



Bridging the Digital Divide

[<librarian.net/talks/lsls14>](http://librarian.net/talks/lsls14)

Hi -- thanks for having me. I've been talking about the digital divide and the tech haves and have-nots for over ten years and I'll be darned if it's not only not going away, it's still with us and in some ways more pernicious than ever. The theme of this conference is basically exactly what I talk about so apologies for the literal metaphors here.

I'll be talking about what has changed and what has stayed the same and what responses are working and not working.



The longer I've been a librarian, the more I've become a hobbyhorser for digital divide topics. It's not so much that the topic is more important to me, but that it seems, over time, to have become less important to everyone else. I think it's human nature to look around you and figure that what you see is the status quo everywhere.

As more people get connected, they think everyone is getting connected. This is normal even if it's not accurate.



Quick background on me, I went to library school (UW) starting in 1993 and wrapped up after some travel and whatnot in 1996. This was the gap between text-based dumb terminal stuff and The Web. Interesting times. The library school was IN the library, here.

At that time the digital divide was firmly between students and teachers. We were making websites for school projects and teachers were having us print them out and put them on their desks.



Nowadays I live in rural Vermont and, like many people there, have a variety of jobs. I teach basic computer classes at the local high school (and sometimes at the library) really simple stuff like "where are my files?" I also do a regular "drop-in time" where people who just have a question or two can come by and ask. My students are mostly, but not all, seniors.

SUBJECTS

AUTHORS

ADD A BOOK

LISTS

RECENTLY

HELP

OPEN LIBRARY

One web page for every book.

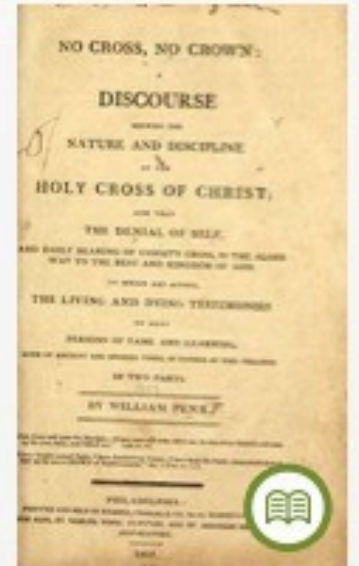
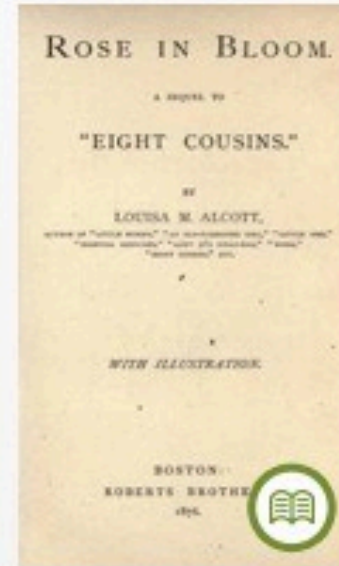
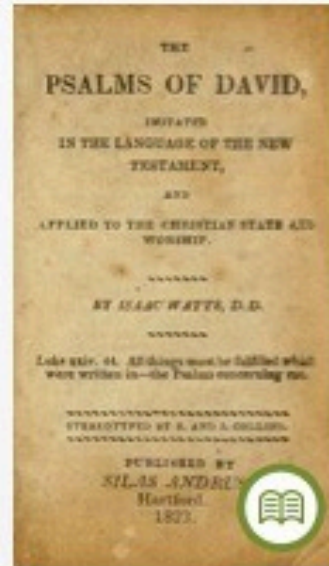
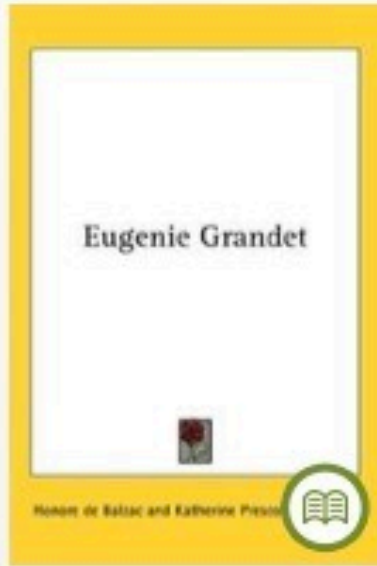
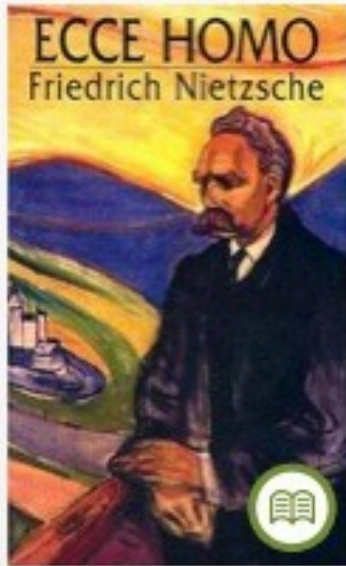
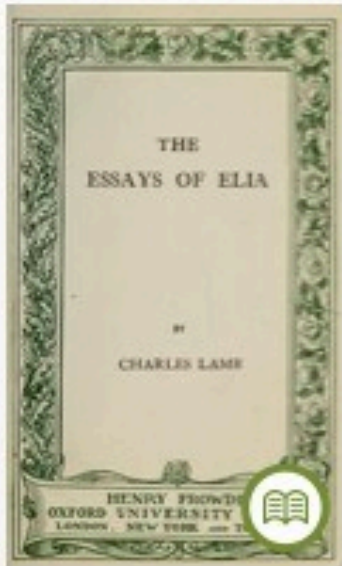
Search

☐ Show only eBooks

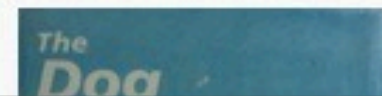
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Open Library is yours
to borrow, read & correct.

Books to Read The World's classic literature at your fingertips. Over 1,000,000 free ebook titles available.



Books to Borrow Here's a sample of recently returned books from the eBook lending library.



I just picked up a job working at Open Library which is a project of the Internet Archive. We do ebook lending worldwide. You want to see technologically confused people? Try explaining how a DRMed ebook download works to someone in Tanzania.

I love the work, but a downside to this job is that the powers that be at the Internet Archive firmly believe that their online library should be self-serve and bristle at paying for "support". Why can't people just figure it out? They'll ask. You've heard it before.



Home & Away

This sort of thing – staying/roaming – one of the things about the digital divide is that it's invisible, the people who are hardest to serve are also rarely on the TV or in the paper talking about their lives. That's why I'm so happy we have conferences like this one where we can all get together, share stories and ideas, and report back.

I'm also a stats/data/numbers nerd so I like to try to pull out numbers that tell a story that I think may not be otherwise getting told. I'll try not to make this too blablanumbersblablastats, but I think some of these facts are important for helping us understand some of this stuff.



I live in rural Vermont. The last town to get hooked up with electricity in my state was Victory Vermont in 1963 ... we're still dragging a little in terms of internet access too. I live in a small town, Randolph, of about 4500 people and we're digitally divided enough that when a new street gets wired, it makes the paper. That, and the people running cables through the woods with horse teams. Not kidding



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VTers who use the internet



Ninety percent of Vermonters use the Internet (that ten percent is about 63,000 people). 30% of offline Vermonters cite "broadband not available" as their reason for not having broadband at home. 19K can't get it at all (which often means "haven't used it" especially for older folks).

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Access from home?



33,000 people



Ninety-four percent of those internet users have access from home--33,000 don't have internet at home. Sometimes this means "at work" and often this means "at the library"

Access from home?

Adult ESL and Literacy Wired For Learning Computer Classes

FREE!!

Free basic computer classes for adult ESL and Literacy learners. Learn to use a computer to search for jobs, practice English, and send e-mail.



July Classes

Word 2

Mon July 16, 10:30am-12 noon
Tue July 17, 6:00-7:30 pm

Internet 1

Wed July 18, 10:30am-12 noon
Thur July 19, 6:00-7:30 pm

Basics 1

Mon July 2, 10:30 am-12 noon
Tue July 3, 6:00-7:30 pm

Basics 2

Mon July 9, 10:30am-12 noon

Internet 2

Mon July 23, 10:30am-12 noon
Tue July 24, 6:00-7:30 pm

Email 1

Wed July 27, 10:30am-12 noon

When I lived in Seattle right after library school I was an AmeriCorps volunteer at Seattle Public Library and helped start the Wired for Learning program which taught tech skills to folks who needed them. In Seattle that was mostly low income folks, new immigrants and people with cognitive or physical disabilities.

My feeling was that I'd do that for a few years, then everyone would have learned the stuff and then we could move on to more sophisticated topics like copyright awareness, online privacy, that sort of thing. When I was first on ALA Council back in ... 2003-2006, people were still debating whether you could require someone to have an email address in order to participate in council.

Then I moved to the east coast which was a bit behind the west coast and to Vermont specifically which is in what I call a tech shadow ["offline and proud of it"] and to this day I'm still teaching "my first email" classes. I am not complaining, I love this work, but the sort of people who need a "my first email" class are different than they were, and the sort of other tech questions people have are different than they used to be.

Teaching the divide, then

- Dial-up awareness
- People's only high speed access may be at the library
- Your library needs a website
- Design matters

Older digital divide topics were more along the lines of

- Lots of people still use the web on dial-up (so make sure your website works for them)

- Many people only have high speed access at the library (so make sure they can do assignments or whatever in chunks of time)

- Your public business really needs a website, even a basic one, that was not built by a 15 year old (nothing against them but they have an annoying tendency to grow up and leave town and take the passwords with them)
- Bad design is alienating. Sometimes makes sites impossible for tech novices, the color-blind, and other print-disabled users and people with mobility impairments

Some of these are still true but less so

Teaching the divide, now

- Dial up users: 941,000
- Device-based broadband
- Websites are standard.
- Social media?
- Bad design is eternal.

-941K people in the US still use dial-up, it's a big number but it's a tiny percentage
-More people have device-based broadband which is actually often better for usability because people design for mobile

-Having websites is standard, now we worry about whether people should be on facebook or twitter

-Bad design is still a problem but nowadays there are more good examples out there for people to follow. Lawsuits have taken care of most companies having websites that work for the blind. Shame on them.
Also, new topics have taken their place alongside these.

And yet...

- Device-based broadband downsides
- Bad design in government sites
- Digital "natives" vs "tourists"
- No infrastructure support
- PEBCAK *

* problem exists between keyboard and chair

- People whose broadband is only through mobile devices often pay for bandwidth and can't use things that require an always-on connection (gaming, adobe) or frequent large updates (weekly software updates)
- Net neutrality is a worrisome issue being debated JUST THIS WEEK in the paper
- People forced to interact with websites that are hard/impossible to use (healthcare.gov) in order to get basic government services

- Digital natives are being taught by ... digital tourists and this is creating some weird etiquette schisms (TXLA encouraged me to "use the backchannel" which was a new term to my mom and I'm sure many other people). Filtering policies set by people who don't understand the web (RTCC examples: can't use Skype, seven month wait to get email unblocked)
- Still no national infrastructure for giving people the skills that they need to tackle this stuff even as we are starting to require them at a "this is what you need to be a citizen" level.
- The thing to notice is that a lot of these problems are less money/technology and much more human/social. (PEBCAK)



I think a lot of people (and myself) can get really caught up in the needs and concerns of our own communities. That's important, our people are important and keeping them served and happy is really our main reason for being. I don't mean to be all "Keeping up with the joneses" about this but it's good to know where you and your people stand relative to the nation at large (and I won't even talk about the larger world, every time I hear about the broadband in Singapore it makes me despondent)

So, where I am, even though I am seeing people day in and day out who don't have internet at home except maybe through their smart phone, here are the realities presented with statistics. I've mushed together number from a few different reports. All my sources are linked on the links page. A lot of them cite each other anyhow. It's tough to get good statistics from people you can't really hope to sell things to.

There's very little money in studying the digital divide.

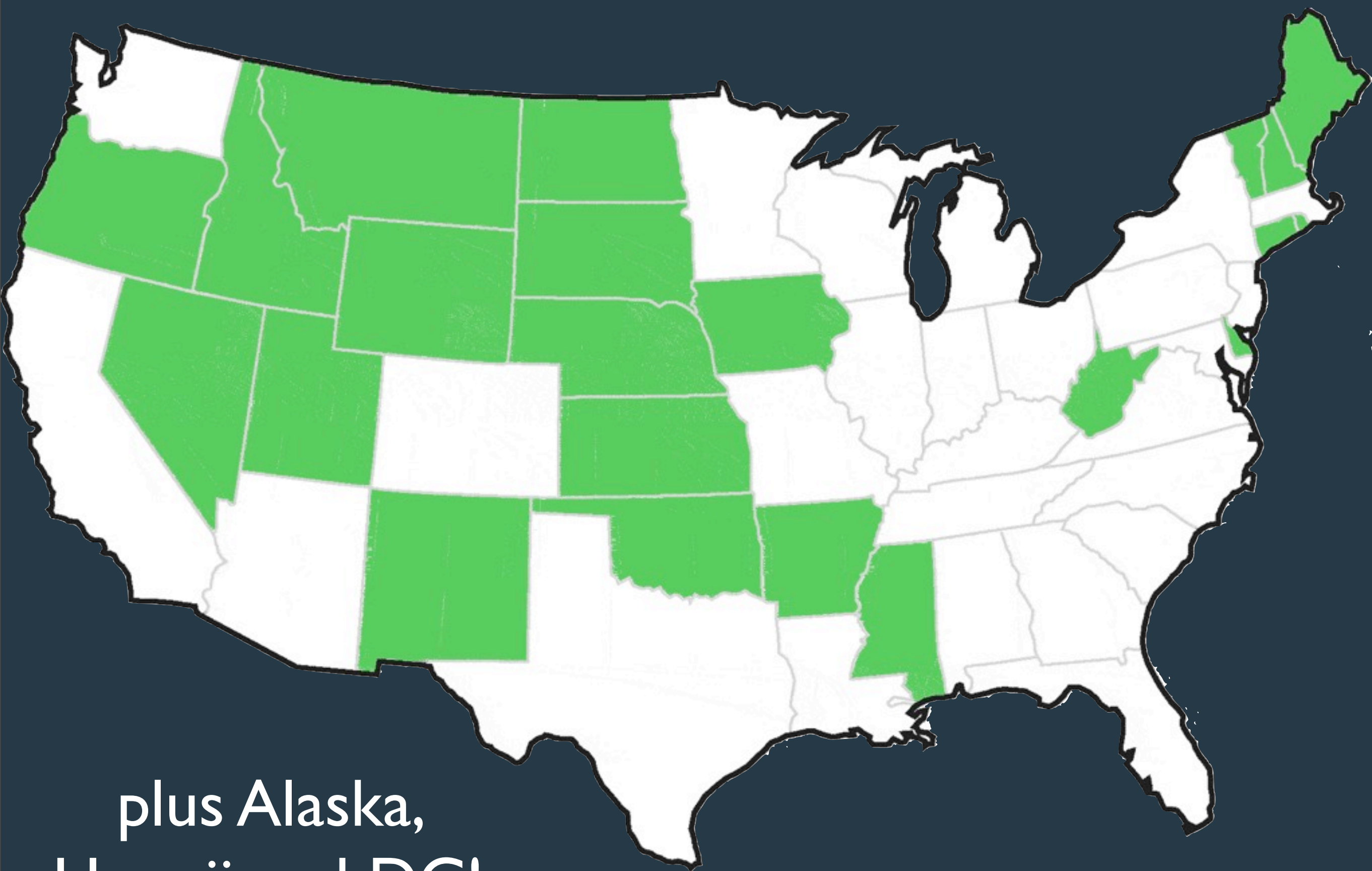


An advertisement for M1 MEGA DEALS. At the top right is the M1 logo. Below it is a large orange box with the text "M1 MEGA DEALS" and "LIMITED PERIOD ONLY! SIGN UP AT ANY M1 SHOP NOW." Below this is a blue curved banner with the text "Beat the COMEX queue!". The main headline is "FIBRE BROADBAND" in large black letters. Below that is another orange box containing "100 MBPS" in large orange letters, followed by "AT JUST" in white on a black background, and "\$39/MTH" in large orange letters. A blue arrow points from the text "It's a steal!" below the price box to the price itself. At the bottom, in small red and black text, it says "FREE Fixed Voice for your home with rental of a Residential Gateway at \$2/mth" and "• FREE unlimited local calls • 30% OFF IDD 002 and 021 services*".

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plus Alaska,
Hawaii and DC!

Back to the US at large. 15% of adults don't use the internet at all. 47 million people.
Oregon Oklahoma Connecticut Iowa Mississippi Arkansas Utah Kansas Nevada New
Mexico Nebraska West Virginia Idaho Hawaii Maine New Hampshire Rhode
Island Montana Delaware South Dakota Alaska North Dakota District of Columbia Vermont
Wyoming

This was a big freakout when we found out that 40 million people didn't have healthcare and
what did we do? We built a mandatory broken website for them to use to solve this problem.
How much do you think this 40 million overlapped with that 47 million? A bunch, right?

offline people

- 25% share a home with an online person
- 14% used to use the internet but stopped
- 63% say they would need help getting online
- 92% are not interested in getting online

25% of offline people have someone else in the house who is online. Remember that now that people get online using mobile devices, access is often "personal" and people don't share access which changes the "Who is offline?" map a lot. A bit more that we know about these folks.

14% (of offline adults) say that they once used to use the internet, but have since stopped for some reason.

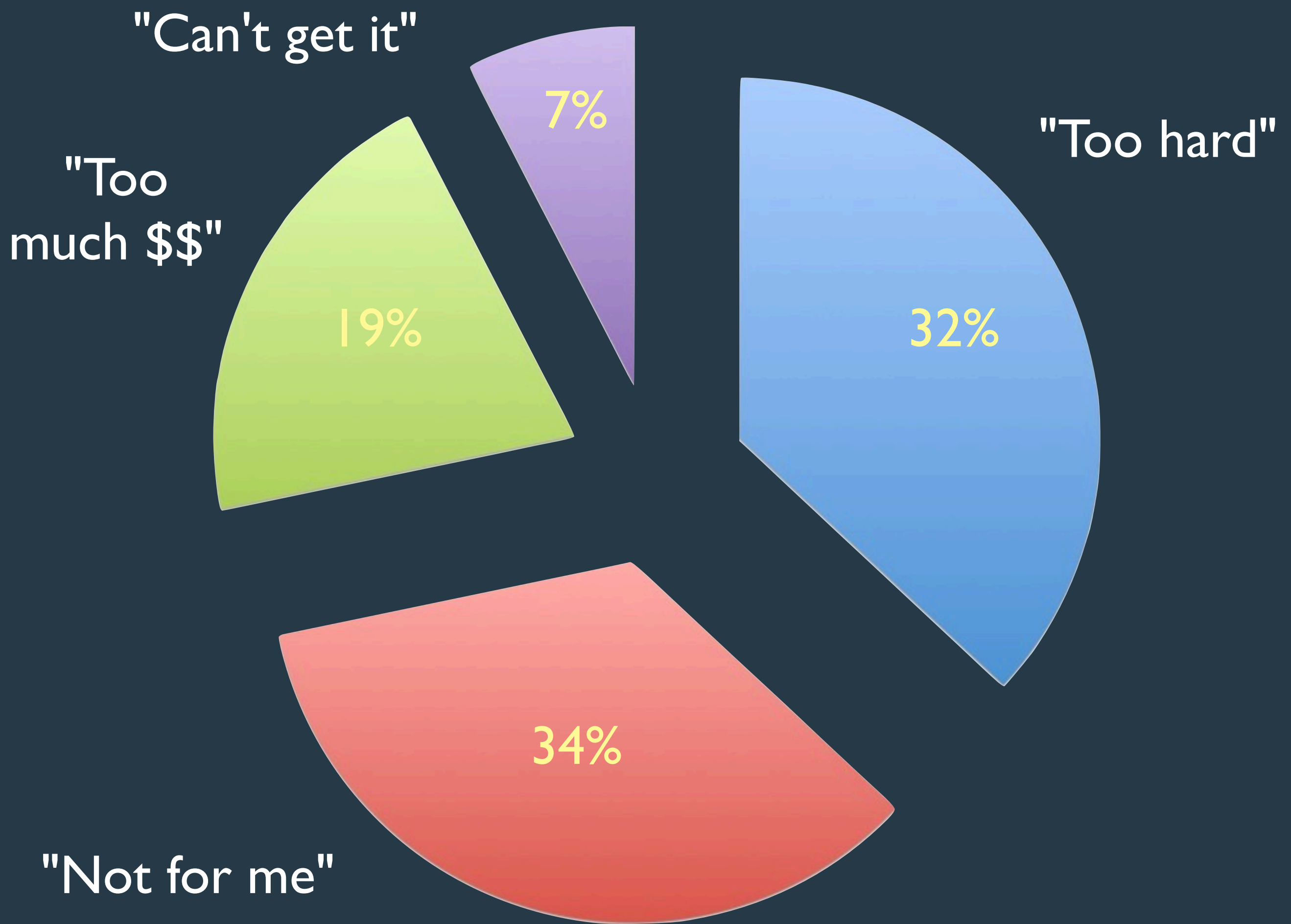
[in my drop-in time I see people who had a partner who died or left who used to "run the computer" in the household]

92% (of offline adults) say they are not interested in getting online

[just like we've found with other information needs, people only do the thing they don't want to do when they have a real reason to do so. It's nice if this is a neat thing like "buy that book you found on NPR" (how I met my current landlady) or "See the grandchildren" and not "Fight with your health insurance company" or "File for unemployment benefits"]

63% (of offline adults) say they would need help getting online

[and this means "outside of their current support network" one of the things we know about problems like poverty is that they become generationally institutionalized. If you're offline there's a good chance that your immediate friends and family are also offline]



IRS was one of the original organizations (along with the FCC) to study offline America (sidebar: why) and they found that people were pretty evenly split. Two (at least) divides with subdivides originally

- 1. Can't get access (can't afford, not available)

- 2. Don't want access (fear, stubborn)

Nowadays? Ten years later. About the same, a little more nuanced.

- 34% "Internet is not for me" (fear, stubborn, who knows)

- 32% "Internet is not easy to use" (need help, have challenges)

- 19% "Too expensive" (need access or need computer)

- 7% "Can't get it" (regulation is helping with this, but slowly)

The can't get access category is rapidly shrinking and is replaced by the "Don't get it" "Can't use it" category. This is progress?

Why hard things are hard

- Literacy
- Physical issues
- Cognitive/emotional
- Priorities

Serving those who are hardest to serve is part of WHAT WE DO but it's getting tougher as the less-hardest are finally getting online. The people who are left often have challenges, sometimes compounding ones.

- language challenges - non-english speakers, poor readers of their own language, dyslexia

- physical challenges - shaky hand, low vision

- cognitive/emotional challenges - bad memory, easily frustrated, "BUT WHY" responders

- "lifestyle" challenges - homelessness, poverty, other more important issues

Divides contain multitudes

- Economic
- Usability
- Empowerment

Looking at this from a slightly different angle, there used to be just an economic divide (can't afford internet, can't afford computer), now we have

```
<ol><li> usability divide <ul>
<li> low literacy "40% of the population has lower literacy skills"<br>
<li> seniors – HUGE group, issues with vision, physical impairments, vocabulary (brains less
plastic which is fine but need more assistance with terminology – Godzilla)<br>
</ul>
I teach a class on getting started with facebook but I have an entire handout which is just
"Can you find the tiny triangle that is hiding your settings?"
<br><br>
<li>empowerment divide – esp with the social web<ul>
<li> 90% of users don't contribute, 9% contribute sporadically, and a tiny minority of 1%
accounts for most contributions (wikipedia)<br>
<li> people don't know how to search (am I right librarians??) and SEO is like the national
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<li> the less you pay the more you are the product being sold (cheap laptops, free webmail,
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Making Everything Easier!™

Novelty Edition

Online Everything FOR DUMMIES®

Learn to:

- find all the hidden triangles that hide the things you want
- adapt to software that updates somewhere between once a week and never
- why RTFMing is barely useful

Microsoft
Comcast
Google



really?

why?

And it's hard to learn about how to use a computer by reading a book.

And I don't care what people say, the digital divide won't be solved by someone building a better website about computer skills. So stop giving them money to do it.

Yay libraries

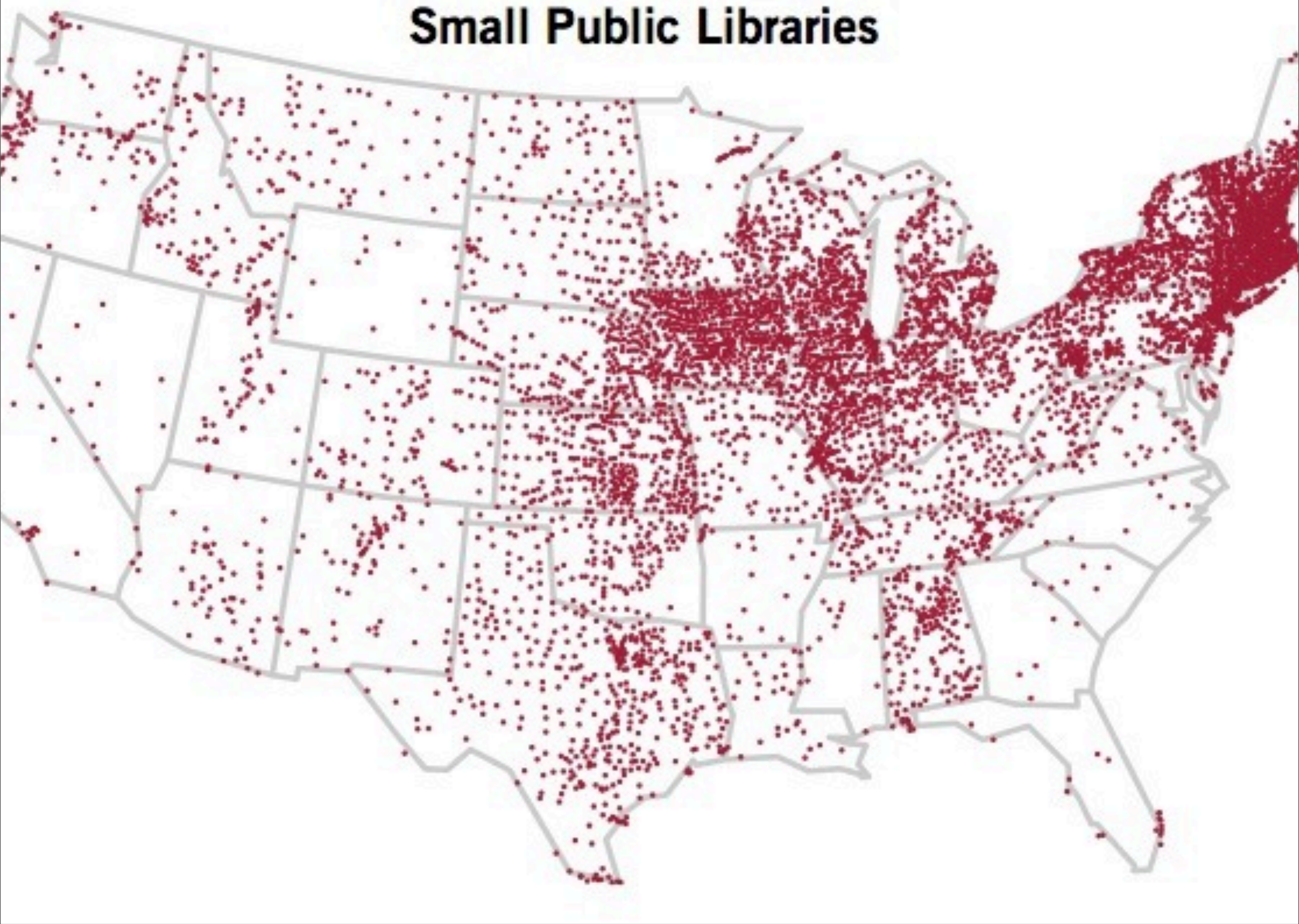
- 91% offer free wifi
- 74% report increased wifi use
- 60% report increased computer use
- 62% are the only source of free access to computers/internet in their communities

So where do libraries come in? Well we've always been the institution for everyone, and we seem to have gotten the role of social safety net for the digital divide. I'm not complaining, exactly, but it would have been nice if that job had come with some money.

Libraries have responded to the demand by increasing access, doubling the number of public computers in the past 10 years. 91% of public libraries provide free Wi-Fi, and 74% of libraries report use of Wi-Fi increased in 2011. 62% of public libraries report that they are the only source of free public access to computers and the internet in their communities. 60% report increased use of public internet computers.

Yay libraries.

Small Public Libraries



Back to the topic at hand, libraries, and rural libraries. I went to Michigan a few weeks ago. And we were all watching the ice breakers... And following the ferry company on facebook? 47% of all public libraries are rural, but they serve just over 12% of the target library service population in the United States

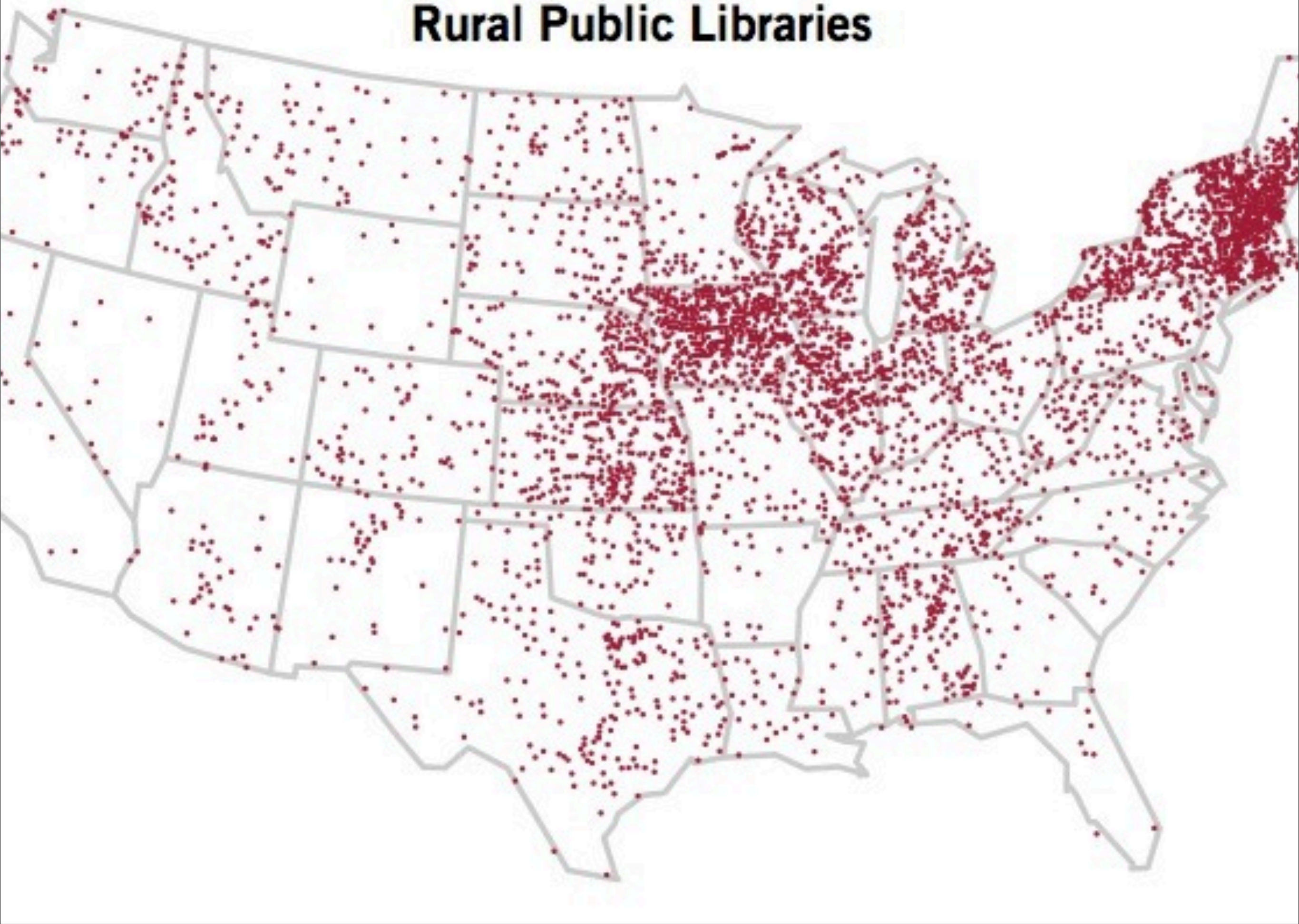
And the definition of rural has changed, at least according to the govt.

In 2006, National Center for Ed Stats redesigned & redefined "rural." Rural locations used to just be "Within the metropolitan statistical area" or not. Now they're broken down into three separate categories: fringe rural, distant rural, and remote rural

VT – 79% rural, 98.7% small (small = less than 25K people)

MN – 56% rural, 80% small

Rural Public Libraries



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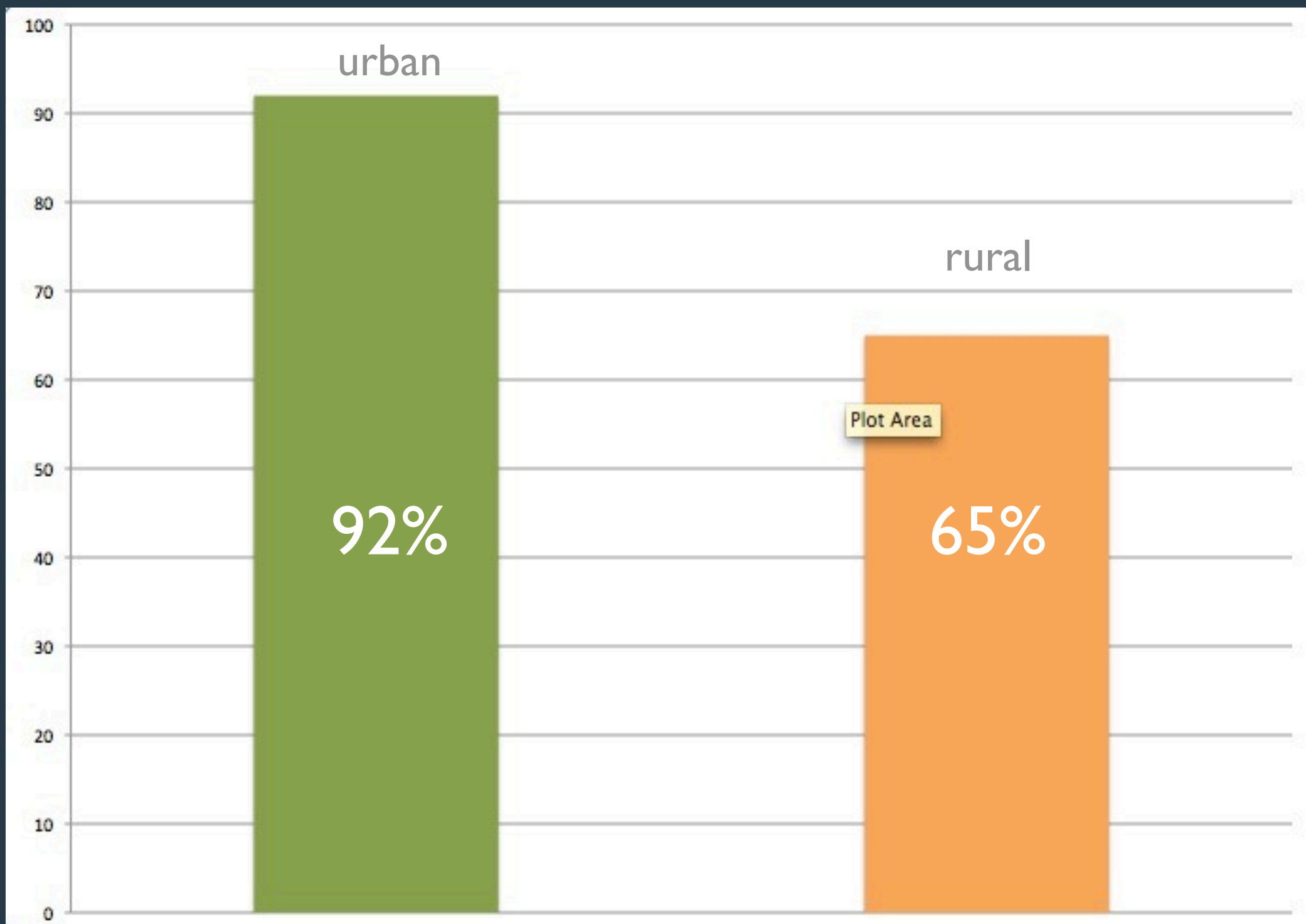
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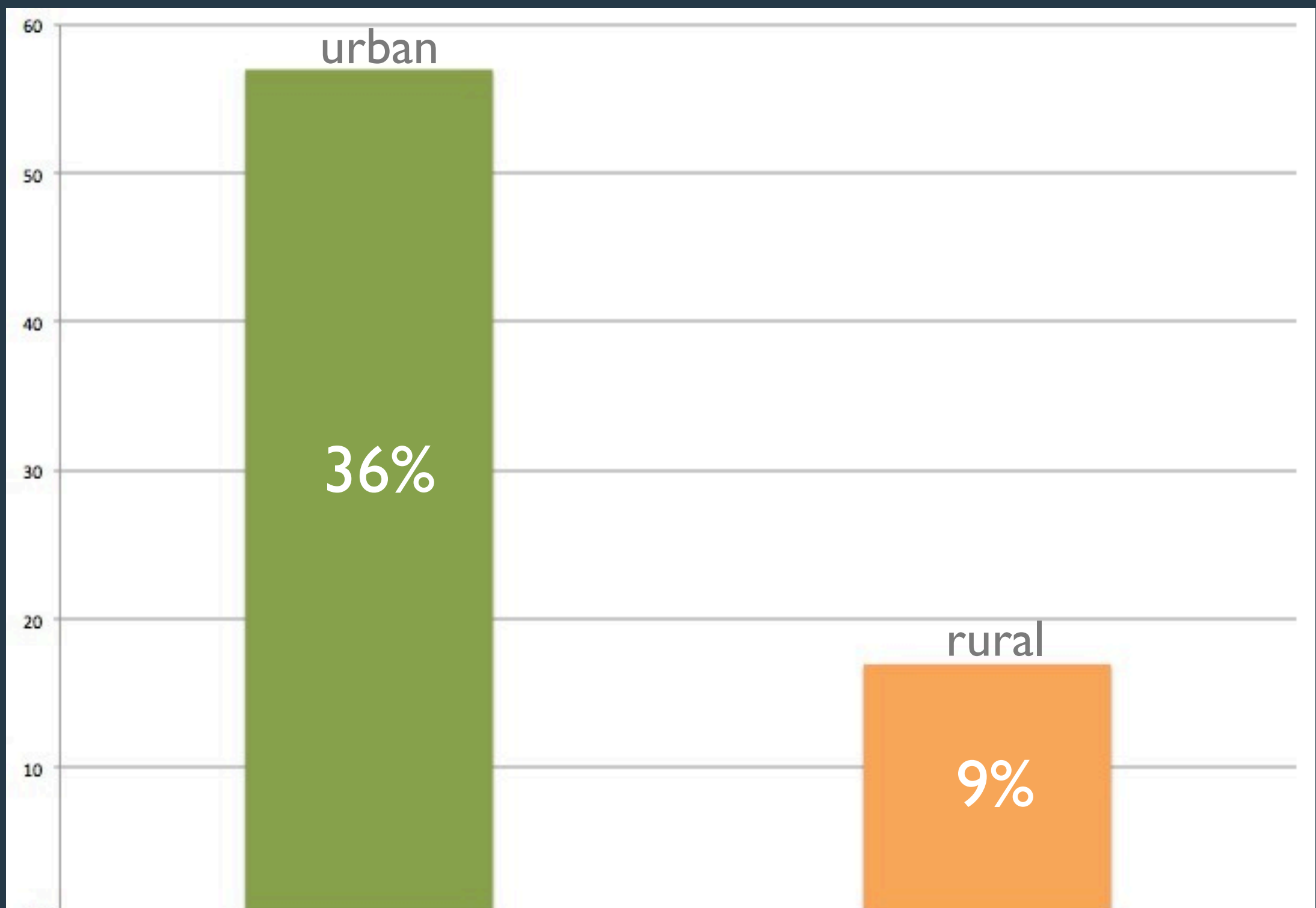
ebooks?



And there are some real differences between urban/rural library situations 76% of libraries nationwide offer access to e-books, and 39% of libraries provide e-readers for check-out by patrons

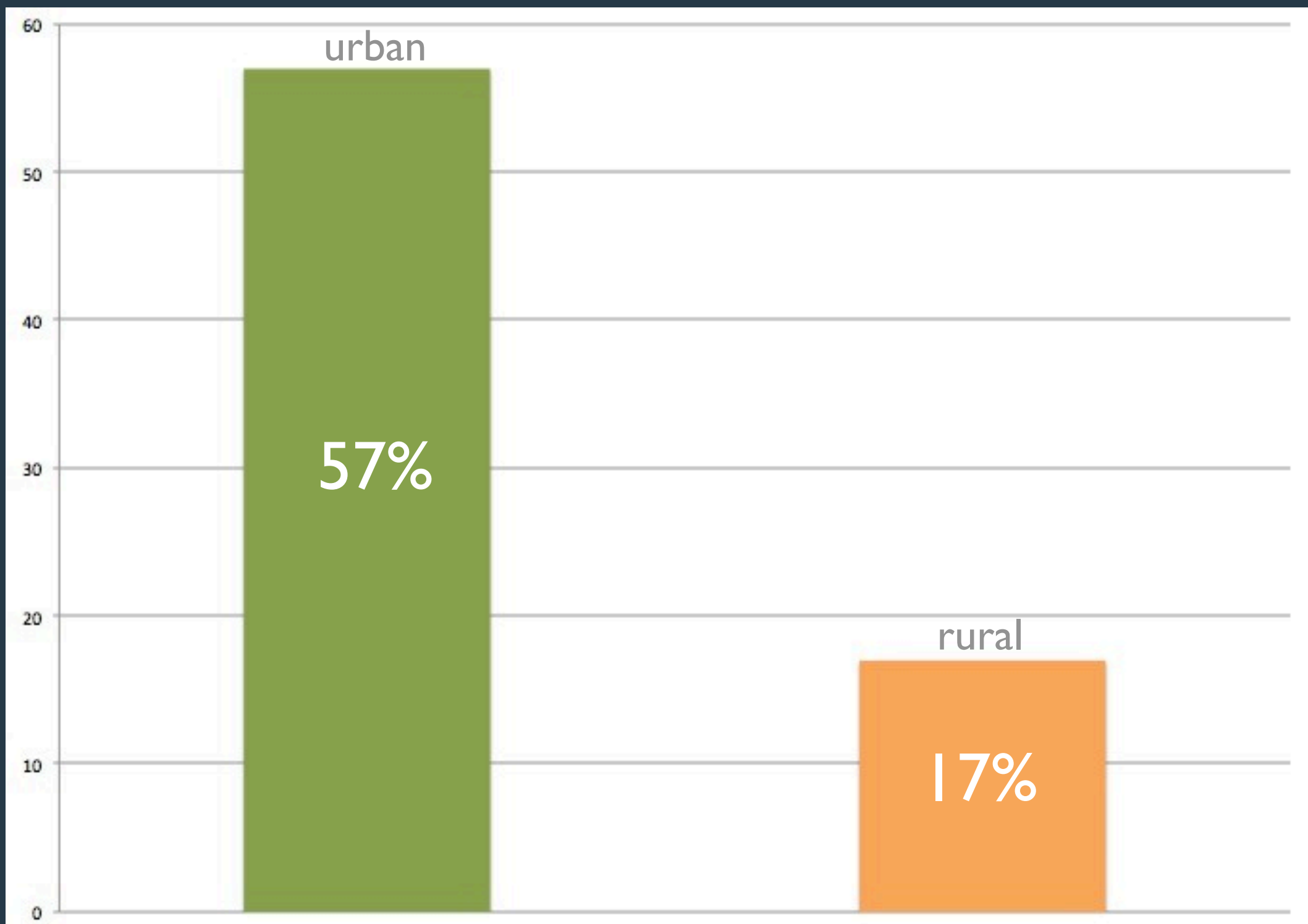
– e-books are available from 92% of urban libraries, compared to 65% of rural libraries [4% of readers read e-books exclusively.]

mobile?



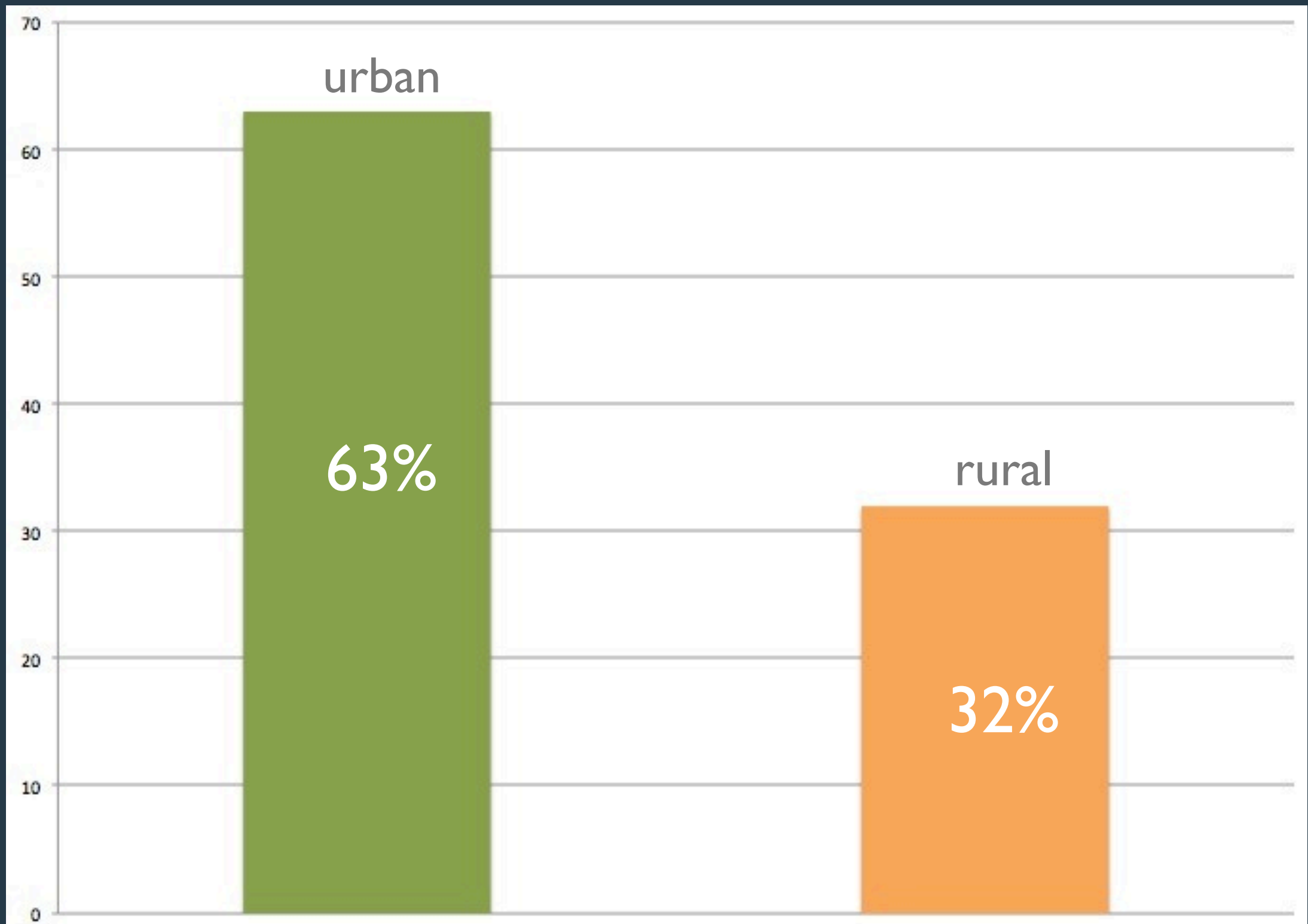
15% of library websites are optimized for mobile devices
36% of urban libraries have websites optimized for mobile devices
compared to 9% of rural libraries (where you sometimes can't get a signal)

broadband?



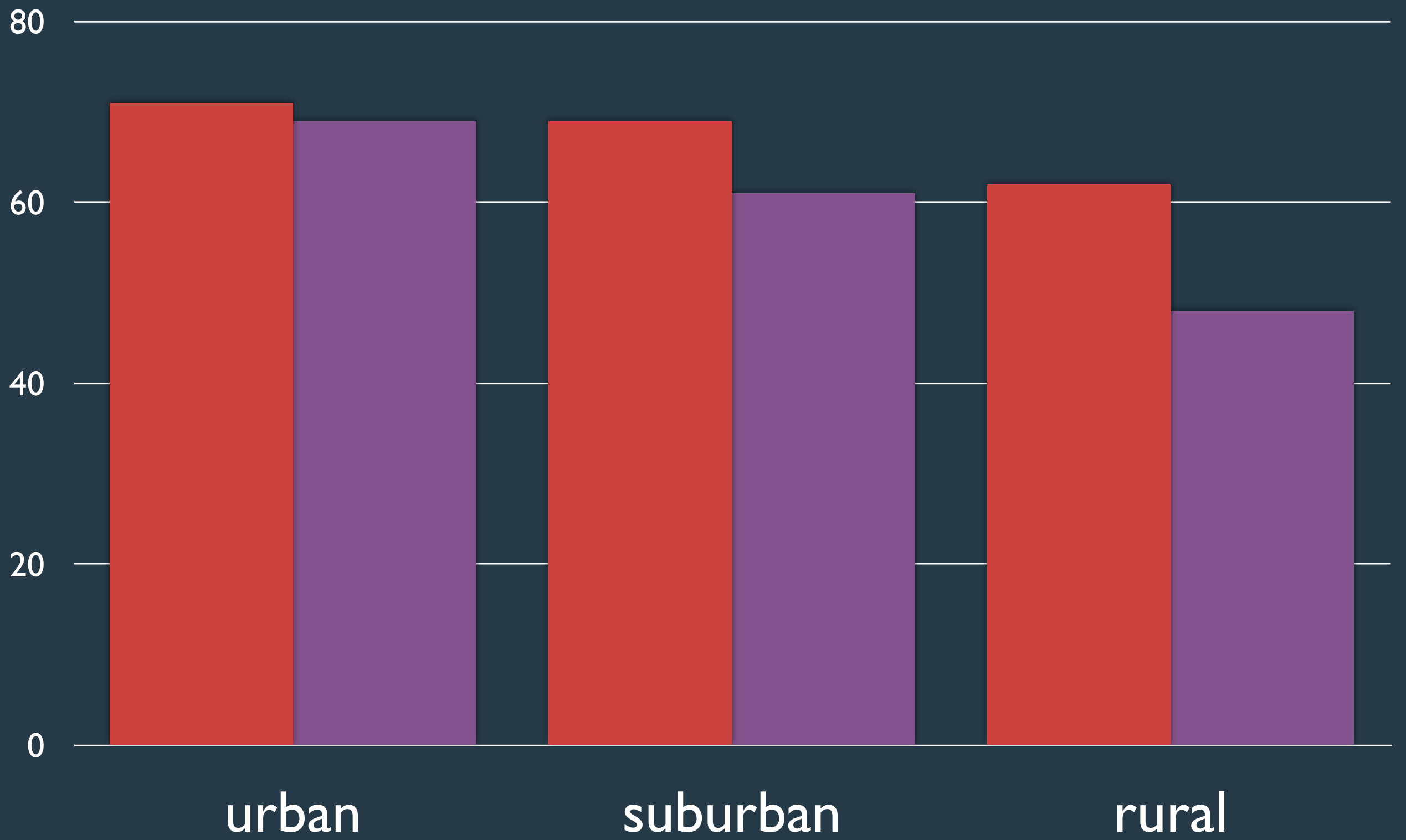
57% of urban libraries offer broadband speeds greater than 10 Mbps, as compared to 17% of rural libraries

training?



Technology training classes are provided by 63% of urban libraries, compared to 32% of rural libraries

library is important have library card



Rural: 62% of residents say the library is important and 48% have library cards
City: 71% say the library is important to them and 59% have library cards.
Suburbs: 69% say the library is important and 61% have library cards.

what's normal?



I spoke earlier of the empowerment divide and I think one of the unique problems that rural libraries have is exactly what I spoke about earlier. People tend to think what's true and real is what they see around them. This is a normal response.

However, we sometimes get stuck in little eddies in our rural locations (good ones and bad ones – my library had to rethink its privacy policies because the usual "an email address is for one person only" thing doesn't hold true where I am. Good on them for thinking about it and not telling people they were using email wrong) where lack of tech understanding leads to continued tech apprehension and a normalizing of the offline life that may be counterproductive for people.

(story about Chris who doesn't drive)

RIGHTS OF CITIZENSHIP

YOUR RIGHTS.

Your Rights of Citizenship give
you the Privilege of joining your
fellows in the defence of your

HONOUR AND YOUR HOMES

Join under the Group System to-day
and safeguard both.

YOUR DUTY.

Your Duty is to Fight the
COMMON FOE and to get your
Comrades to join you.

FORWARDED BY THE PARLIAMENTARY SOCIETY COMMITTEE LONDON

NUMBER No. 147

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Now, people are welcome to make choices about how much they want to interact with technology in their lives whether it's cars or Candy Crush. At the same time, people need to be realistic that their decision to opt out comes with social costs. And that while we're happy, in most cases, to be available for My First Email classes, it's no more appropriate for us to type a letter for someone (something I've been asked) or ask us to build "a small website" for them (ditto) than it would be for them to ask us to read a book to them (though I'd be happy to help them with the technology that would make that work). Things digitally divided people are missing out on, a short list... everyone has one of these, this is mine

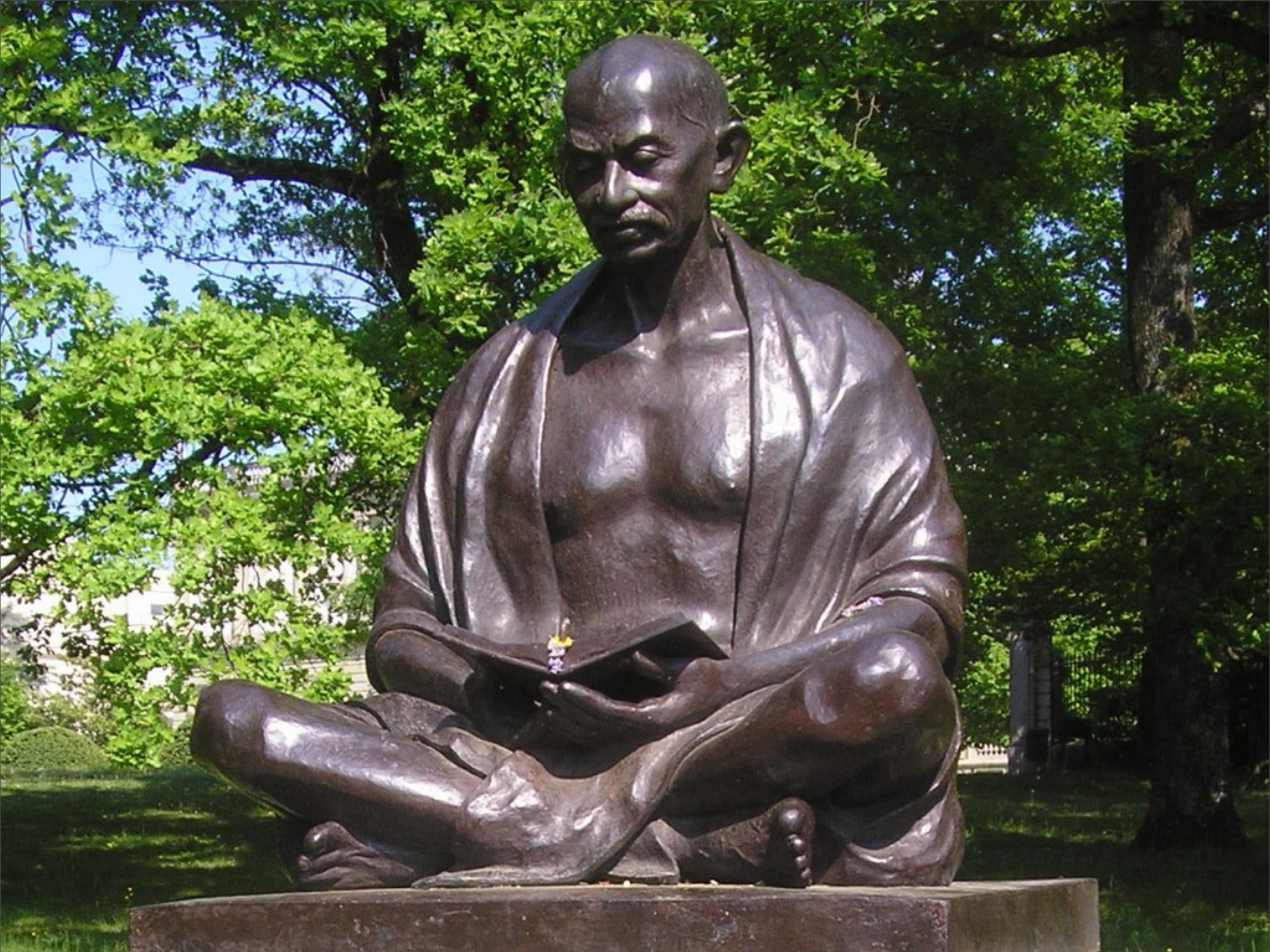
1. connections to people/businesses (twitter backdoor)
2. lower prices, different marketplaces, coupons (esp necessary for rural folks)
3. civic engagement (white house petitions, DMV stuff, hunting and fishing licenses)

So helping people get online, in whatever fashion that takes, is actually helping them to be citizens, to be interactive, to be part of the information economy, to participating in a democracy.



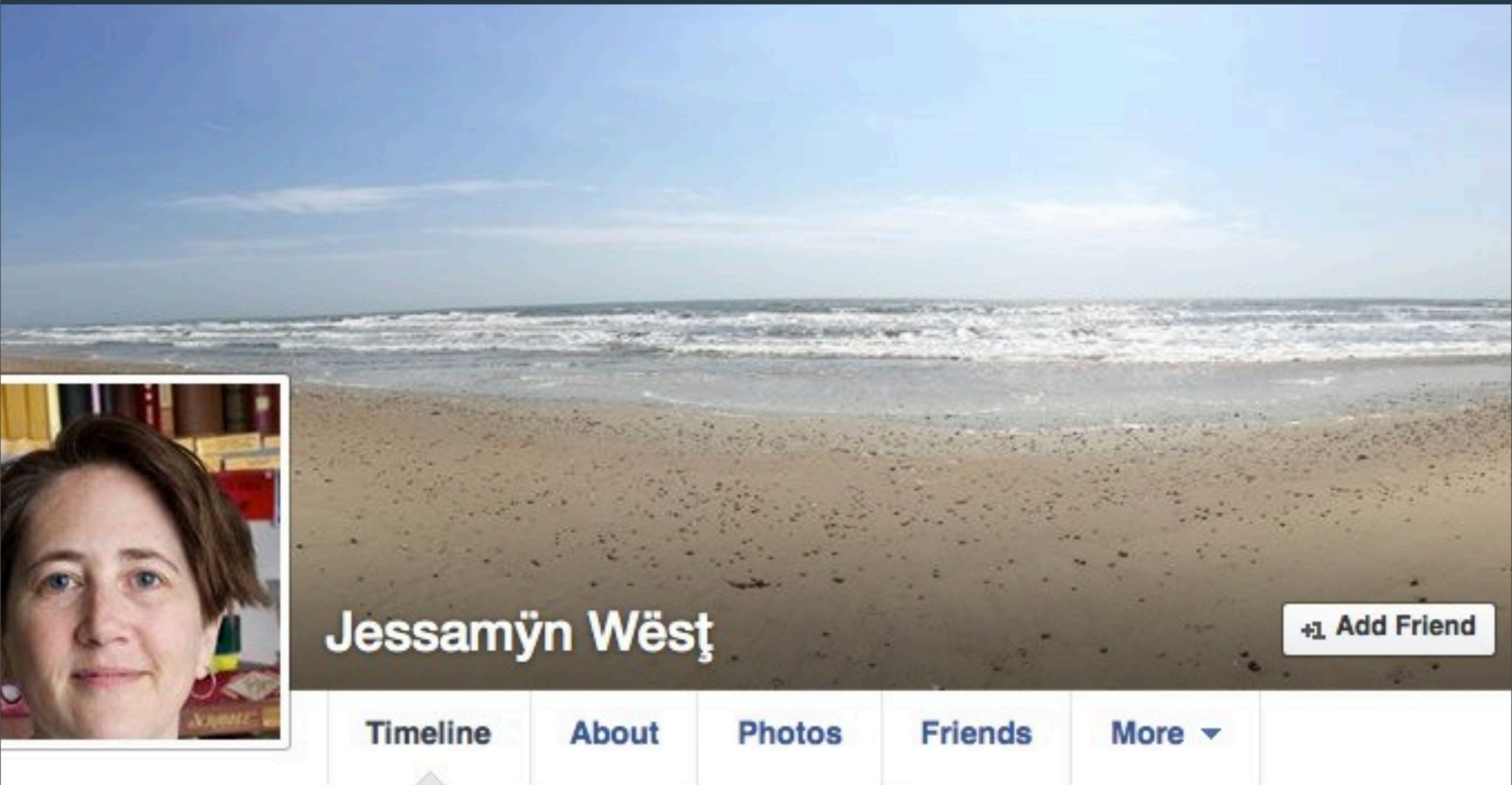
And I don't want to be all "Oh the internet is transformative and disruptive and so edgy and flips the script and makes everything better for everyone"... since for everyone who is using Twitter to spark Arab Spring there are 10,000 who are harassing everyone on facebook to play bejeweled blitz.

But we have an opportunity here to not treat this as just a content reservoir where we can be passive consumers laughing at cat pictures (though that is part of it) but as an interactive tool where we can make our ourselves heard, express ourselves, find other people like us (who sometimes may not be in our exact rural locations). And helping people do THAT is the job that we have in front of us today.



Gandhi is quoted a lot as saying "Be the change you want to see in the world", but it's a bit of a paraphrase of his longer statement.

"We but mirror the world. All the tendencies present in the outer world are to be found in the world of our body. If we could change ourselves, the tendencies in the world would also change. As a man changes his own nature, so does the attitude of the world change towards him.... We need not wait to see what others do."



So while we can't always act like we've got broadband when we don't, we can act like we know how to use this tool for good and how to mitigate its downsides and how to accentuate its upsides, to help people get over the empowerment divide which the one that is the most challenging *right now*.

For patrons, for rule makers, for information professionals. Everyone's got their own digital divide but helping to kick the ball down the field a little more is helping to mirror the world you want to see.

One of the things I always do when I would teach my facebook classes, then and now, was to tell the people who were learning to be social online that if they didn't know who to add as a friend, they could always add me. One person who is not going to fill your wall with political fights or spam or embarrass you in front of your mom. I know it's a bit like that "Well I helped *this* starfish...!" parable except that as a profession, if we're all doing that, modeling good internet use, showing people that it is possible to use it, work with it, connect with it and even enjoy it... we really have the power to help a lot of people get over, what ever it is that they have to get over, to be where they want to be.



So while we can't always act like we've got broadband when we don't, we can act like we know how to use this tool for good and how to mitigate its downsides and how to accentuate its upsides, to help people get over the empowerment divide which the one that is the most challenging **right now**.

For patrons, for rule makers, for information professionals. Everyone's got their own digital divide but helping to kick the ball down the field a little more is helping to mirror the world you want to see.

One of the things I always do when I would teach my facebook classes, then and now, was to tell the people who were learning to be social online that if they didn't know who to add as a friend, they could always add me. One person who is not going to fill your wall with political fights or spam or embarrass you in front of your mom. I know it's a bit like that "Well I helped *this* starfish...!" parable except that as a profession, if we're all doing that, modeling good internet use, showing people that it is possible to use it, work with it, connect with it and even enjoy it... we really have the power to help a lot of people get over, what ever it is that they have to get over, to be where they want to be.



Thank you!

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