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Identifying Strategies and Metrics for Measuring Success and Long-Term Impact in Downtown Lewiston's Tree Streets Neighborhood

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Identifying Strategies and Metrics for Measuring Success and Long-Term Impact in Downtown Lewiston's Tree Streets Neighborhood

**Completed in Partnership with The City of
Lewiston**

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*Program in Environmental Studies April 30th
2020*

**Executive
Summary:**

Our report provides a detailed explanation of our processes to determine metrics for measuring long-term and short-term success in Lewiston's Maine, downtown Tree Street Neighborhood. The aim of our work was to assist The City of Lewiston and their efforts to secure the Housing and Urban Developments (HUD), Choice Neighborhood Implementation Grant. We worked closely with Lewiston's Healthy Neighborhood Development Team, whose focus is targeted to the Neighborhood component of the Implementation Grant.

Using the four strategies given to us by the Healthy Neighborhood Development Team, our work focused on establishing metrics to support these strategies. Our approach to developing metrics was heavily influenced by the Goals of Lewiston's "Growing Our Tree Streets" Transformation Plan to represent the Tree Streets

Neighborhood positively and accurately. We specifically foregrounded our approach to metrics in an asset-based mindset to align ourselves with the Healthy Neighborhoods Development Team and the Transformation Plan while remaining cognizant of HUD’s requirements for metrics.

We identified 24 metrics that support the four strategies while also supporting the larger Goals from the Transformation Plan. Our established metrics indicate success across six Goals of the Transformation Plan and while dually supporting the four strategies. Of the 24 metrics, 14 specifically satisfied HUD requirements. All metrics are accompanied by information to support the location and collection of data.

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INTRODUCTION

Across the United States, communities are faced with issues regarding housing. Housing has extreme impacts on the lives of residents, often dictating or impacting their susceptibility to a number of detrimental effects. These include environmental hazards, ability to obtain nutritious food, and what kind of academic opportunities children might have. Importantly, many do not have the choice to live in housing which is safe and has access to necessities listed above due to financial and social restraints. Access to safe and affordable housing is increasingly becoming a privilege not a right, leaving many families and individuals to live in residences which are without access to many necessities.

One kind of these risks which many residents face is lead exposure, a problem in households across America. Historically, relatively high levels of lead were acceptable in new housing construction until the regulations used today were set in place in 1978 (Congressional Research Service, 2013). Issues of lead levels are especially problematic in areas of poverty due to multiple reasons. Housing is expensive and therefore families without ample funds often do not have a large

selection of rentable spaces, especially lead-free housing. On top of this, these families may not have the ability to renovate their homes in order to reduce lead poisoning risk. Additionally, lead has its most severe effects on the development of all children, but those who live under the poverty line are at the highest risk. Children that are malnourished, a population primarily living in households under the poverty line, have higher rates of lead absorption (Congressional Research Service, 2013).

Lewiston, Maine is facing many of these national problems. Lewiston has an aging housing stock built primarily when lead paint was allowable in homes and a limited number of residences available. Additionally, one of Lewiston's challenges is the wealth of residents, as wealth is strongly linked to access to safe and healthy housing. While the national poverty rate in 2018 was 11.8%, Lewiston's was 21.3%, almost double (Semega et al., 2019 and United States Census Bureau: Lewiston, Maine). Similarly the national average income was \$63,179 with Lewiston's sitting considerably lower at \$41,371 (Income and Poverty in the United States, 2019 and United States Census Bureau: Lewiston, Maine). The Tree Streets neighborhood is an area in Downtown Lewiston which is especially experiencing these challenges, where safe and healthy residences are difficult to obtain and retain. One of the primary obstacles to the acquisition and retention of homes is wealth and income, as stated above. While the household income of Lewiston is considerable lower than the national average, the median household income in the Tree Streets comes in at "\$20,025, half the citywide median (\$40,670) and 37 percent of the County median (\$53,285)" (Ribbon Demographics). This low household income means that there is little choice as to what housing is available to many of the residents of the neighborhood, 4 often translating to them having aging houses in spaces which don't have access to many resources as their only option

Lewiston industrialized rapidly to accommodate a growing industry presence in the 19th century (Chittim). Housing was built in haste, and not up to code leaving workers and their families vulnerable to unhealthy conditions, such as high levels of lead. Since the closure of the textile mills, the housing stock has not been properly updated or cared for which reflects the poor housing conditions presently. This has created a need for both new development and rehabbed housing to support the health of Lewiston. The community has a long history of strong community engagement that both supports the current needs along with the future foresight and planning. In 1997 a comprehensive plan was drafted, in 1999 the downtown master plan was created, and in 2008 the Peoples Downtown Master Plan was written just to name a few (City of Lewiston|2017 Comprehensive Plan). This dedication makes Lewiston unique and is

what has allowed for the current Transformation Plan to come to life.

Housing and Urban Development (HUD) is a federal agency that addresses housing needs across America (Housing and Urban Development). HUD recognizes that housing is an essential element for a productive and healthy lifestyle, so they view housing as an opportunity to be a catalyst for neighborhood revitalization. A specific grant program by HUD that does this is Choice Neighborhoods (Housing and Urban Development). Choice Neighborhoods is built on the idea that residents should be able to live in a home and neighborhood that they would choose, instead of a space into which they are forced to live due to limitations. Choice Neighborhoods provide neighborhoods in need of transformation and revitalization the resources for doing so. Choice Neighborhoods awards two types of grants: Planning Grants (up to \$500,000) and Implementation Grants (up to \$30.5 million) (Housing and Urban Development). The recipients of the grants (grantees) include cities, local government entities, public housing authorities, community-based organizations, and more (Housing and Urban Development). Communities are given agency in choosing what types of changes they would like such as safety, good schools, commercial activity, and job opportunity.

The City of Lewiston in partnership with Community Concepts Inc., is applying for the Choice Neighborhoods Implementation Grant for the Tree Street Neighborhoods. The Tree Street Neighborhoods are located in downtown Lewiston and have a reputation for being unsafe. In order to be a competitive recipient of the grant, The City of Lewiston and Community Concepts Inc., have created a comprehensive Transformation Plan outlining the areas where the transformation will be concentrated. The 9 main goals of the project are as follows (Grow Our Tree Streets Transformation Plan):

1. Grow a healthy future through a holistically lead-free Lewiston effort rooted in the Tree

Street
s

2. Grow a new narrative for the Tree Streets as a safe and beautiful neighborhood
3. Grow the inclusiveness of our community by increasing trust and relationships across cultures
4. Grow an inventory of healthy housing and offer housing choices for all
5. Grow commitment to and influence in the neighborhood from local owners,

long-term

investors, and residents 6. Grow an environment that supports health and wellness among community members 7. Grow our Tree Streets into a fun, safe, and nurturing environment for our youth 8. Grow individual education outcomes 9. Grow pathways to thrive and economic mobility for all.

These goals are in place in order to direct the communities time, money, and energy toward positive change. The Transformation Plan does a good job focusing on the valuable aspects of the Tree Streets Neighborhood and encouraging their growth instead of focusing on the negative aspects and their elimination. This dichotomy between outlooks is known as the asset vs. deficit mindset. The asset mindset is based on the focus on the positives, or the “pros” of the space, emphasizing what valuable features have, do, or can exist in the community. Asset mindset takes into account multiple facets of a community, often those that tend to be overlooked in the face of pure economic values, such as social, cultural, and historical. Deficit, on the other hand, is a lens which focuses on what a community is lacking. It centers around the idea that something is missing and it must be found to give progress and add value to the community.

Applying this concept of asset vs. deficit mindset to Lewiston’s Tree Street Neighborhood, the Tree Streets have a lot of really valuable assets which distinguish it as a resilient and vibrant community. It is an area with a really rich history and has been home to a multitude of cultures, with 32 dialects registered as being spoken there. The community is tenaciously involved in its programs designed to create positive change in the neighborhood. The neighborhood shows a really bright future with a rather young overall population. However, these positive attributes can be undermined by a deficit-based approach, which paints a picture of the Tree Streets as an area which is afflicted by poverty, is unclean (often referred to as the Dirty Lew), and is physically unsafe.

This duality of representations is tightly tied to metrics. Metrics are tools which are used to measure success in a system. Metrics are especially important to initiatives like community indicator projects which have seen a recent surge in implementation (Zachary et al., 2010). These projects seek to identify metrics which assess community progress and set up a framework that “allows for triangulation in gauging hard-to-measure issues and can provide more detailed and disaggregated information” (Forrest et al., 2015, p. 334). These measurements of progress range in a multitude of sectors of community and governance. Metrics are related to the idea of asset

vs. deficit mindset in that they can be very politically-charged tools. What the metric is, who designs the metric, and why it is implemented all dictate whom the metric may benefit. It is very easy for metrics intended to measure community success to instead end up highlighting a community's faults. Therefore, the implementation of carefully thought-out metrics is essential to indicator projects.

AIM & OBJECTIVES

Aim: The aim of our project was to assist The City of Lewiston and the Healthy Neighborhood Development Team in an effort to work towards securing the Choice Neighborhood Implementation Grant. Our role in this large project was to identify metrics to measure long-term and short-term success in Lewiston's Tree Street Neighborhood. These metrics intend to support strategies given to us by the Healthy Neighborhood Development Team along with supporting HUD's metric requirements.

Objective

s:

- 1.) Researching and establishing metrics to measure long and short term success of Lewiston's Tree Street Neighborhood.
- 2.) Identifying data to support metrics and locating where data might be found.
- 3.) Creating future steps with established metrics.

METHODOLOGY

Research- The first step for our project started with research components. We needed to better understand two different things. The first being the Tree Street neighborhood and how we could be of assistance to the City of Lewiston and their process of applying for the Choice Neighborhood Implementation Grant. We consulted the "Growing our Tree Streets" Transformation Plan to gain better understanding of the neighborhood's goals and the direction of the project. Figure 1, illustrates the complex processes required to get the Implementation Grant and the previously conducted work. Below, our focus is highlighted in purple. The second part of our research was to learn about previous Choice Neighborhood Grant recipients and look at their transformation plans, specifically at the metrics they used to measure short and long term success. We also

consulted HUD's (Housing and Urban Development's) requirements for the grant to gain understanding of what their expectations are for metrics (Appendix 3). This research was then used throughout our project as we moved into the next steps.

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(Figure 1: The relationship between Community Planning Grant, Transformation plan and the Implementation Grant)

Identifying Strategies- Our goal of the project was to help identify metrics that would measure both short term success and long term success in the Tree Street Neighborhood. Our metrics were to represent specific strategies that will be put in place to achieve the overarching goals of the Transformation Plan. The Choice Neighborhood Implementation Grant will allow for these strategies to go into place and our metrics provide a way to measure if the strategies are successful. These strategies are to achieve the goals of the Transformation Plan. We were given four different strategies by the Lewiston Healthy Neighborhood Development Team. Figure 2, shows these strategies along with the colors we designated them. It is important to note the color of each strategy as we used color to categorize each metric and what strategy it represented. This is shown in our Appendix 2, "Metric Data Table."

(Figure 2: Strategies- Blue: Promote high design standards for new and rehabbed housing. Yello-New housing development organization to create lead-free infill housing through new construction. Pink-Expand Head Start, Early head start, and new high quality home-based child care business in the Tree streets. Purple-Create a centrally located food facility.)

Goals- Once our strategies were determined as shown above, we got to work trying to figure out which goals were being accomplished with the four strategies. This was important to figure out so when we worked on creating metrics we could represent not just the strategies but also the overarching, big picture Goals as well. We worked with goals laid out from the “Growing Our Tree Streets” Transformation Plan.” Our process was to look at each strategy above and conceptualize the bigger meaning of how the strategies are working to accomplish the Goals. Figure 3 shows the Goals we chose that represented the strategies from above. We used color to represent the goals to give a cleared visual for creating our “Metrics Data Table” shown in Appendix 2.

(Figure 3: Goals from Transformation Plan, Each goal represents a more specific goal then stated above it follows as such: Goal 1: Lead Free “Grow a healthy future through a holistically lead-free Lewiston effort rooted in the Tree Streets” Goal 4: Home “Grow an inventory of healthy housing and offer housing choices for all” Goals 6: Health & Wealthness “Grow an environment that supports health and wellness among community members” Goal 5: Ownership “Grow commitment to and influence in the

neighborhood from local owners, long-term investors, and residents” Goal 8: Learning “Grow individual education outcomes” Goal 9: Jobs & Economic Development”)

Our process to come up with the six goals looked like the image below. This shows the relationship between goals and strategies. We found that they were not a 1:1 ratio and in fact the strategies were able to accomplish more than one goal. This process was later used to understand how each metric not only related to each strategy but the goals as well, we created a relationship chart to show this, you can see this in Appendix 1.

(Figure 4-Relationship between goals and strategies)

Establishing Metrics- Our next step after we were given the strategies was to identify metrics that would support our strategies. We had to come up with some sort of definition for metric to make sure we were all on the same page. We used these two definitions in doing our work: “a metric is a *quantitative* assessment used for assessing, comparing and tracking performance or production”(Mckwinney, 2018) and our own working definition: “*Metrics* allow HUD, Tree Street Residents, & The City of Lewiston to track progress and *focus* efforts.” We took into account, thinking about asset based metrics along with using our past research to find metrics that worked for other communities. We deliberately thought about what makes a metric

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successful and tried to come up with a large variety of different types of metrics. We wanted to encompass the entire Tree Street Neighborhood and represent it in more ways than just one. During this step, we spent time looking over what HUD’s requirements for metrics are and identified many to work within their framework for the grant itself (see Appendix 3). We created a table that identified each metric and how it fit in with the strategies along with the overarching goals (“Metric Data Table in

Appendix 2). It was important during this stage to fully understand how goals, strategies and metrics relate to one another and their relationship to the transformation plan and the Choice neighborhood grant. (Appendix 1 shows this complex relationship). Figure 5 below shows how a metric is formed and supported, our processes were different from this image but it gives a helpful visual framework. Below we give an example of how each metric came into existence but other steps need to be established before it makes sense to go through the entire process.

(Figure 5- How to Establish a Metric)

Type of Metric-Part of creating our metrics was determining what type of metric to implement and how it will be measured going into the future. We classified our metrics in three different ways. The first being a trend metric, which measures how data might fluctuate either increasing or decreasing over time. A threshold metric is the second classification and is dependent on data reaching some sort of set amount with an expected outcome. The third classification is a baseline metric. This type of metrics has no attached value judgments, rather it will serve as a starting point for future measurements.

Locating Data - Although the scope of our project was not to collect data we did spend time tracking down where potential data could be found and the next steps that would need to be taken if data was not located. This all went into making our “Metric Data Table” that is shown below in Appendix 2. This also gave us an opportunity to think about the future steps of the project and come up with a detailed table of where we foresee challenges arising as the project moves forward. Our data collection ranged from the Transformation Plan, to different studies, to websites to listing names of companies that hold data. The range was very wide in how we located data and it is represented when looking at the “Metric Data Table” (Appendix 2).

Example of Creating a Metric- Once we established all the steps shown above we got down to our own processes of creating metrics. There was a six step process that went into every metric. The diagram below shows each step with an example to give a better idea of how our process worked. We found this to work extremely well, it gave us a checklist to make sure we were representing our given strategies while keeping in mind

the goals of the transformation plan. The steps below started with: 1) Our given metric
2) establishing a metric that could measure the

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strategy laid out 3) determining how the metric related to our six goals 4) determining what type of metric it was (trend, threshold or baseline) 5) deciding if it satisfied HUD's requirements. 6) Locating Data or determine if further steps will need to be taken. *(For a our full list of metrics go to our glossary or "Metric Data Table-Appendix 2)*

(Figure 6-How to Create a Metric)

Future Steps-Once our "Metric Data Table" was completed we created an additional table seen in Appendix 4 called "Future Steps" for this process we went through each of our metrics and looked at the data collection processes along with the nature of each metric. If data collection was extensive we included it in our table for Future

steps. Another thing we looked at was if defining any part of the metric wasn't obvious, for example a word like "accessible" can mean different things to a variety of people and will need further defining in the future stages of the process. Additionally, we listed extra metrics in Appendix 5-Additional Table of Metrics that didn't fit into our strategies given but are still important to the work. To make future steps easier we also created a demographic table of the Tree Streets found in Appendix 6.

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RESULTS AND DISCUSSION

Of the 24 metrics developed in our "Metric Data," to support the Lewiston Transformation Plan, below represents a high-level summary of our findings. Following the summary, metrics are grouped into five distinct categories based on one shared theme: **Energy Efficiency, Housing, Ownership, Education, Food**. An additional sixth category, **Additional HUD metrics**, is provided for metrics we deemed useful that extend beyond the "Neighborhood" component of the Implementation Grant (these metrics are not included in the "number of metrics" count). Metrics that satisfy HUD requirements are denoted in **bold** (see full HUD requirements in Appendix 3). Additionally, a description of each metric is included in the glossary and 10 metrics are expanded upon in "Future Steps" (see Appendix 4).

Number of metrics: 24

Number of trend metrics: 17

Number of threshold metrics: 2

Number of baseline metrics: 5

Number that satisfy HUD: 14

Number of metrics expanded in "Future Steps:" 10

Satisfied by existing/available data 21

Not satisfied by existing/available data and

3

will require new primary data collection:

Metrics:

(Figure 7- Metric summary table)

Our Established

Energy Efficiency:

- **Energy Efficiency of Tree Street Neighborhood**
- Number of units using Lewiston's pattern book
- **Proportion of energy used from renewable sources**

(Figure 8: Energy Efficiency Metrics)

Energy Efficiency encompasses three metrics. Two of these metrics satisfy HUD requirements. According to HUD, energy efficiency is measured by low per unit energy and water consumption, while also meeting accessible design standards (see HUD requirements table). These metrics support the strategy “*Promote high design standards for new and rehabbed housing*” and will provide quantifiable means for satisfying this strategy by understanding the composition of the neighborhood, targeting new construction (pattern book) and working to actively increase energy efficiency. In addition, these **Energy Efficiency** metrics connect to

1
2

Goal 1: Lead Free & Goal 4: Homes. (See *Glossary* for a more in depth explanation for individual metrics)

Housing:

- **Vacancy Rate**
- **Proportion of Mixed Land Use in Lewiston**
- **Average Age of Units in Tree Streets (along with rehabbed metric)**
- **Average lead levels in children**

(Figure 9: Housing Metrics)

Housing encompasses four metrics. All four of these metrics satisfy HUD requirements. According to HUD, housing is assessed based on the following criteria: *Well-Managed and Financially Viable; Mixed-Income; & Energy Efficient, Sustainable, Accessible, Healthy, and Free from Discrimination*. (see HUD requirements table). These metrics support the strategy “*New Housing development organization to create lead-free infill housing through new construction*” and will provide quantifiable means for satisfying this strategy by understanding the demographics of the neighborhood and composition of the buildings in the neighborhood, targeting safe and accessible housing for all. In addition, these **Housing** metrics connect to Goals 1: Lead Free, Goal 4: Homes, & Goal 6: Health and Wellness. (See *Glossary* for a more in depth explanation for individual metrics)

Ownershi

p:

- **Proportion of ownership to tenants in buildings**
- **Change in total ownership in Tree Streets by demographics**
 - **Gender**
 - **Race**
- **New Homeowner classes-completion rate**
- **Diversity of residents who complete ownership programs:**
 - **Economic**
 - **Racial**
 - **Gender**

(Figure 10: Ownership Metrics)

Ownership encompasses four metrics. All four of these metrics satisfy HUD requirements. Ownership is an important objective to the Tree Streets and the Transformation Plan, and while not directly addressed by HUD, ownership relates to the following HUD requirement criteria: *Well-Managed and Financially Viable; Mixed-Income; & Energy Efficient, Sustainable, Accessible, Healthy, and Free from*

Discrimination; Amenities (see HUD requirements table). These metrics support the strategy “*New Housing development organization to create lead-free infill housing through new construction*” and will provide quantifiable means for satisfying this strategy by understanding by pointedly addressing ownership through new homeowner education, ultimately targeting a high ownership rate amongst Tree Street residents. In addition, 13

these **Ownership** metrics connect to Goals 1: Lead Free, Goal 4: Homes, Goal 5: Ownership & Goal 6: Health and Wellness. (See *Glossary* for a more in depth explanation for individual metrics)

Education:

n:

- Number of eligible/licensed high quality, home based child care facilities
- Population % under the age of 5/ Number of eligible students for Head Start/Early Head Start in Tree Streets
- **Proportion of children in Head Start/ Early Head Start from the Tree Streets**
- Proportion of Head Start/Early Head Start spots **reserved** for Tree Street Students
- **Percentage of Students from the Tree Streets scoring at or above proficiency on standardized tests**
 - **Proportion of Chronically Absent students**
 - Proportion of students from the Tree Streets considered “economically disadvantaged”

(Figure 11: Education Metrics)

Education encompasses seven metrics. Three of these metrics satisfy HUD requirements. According to HUD, education is assessed based on the following criteria: *Effective Education* which entails access to high quality learning opportunities specifically targeting early learning opportunities (resulting in students “ready to learn” by kindergarten) (see HUD requirements table). These metrics support the strategy “*Expand Head start, early head start, and new high quality home-based child care business in the Tree Streets*” and will provide quantifiable means for satisfying this strategy by expanding the infrastructure for early learning opportunities as well as

measuring the outcomes of early education investment through subsequent school performance and attendance. In addition, these **Education** metrics connect to Goal 6: Health and Wellness, Goals 8: Learning, & Goal 9: Jobs & Economic Development. (See *Glossary* for a more in depth explanation for individual metrics)

Food • Number of current food locations accessible to Tree Street residents providing

fresh foods

• **Amenities in Walking**

Distance

- Number of food related business in Tree Streets
- Proportion of Tree Street households that are food secure
- Proportion of residents growing food for themselves or their family
 - Encompassing community gardens, urban gardening
- Proportion of residents regularly accessing emergency food supplies

(Figure 12: Food Metrics) **Food** encompasses six metrics. Two of these metrics satisfy HUD requirements. According to HUD, food can be assessed based on the following criteria *Amenities* which outlines the distance to “basic services” (such as grocery stores) (see HUD requirements table). These metrics support the strategy “*Create a centrally located food facility*” and will provide quantifiable means for ensuring residents have access to affordable and culturally relevant foods as well as opportunities ¹⁴

for food related business growth. In addition, these **Food** metrics connect to Goals 6: Health and Wellness & Goal 9: Jobs and Economy. (See *Glossary* for a more in depth explanation for individual metrics)

Additional HUD

Metrics:

- **Employment Rate**

- **Eviction Rate**
- **Median Rent**
- **Proportion of households that are rent burdened**
- **Median Household Income**
- **Current Health (Depression, asthma, lead poison, diabetes, arthritis)**
- **Change in Property Value**
- **Demographics of Tree Street**

(Figure 13: Additional HUD Metrics)

Additional HUD Metrics encompasses eight metrics. All eight of these metrics satisfy HUD requirements. While these metrics do not specifically support any of the four strategies, they are still useful baselines which can be used to measure positive growth in the Tree Streets. These metrics do not fall neatly into the “Neighborhood” component of the Implementation Grant, so they may better satisfy strategies for the “People” or “Housing” objectives, so they are intended for shared use and collaboration between working committees. These metrics support Goal 5: Ownership, Goal 6: Health & Wellness, and Goal 9: Jobs & Economy (See *Glossary* for a more in depth

explanation for individual metrics) **RECOMMENDATIONS FOR NEXT STEPS:**

Our project began to establish the framework that will be able to measure immediate and long term success in the Tree Streets neighborhood. By utilizing the data table created that relates, Transformation Plan Goals, to strategies, to established metrics for measuring success, to potential areas for data collection— members of the Healthy Neighborhoods Development Team will be able to begin implementing methods for action. Our work was largely foregrounded in planning processes, so we hope we laid a useful and appropriate framework for the Healthy Neighborhoods Development Team to begin focusing on actualizing methods of measuring the established metrics through data collection. Given the metrics our group established, members of the Healthy Neighborhoods Development Team should consult the accompanying data collection information. Based upon the data’s classification, (“available,” or “not yet available”) members can take corresponding action. If the data is available, and the location of the data is known, members may contact the data holder and inquire about

usage of the data. If the data is “not yet available” members may begin to implement methods for collecting, or making the data

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available, per our recommendations. Additionally, members should consult the **Glossary** for a more in depth description of all 24 metrics and beyond that consult the “Future Steps” table (Appendix 4) for more information about a select few metrics which we deemed needing additional guidance.

In order to measure the immediate and long term success of the Tree Streets neighborhood through the metrics established from our project, members of the Healthy Neighborhoods Development Team can make use of the “type” of metric— as noted in the data table. If the data table indicates that the metric type should be “increasing” they will want to make note of this in subsequent data collection to ensure that the data is indicating success, whether this be immediate or long term. Moreover, organizations in the Tree Street Neighborhood supporting the Transformation Plan will be able to make note of the directionality of the data to ensure that their work is aligned with, and supporting the intended trajectory.

The data table will be of great value when applying for the Housing and Urban Development (HUD) Implementation Grant. In the grant process, the Healthy Neighborhood Development Team will be able to put forth an established framework for measuring the immediate and long term success in the Tree Streets neighborhood. The data table created aligns the established metrics for the Tree Streets neighborhood with the HUD indicators for success (Appendix 3). Therefore, many of the established metrics our group proposed, will be satisfactory to how HUD measures immediate and long term success.

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GLOSSARY: *On the left side we have all of our metrics organized by the strategy they were created for. On the right a description of the metric is provided as well as a justification for each metric.*

Energy Efficiency:

Energy Efficiency of Tree Street Neighborhood

efficiency is really important to this strategy, so for starters it is important to learn about the overall energy usage for the Tree Street *NOTE: Overall energy usage for the neighborhood) MMBtu/housing unit* Neighborhood. This can then be tracked as improvements are made to energy *average in the neighborhood. Overtime energy efficiency of the neighborhood* efficiency.

Number of units using Lewiston's Pattern books This metric was created for a potential future goal of Lewiston creating a pattern book with floor plans and architecture of buildings and homes that are energy efficient and safe already planned out. This way it can be tracked how many units are being improved upon or built using these resources.

Proportion of energy used from renewable sources

(MMBtu/unit of different energy usages, renewable vs. nonrenewable)

Much like the first metric in this section, energy from renewables that is efficient is one of the main goals of this strategy. We want this metric to show an increase of renewable energy over time promoting a cleaner Tree Street Neighborhood that will positively impact the environment along with the residents health. This metric will track the improvements over time.

Homes and Housing:

Proportion of Ownership to Tenants in Buildings This proportion measures the number of residents in the Tree Streets

neighborhood who actually own their home. This metric is important for measuring community success because it ties highly into home security and safety. A resident who owns their own home will often be less easily displaced and also have more say in the living conditions of the home, while a tenant is subjected to the will and actions of their landlord.

Change in total ownership in Tree Streets by demographics

- *Racial*
- *Gender*

The identities of those who actually own homes are very important to measuring the extent to which this grant would benefit all members of the community. Racial and gender diversity in home ownership would indicate that this initiative does not favor just one group of people, but a number of social groups.

Vacancy Rate: Vacancy rate measures the proportion of homes which are without

inhabitants. If the vacancy rate is very low, it means that there are few alternative housing options for residents. If the vacancy rate is very high, it means that there are many units which are not being utilized. This metric is aimed at measuring the middle mark where housing is both available to residents while not so empty that the neighborhood is experiencing a market failure in housing. It is popularly believed that a vacancy rate of between 6 and 7 percent is the optimal range (Northeastern)

Proportion of Mixed Land Use in Lewiston Mixed land use has the potential for both residential and business growth. It

can also condense the needs of a neighborhood, as people might be in walking distance of goods and resources they require. This metric is looking for an elevated proportion of mixed land use in Lewiston for

these reasons.

Average Age of Units in Tree Streets (along with rehabbed metric) The average age of housing in Lewiston is often correlated with lead levels.

Older houses were often built without lead in mind as a contaminant. For this reason, a trend toward newer housing will hopefully correspond to lower lead levels throughout the community.

New Homeowner classes-completion rate The rate of completion for new homeowner classes will indicate how helpful

the resident deem the class to be. Additionally, it could indicate across the board how accessible the class is to residents.

Diversity of residents who complete ownership programs:

- *Economic*
- *Racial*
- *Gender*

The identities of enrolled residents are important. Who actually feels comfortable with the idea of this program? Who trusts the

organization running the classes? But perhaps more pressingly, who sticks around to the end of the program? Who feels safe with the organization and with their peers. By using these three social metrics to measure diversity of the residents who complete the program, we can start to see to what extent this program is serving residents equally.

Average lead levels in children The average lead levels in children give some indication to whether homes

are lead-safe. If we see lead levels decrease, there is a good chance that is due to homes becoming more lead-free.

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Number of eligible/licensed high quality, home based child care facilities The infrastructure to support effective early education is essential in ensuring that education is accessible to all residents of the Tree Streets that decide to take advantage. In an effort to expand early education, it is important that these care facilities are able to meet high standards of education to provide exceptional care and education.

Population % under the age of 5/ Number of eligible students for Head Start/Early Head Start in Tree Streets

The population percentage under 5 years old determines the number of eligible students for Head Start and Early Head Start programs. This

metric serves as a baseline to determine how many added slots or additionally care facilities would be necessary to service interested residents. Additionally, The Tree Streets have the highest concentration of kids under five in the entire State of Maine, so it's imperative significant investment into early education is

readily available (Ribbon Demographics).

Proportion of children enrolled in Head Start/ Early Head Start from the Tree Streets

This metric will work in tandem with the subsequent metric to determine that significant emphasis is being placed on enrollment of Tree Street students in Head Start and Early Head Start programs.

Proportion of Head Start/Early Head Start spots reserved for Tree Street Students

Head Start and Early Head Start are not exclusive to the Tree Street residents, so it is essential that the Tree Street community is

given adequate slots and an emphasis is made on actively enrolling students, as it is more economically disadvantaged than other neighborhoods, which is typically correlated with lower performance in education.

Percentage of Students from the Tree Streets scoring at or above proficiency on standardized tests

Performance on standardized tests adheres to HUD's "ready to learn" requirement for entering Kindergarten. This metric will determine if Head Start and Early Head Start are having impactful learning impacts on children and provide quantitative data.

Proportion of Chronically Absent students This metric will serve as an indicator for long-term impact of investment of

early education programs such as Head Start and Early Head Start, and the potential to impact attendance later on. Attendance is a critical component to academic success.

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Education

Proportion of students from the Tree Streets considered "economically disadvantaged"

This *Number of current food locations accessible to Tree Street residents*

metric was created to measure a few different things, first it looks at a *providing fresh foods*

key problem of defining accessibility and what that looks like for the Tree Streets, second it gives a maker to understand if the community has equal opportunity to access fresh food. Fresh food and preventing health problems

Further Work: Define "accessible"

and lack of access to it is a disadvantage for a community.

Amenities in Walking Distance (miles)

(Food, pharmacies, gyms, libraries)

This metric quantifies how accessible different amenities are to a community. This is a metric that HUD looks into as well. This is important to measure as equal access to grocery stores, gyms, pharmacies etc...can really help a community and lift it up. If these things are within walking distance the socio-economics don't play as much of a factor because physical accessibility isn't restricted. This is also a place where it is important to see if more measures need to be put in place to make amenities more accessible if they aren't in walking distance.

Number of food related business in Tree Streets This metric serves as a baseline to track the potential for new business that

could emerge as a result of a shared food facility.

Proportion of Tree Street households that are food secure Food security and its inverse, food insecurity,

are important to highlight in the context of a shared food facility as a shared food facility has the potential to create a sustained and accessible means for obtaining food to feed one's household.

Proportion of residents growing food for themselves or their family -encompassing community gardens, urban gardening

An asset based metric, this metric allows for households growing their own food as a method of combating food insecurity. A shared food facility could allow for residents to have a space to commercialize their gardening or even an opportunity to connect residents through cultural connections achieved through food and cooking.

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This metric correlates with academic performance. Students who are considered “economically disadvantaged” (receiving free or reduced lunch) tend to perform lower on standardized tests than those who are not considered economically disadvantaged (Kids Count Report).

Food

Proportion of residents regularly accessing emergency food supplies

**definition for “regularly” in next steps etc.*

The aim of this metric is to measure how reliant this community is on emergency food supplies.

We hope to see this go down overtime, as we want the community to not be food stressed and rather food secure. This helps measure improvements that can be made around a new food facility which hopefully promotes more food security.

Employment Rate This is a metric that HUD wants to be tracked, to see if employment rate improves over time after the grant is implemented.

Eviction Rate Eviction rate can represent a lot of different things in a community, and HUD wants to know if the partnership between landlords and residents are good along with it is a way to measure how economically stable a community is.

Median Rent This HUD metric can be used to compare median rent in other areas close by to see if it is much lower and could attribute to residents moving there not out of choice but out of necessity.

Proportion of households that are rent burdened (30 percent or more of income spent on housing costs)

This metric works in accordance with HUD’s definition of “rent burdened.” It is important to consider this number as a baseline for catering affordable and accessible housing.

Median Property Value This metric will serve as a baseline for coming development. It is important for development to consider how much of a property value increase is healthy-- too much of an increase has the potential to cause gentrification and displacement of residents.

Median Household Income This metric will hopefully increase as more investment comes to the neighborhood. With increased median household income benefits such as increased educational outcomes, neighborhood safety, etc. occur.

Current Health (Depression, asthma, lead poison, diabetes, arthritis) This is a safety metric along with a way of measuring both physical and mental health of a community. This type of metric can be useful to compare to other communities to see if the Tree Streets measuring equally or if more attention needs to be paid to either mental health, or physical health.

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Additional HUD Metrics:

Appendices

Appendix 1-Relationship Chart

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Appendix 2-Metric Data Table

Data Table created for the Housing and Urban Development (HUD), Choice Neighborhoods grant application to establish metrics specific to the Tree Streets that measure progress (long-term success and immediate impact).

KEY:

Bolded Text: Satisfies a HUD requirement* see HUD objectives and metrics to measure “Long Term Success” listed in full below:

Strategies are coordinated with our chart by color:

Blue: Promote high design standards for new and rehabbed housing Yellow: New Housing development organization to create lead-free infill housing through new construction Pink: Expand Head start, early head start, and new high quality home-based child care business in the Tree Streets Purple: Create a centrally located food facility

Goals are taken from Lewiston’s Transformation Plan:

Goal One: Lead Free: Grow a healthy future through a holistic lead-free Lewiston effort rooted in the Tree Streets **Goal Four: Homes:** Grow an inventory of healthy housing and offer housing choices for all **Goal Five: Ownership:** Grow commitment to and influence in the neighborhood from local owners, long-term investors, and residents **Goal Six: Health and Wellness:** Grow an environment that supports health and wellness among community members **Goal Eight: Learning:** Grow individual education outcomes **Goals Nine: Jobs and Economy:** Grow pathways to thrive and economic mobility for all

Metric Goal Type HUD Data Collection

Energy Efficiency of Tree Street Neighborhood

NOTE: Overall energy usage for the neighborhood)

Goal Four: Homes Increasing 1.c-Energy Efficient, Sustainable, Accessible, Healthy, and Free from Discrimination -Lewiston Utilities, oil companies, CMP and natural gas to track energy usage and measure for the entire Tree Street Neighborhood. Electricity: CMP

-Lewiston Utilities, oil companies, CMP and natural gas to Natural **MMBtu/housing unit average in**

Gas the neighborhood. Overtime

Oil: **energy efficiency of the**

-CN Brown Co. **neighborhood**

-Dead River Co. -Downeast Energy -Fieldings Oil Co., Inc. -Irving Oil Corp -Murray Oil Co. -MW Sewall and Co -Lampron Energy Fuels -Webber Energy Fuels -Heutz Oil -Burke Oil

Number of units using Lewiston’s Pattern books

Threshold (accomplishing lead free by 2040) n/a -This will be collected once a pattern book is made and the City of Lewiston will track who uses the materials.

Proportion of energy used from renewable sources

(MMBtu/unit of different energy usages, renewable vs. nonrenewable)

Goal Four: Homes Goal One: Lead Free

Same as energy efficiency metric

With total energy usage from the first source, the proportion of renewables vs. non-renewables. We hope to see this proportion increase overtime.

Proportion of ownership to tenants in buildings

Goal Four: Homes Increasing 1.c-Energy Efficient, Sustainable,

Accessible, Healthy, and Free from Discrimination

track energy usage and measure for the entire Tree Street Neighborhood. Electricity: CMP -Lewiston Utilities, oil companies, CMP and natural gas to track energy usage and measure for the entire Tree Street Neighborhood. Electricity: CMP

Ribbon Demographics via Real Estate Strategies <https://www.towncharts.com/Maine/Housing/Lewiston-city-ME-Housing-data.html>

Change in total ownership in Tree Streets by demographics

- Racial - Gender

Goal Four: Homes

Increasing 3.a-Private and Public Investment in [Goal Five: Ownership](#) the Neighborhood

Goal Four: Homes

Increasing 3.a-Private and Public Investment in Lewiston Housing Authority [Goal Five: Ownership](#) the Neighborhood

Vacancy Rate: Goal Four: Homes

Threshold 3.a-Private and Public Investment in Ribbon Demographics via Real [Goal Five: Ownership](#) the Neighborhood Estate Strategies

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Goal Proportion of Mixed Land Use in

[Five: Ownership](#) Baseline 3.a-Private and Public Investment in Claritas via Ribbon Demographics **Lewiston** the Neighborhood

Average Age of Units in Tree Streets (along with rehabbed metric)

American Community Survey, Lewiston Housing Authority, Lewiston Planning and Zoning Department

New Homeowner classes-completion rate

Goal Four: Homes

Decreasing 3.a-Private and Public Investment in [Goal Five: Ownership](#) the Neighborhood [Goal One: Lead Free](#)

[Goal Five: Ownership](#) Increasing 2.a.-Effective Education Community Concepts, Lewiston Housing Department, Nearby banks

Diversity of residents who complete ownership programs:

- **Economic**
- **Racial**
- **Gender**

Goal Four: Homes

Increasing 2.a.-Effective Education Nearby banks; [Goal Five: Ownership](#) 1.c-Energy Efficient, Sustainable, Community Concepts Accessible, Healthy, and Free from Lewiston Housing Department Discrimination

Average lead levels in children [Goal One: Lead Free](#) Baseline 1.c-Energy Efficient, Sustainable, Accessible, Healthy, and Free from Discrimination

Center for Disease Control Behavioral Risk Factor Surveillance System (BRFSS) via PolicyMap

Number of eligible/licensed high quality, home based child care facilities

[Goal Eight: Learning](#) Increasing 2.a.-Effective Education 4 eligible:

1. Promise Early Education

Center at Longley School (transitioning to Connors) 2. The Promise Hillview

Center 3. B Street Early Head Start and Child Care 4. Coburn Building

Population % under the age of 5/ Number of eligible students for Head Start/Early Head Start in Tree Streets

[Goal Eight: Learning](#) Baseline* n/a -US Census Bureau:

There are 1,101 children age five and under in the Downtown Lewiston Choice neighborhood. Nearly half (489) live in the Tree Streets,

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The Tree Streets have the highest concentration of kids under five in the entire State of Maine.

Proportion of children enrolled in Head Start/ Early Head Start from the Tree Streets

[Goal Eight: Learning](#) Increasing 2.a.-Effective Education -Surveying 4 providers for addresses

of enrolled students

Proportion of Head Start/Early Head Start spots **reserved** for Tree Street Students
Goal Eight: Learning Increasing n/a -Contacting the 4 licensed providers
and determining how many (if any) of their spots are reserved for Tree Street students

-If new licensed facilities are established, how many of their spots are reserved?

-Is this a question that is had upon establishment?

-Does HNPC have a say in how many are reserved?

Percentage of Students from the Tree Streets scoring at or above proficiency on standardized tests

Goal Eight: Learning Threshold 3.c-Effective Public Schools

2.a Effective Education

100% of students entering "ready to learn"

-Maine Education Assessment (MEA) tests -Tree Streets Elementary Schools→ Longley and Montello ... Connors

-Maine Education Assessment (MEA) tests -Tree Streets Elementary Schools→ Longley and Montello ... Connors

-Maine Education Assessment (MEA) tests -Tree Streets Elementary Schools→ Longley and Montello ... Connors

-Maine Education Assessment (MEA) tests -Tree Streets Elementary Schools→ Longley and Montello ... Connors

-City of Lewiston -State of Main

-Kids Count Report 2019

Proportion of Chronically Absent students

Goal Eight: Learning Decreasing 3.c-Effective Public Schools

2.a Effective Education

-Attendance records from schools -Kids Count Report 2019 (what is chronically absent?)

-Attendance records from schools -Kids Count Report 2019 (what is chronically absent?)

-Attendance records from schools -Kids Count Report 2019 (what is chronically absent?)

Proportion of students from the Tree Streets considered "economically disadvantaged"

Goal Eight: Learning **Goals Nine: Jobs and Economy**

Decreasing n/a -The number of students receiving

Decreasing n/a -The number of students receiving

free or reduced lunch... directly accessed from schools

free or reduced lunch... directly accessed from schools

28

-Kids Count Report 2019

Number of current food locations accessible to Tree Street residents providing fresh foods

Goals Nine: Jobs and Economy **Goal Six: Health and Wellness**

Increasing 3.b-Amenities We think further data collection will be needed for this. Here is one place to start

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Mapping Food Stores & Food Risk <https://joe.org/joe/2010december/rb 3.php>
Further Work: Define “accessible”
Mapping Food Stores & Food Risk <https://joe.org/joe/2010december/rb 3.php>

Amenities in Walking Distance (miles)

(Food, pharmacies, gyms, libraries)

Goals Nine: Jobs and Economy Goal Six: Health and Wellness

Baseline* 3.b-Amenities No current data for this metric,

Baseline* 3.b-Amenities No current data for this metric,

would need a further community Survey in the Tree Street Neighborhood.

would need a further community Survey in the Tree Street Neighborhood.

would need a further community Survey in the Tree Street Neighborhood.

Number of food related business in Tree Streets

Goals Nine: Jobs and Economy

Baseline* n/a More data could be collected for this

Baseline* n/a More data could be collected for this

metric. Last collection of data we found was in 2013, which is outdated today.

metric. Last collection of data we found was in 2013, which is outdated today.

COMMUNITY FOOD ASSESSMENT Good Food Council of Lewiston-Auburn LEWISTON, MAINE 2013

<https://goodfood4la.org/wp-content/uploads/2014/03/cfa-layout-0128-low-resolution.pdf>

Proportion of Tree Street households that are food secure

Goal Six: Health and Wellness Goal Eight: Learning

Increasing n/a No current data for this. Would need

Increasing n/a No current data for this. Would need

a future survey or other data collection.

a future survey or other data collection.

Proportion of residents growing food for themselves or their family -encompassing community gardens, urban gardening

Goal Eight: Learning Goals Nine: Jobs and Economy Goal Six: Health and Wellness

Increasing n/a 120 families are using their own

Increasing n/a 120 families are using their own

plots <https://www.stmarysmaine.com/nutrition-center/lots-to-gardens>

plots <https://www.stmarysmaine.com/nutrition-center/lots-to-gardens>

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Proportion of residents regularly accessing emergency food supplies

*definition for “regularly” in next steps etc.

Goal Six: Health and Wellness

Decreasing n/a List of Emergency Food Suppliers:

Decreasing n/a List of Emergency Food Suppliers:

-New Beginnings Outreach Program -Hope House Network -Trinity Jubilee Center -Kaydenz Kitchen Food Pantry -St. Mary's Food Pantry -Root Cellar

-New Beginnings Outreach Program -Hope House Network -Trinity Jubilee Center -Kaydenz Kitchen Food Pantry -St. Mary's Food Pantry -Root Cellar

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Appendix 3- HUD Requirements

****Expanded version of "HUD" column of Data Table. Objectives and metrics to measure "Long Term Success" as defined by HUD listed in full:***

Objectives and Metrics to Measure Long Term Success: Each Choice Neighborhoods grantee is expected to develop metrics based on the objectives listed below in order to measure performance. Grantees are encouraged to develop neighborhood revitalization plans with these

objectives in mind: **1. Housing Objectives:** Housing transformed with the assistance of Choice

Neighborhoods should be: a. **Well-Managed and Financially Viable.** Developments that have budgeted appropriately for the rental income that can be generated from the project and meet or exceed industry standards for quality management and maintenance of the property. b. **Mixed-Income.** Housing affordable to families and individuals with a broad range of incomes including low-income, moderate-income, and market rate or unrestricted. c. **Energy Efficient, Sustainable, Accessible, Healthy, and Free from Discrimination.** Housing that is well-designed, embraces not only the requirements of accessible design but also concepts of visitability and universal design, has low per unit energy and water consumption and healthy indoor air quality, is built to be resistant to local disaster risk, has affordable broadband Internet access, and is free from discrimination. **2. People Objectives:** People that live in the neighborhood, with a primary focus on residents of the housing targeted for revitalization, benefit from: a. **Effective Education.** A high level of resident access to: high quality early learning programs and services so children enter kindergarten ready to learn; and quality schools and/or educational supports that ultimately prepare students to graduate from high school college- and career-ready. b. **Employment Opportunities.** The income of neighborhood residents and residents of the target housing development, particularly wage income for non-elderly/non-disabled adult residents, increases over time. c. **Quality Health Care.** Health for residents over time is as good as or better than that of other households with similar economic and demographic conditions. d. **Housing Location, Quality, and Affordability.** Residents who, by their own choice, do not return to the development have housing and neighborhood opportunities as good as or better than the opportunities available to those who occupy the redeveloped site. **3. Neighborhood Objectives:** Through investments catalyzed with Choice Neighborhoods, the neighborhood enjoys improved: a. **Private and Public Investment in the Neighborhood.** The neighboring housing has a very low vacancy/abandonment rate, the housing inventory is of high quality, and the neighborhood is mixed income and maintains a mixture of incomes over time. b. **Amenities.** The distance traveled from the neighborhood to basic services is equal to or less than the distance traveled from the median neighborhood in the metropolitan area. Those basic services include grocery stores, banks, health clinics and doctors' offices, dentist offices, and high quality early learning programs and services. c. **Effective Public Schools:** Public schools in the target neighborhood are safe and welcoming places for children and their families. In addition, schools have test scores that are as good as or better than the state average or are implementing school reforms that raise student achievement over time and graduate students from high school prepared for college and a career.

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d. **Safety:** Residents are living in a safer environment as evidenced by the revitalized neighborhood having dramatically lower crime rates than the neighborhood had prior to redevelopment and maintaining a lower crime rate over time.

Appendix 4-Future Steps Data Table

The “Future Steps Data Table” expands upon the “Metrics Data Table” (created for the Housing and Urban Development (HUD), Choice Neighborhoods grant application to establish metrics specific to the Tree Streets that measure progress (long-term success and immediate impact)). This data table flags specific metrics in order to provide greater guidance or information about how data to support metrics can be located/collected and additionally by providing anticipated challenges throughout the process. While the metrics established in

the “Metrics Data Table” are specific, this table provides a space for the reasoning why metrics were chosen to be expanded upon/how they best measure/support progress.

Metric Data Collection Future Steps/Perceived Challenges :

Energy Efficiency of Tree Street Neighborhood

NOTE: Overall energy usage for the neighborhood) MMBtu/housing unit average in the neighborhood. Overtime energy efficiency of the neighborhood

-Lewiston Utilities, oil companies, CMP and natural gas to track energy usage and measure for the entire Tree Street Neighborhood.

Electricity: CMP Natural Gas

Oil: -CN Brown Co. -Dead River Co. -Downeast Energy -Fieldings Oil Co., Inc. -Irving Oil Corp -Murray Oil Co. -MW Sewall and Co -Lampron Energy Fuels -Webber Energy Fuels -Heutz Oil -Burke Oil

We foresee this being a very large project. Having each unit or building be contacted to get energy usage will take a considerable amount of time. An additional challenge comes with all of the different energy companies Lewison uses and tracking down how they measure their units and compiling all this data. Once this is determined energy efficiency could be determined and as housing improvements are made with new and more efficient homes, one could see if energy usage goes down and increasing energy efficiency goes up.

We foresee this being a very large project. Having each unit or building be contacted to get energy usage will take a considerable amount of time. An additional challenge comes with all of the different energy companies Lewison uses and tracking down how they measure their units and compiling all this data. Once this is determined energy efficiency could be determined and as housing improvements are made with new and more efficient homes, one could see if energy usage goes down and

increasing energy efficiency goes up.

We foresee this being a very large project.

Having each unit or building be contacted to get energy usage will take a considerable amount of time. An additional challenge comes with all of the different energy companies Lewison uses and tracking down how they measure their units and compiling all this data. Once this is determined energy efficiency could be determined and as housing improvements are made with new and more efficient homes, one could see if energy usage goes down and increasing energy efficiency goes up.

We foresee this being a very large project.

Having each unit or building be contacted to get energy usage will take a considerable amount of time. An additional challenge comes with all of the different energy companies Lewison uses and tracking down how they measure their units and compiling all this data. Once this is determined energy efficiency could be determined and as housing improvements are made with new and more efficient homes, one could see if energy usage goes down and increasing energy efficiency goes up.

Proportion of energy used from renewable sources

Spreadsheet that addresses the amount of energy from oil, gas, propane, natural gas, electric and renewables. We would hope to see renabels

Similar to the metric above, you could do these two data collections together. Instead of contacting every unit/building individually you

could contact 33

contacting every unit/building individually you

Similar to the metric above, you could do these two data collections together. Instead of increase **(MMBtu/unit of different energy usages,** over time. No data currently available for similar utilities as above and learn what percentage **renewable vs. nonrenewable)** this to be a project, identifying which companies of the neighborhood is run on oil, natural gas, supply to the Tree Streets would be step one. electricity and renewables. This will start as a baseline to measure if solar or other renewables are installed in the community if it changes the mix of Energy usage and becomes more environmentally friendly.

could contact 33

Average Age of Buildings in Tree Streets American Community Survey, Lewiston Housing Authority, Lewiston Planning and Zoning Department

The average age of units in the Tree Streets is very helpful for understanding levels of lead that might be present in houses across the neighborhood, as houses built before 1950 are presumed to show high lead levels. Therefore, being able to understand the age of homes can be an indicator to neighborhood health. However, a challenge is that is not as easy to calculate the average age of these houses in addition to the last time some of them were renovated. Additionally, what kind of renovation occurred is a hard piece of information to find out. A porch renovation will clearly not have the same effect on health as an interior renovation focused on stripping lead from the environment. Registered renovation projects will likely be found with the zoning department. We think it would be beneficial however, if the age of houses was compounded with data regarding renovations to the interior of homes.

Diversity of residents who complete ownership programs:

- Economic
- Racial
- Gender
- Handicap

-Community Concepts

The diversity of residents who not just begin, but -Lewiston Housing Department complete the homeownership programs that are to -Nearby banks

be set in place is key to understanding the equity of these plans undertaken by the implementation grant. One of the grant's purposes is to benefit all of the members of the Tree Street Neighborhood. By giving out surveys to residents of the class where they answer questions about themselves including their economic status, the race with

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which they identify, the gender (or lack thereof) with which they might identify, or a handicap with which they identify, residents will give key data to the Lewiston Government as to whether this program proportionally or disproportionately serves the community. It is important, of course, to make answering independent questions or even the whole questionnaire optional. This might encourage more people to feel comfortable in the class and therefore complete the ownership educational process. An alternative program that could also be measured is Raise-Op which organizes community education on ownership. Raise-Op serves to aid residents to acquire safe and affordable community housing (Raise-Op)..

Percentage of Students from the Tree Streets scoring at or above proficiency on standardized tests

(Longley/Montello compared to other Lewiston Schools/ State of Maine)

City of Lewiston literacy rates for children
-Maine Education Assessment (MEA) tests

-Kids Count Report 2019

Standardized testing is a problematic method for measuring/quantifying success, especially considering an asset mindset approach. However, HUD's "ready to learn" assessment could conceivably be satisfied by this metric. Tests from Longley and Montello schools (which previously serviced the Tree Street students... possibly transitioning to Connors Elementary School) take their scores on the MEA tests and compare to the City of Lewiston average scores and to the State of Maine. This will give an idea about where the students from the Tree Streets score.

Standardized testing is a problematic method for measuring/quantifying success, especially considering an asset mindset approach. However, HUD's "ready to learn" assessment could conceivably be satisfied by this metric. Tests from Longley and Montello schools (which previously serviced the Tree Street students... possibly transitioning to Connors Elementary School) take their scores on the MEA tests and compare to the City of Lewiston average scores and to the State of Maine. This will give an idea about where the students from the Tree Streets score.

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Additionally, these standardized tests begin in elementary school, not in Head Start/Early Head Start programs... so maybe a comparison study could be carried out. By taking students in the Tree Streets who attended Head Start or Early Head Start and comparing their scores to those who did not, a conclusion could be drawn about whether these programs have an effect on "readiness to

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learn."

We believe this metric should have accompanying metrics that are more asset based, that encompass vibrancy/safety of the school environment, to show that school and performance can be based on more than scoring "proficient" or above on a standardized test.

Proportion of students from the Tree Streets considered "economically disadvantaged"
-The number of students receiving free or reduced lunch... directly accessed from schools

From the Kids Count 2019 report, "economically disadvantaged" are those that receive free or reduced school lunches. This information could presumably be found by contacting each respective school. While this is metric is not directly pertinent to Early Head Start/ Head Start programs, it could be used as a building block/in conjunction with measuring "proportion of chronically absent students" (the coming metric) and "percentage of students from the Tree Streets scoring at or above proficiency on standardized tests" (the previous metric) because according to the Kids Count Report children are more likely to be chronically absent and score lower on standardized tests if

considered economically disadvantaged. From the Kids Count 2019 report, “economically disadvantaged” are those that receive free or reduced school lunches. This information could presumably be found by contacting each respective school. While this is metric is not directly pertinent to Early Head Start/ Head Start programs, it could be used as a building block/in conjunction with measuring “proportion of chronically absent students” (the coming metric) and “percentage of students from the Tree Streets scoring at or above proficiency on standardized tests” (the previous metric) because according to the Kids Count Report children are more likely to be chronically absent and score lower on standardized tests if considered economically disadvantaged.

- Economically disadvantaged determined by if the student receives free or reduced lunch
- Kids Count Report 2019

From the Kids Count 2019 report, “economically disadvantaged” are those that receive free or reduced school lunches. This information could presumably be found by contacting each respective school. While this is metric is not directly pertinent to Early Head Start/ Head Start programs, it could be used as a building block/in conjunction with measuring “proportion of chronically absent students” (the coming metric) and “percentage of students from the Tree Streets scoring at or above proficiency on standardized tests” (the previous metric) because according to the Kids Count Report children are more likely to be chronically absent and score lower on standardized tests if considered economically disadvantaged.

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because according to the Kids Count Report children are more likely to be chronically absent and score lower on standardized tests if considered economically disadvantaged.

Conversely, the inverse of this metric could be used to be asset based, by stating “proportion of students to be not economically disadvantaged or economically advantaged.”

Proportion of Chronically Absent students

- Attendance records from schools

- Kids Count Report 2019 (what is chronically absent?)

While this data is important to consider... it does not directly relate back to this specific strategy. Head Start and Early Head Start are not compulsory, so measuring chronic absence from them would not be effective... However, a study could be conducted by taking students who were enrolled in Early Head Start/Head Start were *less*

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likely to be chronically absent in elementary-high school.

Number of current food locations accessible to Tree Street residents providing fresh foods

Further Work: Define “accessible”

Needs further data

Mapping Food Stores & Food Risk

<https://joe.org/joe/2010december/rb3.php>

The biggest challenge we see for this in the next steps is defining what “accessible” means. Does this mean affordability? Is it the distance away from fresh food? How much does it have to do with quality? All of these questions are a part of defining accessibility and that will need to be defined as the first step to moving forward.

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In addition, we do not believe that data exists for this yet. A survey of the neighborhood amenities would likely be the best way to satisfy this. Additionally, with the “accessible” definition, this would vary from household to household based on location, so this would also have to be considered.

Proportion of Tree Street households that are food secure

More data could be collected for this metric. Last collection of data we found was in 2013, which is outdated today.

COMMUNITY FOOD ASSESSMENT Good Food Council of Lewiston-Auburn LEWISTON, MAINE 2013

<https://goodfood4la.org/wp-content/uploads/2014/03/cfa-layout-0128-low-resolution.pdf>

We see this being a challenge in identifying what qualifies as food secure and the inverse, “food insecure.” We foresee challenges in measuring this and making it comprehensive across all households. Does food security extend beyond general access to any food, or does it include healthy and culturally relevant foods? This metric is highly textured and includes lots of nuances and it is important to consider this.

We see this being a challenge in identifying what qualifies as food secure and the inverse, “food insecure.” We foresee challenges in measuring this and making it comprehensive across all households. Does food security extend beyond general access to any food, or does it include healthy and culturally relevant foods? This metric is highly textured and includes lots of nuances and it is important to consider this.

Additionally, the data is outdated. So, there would need to be additional data collected to support this metric.

Proportion of residents regularly accessing emergency food supplies

*definition for “regularly” in next steps etc.

List of Emergency Food Suppliers: -New Beginnings Outreach Program -Hope House Network -Trinity Jubilee Center -Kaydenz Kitchen Food Pantry

Like the other two metrics related to this strategy, defining what “regularly” is the first step in using this metric. Lewiston already has a fantastic network of emergency food suppliers, talking to them will take a considerable amount of time to

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-St. Mary’s Food Pantry -Root Cellar
fully identify data for this metric. This metric would presumably have to come from the households or the suppliers and this could present issues of privacy that must be considered.

Appendix 5-Additional Table of Metrics

Additional Table of metrics to keep in mind extending beyond the Neighborhood section of the Implementation grant. This Table serves to help holistically support the Goals of the Transformation Plan.

Employment Rate [Goals Nine: Jobs and Economy](#)

Increasing 2.b- Employment Opportunities

-BLS, has records of Lewisons unemployment rate at 2.9% currently. <https://www.bls.gov>

-Unemployment is nine percent, a rate nearly twice that of the City (five percent) (Transf. Plan, p.6)

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Decreasing 1.a-Well-Managed and Financially Viable. 2.d- Housing Location, Quality, and Affordability.
 Financially Viable. 2.d- Housing Location, Quality, and Affordability.
 City of Lewiston
 City of Lewiston
 City of Lewiston

Eviction Rate Goal Four: Homes

Goals Nine: Jobs and Economy

Decreasing 1.a- Well-Managed and Financially Viable.
 Call State of Maine Judicial Branch
 Call State of Maine Judicial Branch
 Call State of Maine Judicial Branch
 Call State of Maine Judicial Branch

Median Property Value Goals Nine: Jobs and Economy

Baseline 1.a-Well-Managed and Financially Viable 2.d- Housing Location, Quality, and Affordability
<https://www.towncharts.com/Maine/Housing/Lewiston-city-ME-Housing-data.html>
<https://www.towncharts.com/Maine/Housing/Lewiston-city-ME-Housing-data.html>
<https://www.towncharts.com/Maine/Housing/Lewiston-city-ME-Housing-data.html>
<https://www.towncharts.com/Maine/Housing/Lewiston-city-ME-Housing-data.html>
<https://www.towncharts.com/Maine/Housing/Lewiston-city-ME-Housing-data.html>

Median Rent Goal Four: Homes

Goals Nine: Jobs and Economy

Baseline 1.a-Well-Managed and Financially Viable. 2.d- Housing Location, Quality, and Affordability
 City of Lewiston
 City of Lewiston

Proportion of households that are rent burdened (30 percent or more of income spent on housing costs)

Goal Four: Homes Goals Nine: Jobs and Economy

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Decreasing 1.a-Well-Managed and Threshold **Median Household Income** Goals Nine: Jobs
 2.b-Employment
 The median household **and Economy** opportunities
 income in the Tree Streets is 2.a Effective Education
 \$20,025, half the citywide median (\$40,670) and 37 percent of the County median (\$53,285) (Transf. Plan, 33).

Current Health (Depression, asthma, lead poison, diabetes, arthritis)

3.d Safety

(In Transformation Plan-Ask Misty possibly about where the data came from) page 181

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Appendix 6-Demographics of Tree Streets Table

Demographics of the Tree Streets neighborhood to help inform research and serve as background for future data collection. Demographics: Data: Source:

Languages spoken: 83% English

22% Portuguese 20% French 19% Somali 6%

Swahili 6% Other 3% Arabic 3% Spanish

-Sign-In Results from September Public Forums, participants indicated where they were born on a world map

18% black 5% two or more race 2% some other race
1% asian

Source: Ribbon Demographics via RES

Country of Origin for Foreign-Born 2016 69%

Africa

20% Americas 9% Asia 2% Europe

Source: 2012-2016, ACS 5-year Estimates

Poverty in Tree Streets: 49% live below poverty line

62% of families with children live below poverty line

-Source: Ribbon Demographics via RES, 2012-2016, ACS 5-year Estimates

Income: The median household income in the Tree Streets is

\$20,025, half the citywide median (\$40,670)

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Thirty-eight percent of households in the neighborhood earn less than \$15,000 per year, and 62 percent earn less than \$25,000 per year.

-Source: Ribbon Demographics via RES

Race, Ethnicity & Country of Origin: 74% white

Source: **Age Distribution** The median age of the Tree Streets Neighborhood is 30

Ribbon Demographics via RES years old, more than 10 years younger than Androscoggin County's median age of 41. The Tree Streets Neighborhood is home to many children and youth and has the highest density of children in the State of Maine.

In the Tree Street Area, 16% of the population is between the age of 15 and 24 years old

Education: 11% less than high school

12% some high school, no diploma 37% high school graduate (includes equivalent) 23% some college, no degree

7% associates degree 6% bachelor's degree 4% professional degree

Source: Ribbon Demographics via RES

Ownership: Only 4% of households own their homes Source: Ribbon Demographics via RES

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