INTERSECTING TRENDS

- WiFi usage growing
- Circulation of non-traditional “Library of Things” collections (including GoPro cameras & fishing poles)
- Lack of home Internet options
- Bridging the digital divide in low income areas
- Metered use for personal accounts
- Libraries and streaming services
- E-collection growth
INCREASE IN WIFI USAGE
BETHLEHEM PUBLIC LIBRARY

Type: School district library
Budget: $4,003,374
Population served: 28,243
Annual circulation: 669,383
ALBANY PUBLIC LIBRARY

Type: School district library
Operating Budget: $7.5
Locations: 7
Population served: 98,500
2016 circulation: 1,511,199
Poverty rate: 29.4%
LIBRARY DISTRICTS
PLANNING
PLA 2016

Tech to Go: Circulating Nontraditional Items

http://2016.placonference.org/program/tech-to-go-circulating-nontraditional-items/

Mobile Beacon
BACKGROUND INVESTIGATION

Contacted librarians from PLA session and libraries listed on Mobile Beacon Website

- Forest Park, IL
- Niles Public Library, IL
- Providence Community Library, RI
FEEDBACK FROM IMPLEMENTERS

• Non-requestable status allowed some patrons to monopolize borrowing
• Complete Internet Safety Course before checking out hotspot
• Can’t stream movies with NetGear fuse
• Device damage
• Lost devices (1/3 of collection lost at PCL after 1 year)
• Deactivation of devices
• Lost pieces
• Employee use of hotspots for library programs
• Negative feedback regarding coverage
• Tech Soup grant limited to 10 specific devices per year
CONCERNS

• Network coverage
• Data limit (based on Provider Terms of Service)
• Unlimited Data = Throttled Data until next billing cycle
• Loan rules
• Cataloging
• District residents only?
• User agreements
• Damage/lost item
• Availability
CHOICES

External factors

• Service provider
• Device

Internal factors

• Loan period
• Requestable or not
• Fines
• Damage fees
• Patron requirements (deposit, user agreement, age limit)
• User survey
• Circulation accessories (case, cord, USB adaptor)
• Device configuration
• Staff training
• Department ownership
APL’s TABLET PILOT

Based on the Queens Public model (App Overlay)

- Tablets were attractive to theft/non return

- Throttled Data until next billing cycle

- Tablets broke easily

+ Creation of a device committee helped mitigate similar issues for the Hot Spot program, develop new programs, standardize training and processes.
## SERVICE PROVIDER

- **Coverage area**
- **Cost**
- **Contract length**

<table>
<thead>
<tr>
<th>Provider</th>
<th>Mobile Beacon (Sprint wireless carrier)</th>
<th>T-Mobile (T-Mobile wireless carrier)</th>
<th>Verizon (Verizon wireless carrier)</th>
</tr>
</thead>
</table>
| Cost                            | Year 1: $2699.90  
Year 2: $1200 | Year 1: $5117.50  
Year 2: $4317.60 | Year 1: $6800.00  
Year 2: $4800.00 |
| Devices                         | 10 devices                             | 10 devices                          | 10 devices                        |
| Data                            | 23GB per billing cycle per device before deprioritized, not throttled | 6GB per month/36GB per year per device; data throttled after device goes over each month | 6GB per month/36GB per year per device; data throttled after device goes over each month (2 year contract) |
BETHLEHEM COVERAGE SPRINT

Coverage details for

Delmar, NY 12054

Recent searches

12054

Data coverage

Show: LTE Plus

LTE Plus
Sprint's fastest network. Available only on select devices.

4G LTE
Filter coverage by 4G LTE for more info.

Extended LTE
Roaming in these areas counts as on network usage. Similar level of service as on network, but not all services may be available. Learn more.

LTE Roaming

3G & more
Filter coverage by 3G & more for more info.

Off-network roaming

No coverage

Coverage updated on: 3/29/16

>> Shop for this device
>> Shop for phones
>> International roaming coverage
>> Print map

This tool provides high-level estimates of our wireless coverage.
BETHLEHEM COVERAGE SPRINT

Coverage details for:
Delmar, NY 12054

Recent searches
12054

Data coverage

- **LTE Plus**: Sprint's fastest network. Available only on select devices.
- **4G LTE**: Filler coverage by 4G LTE for more info.
- **Extended LTE**: Roaming in those areas counts as on network usage. Similar level of service as on network, but not all services may be available. Learn more.
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- **Off-network roaming**
- **No coverage**

Coverage updated on: 3/29/16

> Shop for this device
> Shop for phones
> International roaming coverage
> Print map
BETHLEHEM COVERAGE T-MOBILE
ALBANY COVERAGE
T-MOBILE
COVERAGE MAPS

http://coverage.sprint.com/IMPACT.jsp

https://www.t-mobile.com/coverage/coverage-map
TECH SOUP

- Tech Soup is a non-profit institution for non-profits and libraries
- Allows 10 devices per fiscal year at a reduced cost (free or $10-$18 per device)
- Franklin Wireless device 4G LTE device only
- http://www.techsoup.org

Bethlehem Public Library decided to not to use Tech Soup funding
IMPLEMENTATION
MOBILE BEACON

✓ Coverage from Mobile Beacon via Sprint was adequate
✓ Cost of device was adequate
✓ Access to 3G and 4G LTE network was essential
✓ Data plan from Mobile Beacon was the most cost-effective

July 2016 we purchased 10 Mobile Beacon Pocket WiFi hotspots
DEVICE

**Franklin Wireless R850**
A portable, wireless hotspot.

$70.00

Access for: On-the-Go
Connects: up to 10 Wi-Fi enabled devices
Service Fee*: $10/month
Data Plan*: Unlimited 4G LTE

---

**Pocket Wi-Fi**
A portable, wireless hotspot.

$140.00

Access for: On-the-Go
Connects: up to 10 Wi-Fi enabled devices
Service Fee*: $15/month
Data Plan*: Unlimited 3G, 4G LTE, LTE Plus
APL: T-MOBILE

Cost of Device: 0
Cost of Service: $8.20 monthly, per device ($934 annually)
Type of Device: T-Mobile Alcatel Linkzone 4G LTE
Upload/Download: 802.11 g/n, 2.4GHZ - 4Mbps Up & 32Mbps Down (These numbers fluctuate depending on whether the device is being used indoors or out and if in a crowded area with other wireless devices and interferences.)
Covered under e-rate*

*Benefit of the poverty rate
APL DEVICE: T-Mobile Alcatel Linkzone 4G LTE
T-MOBILE

✓ Coverage was adequate
✓ Established relationship with T-mobile
✓ Access to 3G and 4G LTE network was essential
✓ We needed more than 10 for the organization
CIRCULATION PARAMETERS BPL

- 2 week loan
- $5 per day late fee
- Can be borrowed by any UHLS card holder
- Requestable by BPL patrons only
- Requestable vs. non-requestable (15/5)
- No age requirement
- No deposit
- No user agreement required
- Carrying case, USB cord, No USB wall adaptor, hotspot, user guide
CIRCULATION PARAMETERS APL

• 4 week loan
• $1 per day late fee
• Non-requestable
• 18 +
• Account for 60 Days
• No deposit
• User agreement required
• Carrying case, USB cord, wall adaptor, hotspot, user guide
DEVICE SET UP

- 2 Network names (5 Ghz and 2.4 Ghz)
- Same WiFi password for all devices
- User can not edit most settings (network or password)
- Configure using web portal (http://myhotspot)
EVALUATION
SURVEY

Please take a moment to fill out this anonymous survey question. Your answer will help us serve you better.

**What do you think about the mobile WiFi hotspot?**

I have Internet service where I live.  
☐ Yes  
☐ No

I borrowed this WiFi hotspot for the following purpose(s):  
(Check as many choices as apply.)

☐ homework completion or submission
☐ entertainment
☐ employment or work
☐ general education
☐ other

The speed and connection of the WiFi service is:

☐ better than I expected
☐ just as I expected
☐ worse than I expected

Your comments:

________________________________________

________________________________________

________________________________________

Bethlehem Public Library • 451 Delaware Avenue, Delmar NY
SURVEY RESULTS

Internet access where I live

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>14</td>
<td>8</td>
</tr>
</tbody>
</table>

BETHLEHEM PUBLIC LIBRARY

SURVEY RESULTS
SURVEY RESULTS

Performance of Hotspot

<table>
<thead>
<tr>
<th>Category</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better than expected</td>
<td>7</td>
</tr>
<tr>
<td>Just as expected</td>
<td>10</td>
</tr>
<tr>
<td>Worse than expected</td>
<td>2</td>
</tr>
</tbody>
</table>
SURVEY

Results of survey showed us

• Patrons were testing our services
• Requests were important and should be continued
• Need to investigate slowness
  • Data limits
  • Geographic location of hotspot
  • Physical location of hotspot indoors
MARKETING

- Press release (*Times Union, Spotlight, Chamber of Commerce*)
- Internal signage
- *Pokemon Go(es) to the Four Corners program*

Internet to Go with the Bethlehem Public Library

All News Releases

August 12, 2016

When it comes to the free WiFi access at the library – you CAN take it with you. Bethlehem Public Library has started loaning out Pocket WiFi hotspots that allow users WiFi access within the Sprint network anywhere in the United States.

There is no denying that Internet access opens up new possibilities in education, entertainment and commerce. By providing “Internet to Go,” the library is making sure that access is available to everyone in the community. As WiFi usage at the library and the library-sponsored signal at the town pool continues to grow, adding portable hotspots to the catalog was the logical next step.

Patrons can use the device to stream music or their favorite shows or do some online research on their own time and in their own space -- there are no restrictions as long as Sprint service is available.
BECAUSE MORE THAN A QUARTER OF U.S. HOUSEHOLDS DON'T HAVE A COMPUTER WITH INTERNET CONNECTION.
IMPLEMENTATION BPL

Since July 2016

• 263 total checkouts
• 1 billed item with suspension of service (pending)
• February 2017 purchase of 10 additional hotspots
• Investigation of other WiFi services (TV whitespace, WiFi at Town Pool and Five Rivers)

Room for Improvement:

• Need to expand Internet access to areas of district with limited access--Sprint network has limited coverage
IMPLEMENTATION APL

Launched September 2016 at Washington Ave., all other locations in November of the same year

- 238 total circs since first one item was created in Sierra (8/11/2016)
- We 32 are Available for circ (Wash 6, Bach 5, Del 4, Howe 5, North 3, Pine 5, Arbor 4)
- 1 Lost & Paid, 2 damaged, 7 Billed & 5 repair
- Investigation of other WiFi services (Washington Skate Park, Downtown BID dog park, and pop up libraries)
- Inhouse device usage (Chromebooks)

Major Organizational Lesson

- TRAINING FOR STAFF IS ESSENTIAL
QUESTIONS