Winter 4-2018

Healthy Neighborhoods: Engaging Residents in Neighborhood Assessment

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EXECUTIVE SUMMARY

The neighborhood that an individual lives in has been proven to have a significant impact on the health of that person. Healthy Neighborhoods, a coalition of community partners in Lewiston, Maine, is committed to maximizing the health of their community members by improving neighborhood conditions. Achieving a neighborhood that is entirely conducive to resident health will be a gradual process, but Healthy Neighborhoods plans to make a more immediate step toward this goal by investing funds from a HUD Choice grant to increase the number of healthy attributes in the neighborhood and to capitalize upon existing attributes. These neighborhood attributes have all been demonstrated to have a direct impact on individual health and include safe and affordable housing, access to medical care, access to healthy food, employment and training opportunities, social supports, and neighborhood amenities such as parks and other green spaces. Healthy Neighborhoods' investment is intended to help facilitate overall neighborhood revitalization by demonstrating the neighborhood's potential to a variety of investors and by increasing resident commitment to the neighborhood's well-being.

Our project evaluated community perceptions of Lewiston's downtown Tree Street neighborhood through focus groups in order to ensure that investment occurs in locations that residents believe need work and that it addresses community-identified deficiencies. It is a core belief of Healthy Neighborhoods that residents' voices should be a crucial part of the neighborhood revitalization process, making focus groups an essential source of information. These focus groups gauged opinions on neighborhood safety, housing, medical access, and healthy food access, and resulted in geospatial data as well as qualitative notes. The geospatial data was translated into GIS layers that visualize the responses given during focus groups, and a clear methodology for this process was developed to be used when further data is collected through future focus groups. This data will be used to select streets with numerous deficiencies (and ideally amenities that could be maximized) to be further considered as potential sites for investment and revitalization. Depending on the needs demonstrated during focus groups, this revitalization may take many potential forms such as the introduction of vendors who sell healthy and affordable food, lead abatement from homes, the transformation of empty lots, or improved transportation services to healthcare providers.

The downtown Lewiston area has tremendous potential for revitalization and Healthy Neighborhoods has sufficient funding, invested persons, and expertise to significantly improve the health of the neighborhood and its residents. We intend for the data and data synthesis methodology that resulted from this project to help inform the process of selecting potential locations and strategies for investment. We also suggest that an increased emphasis be placed on the collection of qualitative data in future focus groups in order to expand the currently very limited set of qualitative notes and to further enhance Healthy Neighborhoods' understanding of community perceptions.

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INTRODUCTION

Healthy Neighborhoods is a coalition of community partners committed to maximizing the health of Lewiston, Maine's downtown residents through community-based conversations that lead to neighborhood improvement. Healthy Neighborhoods consists almost entirely of volunteers and part-time staff and is deeply embedded in the community it works with. The coalition is comprised of a highly diverse array of stakeholders including senior citizen organizations, youth and adult education organizations, and local parents who all share the aim of transforming "the urban core of Lewiston Auburn into healthy neighborhoods that people choose to live, work, play and invest in" (Healthy Neighborhoods internal document, n.d.). This organization operates under the firmly-held beliefs that an individual's environment, such as their neighborhood, plays a crucial role in determining their health and that Lewiston's downtown residents deserve to be healthy. It is these beliefs, the first of which is supported by the existing literature (American Planning Association 2018, Galster 2014, Root 2012, Ross et al. 2004), that guide all of the organization's initiatives. In particular, Healthy Neighborhoods believes that the health of any given neighborhood is dependent upon factors such as the availability of housing that is safe, lead-free, and affordable, healthy and accessible food, places to exercise safely, training and employment opportunities, good medical care, and social supports (Fig. 1, Healthy Neighborhoods internal document, n.d.). The organization's long-term goal is to transform and revitalize Lewiston's downtown Tree Street neighborhood so that it exemplifies all of these qualities. The members of Healthy Neighborhoods are deeply invested in the health of the Tree Street neighborhood's residents, and hope to help this neighborhood reach its full potential by creating change based on community input.

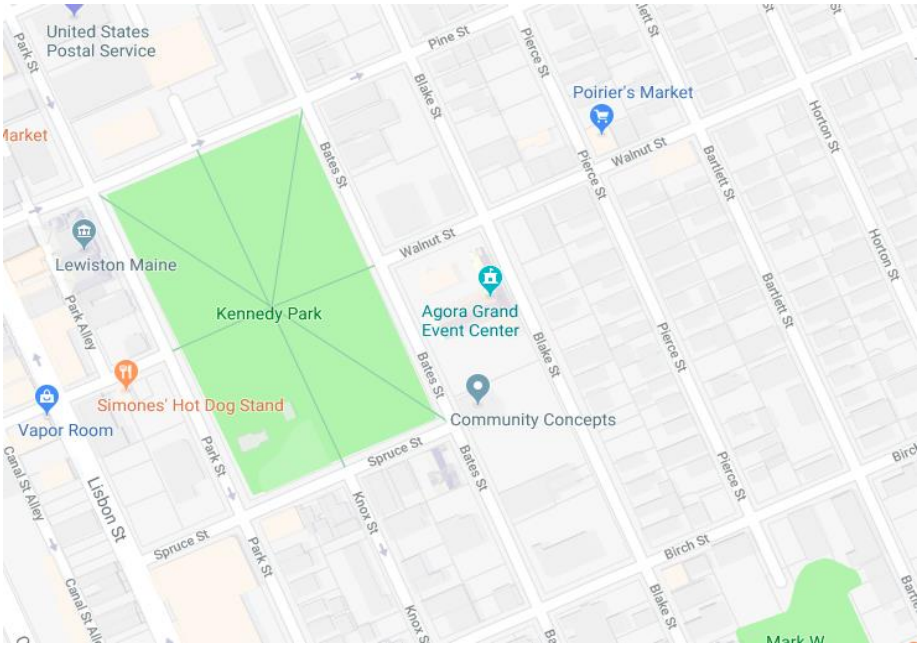

Figure 1. Lewiston's downtown Tree Street Neighborhood. Map generated in GoogleMaps.

Although previous work has been done in association with Healthy Neighborhoods to inventory and map neighborhood amenities such as green spaces within this neighborhood (Griffin et al. 2017), a significant amount of work remained to be done by the organization to gauge diverse neighborhood perceptions of neighborhood safety, housing, employment, medical care, food access, and social supports. Once Healthy Neighborhoods has fully evaluated the current status of the Tree Street neighborhood and determined how best to ameliorate its deficits and maximize its healthy attributes, the organization will determine how to invest its HUD Choice grant funding within the neighborhood. These investments will remove community-identified barriers to neighborhood health and will be a first step in working toward a Tree Street neighborhood that contains all aspects of a healthy neighborhood. The benefits associated with these initial investments will be used to demonstrate the positive potential of Healthy Neighborhoods' work when lobbying for future grant funding and convincing investors, families, and businesses to commit themselves to this neighborhood. Although the process of allocating and utilizing the HUD Choice grant will take place over a much longer timeframe than our spring semester, this is the ultimate goal that we have been working towards with Healthy Neighborhoods.

Figure 2. Components of a healthy neighborhood. The components in black are the ones that were considered during this project.

Our aim is to assist Healthy Neighborhoods in engaging community stakeholders to gather, assess, and compile residents' perceptions of physical and social aspects of their neighborhood. Our purpose is to identify areas of the downtown Lewiston neighborhood that residents believe are particularly in need of revitalization to be considered as areas for investment in the early stages of neighborhood improvement. In order to achieve this aim, we have assisted in filling Healthy Neighborhood's knowledge gap regarding community perceptions of housing, food access, medical access, and neighborhood safety in Lewiston. The steps we took to reach this aim included a literature review to determine standard criteria for the evaluation of these elements of a healthy neighborhood, working with Healthy Neighborhoods to solicit neighborhood feedback in order to qualitatively assess these criteria, and compiling and distributing these findings. There was not a neighborhood approach to the development of criteria and focus group questions because Healthy Neighborhoods is focused on starting conversations and gathering preliminary data at this point, and more in-depth community discussions will take place when finalizing locations for initial investments. These early focus groups therefore serve another aim of Healthy Neighborhoods by facilitating conversation among residents of the Tree Street Neighborhood. They hope this process will help empower some residents to work amongst themselves toward neighborhood revitalization which will help to create positive change at a faster rate than Healthy Neighborhoods could manage on their own.

METHODS

1. Understanding context and making a plan

The first step of our project involved scheduling an initial meeting with our community partner. During this meeting, our community partner introduced us to the goals and context of the Healthy Neighborhoods coalition. We laid out our strengths and weaknesses in order to best decide what kind of contribution we could make to their larger project.

We also went over our class syllabus with our partner so that we could incorporate our class schedule into our plan for the semester. With our partner, we created a plan for how we would work our project into their greater needs, as seen below (Fig. 3). Healthy Neighborhoods is interested in assessing community members' perceptions of neighborhood amenities as well as shortcomings of the Tree Street neighborhood in Lewiston.

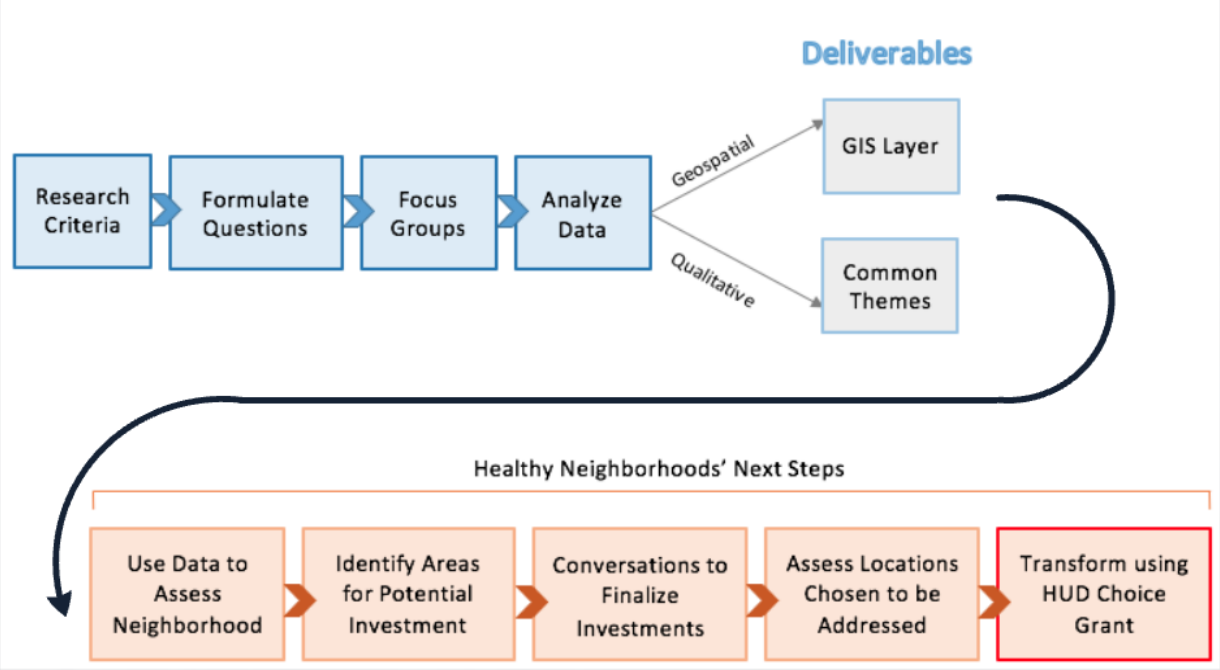

Figure 3. Project overview. Our contribution to Healthy Neighborhoods is highlighted in blue, which will feed into their next steps highlighted in orange.

2. Research and generation of questions

Based off of the research already done for Healthy Neighborhoods and their further interests, we divided up research on standardized criteria for neighborhood safety, safe housing, food access, and access to medical care.

We presented our findings to our community partner, at which point we were given suggestions for further research. After following suggestions, we formulated 3-4 questions for each category of criteria that could be asked in a focus group setting. After doing our initial research, we thought about what we wanted to know about perceptions. For example, if we wanted to know where there is a lot of lead paint, we would frame our question around where people see chipping or peeling paint. Our community partner had significantly more experience with community outreach and effective focus group questioning, so we worked with them and under their guidance to reword questions to better frame the answers we were trying to get.

3. Maps and focus group preparation

In order to record the people's responses to these questions in a way that would facilitate the future presentation of data in a GIS layer, we printed large maps of the Tree Street neighborhood where participants would place color coded stickers that corresponded to the questions asked.

As part of this process, Emily applied for a $300 grant from the Bates Harward Center that would cover the cost of printing the maps for the focus groups.

The materials for each focus group included a map for each table of participants, colored stickers to represent answers to questions, question sheets that were color coded with the

corresponding answer stickers, and facilitator note sheets that organized notes taken on the conversations happening during the focus groups. These notes would later inform some preliminary interpretations of the information we learned during the focus groups.

4. Focus Groups and Data entry

Healthy Neighborhoods organized several focus groups throughout the semester in collaboration with some of their community partners (Fig. 4). Due to weather, we were only able to attend one focus group. Each of us assisted with focus group facilitation primarily by taking notes and also answering questions for focus group participants. Colored stickers were given to each participant corresponding to each question we would ask. We each had a table with a map, where individuals would respond to questions by sticking their corresponding stickers on areas that applied to their answer. For example, if we asked where people went to buy food if they were low on time, a participant might put a sticker on the map at the address of a market near their home.

For the focus groups that we were unable to attend, we did data entry of the stickers on the maps into a spreadsheet. The information recorded included the address of the sticker, the number of occurrences (the number of that color sticker on that address), and the question that the answer corresponded to. We also compiled any qualitative notes we had.

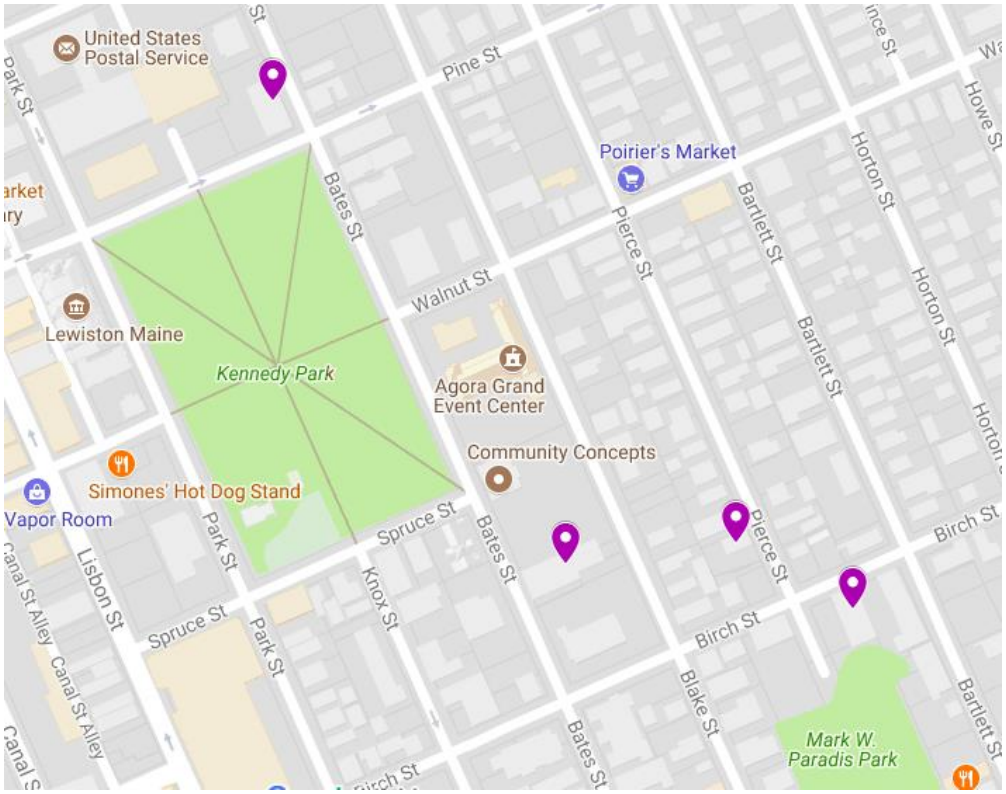

Figure 4. Purple pins indicate the locations of focus groups for which we either gathered or entered data. Map generated in GoogleMaps.

5. Preliminary data assessment and structuring future data analysis with GIS

Working under the guidance of Camille Parrish, Abby compiled the data we had and made a GIS layer for each category of questions: neighborhood safety, housing, food access, and access to medical care. She also created a step-by-step guide of how the layers were created so that data from ongoing focus groups could be entered into the layers (Appen. IV).

RESULTS

Our results will help aid Healthy Neighborhoods in understanding residents' perceptions of the Tree Street neighborhood. A finalized GIS layer and compilation of qualitative notes from the Take 2 focus group are a product of our work with Healthy Neighborhoods this semester. While these two are directly derived from data collection, we also have established a GIS methodology that will help guide Healthy Neighborhoods and future capstone groups. Finally, we recognize that our data is limited but for the sake of future research, we have also determined recommendations in analyzing both the GIS layers, qualitative notes and how they might potentially relate to each other.

The finalized GIS layers (Figs. 5-8) are representations of the individual "data sets" that correspond to each focus group. The points that were collected on every map in a particular focus group were translated into the GIS layers. The result shows a layer for every question asked within a specific focus group. The size of each dot on the layers is correlated with the number of respondents who gave that particular answer. This map format will allow Healthy Neighborhoods to use these layers and those resulting from future focus groups to assess trends in neighborhood perceptions. The files to our specific data will be accessible to Healthy Neighborhoods and future capstone groups. Our GIS methodology can help Healthy Neighborhoods continue their geospatial data collection for future focus groups.

Medical Access Data

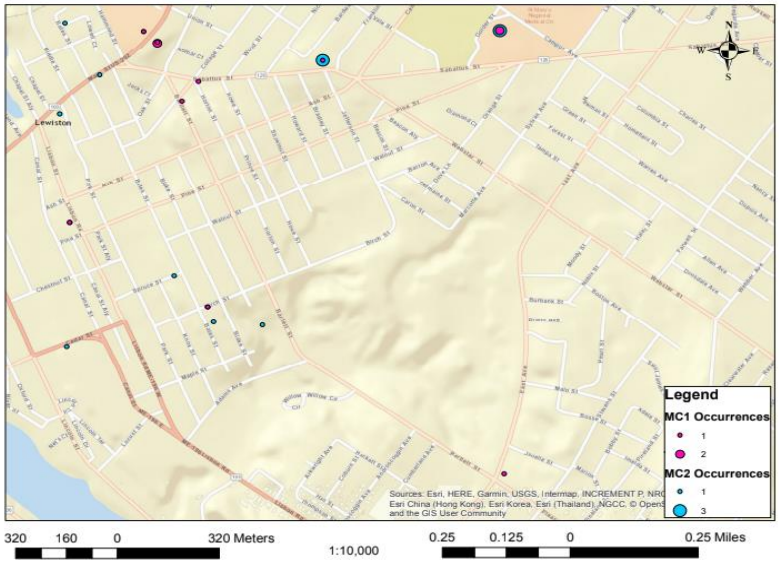

Figure 5. Medical Access Data Map. The data here is compiled from all focus groups through March 15th. The associated questions can be found in Appendix II.

Food Access Data

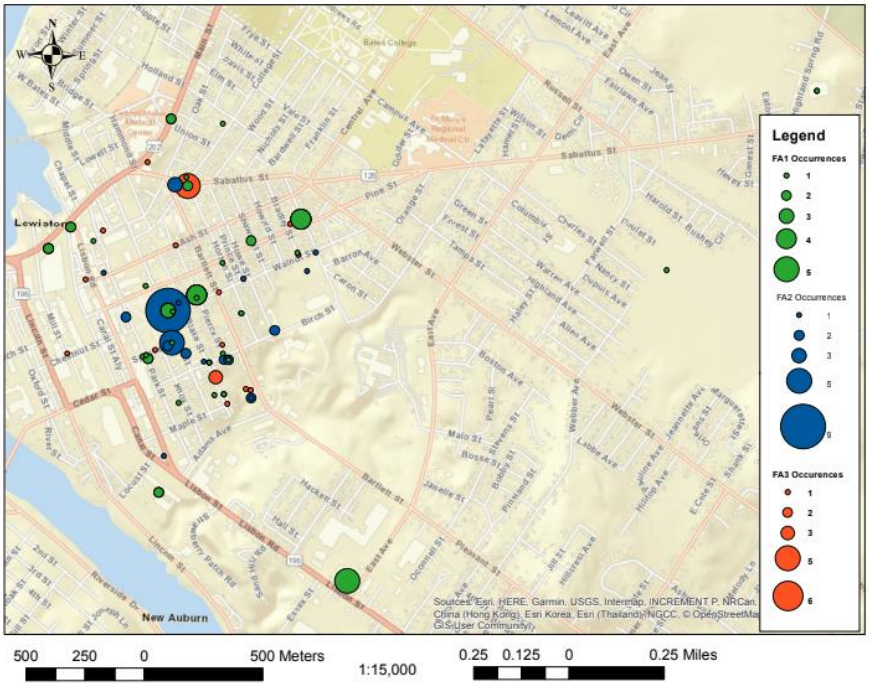

Figure 6. Food Access Data Map. The data here is compiled from all focus groups through March 15th. The associated questions can be found in Appendix II.

Neighborhood Safety Data

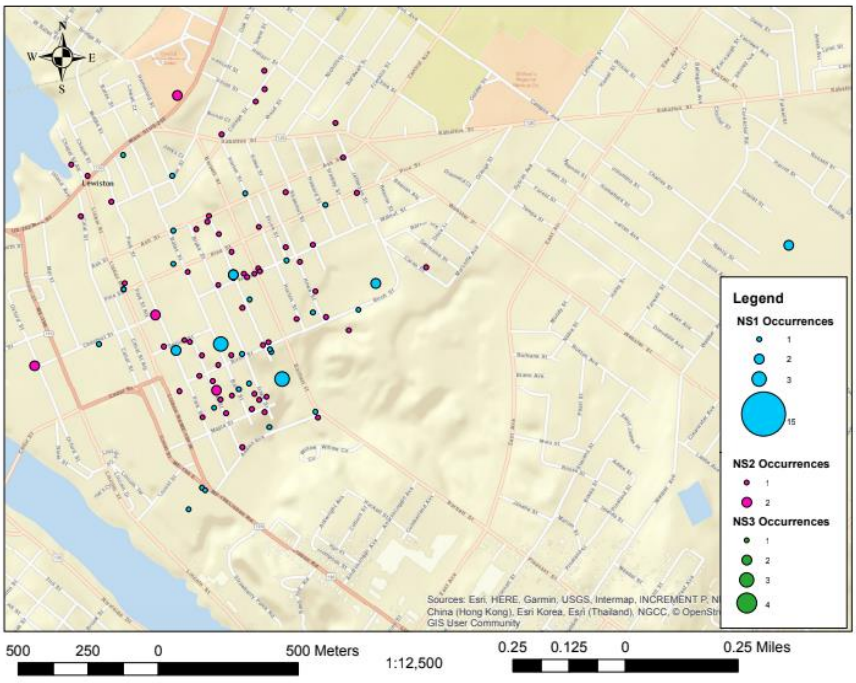

Figure 7. Neighborhood Safety Data Map. The data here is compiled from all focus groups through March 15th. The associated questions can be found in Appendix II.

Housing Data

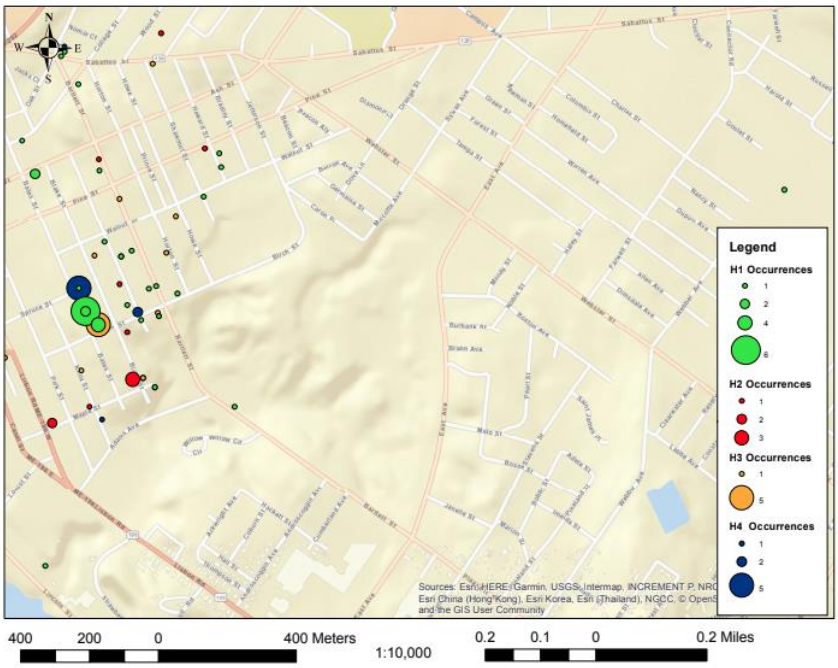

Figure 8. Housing Data Map. The data here is compiled from all focus groups through March 15th. The associated questions can be found in Appendix II.

The notes compiled from the Take 2 focus group is a limited set of qualitative information that can begin to inform how residents perceive the Tree Street Neighborhood. While more geospatial and qualitative data needs to be collected, what has already been collected should start to be analyzed. Moving forward, Healthy Neighborhoods can use the data we have collected to help inform their decision in choosing locations to invest in the Tree Street Neighborhood. With the existing data and our methodology, Healthy Neighborhoods can begin to deepen their understanding of existing community assets.

LIMITATIONS

There are a few areas in which we feel that the data collection process could have been improved. While there is almost an even representation of the Tree Street Neighborhood through a variety of organizations, it is not a perfectly representative. There is the risk of people who live or spend their time in the Tree Street neighborhood who do not affiliate themselves with an organization, and as a result their voice is lost in the process. Efforts to collect data that is a better representation of the Tree Street neighborhood can help Healthy Neighborhoods make meaningful inferences about residents' perceptions.

In terms of qualitative data, we feel that not enough was collected to gain an accurate understanding of resident's perceptions of the Tree Street neighborhood. The only focus group in which we were able to take notes on verbalized comments was Goodwill's Take 2 Youthbuild group. The major themes we found in synthesizing the qualitative data were that parks are unsafe, accessible food is unhealthy, housing becomes too expensive near Bates, there are areas in which people feel unsafe in the neighborhood and many people do not trust the available medical care. Although this is representative of Take 2 Youthbuild, other organizations that represent seniors or religious groups, for example, might have very different perceptions. As a result, we feel that much more qualitative data needs to be collected to verify these larger themes. Another barrier we encountered in gathering qualitative data was scheduling and weather conditions. The reason why there is only one sample of qualitative data is largely due to external factors that prohibited our attendance to the other three focus groups. Consequently, there were not enough facilitators to accurately collect qualitative data at each focus group. In the future, for successful scheduling we recommend a constant line of communication and notifying in advanced when there are changes in the agenda. If possible, we also recommend holding focus groups in seasons with practical weather.

Within the quantitative data collection process, influence of peers and misplacement of stickers had the potential to cause inaccuracy in the results. During the workshops, individuals in each group were asked to place a sticker representing their own answer to the corresponding questions. This may have led to some confusion, as some groups collectively agreed in a response to the questions and would place one sticker for the entire group. This causes inaccuracy in the data because locations that have more stickers than others emphasize a common perception of the neighborhood. With the 'one sticker per group' method, there is no way in understanding whether this is a collective view or an overpowering voice. This is problematic because some participants might feel pressure to conform to strong voices within the group. This leads to inaccuracy in representing every individual's own perceptions of the Tree Street neighborhood in the focus groups. Also because the maps are so large, participants were more inclined to place the sticker in the general area instead of the exact location. This also created defective quantitative data because some stickers did not accurately represent the exact location that corresponded with the individual's answers.

Healthy Neighborhoods has a large goal of using their investment in part to enhance the healthy attributes of the Tree Street Neighborhood. We therefore suggest including focus group questions that more specifically identify aspects of the neighborhood that residents believe are healthy attributes.

RECOMMENDATIONS

As Healthy Neighborhoods continues to examine residents' perceptions of the Tree Street Neighborhood, we recommend a possible approach for analyzing the raw spatial and qualitative

data. This is only one recommendation out of many for data analysis and we acknowledge that there are multiple approaches that are more or just as effective.

GIS is a useful tool in that it gives a visual representation of the data collected. This visualization makes identifying patterns and cross comparison within the data easier. When looking at finalized GIS layers, we suggest identifying clusters of points / large points and from this inferring potential patterns that may emerge from the data. Because the clusters of points of the same layer, or one very large point signifies a commonly shared opinion, it is worth noting. Clusters or large points can point to areas in the neighborhood that need more investment or are utilized by residents. Identifying these points and checking their corresponding category can help Healthy Neighborhood ask new questions that might be able to shed light on why these specific areas are important. This also holds true when layering two different categories over each other such as food access and neighborhood safety. It might be intuitive that the clusters of food access will not overlap with clusters of neighborhood safety. If they do, this could tell Healthy Neighborhoods to ask a question in a future focus group like, do you ever feel unsafe buying groceries? If yes, why? Answers might inform healthy neighborhoods that a barrier to food access is lack of neighborhood safety. Although our data is too limited to reach this far into the analysis, beginning to identify patterns is possible. For instance, if there is a high concentration of dots in a certain area, we can start to draw conclusions about the value of that area in the neighborhood. Below, we see the food access data that we have collected thus far (Fig. 6). By assessing what the most popular places where people go to eat, we can figure out what kind of food they are eating and question whether or not these options qualify as "healthy."

Food Access Data

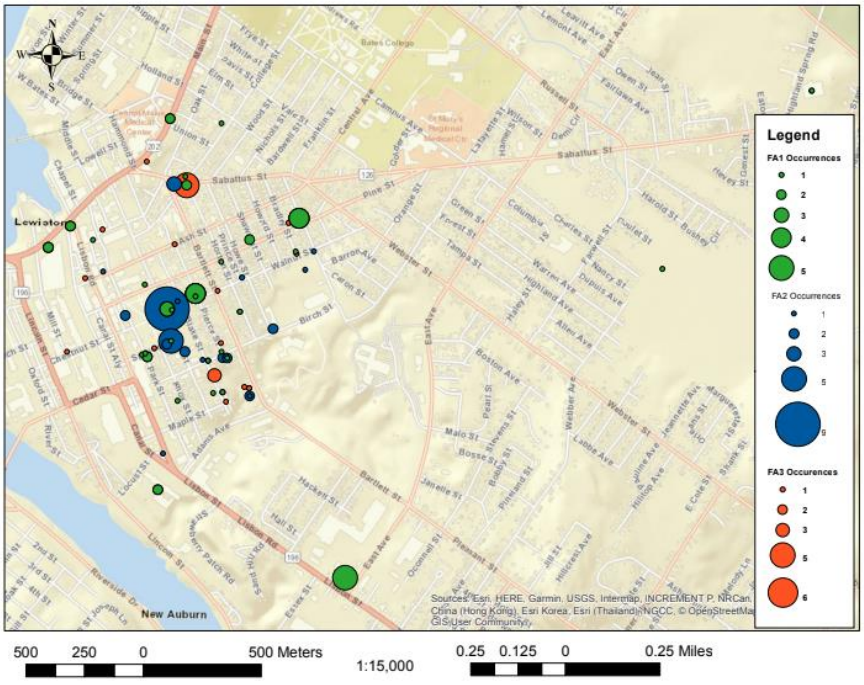

Figure 6. Food Access Data Map. The data here is compiled from all focus groups through March 15th. The associated questions can be found in Appendix II.

Again, our collected data is limited and will not be able to draw any finalized conclusions.

We feel that the analysis of qualitative data should focus on identifying common themes and the information that cannot be gathered from the maps. Similarly to the geospatial analysis, noting which comments have been verbalized multiple times is important in understanding collective views that residents might have. Because the data is qualitative, grouping comments into similar categories will be helpful in identifying overarching themes. For example, if there are multiple comments on Birch St about stabbings and others on fights, these comments might be grouped together to say there is violence on Birch St. Another important part of the qualitative data analysis is to narrow in on what can't be learned from a map. Sifting through the qualitative data that gives explanations of the "why" residents respond in certain ways to the questions. Meaning, comments that provide insight on why residents feel that they can't get medical care at St. Mary's Hospital. This can help Healthy Neighborhoods gain an understanding of what kind of medical care might be more useful to Tree Street residents.

Analyzing the geospatial and qualitative data together might be the most informative analysis to Healthy Neighborhoods. The qualitative data in a sense is the residents' voices behind the different points found in the GIS layers. The comments help explain the data and allow for further insight on why certain patterns emerge. Cross comparing the points on the GIS layer with the comments for each specific question can reveal information on Tree Street residents' perceptions. For instance, there might be many points around and in Kennedy Park that represent residents feeling unsafe. The qualitative data may reveal multiple individuals say they feel unsafe in Kennedy Park at night because it is very dark. Healthy Neighborhoods could suggest the idea of adding lamp posts to Kennedy Park in order to increase visibility that as a result could instill neighborhood safety. Because qualitative data can be so useful in drawing insight to the geospatial data and allows Healthy Neighborhood to make meaningful inferences, we stress the importance of collecting more.

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APPENDIX

I. Compiled Criteria and Resulting Focus Group Questions
II. Question Sheet for Focus Group Participants
III. Sample Qualitative Note Sheet from Take 2 Focus Group
IV. Guide for the Creation of GIS Layers

Appendix I.

Housing Affordability Criteria

Affordable Housing in Lewiston

1. *The median gross income for households in Lewiston is $37,500 a year, or $3,125 a month. The median rent for the city is $683 a month. - Affordable housing snapshot (Affordable housing in Lewiston, 2015)*
2. *HUD indicates that housing that costs 30% or less of household income is affordable (Affordable housing in Lewiston, 2015)*

The voucher program in Lewiston was researched in order to familiarize ourselves with current housing regulations. Although this information was not used in forming focus group questions, it was helpful to get an idea of what plays into housing affordability in Lewiston.

Voucher Program

3. *Types of vouchers managed and the monthly costs of each (Lewiston Housing Authority, 2015)*
4. *Waiting List and Tenancy (Lewiston Housing Authority, 2015)*
5. *Income Characteristics (Lewiston Housing Authority, 2015)*
6. *Heads of Household Characteristics (Lewiston Housing Authority, 2015)*
7. *Public Housing Operated by Lewiston Housing Authority (Lewiston Housing Authority, 2015)*
8. *Housing Choice Vouchers Fact Sheet (HUD)*
9. *Housing Choice Vouchers Program List (HUD)*

Avg rent in Lewiston in work hours

Total median individual income for a Lewiston resident $2,276 and median monthly rent is $683. These numbers were given to us by Shanna Cox. Below is a breakdown of how many work hours it would take for a Lewiston resident to work in order for housing to be affordable (30% of household income).

Current Minimum wage: $9	**Wage: $13**
Calculation of work hours needed to fulfill median rent:	
→ 253 hours / month	→ 175 hours / month
→ 63 hours / week	→ 44 hours / week
→ 12.6 hours / day (5 day work week)	→ 9 hours / day

Focus Group Questions

- Where do you think housing in your neighborhood is affordable?
    - Criteria: 30% of household income spent on rent, rent of $680 with household income of $2,275, Working with minimum wage 60 hours / week.
- Where do you think housing in your neighborhood is unaffordable?

    - This question was used in the first focus group but was eliminated because it did not provide any new information. The criteria used was again the housing affordability.
- Where is the area in the neighborhood where housing might become unaffordable?
    - Criteria: No new housing affordability information was used to formulate this question.

Safe Housing Criteria

1. *Elements of a green and healthy home: Dry, Clean, Safe, Well-ventilated, Pest-free, contaminant -free, Well maintained, Energy efficient (Green and Healthy Homes Initiative, 2018)*
2. *Lead poisoning: affects development in children, can lead to learning disabilities, more likely to drop out of school. Adults increase mortality rate 46%. (Green and Healthy Homes Initiative, 2018)*
3. *Household injury- injury is leading cause of death in children and young adults: falls, fires/burns, electrical hazards, slip and fall hazards, tripping hazards, chemical poisonings, choking hazards. (Green and Healthy Homes Initiative, 2018)*

Focus Group Questions:

- Where is there housing in the neighborhood that feels unsafe?
  Criteria: This question was not based on specific criteria, but instead is designed to gauge individual opinions and is therefore very subjective. We were interested in factors that affect perceived safety such as structural stability and safety, violence, drugs, and personal experiences.

Food Access Criteria

1. *"Food security, at the individual, household, national, regional and global levels (is achieved) when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (World Food Summit, cited in CFA)*
2. *Number of "Healthy Food Basket" categories that nearby stores fulfill (fresh fruit, fresh vegetables, whole grains, frozen vegetables, lean meats, low-fat dairy, canned/dry vegetables) (CFA)*
3. *Accessibility of food under government assistance programs such as WIC and SNAP (CFA)*
4. *Affordability of good food, availability, and accessibility (CFA)*

Focus Group Questions:

- When you are trying to make a meal or get a snack with healthy food, and you are looking for a place with many fruit and vegetable options - where do you go?
    - Criteria: Access to sufficient nutritious food
- If you needed food or groceries, but were short on money that week, where would you go to get food?
    - Criteria: Affordability of good food
- If you were trying to get food quickly, where would you go for food?
    - Criteria: Accessibility of good food

Medical Care Criteria

1. *Length of transportation time (Hiscock et al.)*
2. *Availability of services (Number of primary care professionals per 100,000 population, diversity ratio of doctors compared to population, opening hours/weekend services, quality and cost of care, choice of doctor [such as in terms of gender]) (Hyndman et al. and Exworthy et al.)*
    a. *Most important is access to a Primary Care Physician (PCP). Access to evidence-based preventative care and Emergency Medical Services are considered most important after PCP access (Office of Disease Prevention and Health Promotion).*
    b. *Another site lists the most important services as "primary care, dental care, behavioral health, emergency care, and public health services" (Rural Health Information Hub)*
3. *Degree of racial and cultural competency (Exworthy et al.)*
4. *Rates of utilization of different kinds of healthcare services, cost of healthcare services (Exworthy et al.)*
    a. *Insurance coverage should be less than 9.69% of the employee's monthly household income (Healthcare.gov)*
    b. *There isn't clear criteria anywhere for what healthcare should cost with the exception of insurance costs. This is likely a result of the vastly different costs associated with different medical conditions, geographical locations, etc. However, it is suggested that increased transparency of healthcare related costs is important to improving accessibility (Robert Wood Johnson Foundation).*
5. *Healthcare system's degree of navigability (Exworthy et al.)*

Relevance and acceptability of services to the population in question (Gulliford et al.)

Focus Group Questions:

- If you or someone in your home woke up with a fever on a weekday, where is the first place you would take them for care? What about on a weekend?
    - Criteria: Availability of services, length of transportation time
- For you or people in your home - if you were trying to see the doctor when your are healthy, or to manage a chronic condition like high blood pressure, diabetes, or asthma - where do you go?
    - Criteria: Availability of services, utilization of different kinds of healthcare services

Other Focus Group Questions (Neighborhood Safety):

- Where do you choose to play, exercise, or spend time outside of your home?
- Where might you choose to not to play - or tell others not to go - because you do not feel it is safe?

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Appendix II.*

Neighborhood Safety (Blue dots)

1. **Where do you choose to play, exercise or spend time outside of your home?**
    - *Places you take your kids, ride a bike, have a picnic, etc.*
2. **Where might you choose not to play - or tell others not to go - because you do not feel it is safe?**
3. **Where is there housing in the neighborhood that feels unsafe?**
    - *Unsafe could mean the physical housing seems unsafe: chipping or peeling paint, broken stairs or windows, etc.*
    - *Unsafe could also mean it contributes a feeling of unsafety to the neighborhood because of the activity within the housing.*

Food Access (Orange Dots)

1. **When you are trying to make a meal or get a snack with healthy food, and you are looking for a place with many fresh fruit and vegetable options - where do you go?**
2. **If you needed food or groceries, but were short on money that week, where would you go to get food?**
3. **If you were trying to get food quickly, where would go for food?**

Medical Care (Red dots)

1. **If you or someone in your home woke up with a fever on a weekday, where is the first place you would take them for care? What about on a weekend?**
2. **For you or people in your home - if you were trying to see the doctor when you are healthy, or manage a chronic condition like high blood pressure, diabetes or asthma - Where do you go?**

Housing (Pink dots)

1. **Where do you think housing in your neighborhood is affordable?**
2. **Where is the area in the neighborhood where housing might become unaffordable?**
3. **Where do you live? (use the blank HOT PINK dot)**

Appendix III.*

Healthy Neighborhoods Downtown Lewiston Mapping Workshop

Facilitator Notes

Neighborhood Safety (Blue dots)

1. **Where do you choose to play, exercise or spend time outside of your home?**
    - *Places you take your kids, ride a bike, have a picnic, etc.*

    a. Why do you often pick this location?

Notes:

- One participant chose Kennedy Park, and another was very surprised that he felt safe there

2. **Where might you choose not to play - or tell others not to go - because you do not feel it is safe?**

    a. Does the time of day change your response (dark vs. daytime)?

    b. Does being alone or with other people change your response?

Notes:

- People feel less safe in the summer and at night
- "It's the people, not the neighborhood"
- Any parks
- People were upset that Kennedy Park is next to a police station yet isn't safe
- Can't walk anywhere in Lewiston at 2am
- Asked for a neighborhood watch due to drugs and pedophiles

3. **Where is there housing in the neighborhood that feels unsafe?**
    - *Unsafe could mean the physical housing seems unsafe: chipping or peeling paint, broken stairs or windows, etc.*
    - *Unsafe could also mean it contributes a feeling of unsafety to the neighborhood because of the activity within the housing.*

    a. What about the selected location makes it feel unsafe?

Notes:

- Many have chipping paint and are structurally falling apart
- Oak street housing is "terrible, old, rickety, and about to fall apart"
- Cockroaches and bedbugs
- "All the housing downtown"
- Any apartment owned by Joe Dunn
- Once you cross Webster St. it gets better

Food Access (Orange Dots)

1. **When you are trying to make a meal or get a snack with healthy food, and you are looking for a place with many fresh fruit and vegetable options - where do you go?**

Notes:

- One person had used the food bus when he was homeless but no other participants had heard of it

2. **If you needed food or groceries, but were short on money that week, where would you go to get food?**
    a. Why that location?

Notes:

- Might just wait until paid and not eat

3. **If you were trying to get food quickly, where would go for food?**

Notes:

- "It's mostly snack food but it's food"
- Also talked about ordering out if you can afford the delivery fee

Medical Care (Red dots)

1. **If you or someone in your home woke up with a fever on a weekday, where is the first place you would take them for care? What about on a weekend?**
    a. What factors go into deciding and how do different factors play into where is selected?

Notes:

- The comment was made that this question didn't make sense with the map because only one hospital is shown - not thinking of other sources of healthcare
- People didn't feel understood or respected by their medical providers (especially at CMMC)
    - Told stories of being denied certain tests because they lacked MaineCare and waiting very long times to be seen in the ER
- One male participant mentioned that he's only been able to access a female psychiatrist

2. **For you or people in your home - if you were trying to see the doctor when you are healthy, or manage a chronic condition like high blood pressure, diabetes or asthma - Where do you go?**
    a. Do you seek preventative care when you are healthy/regular check ups? Why/why not?

Notes:

- Use the internet for information
- Feel particularly unsafe at St. Mary's mental hospital

Housing (Pink dots)

1. **Where do you think housing in your neighborhood is affordable?**
    a. Aside from how we - the facilitators defined it - how is affordable interpreted? What makes a home affordable?

Notes:

- The most affordable housing is really bad
- Low-income housing carries a social stigma - people see you as mooching off the government

2. **Where is the housing that is unaffordable in the neighborhood?**

Notes:

- Landlords have been trying to increase rent
- Have to have a lot of roommates
- Rental housing increasingly requires credit histories (hard for young people)
- More places are requiring a base amount of income that is greater than disability - participant believed he could afford the housing but didn't make enough to meet this base income amount

3. **Where is the area in the neighborhood where housing might become unaffordable?**
    a. As lewiston becomes a place of investment is there anywhere in the neighborhood you are concerned will become too expensive for residents? If so, what is causing that concern?

Notes:

- All of the downtown
- Near Bates

4. **Where do you live? (use the blank HOT PINK dot)**

*Both Mapping Workshop documents (Appendices II and III) were created by Paige Wagner and Shanna Cox of Healthy Neighborhoods, 2018.

Appendix IV:

Entering Data into GIS

If you do not have access to ArcGIS there is a free online program called QGIS https://www.qgis.org/en/site/

1. Format of data entry in Excel:

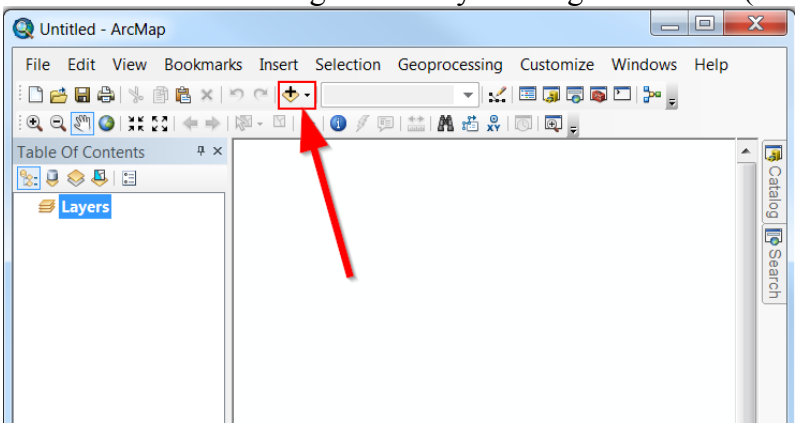
Question	Address	City	State	Zip	Response

Data MUST be formatted in this way for the geocoder to connect parcels with latitude/longitude data.

2. Once you have entered data from maps into this type of spreadsheet, you need to use a geocoder to translate the address data into latitude and longitude. You can google any geocoder, I recommend Texas A+M Geocoder: http://geoservices.tamu.edu/Services/Geocode/

Save the geocoded data as ".csv"

3. In GIS, bring in the table that has been geocoded by clicking "add data." (shown below)



Click "display," right click -> "display XY data"

Then click on "coordinate system"-> "geographic coordinate system" -> "world" -> WGS 1984 That will link the data with the proper coordinate system.

Events-> right click "Data"-> export data-> give name and hit "ok."