

Evaluating the Placement of Little Free Libraries in Bloomington, IN Using Socioeconomic Indicators Determined by Geospatial Analysis

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ABSTRACT: The purpose of this research is to investigate the influence of socioeconomic indicators on the distribution of Little Free Libraries in Bloomington, IN. A Little Free Library is a book storing box that provides free books to a community. Comparing the locations with demographic data shows that Little Free Libraries are concentrated in white, affluent areas with high levels of education attainment which fails to reduce the book deserts in Bloomington, IN. Income was the most likely indicator of placement, with only 23% of LFLs located in areas with annual median incomes below \$30,000.

Keywords: Little Free Libraries, Bloomington, Indiana, literacy, socioeconomic indicators



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Introduction

The Little Free Library (LFL) is a personalized book storing box that provides free books to a community. Todd Bol started the LFL movement in 2009 when he built the first LFL in front of his mother's house in Hudson, Wisconsin (Kirch, 2019). After the idea quickly spread to nearby Detroit, Michigan, Richard Brooks helped Bol establish a website which defined goals for the nonprofit. The term "Little Free Library" was trademarked in 2012 at the same time the organization became a 501(c)(3) nonprofit. The branded book sharing movement has grown rapidly in recent years, sparking many questions about the efficacy of the LFLs (Wilson, 2020). Supporters claim that the LFL mobilizes communities to address literacy rates and achievement gaps. Critics believe they are either ineffective or serve predominantly white, affluent areas that do not need them (Wilson, 2020). Several important questions have arisen regarding Little Free Libraries:

1. What kind of books are likely to be found in them?
2. Does their presence influence literacy rates in the neighborhoods that house them?
3. Where should they be installed?
4. How does the LFL steward impact the quality and quantity of books?
5. How does their impact compare to passive space or other resources?

The organization is pursuing three new trademarks with the U.S. Patent Office: "wooden boxes with a storage area for books," "signs, non-luminous and non-mechanical, of metal," and "guest books and rubber stamps." Tony Bol, Todd Bol's brother, protests the efforts for these trademarks and emphasized that the new trademarks would enable the organization to "stake trademark claims over all wooden book boxes, book boxes with signs, and book boxes with guest books, allowing for monopolization of the Little Free Library movement as a marketplace." This could lead to legal action against any wooden book box, even those not using the title "Little Free Library" (Kirch, 2019). It is important to note that Tony Bol is the founder of Share With Others, a for profit organization similar to Little Free Library. His organization claims to direct profits to charitable causes and sells wooden book boxes that are nearly identical to those sold by LFL (Share With Others). Greig Metzger, the LFL Executive Director, explained, "If (individuals and nonprofits) want to use little free libraries as a means of engaging with their community, that's fine; we're not going to go out suing people for putting up a box." He argued that the LFL organization will not pursue legal action against community members, only for-profit businesses using their intellectual property such as Share With Others (Kirch, 2019).

LFL stewards, the people or organization responsible for installing, maintaining, and monitoring the LFL boxes in their community, can build a Do It Yourself LFL or buy one from the official nonprofit website. The prices for official boxes range from \$169.95 for a mini shed to \$389.95 for a composite two story box. Kits are also available and range from \$159.95 for a mini shed kit to \$359.95 for a composite two story kit. Equipment for installation, signage, and books are also available. To be an official LFL, a steward must register the box on the LFL website. Registration is \$39.95 and results in an official customized plaque, a charter number, and the publication of the location on the LFL website which shows the locations of all

registered LFL boxes on an interactive map (*Little Free Library*, n.d.). An estimated 60% of little libraries are not registered with the organization (Krug, 2019).

Several studies have shown the importance of access to books, especially at young ages (Neuman & Moland, 2019). LFLs aim to provide this resource to all children. For its innovative efforts, the LFL was awarded the National Book Foundation's Innovations in Reading award in 2013 and a Library of Congress Literary award in 2015. There is at least one LFL on every continent, including one on Antarctica established by Dr. Russel Schnell (an atmospheric scientist working with the National Oceanic and Atmospheric Administration at the South Pole) (Metzger, 2020). While the expansion of LFLs is undeniable, the efficacy of the book boxes is still debated. Many community groups and individuals have installed LFLs to also serve as interactive art displays. After George Floyd's murder in Minneapolis, MN, the LFL organization established the Read in Color program to distribute books that encapsulate racism and social justice (Metzger, 2020). The organization estimates an average of 468 visits per library per year at the over 100,000 libraries in 110 countries (Metzger, 2020).

Not everyone is pleased when new boxes appear in their neighborhood. Municipal governments are typically alerted of new LFLs through citizen complaints and use ordinances that ban unapproved structures in residential yards and obstructions to right of ways ordinances to limit LFLs (Kozak, 2017).

One review said, "Free Libraries sprout where public library branches are plentiful and where neighborhoods are white" (Capps, 2017). The placement of LFLs is an important point of debate and research. The location provides information concerning the owners, stewards, and accessibility. Recent studies show that LFLs are most likely to be placed in medium-high income, white areas (Wilson, 2020). These groups do not experience book shortages and are not the people the LFLs are meant to aid. Schmidt and Hale argue that Little Free Libraries are "examples of performative community enhancement, driven more so by the desire to showcase one's passion for books and education than a genuine desire to help the community in a meaningful way" (Capps, 2017; Schmidt & Hale, 2017).

With the rapid expansion of the LFL organization, it is crucial to understand the socioeconomic indicators that may influence the placement of LFLs. Local data can be a powerful tool to align community needs with LFL placement.

Subjectivity of Stewardship

Modern libraries serve a more expansive role than just that of lending books. They are community centers providing reliable internet access and gathering spaces for local groups. Libraries document the literature acquired to maintain a diverse, high-quality collection that provides both entertainment and reference materials. The subjective role of stewards allows for the possibility of bias that may limit exposure to diverse ideas. Some guidance is provided to stewards on the LFL website and *Steward's Guide*, but the guidelines are vague and do not establish a standardized approach. The *Steward's Guide* suggests stewards should "curate (their LFL) in a way that makes (them) comfortable" while also keeping an open mind about content they *Journal of Radical Librarianship*, 9 (2023) pp.1-10

might not usually keep for themselves. The organization recommends against removing books that the steward deems inappropriate for their LFLs or do not align with their personal preferences (Little Free Library, 2022). Stewards may remove books for any reason which may restrict materials addressing religion, LGBTQ+, mental health, sex, race relations, or any other subject the steward deems inappropriate or does not personally agree with. It is important to note that standard public libraries would stock books regarding all subjects, regardless of the librarians' personal beliefs. Regardless of whether if it is implicit or explicit, stewards may limit diverse materials which may result in skewed experiences that do not provide adequate, representative role models for children.

In addition to content of the books, LFL also recommends monitoring the books' appearances. The organization warns stewards that "people like pretty, shiny, well-kept books...not outdated, yellowing, mass-market paperbacks" (Little Free Library, 2022). Books that have fallen into disrepair are recommended for removal so space can be made for new books, making regular maintenance a necessity for proper curating.

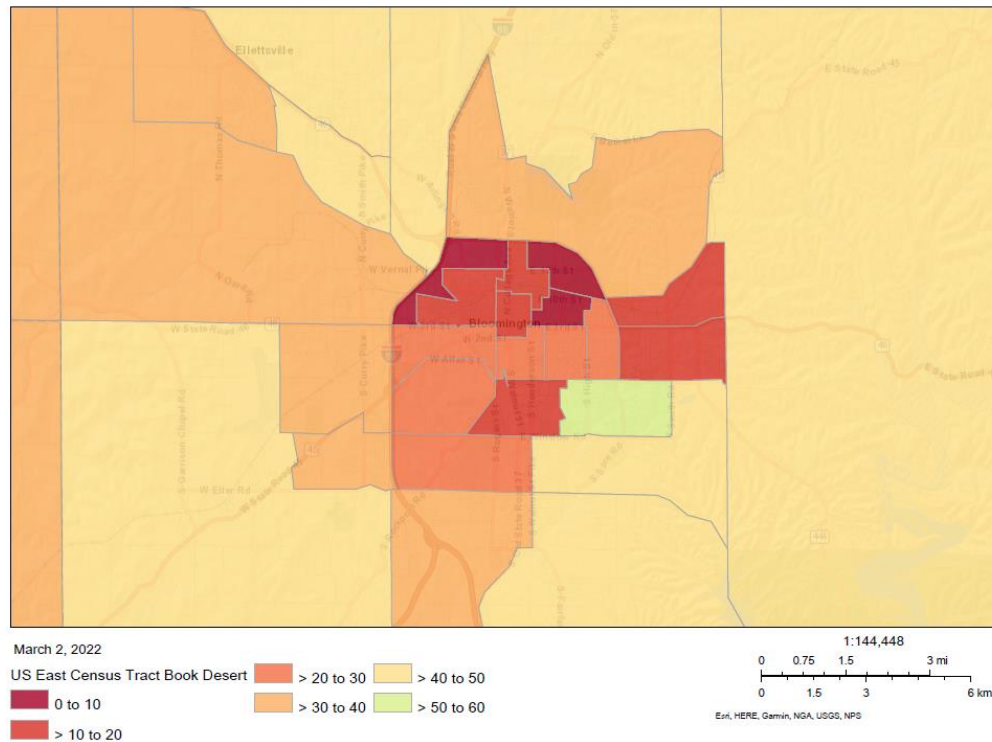
Book Access and Literacy

One of the most important indicators of development of language and comprehension skills at young ages for children is reliable access to quality books, typically achieved through bookstores, public libraries, and schools (Neuman & Moland, 2019). Early literacy can increase financial and social mobility later in adulthood.

Unite for Literacy (UFL) is an organization designed to improve literacy by providing free, open access to digital libraries for families through their website. UFL established the term "book desert" to describe areas without reliable, permanent access to books in the home (Neuman & Moland, 2019). The organization evaluates book deserts by estimating the number of households in an area with at least 100 books (Condon, 2014). The best predictor of school success, in both rich and poor countries, was the number of books in the home. The results showed that 100 books were the optimum number of books for early school success (entry into high school)(Evans et al., 2010). UFL combined this information with American Community Survey (ACS) data to approximate the number of books per household in various regions and then added to an interactive map. The book deserts in Bloomington, IN were investigated as shown in in Figure 1. The most significant book deserts are in the northern half of Bloomington with less than 10 books. Only one Census Tract had more than 50 books, which is still significantly less than the recommended 100 (Evans et al., 2010).

LFLs are viable as supplementary book sources but should not be used as primary sources because not everyone has access to reliable transportation to access them. They must be placed in regions where it is easy for community members to access, especially children who cannot drive or do not have adults willing to drive them.

Figure 1 Book deserts in Bloomington, IN determined by Unite for Literacy.



Income segregation is often the limiting factor for social mobility and perpetuates a cycle that prevents lower income neighborhoods from accessing the same resources as affluent areas. High income houses are typically highly isolated from middle- and low-income neighborhoods (Reardon & Bischoff, 2011). Amenities like libraries, parks, better schools, and other opportunities are concentrated in high income areas, which perpetuating the income segregation cycle (Neuman & Moland, 2019; Reardon & Bischoff, 2011).

Compared to affluent neighborhoods, low-income neighborhoods often have less funding, worse travel accessibility, and staffing shortages that do not provide the necessary resources to the members of the community, especially when demand suddenly rises. Therefore, relying solely on public libraries is not sufficient to reduce book scarcity in homes. Libraries closing, temporarily or permanently, will plunge a community into a book desert. LFLs are common supplements to libraries because they are cost effective and do not require professional installation. Low-income regions can use LFLs to supplement inadequate public resources.

As time progresses, fewer books are restocked so the rate of checking out exceeds the input, leading to a large need for replenishment. Results indicate that LFLs are used on a weekly basis and the most popular books selected were fiction. Hamilton (2014) found that no books were returned to the library, indicating a need for constant replenishment. Data on LFL usage is hard to collect due to the qualitative surveys required. It is impossible to monitor each LFL and survey response rates are low. Therefore, it is important to note that results using qualitative surveys are reporting a minimum usage that is likely not representative of the true frequency of visits. Hamilton put surveys in each book with instructions, but no surveys were returned because no books themselves were returned. The only available metric is the number
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of books present in the LFL, but it is impossible to know how many books each person took.

Method

Qualitative information could not be obtained through interviews with community members. Therefore, data regarding frequency of use and demographics of users was not obtained. This project serves purely as a case study without comparative analysis between locations.

The LFL official website only displays officially registered boxes, leaving out the many unregistered boxes that exist. Therefore, the present researcher utilized the Monroe County Library website which documents all LFLs within the city. Any community member can report new LFLs. Because there was not an efficient way to export the data, the locations were manually transcribed from this website. These coordinates were overlaid with demographic data obtained from the U.S. Census. ACS 2019 (5-year estimate) data was obtained and visualized using the Social Explorer feature. The primary indicators investigated were median household income, racial makeup, and education distribution. These variables address the concern about mostly white, affluent regions receiving more LFLs than other regions. A summary of these socio-economic variables is shown in Table 1.

Table 1 Demographic data obtained from Social Explorer Tables: ACS 2019 (5-year estimates).

Total Population		
Total Population	84,116	
Population Density (per mi ²)	3,632.2	
Land Area (mi ²)	23.16	
Population by Age		
Under 5 Years	2,648	3.1%
5 to 9 Years	2,527	3.0%
10 to 14 Years	2,117	2.5%
15 to 17 Years	2,056	2.4%
18 to 24 Years	35,021	41.6%
25 to 34 Years	13,215	15.7%
35 to 44 Years	7,379	8.8%
45 to 54 Years	5,468	6.5%
55 to 64 Years	5,624	6.7%
65 and older	8,022	9.5%
Population by Race		
White Alone	68,891	81.9%
Black or African American Alone	3,317	3.9%
American Indian and Alaska Native Alone	242	0.3%
Asian Alone	8,561	10.2%
Native Hawaiian and Other Pacific Islander Alone	8	0.0%
Some Other Race Alone	336	0.4%
Two or More Races	2,761	3.3%
Household by Income		
Households:		
Less than \$25,000	11,682	38.1%
\$25,000 to \$34,999	2,947	9.6%
\$35,000 to \$49,999	4,006	13.1%
\$50,000 to \$74,999	4,147	13.5%
\$75,000 to \$99,999	2,584	8.4%
\$100,000 or more	5,258	17.2%
Educational Attainment for Population 25 years and over		
Population 25 Years and Over:		
Less than High School	2,849	7.2%
High School Graduate (Includes Equivalency)	6,249	15.7%
Some College	8,431	21.2%
Bachelor's Degree or Higher	22,218	55.9%

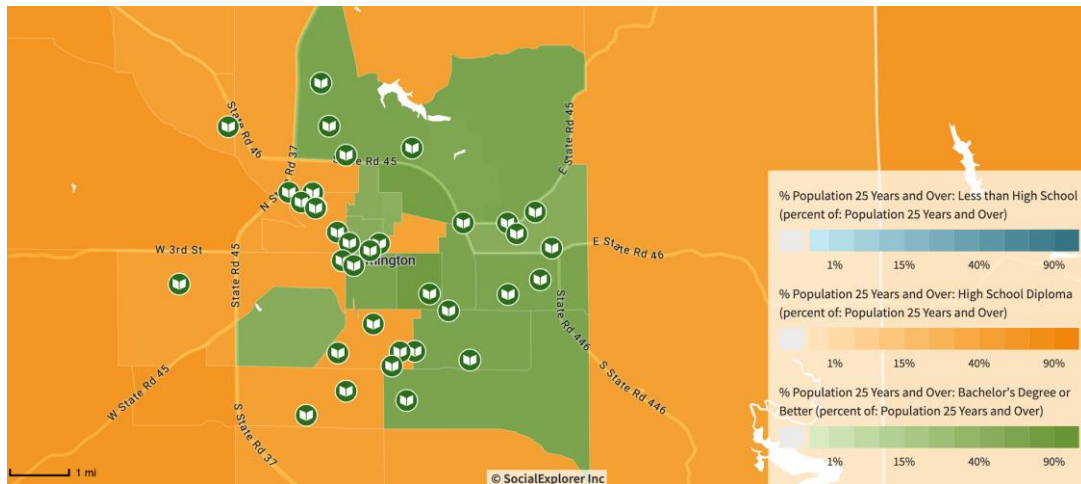
Results and Discussion

There was a clear trend for LFLs to concentrate in areas with higher median incomes, higher white only populations, and higher levels of education attainment.

Bloomington has a high percent of white population (82%), so this finding was expected (United States Census Bureau, n.d.). About 46% (16 out of 35) of LFLs were *Journal of Radical Librarianship*, 9 (2023) pp.1–10

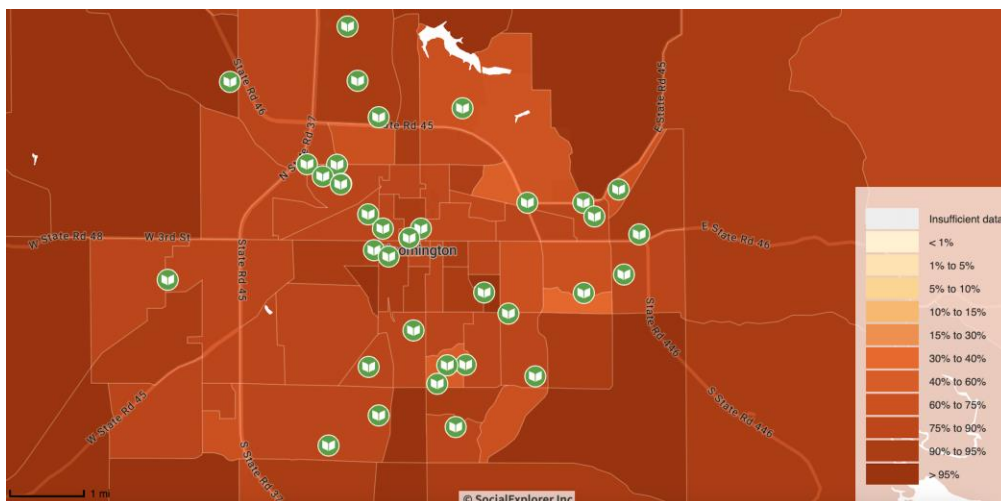
placed in areas where less than half of people had a bachelor's degree or higher as shown in Figure 2. This means the majority of LFLs are placed in regions where most people have at least a bachelor's degree.

Figure 2 Education distribution for 25 years and older with LFL locations overlaid ACS 2019 (5-year estimate) (United States Census Bureau, n.d.).



Nearly 60% of LFLs (20 out of 35) were placed in areas with over 80% white only populations as shown in Figure 3. There is not a clear trend in the racial makeup of Bloomington. Communities of color are evenly spread throughout the city while only being about 18% of the total population (United States Census Bureau, n.d.). Similar studies have also found that LFLs are concentrated in regions with higher literacy rates and levels of educational attainment (Reborei & Burge, 2017; Schmidt & Hale, 2017; Houghton et al., 2022).

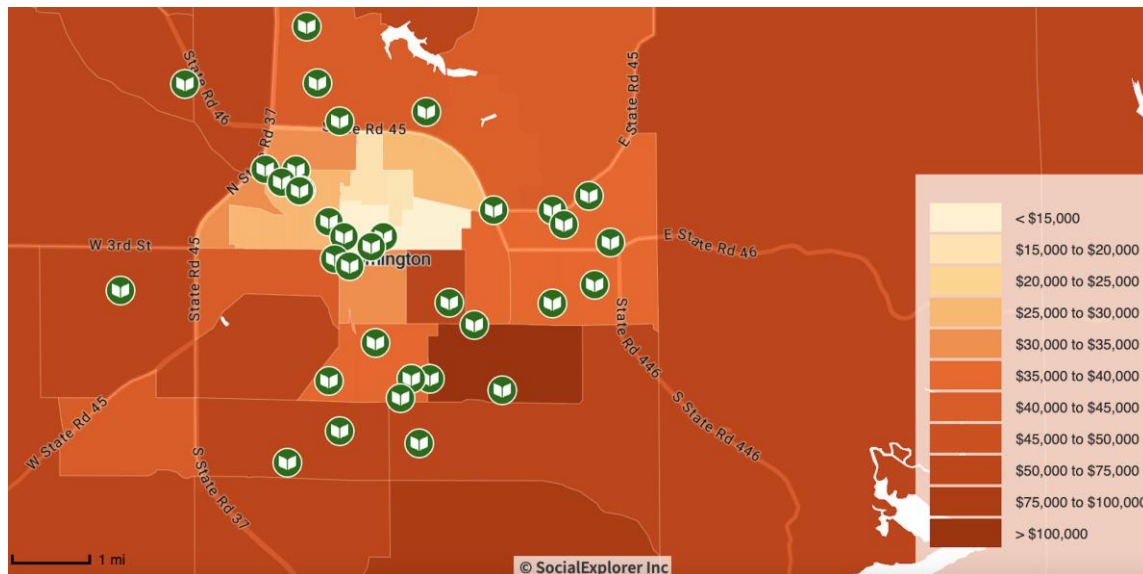
Figure 3 White only population ACS 2019 (5-year estimates) (United States Census Bureau, n.d.).



Income, however, was a more likely determinant of the presence of LFLs than either education or race, as shown in Figure 4. Northern Bloomington displays large income disparities with only 23% (8 out of 35) of LFLs placed in areas with a median income

less than \$30,000 per year.

Figure 4 Median household income (in 2019 inflation adjusted dollars) with LFL locations labeled by Census Tracts from the ACS 2019 (5-year estimates) (United States Census Bureau, n.d.).



The findings of this study are summarized in Table 2. The majority of LFLs are placed in areas that are predominantly white, well-educated, and above the federal poverty line. Income is the best socioeconomic indicator for Little Free Library locations while education and race played minor roles. This research confirms that about 43% are in regions with more than 20% people of color, 46% are in regions where high school is the highest level of education, and 23% are in areas where the annual median income is less than \$30,000.

Table 2 Summary of this study indicating the number of LFLs and percent of total LFLs available based on three socioeconomic indicators.

Socioeconomic Indicator	Number of LFLs (35 total)	Approximate % of LFLs
Race (Over 20% people of color)	15	43%
Highest Education Attainment (High school)	16	46%
Annual Median Income (Less than \$30,000)	8	23%

Future studies should seek to identify the efficacy of LFLs, frequency of visits, and demographics of users to better understand the local impact of LFLs. Further analysis should be performed on the range of access for each LFL as it is unclear how far people are willing to travel to access an LFL. The Unite for Literacy Book Desert Map is useful for broad characterizations but does not provide enough detail to establish precise LFL placements. Therefore, developing standardized criteria may be useful for guiding the placement of LFLs.

Conclusion

The goal of this study is to use geospatial analysis to determine what socioeconomic indicators influence the placement of LFLs and to identify the best locations for potential LFLs in Bloomington, IN. The LFL movement has been criticized for prioritizing regions that do not experience book shortages or low literacy rates. To address these concerns about equitable distribution, this paper explores the distribution of LFLs in Bloomington, IN. LFLs are concentrated in white, affluent areas with high levels of education attainment. Income was the most likely indicator of LFL placement, with only 23% of LFLs located in areas with annual median incomes below \$30,000.

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