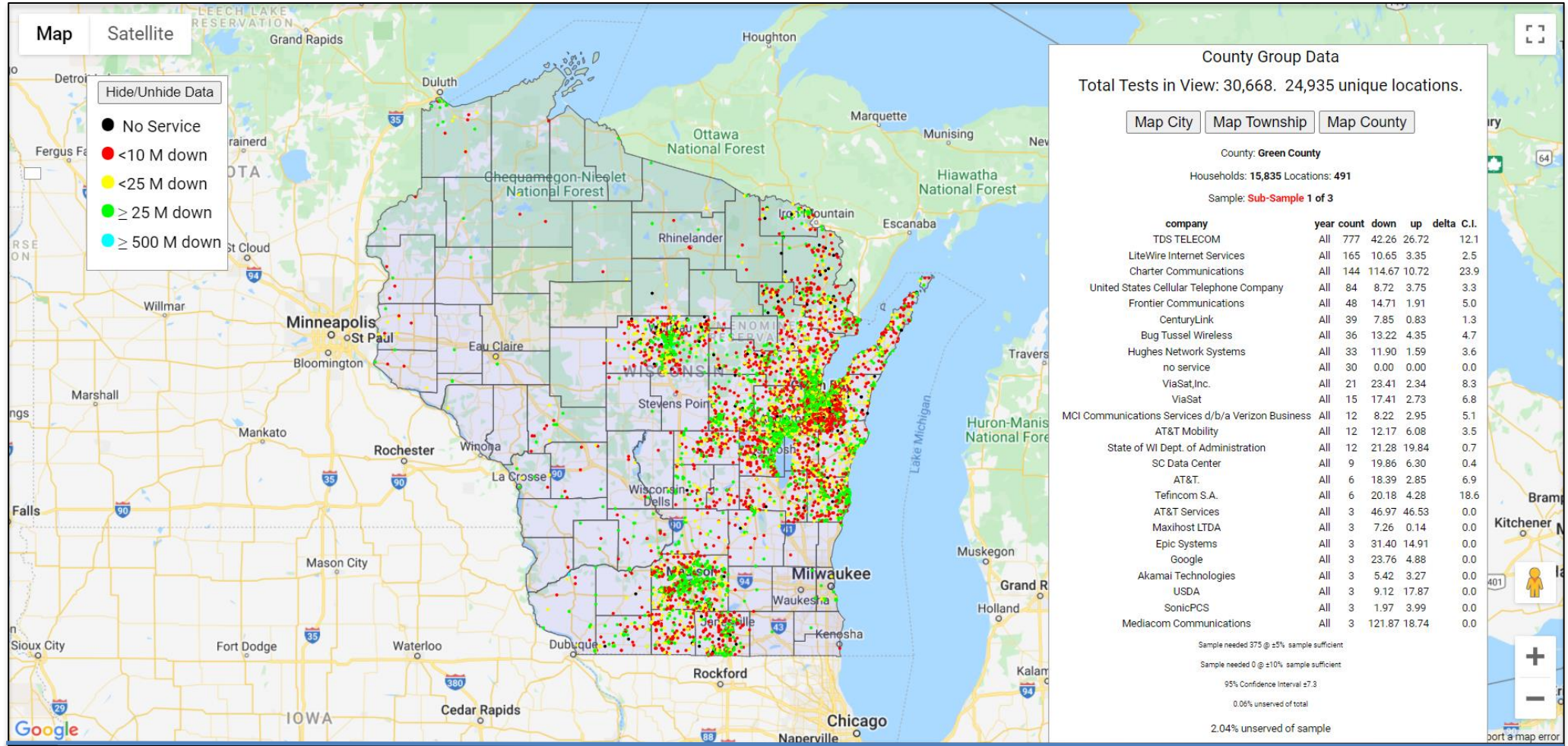
Your contact email (optional)

[Let's do it](#)

We **do not** use tracking cookies.
We **do not** store your address.
We **will** store your location and speed test results.
[Please review this Disclaimer.](#)



MadREP Broadband Speed Test





MadREP Broadband Speed Test

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Green County

Households 15,835
 Population 36,842
 Test locations 357
 Total Tests 497
 Percent participation 2.25%
 Participation goal (10%) 1,584

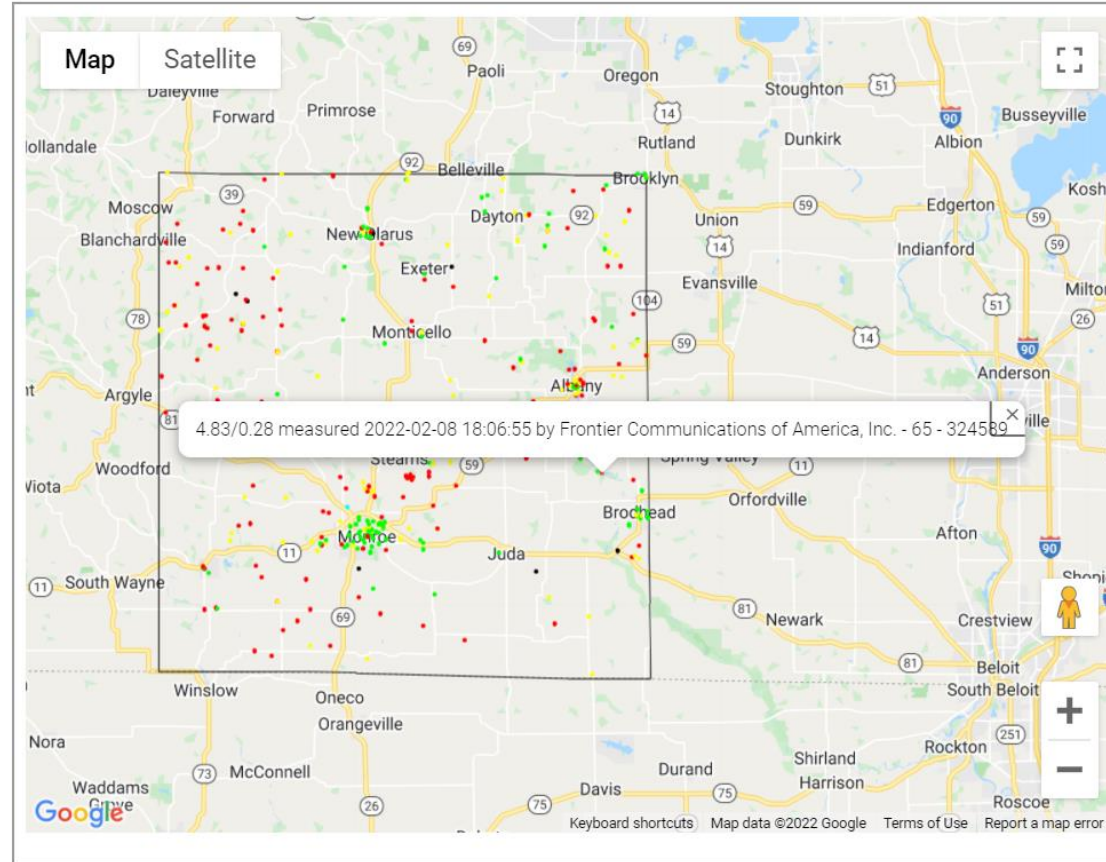
Download

• No Service 7 2.0%
 • 0-10 Mbps 144 40.3%
 • 10-25 Mbps 98 27.5%
 • 25-150 Mbps 83 23.2%
 • 150+ Mbps 25 7.0%

Upload

No Service 7 2.0%
 <3 Mbps 176 49.3%
 3-10 Mbps 96 26.9%
 10-25 Mbps 53 14.8%
 25-150 Mbps 18 5.0%
 > 150 Mbps 7 2.0%

	Min	Max	Med Mbps
Download	0.26	504.61	13.41
Upload	0.03	531.86	2.96
No service reasons: may total >100%			
Not Available			100.00%



Fixed 339 locations

Download		Upload	
No Service	7 2.1%	No Service	7 2.1%
0-10 Mbps	136 40.1%	<3 Mbps	173 51.0%
10-25 Mbps	89 26.3%	3-10 Mbps	82 24.2%
25-150 Mbps	82 24.2%	10-25 Mbps	53 15.6%
150+ Mbps	25 7.4%	25-150 Mbps	17 5.0%
		> 150 Mbps	7 2.1%

Cellular 18 locations

Download		Upload	
0-10 Mbps	8 44.4%	<3 Mbps	3 16.7%
10-25 Mbps	9 50.0%	3-10 Mbps	14 77.8%
25-150 Mbps	1 5.6%	10-25 Mbps	0 0.0%
150+ Mbps	0 0.0%	25-150 Mbps	1 5.6%
		> 150 Mbps	0 0.0%



MadREP Broadband Speed Test

[Print this page](#)

Dane County

Households 215,946
 Population 488,068
 Test locations 1,488
 Total Tests 2,196
 Percent participation 0.69%
 Participation goal (10%) 21,595

Download

• No Service 15 1.0%
 • 0-10 Mbps 415 27.9%
 • 10-25 Mbps 287 19.3%
 • 25-150 Mbps 474 31.9%
 • 150+ Mbps 297 20.0%

Upload

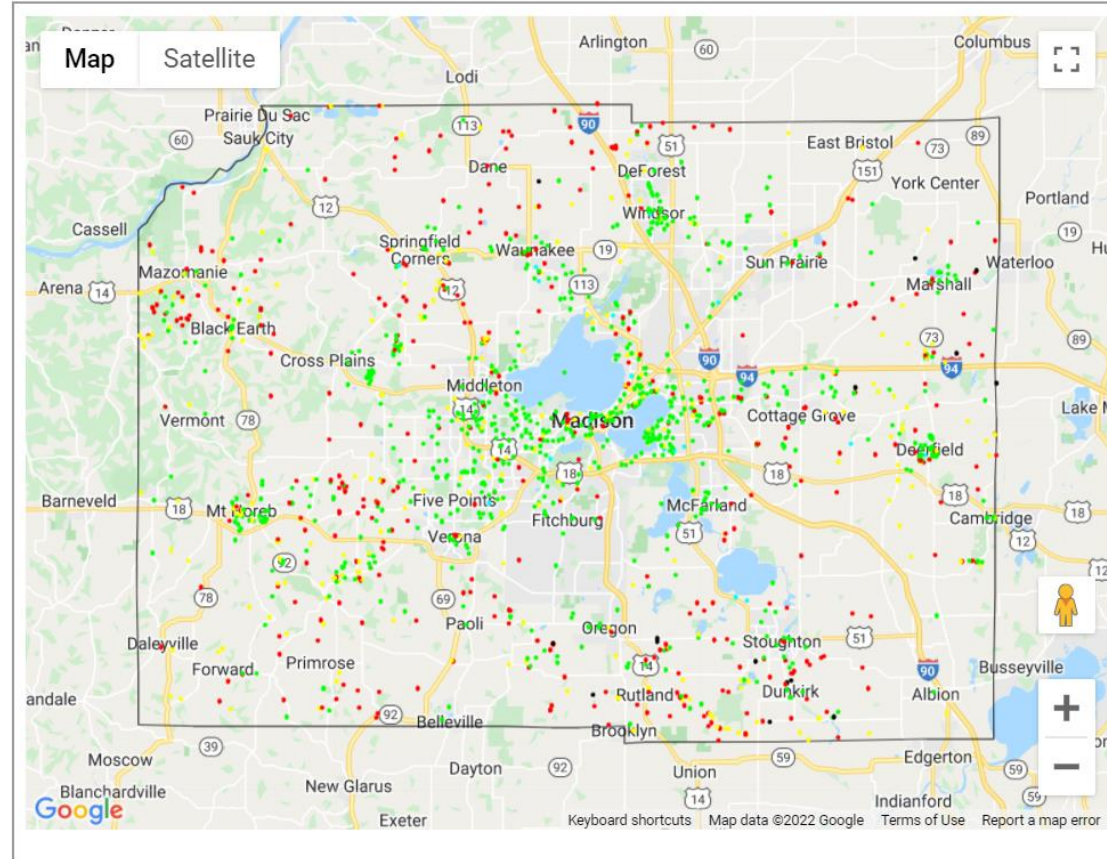
No Service 15 1.0%
 <3 Mbps 508 34.1%
 3-10 Mbps 333 22.4%
 10-25 Mbps 398 26.7%
 25-150 Mbps 128 8.6%
 > 150 Mbps 106 7.1%

	Min	Max	Med	Mbps
Download	0.10	832.01	27.58	
Upload	0.04	909.78	7.90	

No service reasons: may total >100%

Not Available 92.31%

Too Expensive 7.69%



Fixed 1,327 locations

Download		Upload	
No Service	15 1.1%	No Service	15 1.1%
0-10 Mbps	355 26.8%	<3 Mbps	454 34.2%
10-25 Mbps	246 18.5%	3-10 Mbps	280 21.1%
25-150 Mbps	433 32.6%	10-25 Mbps	373 28.1%
150+ Mbps	278 20.9%	25-150 Mbps	116 8.7%
		> 150 Mbps	89 6.7%

Cellular 161 locations

Download		Upload	
0-10 Mbps	60 37.3%	<3 Mbps	54 33.5%
10-25 Mbps	41 25.5%	3-10 Mbps	53 32.9%
25-150 Mbps	41 25.5%	10-25 Mbps	25 15.5%
150+ Mbps	19 11.8%	25-150 Mbps	12 7.5%
		> 150 Mbps	17 10.6%

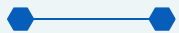
Telemedicine and the Digital Divide

David F. Schneider, MD, MS

Medical Director – Virtual Care, UW Health

Alliant Energy Broadband Speaker Series

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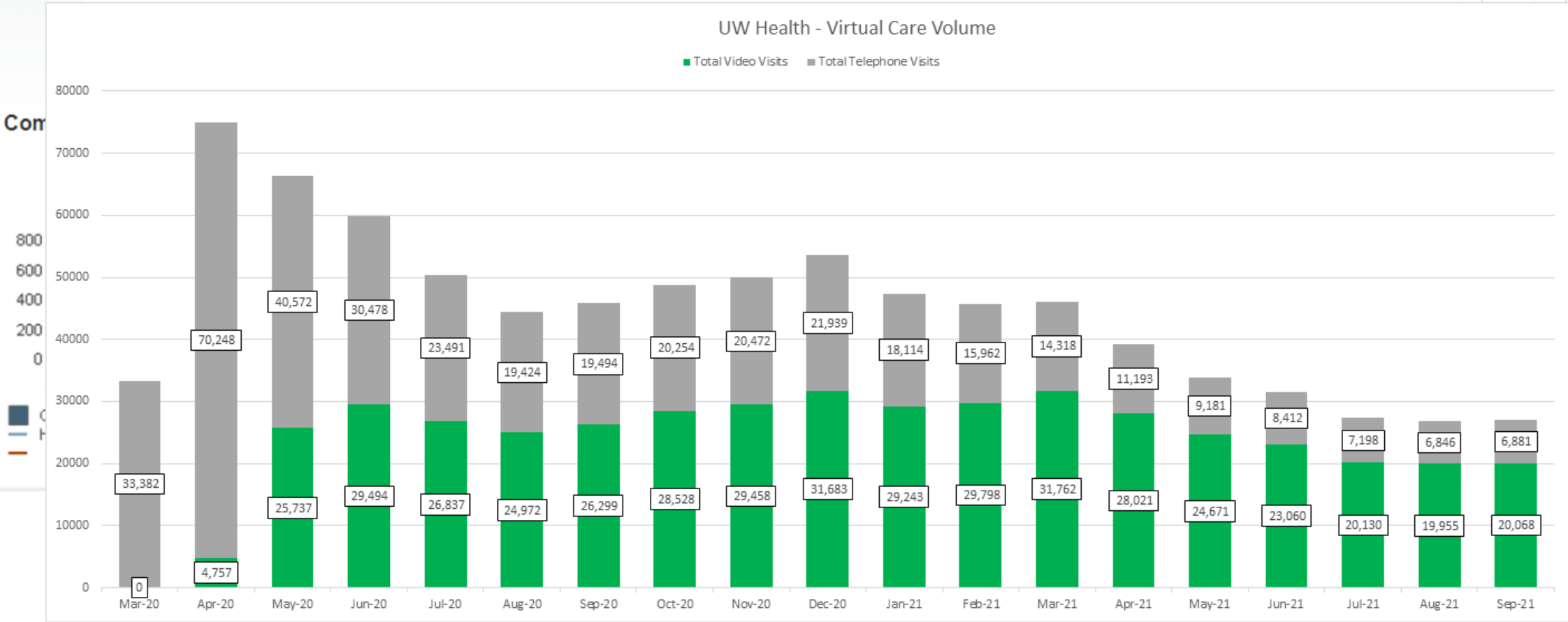
Not “The Future” Anymore



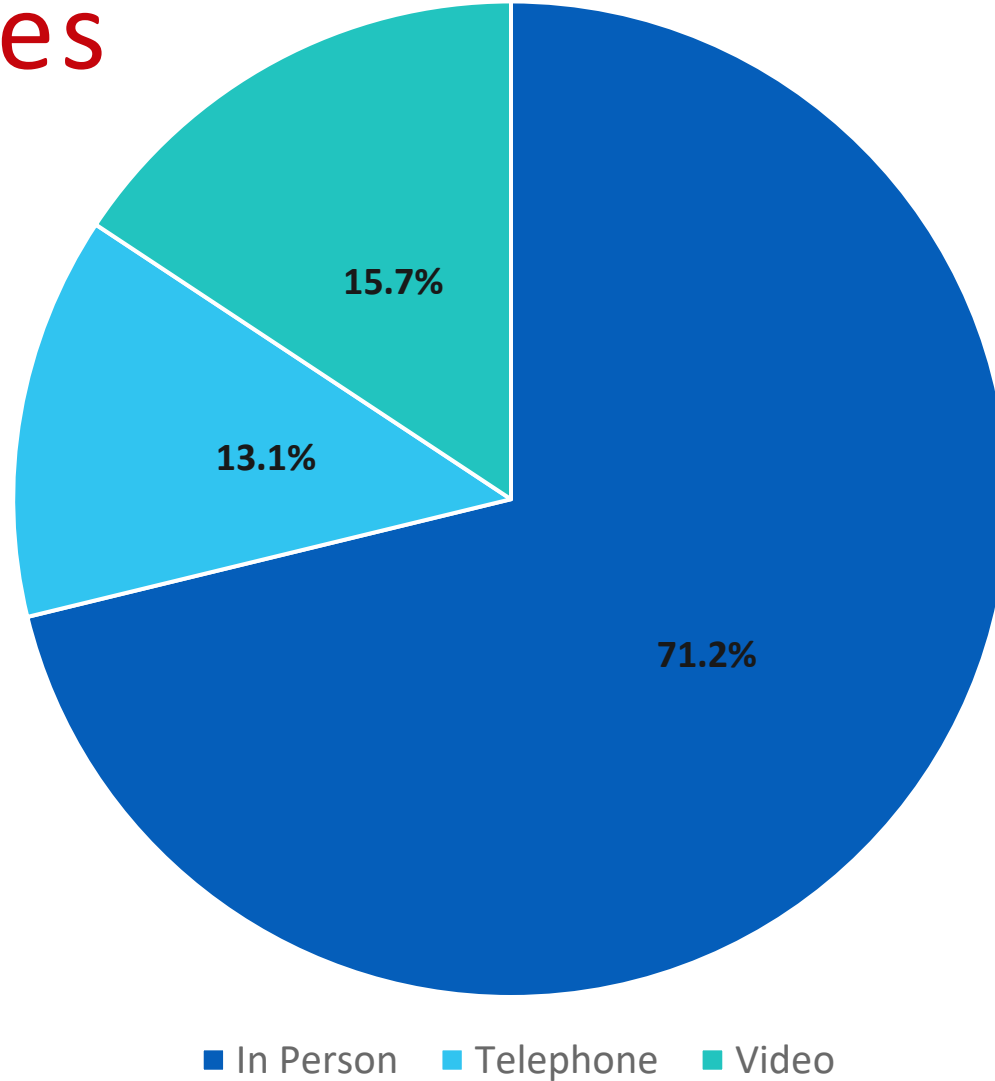
The Jetsons, ABC, 1962



Visit Volumes – Initial Period



Visit Types



Predictors of Video Visit



Variable		Max Technology Used			p	
		In Person	Phone	Video		
Age 65-74					0.1	
Age >/= 75					0.1	
Male	URBAN VS RURAL	OUT OF STATE	84.71%	5.13%	10.16%	0.1
Asian		RURAL	81.93%	6.61%	11.46%	0.1
Black		URBAN	81.42%	5.16%	13.42%	0.1
Hispanic		Grand Total	81.53%	5.37%	13.09%	0.1
Rural		0.87 (0.80 – 0.94)			< 0.001	
Spanish Speaking		0.63 (0.1 – 0.66)			< 0.001	
		0.36 (0.29 – 0.43)			< 0.001	

All of these groups were *less* likely to have a video visit



WEA Member Benefits™
FOUNDATION INC.



Expanding Private Philanthropy Funding for K-12 Student Internet Access in Wisconsin

Steve Goldberg, Executive Director

We Are a Catalyst

- ▶ Bringing more philanthropy to the table
- ▶ Major “missing piece”
- ▶ Statewide funding model
- ▶ Pilot project

K–12 Student Internet Access

- ▶ Partners: Department of Public Instruction (DPI), Public Service Commission (PSC), Cooperative Educational Service Agency (CESA Purchasing)
- ▶ Affordability gap
- ▶ PSC grant

Pilot Project: Sept. 2021-Aug. 2022

- ▶ PSC grant
- ▶ WEA Member Benefits Foundation
- ▶ Alliant Energy Foundation *
- ▶ Goal: 210 student households

Pilot School Districts

- ▶ Janesville, Menasha, Shawano, Beaver Dam, Sheboygan Falls, Madison, Portage
- ▶ DPI/CESA Digital Learning Bridge

The Impact of “Bulk & Batch”

- ▶ Group purchasing power/pricing
- ▶ Upfront, lump sum payment for full 12 months of access
- ▶ ISP cooperation

The Appeal to Funders

- ▶ Uses an established funding vehicle: “plug & play”
- ▶ Opportunity to adopt specific school districts
- ▶ We are the matchmaker

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