Escape Velocity: How A Rural Library System Became a National Leader in Digital Access.

Dan Hutchins

MLIS; Library Professional

Public library experience

- Five years as a page (high school).
- Five years in a public library circulation department. (college).
  - Circulation supervisor (library school).
- Ten years as a frontline Adult Services librarian, including Head of Adult & IT Systems Administrator.
- Over 11 years as a public library director at Harrison Township Public Library and Van Buren District Library.



Most recent role: Executive Director, Van Buren District Library (VBDL)

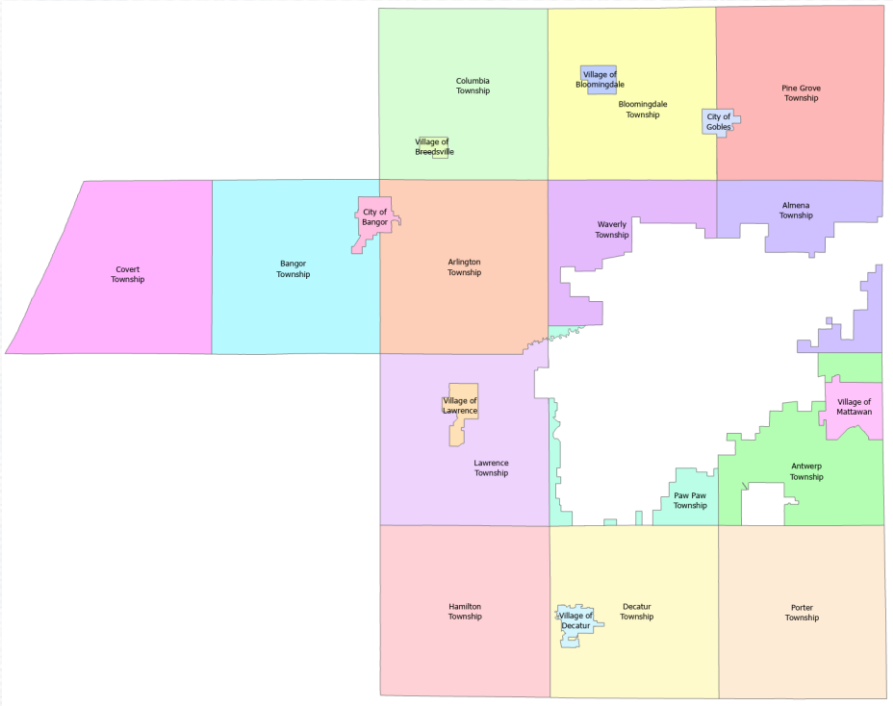
- Worked with the Van Buren County Courts and Michiganlegalhelp.org to turn all 11 public library locations in Van Buren County into Michigan Legal Help Self-help Centers, with a training grant from the Justice For All Commission (JFA), an initiative of the Michigan Supreme Court.
- The mission of the Justice For All Commission is to expand access to the state's civil justice system.
- I was subsequently appointed by the Supreme Court to the JFA.

Most recent role: Executive Director, Van Buren District Library (VBDL)

- Established a 420-device mobile Internet hotspot lending program:
  - Expanded from 30 to 60 devices per location;
  - By 2025 the program had grown into Mobile Beacon's largest library distributor of cellular Internet data in the nation.
  - Started with $53,000 in FCC Emergency Connectivity Funds;

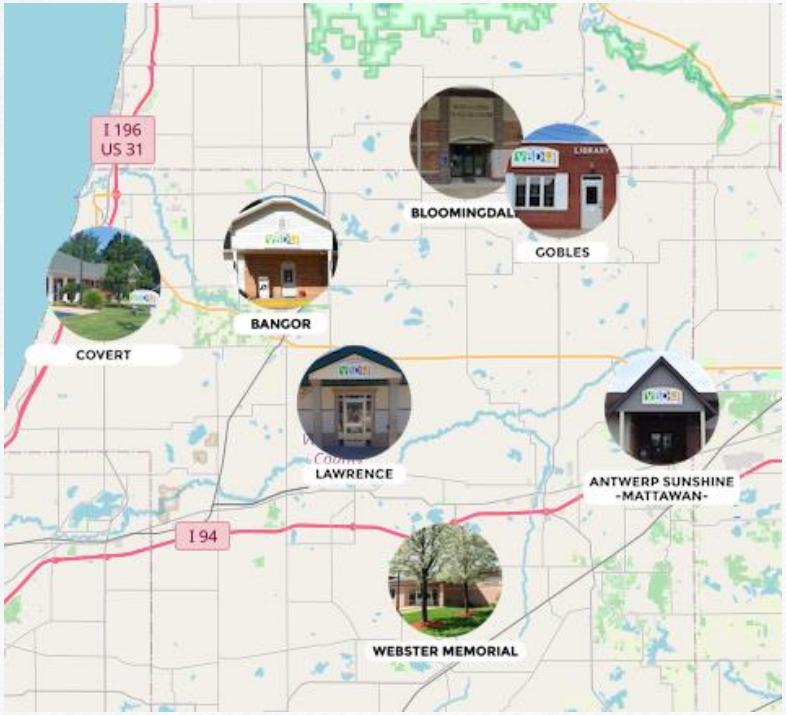
About Van Buren District Library (VBDL)

- VBDL began as a county library system in the 1930s and was the first public library to re-establish under the District Library Establishment Act, PA 24 of 1989.
- Van Buren District Library covers exactly two thirds of Van Buren County, which extends from Kalamazoo in the east to Lake Michigan in the west.
- Many of the county's most populated areas, such as South Haven, the Paw Paw school district, and Lawton are not included in VBDL's service area.



About Van Buren District Library (VBDL)

- Seven locations throughout Van Buren County.
- Service population of 44,230.
- Approximately 60 staff members, or about 31 FTEs or full-time equivalents.
- 2026 budget $3,625,000, up from $2,269,00 before the implementation of VBDL's mobile Internet hotspot lending program.



Many in VBDL's service area face financial challenges.

- Covert Township, along the Library District's western border, has a poverty rate of about 26%.
- Decatur, home to the Library District's administrative headquarters, has a poverty rate of about 22%.
- For comparison, Michigan's poverty rate is 13%, and the national poverty rate is 12%.

VBDL's service area is mainly rural and broadband infrastructure does not extend everywhere.

- According to the 2010 Census, 22% of Van Buren County households lacked a broadband Internet connection.
- As various programs and projects work together to wire Van Buren County, that number has rapidly fallen.
- By 2020 the number without broadband had decreased to about 12 to 13%.
- However, these programs and projects often neglect to address a few key factors:

VBDL's service area is mainly rural and broadband infrastructure is not ubiquitous; and often unaffordable

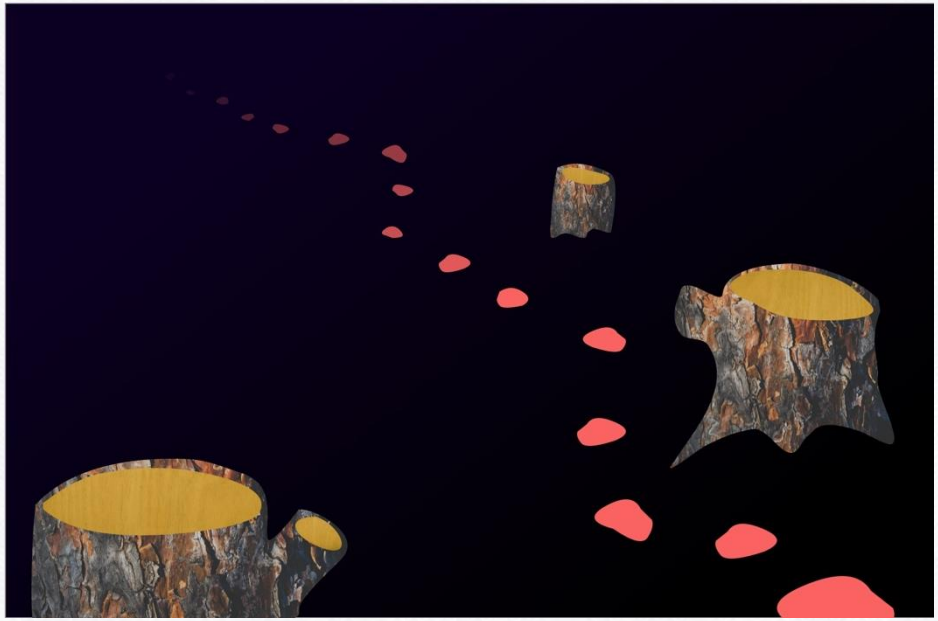
- Available infrastructure and affordability are two separate things.
- Infrastructure does not always facilitate connectivity.
- Many homes in VBDL's service area are situated several hundred yards from a thoroughfare.
- The Internet service providers (ISPs) often charge exorbitant fees to connect set-back homes to nearby service lines, sometimes as much as $8,000.

Pursuing serendipity

- While I wish I could claim that VBDL's status as Mobile Beacon's top library distributor of Internet data, and the Library District's goal of bridging the digital divide were by design, in truth, those things were a journey of serendipity, or ***a series of happy accidents.***
- The Library District took full advantage of the opportunities it was offered, when it was offered them.
- The Library District leveraged its relationships amongst its colleagues in the library profession, and its business associates in the local community.

Pursuing serendipity

- Pursuing this series of opportunities and relationships was not dissimilar to following a proverbial trail of breadcrumbs, each opportunity leading to the next.



Prior to the Covid Pandemic

- Prior to the Covid Pandemic, VBDL offered Internet access through public access computers at its seven locations, in addition to WiFi access ***within*** all seven of its branches.
- In 2019 VBDL facilitated 37,448 user WiFi sessions.

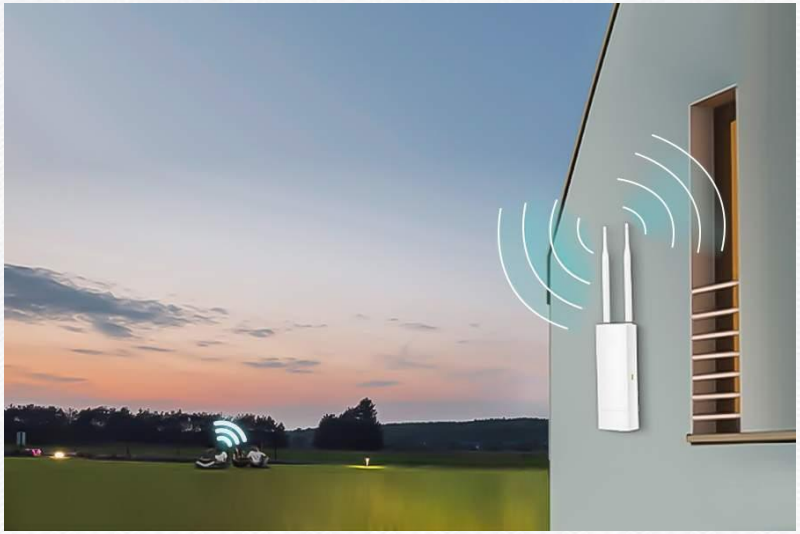
Then came Covid



- During the stay-at-home order, I received a telephone call from Steve Shults, the CEO of Van Buren County telecom Bloomingdale Communications.
- Bloomingdale Communications is a local, homegrown, telecom and VBDL's ISP.
- Steve and I had developed a friendly relationship shortly after I started at VBDL in 2017.

Outdoor WiFi access points

- Steve recognized many in Van Buren County lacked home Internet access.
- During Covid we were attempting an unprecedented experiment; to operate society in a social distanced manner via the Internet.
- Steve offered to provide VBDL with the necessary equipment to outfit its locations for outdoor WiFi access, if the Library District would install the equipment.



Outdoor WiFi access points

- After the installation of the outdoor WiFi Access points at six of VBDL's seven locations, the Library District's WiFi usage nearly tripled, from 37,448 sessions in 2019, to 112,947 in 2021!
- The Library District had stumbled upon a new way of serving its community.
- VBDL would now explore other means by which it could further "bridge the digital divide.

FCC Emergency Connectivity Funds

- The Library District works with an E-rate consultant, Janelle Morgan of Elite Fund, located in Stanton, MI.
- Janelle was the one who first informed me of forthcoming FCC Emergency Connectivity Funding, and suggested the funds could be used to purchase mobile Internet hotspots.
- Given VBDL's scope and budgetary constraints, mobile Internet hotspot lending had previously seemed out of reach.



The consensus

- I attended the webinars Janelle suggested and conducted an informal survey of libraries within VBDL's Coop to determine which circulated mobile Internet hotspots, and the vendors they used.
- Of those that circulated hotspots:
  - Most were single location, Class 4 libraries serving populations between 12,000 and 19,000;
  - Those libraries usually circulated between 15 to 30 hotspots in total;
  - One, Kalamazoo Public Library, a Class 6 with a service population of 128,000, circulated about a thousand hotspots;
  - Being a class 5 library VBDL exists between those two polarities, serving 44,230 people.
- All libraries consulted used ***Mobile Beacon*** as their hotspot vendor.

Mobile Beacon

- Mobile Beacon is a non-profit and charges only $10 per month, per device for unlimited data;
- Commercial providers charge about $40 per month, per device;
- For commercial vendors, unlimited data often means 200 gigabytes (GB) or less per month, after which the data is throttled, or the connection is slowed, regardless of network conditions;
- In contrast, Mobile Beacon only throttles bandwidth during periods of network congestion;
- Mobile Beacon also allows for filtering, important for libraries which receive E-rate, and must comply with the Child Internet Protection Act or CIPA;
- Mobile Beacon also allows any hotspot to be remotely deactivated on demand, which incentivizes users to return them in a timely manner.

Modeling VBDL's lending program

- Once I determined funding was available and decided upon a vendor, I chose a library to model VBDL's program upon, which was nearby Comstock Township Library.



Modeling VBDL's lending program

- Comstock Library's Director, Emily Kubash, is a friend, and over the years had told me much about their hotspot lending program.
- Comstock Township Library has a service population of 15,231 people;
- Annual budget of approx. $1,000,000 in 2020;
- Number of hotspots, 30 in 2020, since increased to 40.



Modeling VBDL's lending program

- Comstock's hotspot lending policies were:
  - Hotspots were only loaned to resident card holders;
  - Hotspots circulated for two weeks and could not be renewed;
  - If a library patron returned a hotspot and another was available, they could exchange the returned hotspot for the in-stock one;
  - Emily advised if the loan period was longer than two weeks, users tended to form an "inappropriate sense of ownership";
  - Overdue hotspots were assessed a fee of $10 per day, up to the maximum value of the device to encourage timely returns;
  - Library users needed to place a $10 deposit before they could borrow a hotspot;
  - This was a practice VBDL decided not to implement.

Modeling VBDL's lending program

- Holds could not be placed on hotspots, they were available only on a "first come, first serve" basis;
- Comstock would not loan hotspots to anyone under the age of 18;
- However, the devices, once borrowed, were outside of the library's direct control, thus filtered for CIPA compliance;
- Also, for CIPA compliance, a lending agreement was required before a hotspot would be loaned;
- To ensure timely returns, Library staff had established a daily procedure to remotely deactivate overdue hotspots, usually within one business day after the due date.

Modeling VBDL's lending program

- Because Emily is a colleague I trust, I decided to follow the model established by Comstock.
- Comstock's model was tried and tested;
- Comstock's model reliably ensured the hotspots were returned in a timely manner so the devices would continuously circulate.

Modeling VBDL's lending program

- However, I decided to "scale-up" Comstock's lending model to meet VBDL's multi-branch environment;
- The funds to try the program were being made available by the FCC on a reimbursing basis;
- VBDL had seven branches to Comstock's one;
- VBDL also had triple Comstock's service population;
- Scaling-up Comstock's lending program meant that where Comstock owned 30 devices for their single library, VBDL would purchase 30 for each of its seven branches, for a total of 210.

VBDL's implementation team

- As Executive Director, my role was to envision the program, secure the funding, and create the framework.
- However, nothing of this magnitude is ever an individual effort.
- I previously mentioned:
  - Steve Shults and Bloomingdale Communications;
  - Janelle Morgan and Elite Fund;
  - Emily Kubash and Comstock Township Library.

VBDL's implementation team

- To create an actionable lending program for VBDL, it was the task of Administrative Coordinator Tracy Smola to lead the effort which would translate the funding and framework into reality.



VBDL's implementation team

- Tracy:
  - Ordered the devices;
  - Researched and sourced the necessary supplies, such as cases and spare parts for the hotspot lending kits;
  - Adapted the instructions Comstock included with their hotspots for VBDL's use;
  - Established the necessary procedures such as daily deactivation for overdue hotspots;
  - Learned how the devices worked so they might be reset and repaired;
  - Instructed VBDL's staff in the implementation of the program.

VBDL's implementation team

- VBDL's Technical Services Department:
  - Created catalog records and linked the hotspot kits;
  - prepared the cases and instructions;
  - and cataloged all parts included with the hotspot kits.



VBDL's implementation team

- VBDL's staff of over 60 managers and clerks oversee the day-to-day operation of the program.



VBDL's implementation team

- This includes:
  - Loaning and receiving the devices;
  - Answering user questions;
  - Frontline troubleshooting;
  - Collecting overdue fees;
  - Assessing lost and damaged charges;
  - Deactivating and reactivating overdue and returned hotspots;
  - Training new staff regarding hotspot policies and procedures.

Implementation

- VBDL spent the summer and fall of 2021 preparing the framework of the program:
  - Visiting Comstock to witness their process firsthand;
  - Establishing policies at the Board level;
  - The hotspots were ordered in September 2021. However, due to Covid-era supply chain issues, they were not shipped until January 2022.

Implementation

- VBDL spent January and February 2022 preparing for the launch of the program:
  - Setting-up the block-and-allow site to deactivate and reactivate the devices;
  - Preparing the PR;
  - Establishing replacement costs;
  - Training staff.

MOBILE HOTSPOTS ARE HERE!



Van Buren District Library is excited to announce that mobile hotpots are now available for checkout at all seven branches!

- Borrowers must be at least 18 years old and must be a Resident/ Property Owner, Courtesy Card, or Non-Resident purchased library cardholder in good standing.
- A valid photo ID and a signed Mobile Hotspot Lending Agreement will be required at checkout.
- Each kit contains a hotspot device, case, how-to guide, troubleshooting tip sheet, and power-cord.

Ask a VBDL staff member for more information about the hotspots, including borrowing/ returning policies, fines/ liability information, etc.

VBDL VAN BUREN DISTRICT LIBRARY

Implementation

- The service launched on February 21, 2022;
- The hotspots were deployed in batches over the first few months.
- By the end of the first month, 38 of 75 deployed hotspots were on loan.
- Over the next several months we discovered issues we hadn’t considered. For instance, some clever individuals stole hotspot SIM cards and used them in in their own devices, thus stealing the data until we deactivated and replaced the SIMs.

Implementation

- There were also policy considerations:
  - Comstock's original policy limited hotspot loans to one device per household at a time, a practice VBDL copied.
  - But what's a "household" anyway?
    - Is a person who rents a room in another person's home a separate household, or the same household?
    - Are two unmarried people cohabitating a single household?
    - Some library users and even staff challenged existing policies to obtain more hotspots, or just to be contrarian.
    - VBDL eventually lifted the one-device-per-household limit; it was decided the policy conflicted with the Michigan Library Privacy Act, and in practice was tough to enforce.

Implementation

- By the end of the first summer all devices were deployed, and seemingly all of them were always on loan, except for a few held in reserve as replacements.
- Demand quickly exceeded supply.
- The total cost to launch the program for the first year was $34,000.
- This amount covered the purchase of 210 hotspots and six months of pro-rated data.

Funding

- After the first year, program funding challenges emerged.
- It was announced in May 2023 the ECF funding would end on June 30, 2024.
- The timing coincided with the highest inflation our society has experienced in 40 years.



Funding

- The Palisades Nuclear Power Plant in VBDL's service area decommissioned in 2022, taking 11% of VBDL's property tax revenue with it; or $223,000 annually.
- Property tax revenue accounted for 86% of VBDL's 2.3-million-dollar annual budget.
- Remember "The Great Reshuffle"? VBDL could no longer pay to attract and retain staff;
- Given the funding challenges, it was decided that maintaining the hotspot program and addressing the other factors would require a millage increase.

Funding

- Van Buren County is an economically challenged, fiscally conservative place.
- The Library District had never passed a ballot question of any kind on its initial attempt in its history.
- A millage increase to keep up with inflation, replace the funding lost from the decommissioned nuclear plant, and sustain the hotspot program would be a heavy lift.
- Reluctantly, it was decided to ask voters for a .4 mill, $855,000 annual property tax increase during a special election on May 7, 2024.

Funding

- I began planning for the millage campaign in October 2023.
- After four months of preparations, the Library District launched an informational campaign in February 2024.
- A Ballot Question Committee of citizens in support organized simultaneously.
- One of the promises made by the Library District was, should the millage pass, VBDL would not only keep, but also double the size of the hotspot lending program, from 210 devices to 420.

Funding

- The Library District:
  - Distributed informational literature from its seven locations to those borrowing materials, particularly hotspots;
  - Sent an informational mailer to its users and absentee voter households;
  - Posted information to its social media channels;
- Bloomingdale Communications agreed to include the Library District's informational flier with its April billing statement for printing costs;
- Between February and April 2024, I made 26 appearances before local governments and community organizations to share information about the ballot question.

Funding

- The Ballot Question Committee:
  - Sent a “Vote Yes” mailer to absentee voter households;
  - Circulated a Library Millage newsletter to members of the three associated VBDL Friends groups;
  - Spoke with their friends and neighbors in support of the ballot question.
- The Library Board and Staff:
  - Spoke to their friends and neighbors in support of the ballot question.

Funding

- Shortly before midnight on election day, it was reported the question had passed by 12.64%, or 2,616 “yes” votes to 2,016 “no” votes.
- The millage increase proposal passed in 12 of the Library District’s 16 constituent communities.
- Many have told me this margin of victory is considered a “landslide” in fiscally conservative Van Buren County.

Promises made, promises kept

- At its May 2024 meeting, the Library Board approved the purchase of an additional 210 hotspots, bringing the total number to 420.
- These were immediately ordered and deployed during the summer of 2024.

Promises made, promises kept

- After deploying the additional 210 hotpots, this brought the number from 30 to 60 per VBDL location.
- The program remained extremely popular. One VBDL manager observed:
  “Sometimes there are one to three hotspots on the shelves at some of our branches, yet other times there are none.”
- At any given time, 84% of VBDL’s hotspots were out, while the remaining were either being reactivated, or were set aside for repair.

Escape velocity!

- In early July 2025 VBDL received an unexpected phone call from Mobile Beacon.
- Mobile Beacon called to tell us that of their 1,801 public library clients nationwide at that time, Van Buren District Library was their number one distributor of Internet data!



Escape velocity!

- According to Mobile Beacon:
  - In the first six months of 2025 VBDL patrons consumed 312,000 gigabytes (GB) or 312 terabytes (TB) of data;
  - That was 45 times Mobile Beacon's national average, and nearly 100 times the median usage within their network of library clients;
  - VBDL's average data usage per device, per month, was 109 gigabytes;
  - VBDL's top five active hotspots averaged 400 gigabytes per month.

Escape velocity!

- ***Mobile Beacon stated: "This upward trend shows no signs of slowing and underscores how essential the program has become to the community."***

Escape velocity!

- By the end of 2025:
  - Mobile Beacon's full library portfolio included 1,835 libraries, with total library network usage of 26,048,661 gigabytes, or approximately 26,049 terabytes.
  - Van Buren's total 2025 hotspot usage was 648,764 gigabytes, or approximately 649 terabytes.
  - ***VBDL represented about 2.49% of all Mobile Beacon library data usage for the year.***
- ***Of those 1,835 libraries, VBDL accounted for about 1 out of every 40 terabytes used on Mobile Beacon's network!!!***

Lessons learned

- VBDL's hotspot lending program began to outperform after increasing the number of hotspots from 30 to 60 per location.
- When VBDL began the project, my research indicated that for small and rural libraries, the average hotspot collection was 15 to 30 devices.
- Most libraries simply are not providing enough hotspots to meet demand;
- If there are almost never any hotspots available for loan, it's a strong indication a library doesn't own enough of them.

Lessons learned

- Most public libraries don't consider mobile Internet hotspots to be an essential service.
- Many libraries under-fund and under-promote their hotspot lending programs.
- In 1936 Congress passed the ***Rural Electrification Act*** to wire rural areas for electricity, and added telephone service to the act in 1949.
- As of 2026 Congress has passed nothing comparable for broadband Internet, though in the 21st Century it has become an essential utility.

Lessons learned

- In the absence of large-scale federal action, it is up to others, such as public libraries, to bridge the digital divide.
- How libraries pursue their core mission of “equal access” must constantly evolve to meet the times.
- Libraries must always question their own assumptions, biases, and comfort zones regarding how they engage with their core mission.

Lessons learned

- When I asked Mobile Beacon why our hotspot lending program performs so well compared to large, urban systems, which deploy many more devices in more populous areas, their response was that VBDL has “high compliance” meaning:
  - More of VBDL’s hotspots are returned and fewer go missing over larger, urban systems;
  - This in turn means the hotspots continuously circulate.

Lessons learned

- This underscores the importance of strict policies governing the circulation of these devices:
- Only permanent residents or those employed within VBDL's service area may borrow hotspots;
- Hotpots may not be renewed, but may be exchanged for another in-stock device, if one is available;
- Holds may not be placed for hotspots;
- Hotpot data is promptly deactivated once the hotspot is overdue, usually within 24 hours;
- Hotpot overdue fees are $10 per day, up to the maximum replacement cost;
- Library users are blocked from borrowing materials, including hotspots, once their account balance exceeds $20.00.

Lessons learned

- ***A robust mobile Internet hotspot lending program is tangible Diversity, Equity, and Inclusion work at its most fundamental:***
- Libraries are providing access to an essential utility to virtually everyone within its service area, regardless of means or identity;
- Access to the Internet provides individuals with limitless possibilities to explore, interact, engage, and learn;
- In 2026, only literacy itself is more important than digital access.

To me, the core purpose of any library is:

Connecting people to the world around them, and to each other.

*Pablo Picasso allegedly said: **"Good artists copy, great artists steal."***

- There are few, if any original ideas; stop wasting your time trying to be "unique" or "innovative."
- Instead, take your inspiration from what others have successfully done, existing opportunities, available resources, and the relationships you already have.
- Apply those things to your mission, combining them in a way that makes sense to **YOU, in YOUR COMMUNITY, AS IT IS**.
- Follow the results. If those results are leading you somewhere, keep going. If not, pivot and try something else.
- ***Don't keep doubling-down on what isn't working.***

Steve Shults of Bloomingdale Communications said of Van Buren District Library:

"You guys are really mission driven. It's based on service:

1. The realities of serving folks in rural areas is completely different than in urban and suburban areas.
2. Folks are seemingly in need of more of everything but the funding challenges are difficult.
3. Being committed to service and being able to tell a good story is the only way to overcome challenges. You've had to do that to maintain funding so you could provide more services.

Your commitment to providing WiFi hotspots in areas where there are broadband challenges/instability is … a huge example."



Dan Hutchins
Mobile: 248-895-7240
danthutchins@gmail.com

Joe Gleason
Director of Programs
Mobile Beacon
Office: 401-934-0500
Mobile: 401-855-3381
jgleason@mobilebeacon.org

Michael Varney
Sales Manager
Mobile Beacon
Mobile: 508-310-3859
mvarney@mobilebeacon.org