
Developing a Framework for Neighborhood Housing Condition Evaluation

The Neighborhood of
Lealman

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Disclaimer

The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the Neighborhood of Lealman.

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I. INTRODUCTION:

In this report, we attempt to provide a beneficial housing conditions assessment tool to ultimately improve the housing conditions in Lealman and other areas of Pinellas County.

Overall, the housing stock is mature, with homes built in the 1950s, 1960s, and after. The age of housing closely mirrors Pinellas County development years. The Housing stock appeared to have homes built in the 60's, 70's and even in the 21st century during the housing bubble. The Lealman community contains a variety of housing styles and types.

Due to high percentage of home foreclosures and unemployment in the Florida, Pinellas county and Lealman community, our team attempted to create a housing assessment framework to objectively identify the vulnerabilities and weaknesses of the built stock of the Lealman neighborhood. "Satisfaction with social, economic and physical features of the neighborhood affects life satisfaction through the mediation effect of one's overall feelings toward the neighborhood" (Sirgy & Cornwell, 2002).

Lealman is an urban unincorporated community northeast of Saint Petersburg, Florida. Even though this community is unincorporated, it is at the same time one of the oldest in Pinellas. In a 2001 report on the future of central Lealman, the history of Lealman was highlighted. This report wrote about the need for well-maintained properties and yards in item six (6). Also, in item six, the report recommended that the Lealman Community Association identify and assist those in the community. Another recommendation was to educate property owners of problems and about resources for learning how to maintain their property. The purpose of this Assessment Framework is to take a more direct approach to identifying redevelopment opportunities, to become aware of obstacles to redevelopment, and identify sites

that hold future redevelopment opportunities, and will assist in achieving the goal of efficiently utilizing the NSP funds to revitalize and improve the community living conditions.

II. CONTEXTUAL BACKGROUND:

The key objectives for this Housing Condition Survey are to construct a reliable framework for the assessment of the built stock in Lealman, provide a comprehensive evaluation of the residential stock and its conditions, to examine the association between residential conditions and the social and economic circumstances of the Lealman neighborhood.

The purpose of this Assessment Framework is to take a more direct approach to identifying redevelopment opportunities, to become aware of obstacles to redevelopment, and identify sites that hold future redevelopment opportunities, and will assist in achieving the goal of efficiently utilizing the NSP funds to revitalize and improve the community living conditions.

III. PRECEDENT HOUSING ASSESSMENT STUDIES:

Previous communities and cities have used housing surveys to evaluate their existing built stock conditions. Some surveys were detailed while others used brief evaluation approaches. As a result, different levels of data were retrieved and analyzed. Affton, Missouri used an Exterior Housing Condition Survey in 2002 which was developed by their Department of Planning in 2000 (St Louis Department of Planning, 2002). The survey used a scale that was based on a range 0 to 3; a zero classification was a home in good condition and 3 as a home very poor condition. The housing survey checklist looked at eight deficiencies on the exterior of the housing structure only. The eight items on the check list consisted of the following: structural conditions, facade, garage/accessory structure, roof, windows, lawn, driveway, and sidewalks.

The survey allowed the community to identify 9% of the Gardenville area as requiring some type of major rehabilitation. The most cited deficiencies were the roofs with deteriorating

shingles, and falling gutters. Facades of homes in this area also had a problem with peeling paint or deteriorating siding. Less than one percent of the homes in this area were identified as in very poor condition. These homes had six or more deficiencies from the checklist. The data from this survey supported the assigning of a focus inspector to deal with the areas with high volume of violations¹.

Closer to the Lealman community, Hillsborough County, published a Housing Conditions Survey for the unincorporated Hillsborough County in 1990², done by the University of South Florida College of Architecture and Urban Design. This survey was funded by Hillsborough County through the county's federally funded Community Development Block Grant Program (Green, 1990). The survey used teams of two to three surveyors who were trained for 16 hours with visual aids and field inspections. The Florida Center maintained quality control with spot checking neighborhoods after the surveying had been completed.

The check lists started with item A; the identifying of the property with census tract, block number, and tract sheet. Items B through H addressed general building data. Data was collected on a number of dwellings units per building, land use, type of construction, foundation and type, outbuildings, age (this was a judgment call), and stories (floors) that make up the building. Items I through R dealt with site and building condition. The rating scale for most of these items was 1 through 5; two items had a different rating scale. One item had a rating scale of

¹ St. Louis County Department of Planning., 2002, Affton Community plan, <http://www.stlouisco.com/Portals/8/docs/Document%20Library/planning/community%20planning%20and%20revit%20alization/south%20county/affton/Affton%20Community%20Plan.pdf>

²Hillsborough County, University of South Florida, 1990 Housing Conditions Survey for Unincorporated Hillsborough County, <http://www.fccdr.usf.edu/upload/documents/The%20Housing%20Conditions%20Survey%20for%20Unincorporated%20Hillsborough%20County.pdf>

1 through 6, with 6 being not applicable. The final item was the overall condition score by the field surveyor on a scale of 1 through 8. This score was not the result of adding items I through Q, but the impressions of the overall conditions.

Unlike the 1990 Hillsborough Housing Condition Survey, 2009 Northern Ireland survey³ took 142 pages to produce its final report. It was very detailed and complex in evaluating the neighborhood built stock. The survey form was 34 pages long for each house or unit and one page for the local area. There were questions for both the occupants and the surveyor to answer, as well as the surveyor who has to draw a sketch of the unit. Because of the work load to perform a single survey, the six month long project required a surveyor to do only 80 to 210 full inspections. The number of inspections depended on whether the surveyor was contracted on a part time or full time basis. There were 18 surveyors and four supervisors employed on this project with all four supervisors experienced from the 2006 survey.

The wealth of information from this survey was astounding. This survey was made possible with a team of 22 people and about 6 months of collecting data. In addition, many hours were spent prior to the survey in performing the prep work needed to obtain funding and planning the survey. Once the survey was completed it took five authors, two project coordinators and one graphic design person to process the information and produce the final report.

On the other end of the scale of detailed Housing Conditions Surveys, a group of Masters of Urban Planning Students at Texas A&M University made a very condensed Housing Condition Survey (Lewisville City, Texas A&M Urban Planning Students, 2006). The students

³Northern Ireland Neighborhood Housing Survey, 2009, Northern Ireland's strategic housing authority http://www.nihe.gov.uk/index/sp_home/research-2/house_condition_survey.htm.

worked of a Neighborhood Redevelopment Study for the City of Lewisville in the spring of 2006⁴. They chose to use a 1 through 4 point scale for the whole property. On page 45 of their report they wrote about their scale. Page 46, they displayed their GIS graph of their data. They did not write an analysis of their findings from their survey. They failed to provide a defined explanation of their evaluation objectives for the properties in their study area as it related to the housing condition survey. Due to the general nature of their scale, they were unable to extract expressive results similar to other mentioned surveys. They did, however, go into great depth on a number of other studies in their 197 page report. Had they included a few variables, as other surveys had, they would have been able to go into depth about house issues, similar to their other studies in their report.

Our Assessment framework benefitted from all the mentioned surveys and reports into what is being looked at in evaluating a neighborhood, a house and the learned lessons in assessing.

IV. METHODOLOGY:

After reviewing a number of Housing Conditions Survey forms, the group picked a form from the Department of Housing and Community Development of California⁵. This survey form is a sample form ready to use from their website. Similar to the Affton, MO and Hillsborough County survey, the form begins with general questions about the property; address of the

⁴Lewisville City, Texas A&M Urban Planning Students, 2006, retrieved from archone.tamu.edu/laup/Sample_Doc/MUP_Lewisville_06.pdf.

⁵Department of Housing and Community development of California, Housing Conditions Survey, 2008 retrieved from http://www.hcd.ca.gov/hpd/housing_element2/EHN_HousingStockChar.php#Requisite_Analysis, retrieved in 2011.

property, occupied, vacant, for sale, construction type, and structure type. The survey form includes a Frontage Improvements section with curbs, paved streets, gutters, sidewalks, driveway, and adequate site drainage and five graded features of the property: foundation, roofing, siding/stucco, windows, and electrical.

Modifications were made to the Housing Conditions Survey to customize it to the character of the Lealman neighborhood character and architectural features. After visiting the area to be surveyed, the structure type section was changed from asking if the garage was attached or not, to if the building had one or not. The Structure Type section also added public building, and commercial buildings to the section. In the Construction Type section, stucco was added because a wood frame and block could be sided in stucco, preventing the group from being able to determine the Construction Type. Finally, empty lots were added to the vacant question.

The graded features have a more complex grading scale than the above surveys. The scale tries to reflect on the various degrees each issue has on a property. This scale allows serious issues to have more impact on the overall score of a house. A house with a single major issue will stand out more than a house with some minor issues.

Table 1: Housing Rating System

Condition	Rating Criteria
A. Roofing	0= In Perfect Condition 5= Minor Repairs Needed 10= Needs re-roofing 25=Replace Roof Structure
B. Siding/Stucco	0= In Perfect Condition 1=Needs Repainting 5=Patch and Repair 10=Replace and Paint
C. Windows	0= In Perfect Condition 1=Repairs (Broken Panes) 5= Needs Repair 10=Needs Replacement
D. Landscape	0= In Perfect Condition 5= In a Moderate Condition 15= Major landscaping Needed

The roofing scale starts off with a zero for does not need repair. Then for minor roof repair, a score of five is given. This score was given for minor damage to the shingles, flashing, eaves, and trim. For a roof that needs re-roofing, a score of 10 is given. This score was given if the roof had major damage, but looked repairable with a re-roofing project. For a roof that needs the whole roof structure replaced and re-roofed, the largest score on the form is given, a 25. This score was given when a roof looked beyond repair, and had to be replaced including the underlying structure.

The window scale was a little different. The scale started out with zero for no repair needed. Broken window panes received a score of 1. This score only was applied to single pane windows, due to the moisture and resealing problem with trying to repair double pane windows. Windows that showed signs of needing repairs beyond a simple window pane fix was given a score of 5. Windows that showed signs of damage beyond repair, and needing replacement were given a score of 10.

The House siding scale was similar to the windows scale. Siding with no signs of damage or needing any work was given a score of 0. A building that showed signs of needing paint work was given a score of 1. Damage to the siding, which could be patched and repainted, was given a score of 5. Damage to the siding, which needed replacement, was given a score of 10.

Landscape scale was again different from the above scales. Front yard landscapes that are being well maintained and had no issues were given a score of zero. Landscapes that showed some signs of issues, like bare spots, lack of regular mowing, or some jumble in the yard were given a score of 5. Landscapes with major issues from lack of maintenance, and large amounts of junk in the yard were given a score of 15.

Data Collection:

The chosen method of data entry was an Apple laptop running Numbers software. Numbers software is a Macintosh form of the more widely used Microsoft Office Excel program. A GIS file was provided which included property identification. The FID number was the chosen identifier for the properties. The modified survey form was then entered in the Numbers software to form the main database. Due to the main database running slow, the main database was split into six files. This allowed the computer used in the data collection, to run more smoothly. The main file was split every 1000 FID numbers and saved as smaller files. Checks were then made to make sure this new database would be able to be entered back into GIS.

Using the Lealman 2001 Housing Condition Evaluation map, the South West corner of Lealman was chosen because it seemed to be the area with most poor conditions. The team spent eight hours a day, for three days collecting data. Multiple afternoons were used to review the raw data to find errors, and trends in the data set. 25 properties were to be reviewed at again due to

uncertainties presenting on the GIS layers. A fourth day was spent in the study area working on quality control to ensure accurate and reliable data.

Data Processing:

Table 2: Housing Evaluation Score Computation

Points Based on Criteria outlined above	Roofing	Siding	Windows	Landscape	Total Score
	0 5 10 25	0 1 5 10	0 1 5 10	0 5 15	

Table 3: Structural Scoring Criteria

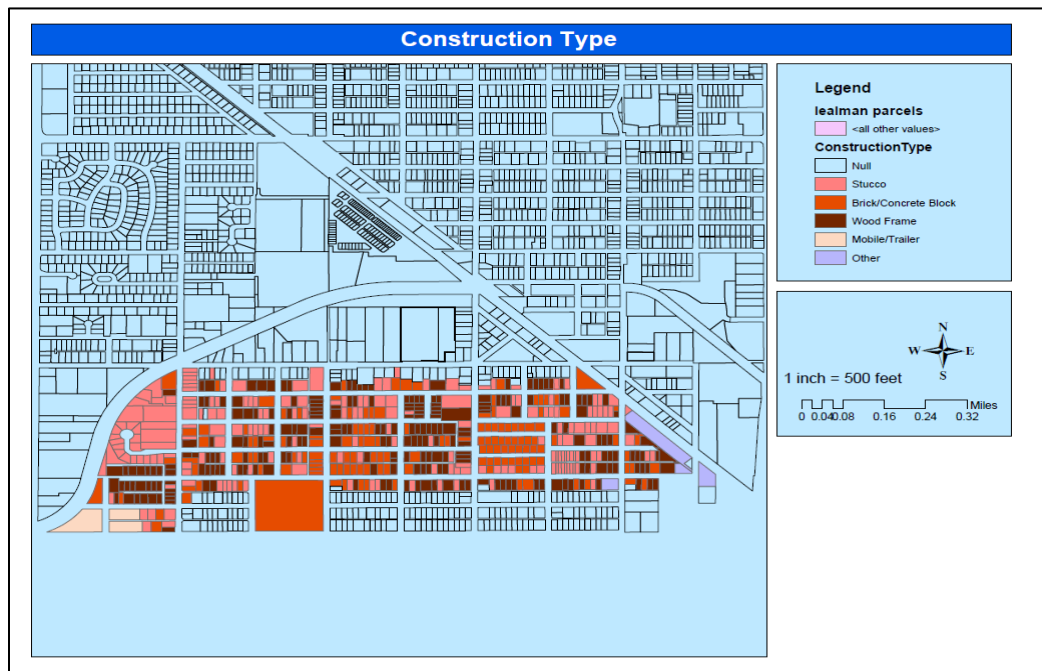
Score Range	Condition
7 or less	Great/Good Condition
8-16	Maintenance Needed
17-22	Repairs Needed
23-31	Major Repairs Needed
32-50	Dilapidated

V. RESULTS

The survey conducted by the group was able to find few properties that appeared to be vacant in the study area. With the current economic situation the Lealman community reported high unemployment and foreclosures rates. However, only 5.9% of the properties appeared vacant. Most of the vacant properties lack curtains to reveal an empty house. Only a few vacant properties were unkempt from lack of maintenance. Empty lots made up 39 properties for a total of 6.7% of the area's properties. Few lots appeared to be owned by a joining house. Most lots appeared to be ready for development. A couple of for sale signs were seen on some of the empty lots.

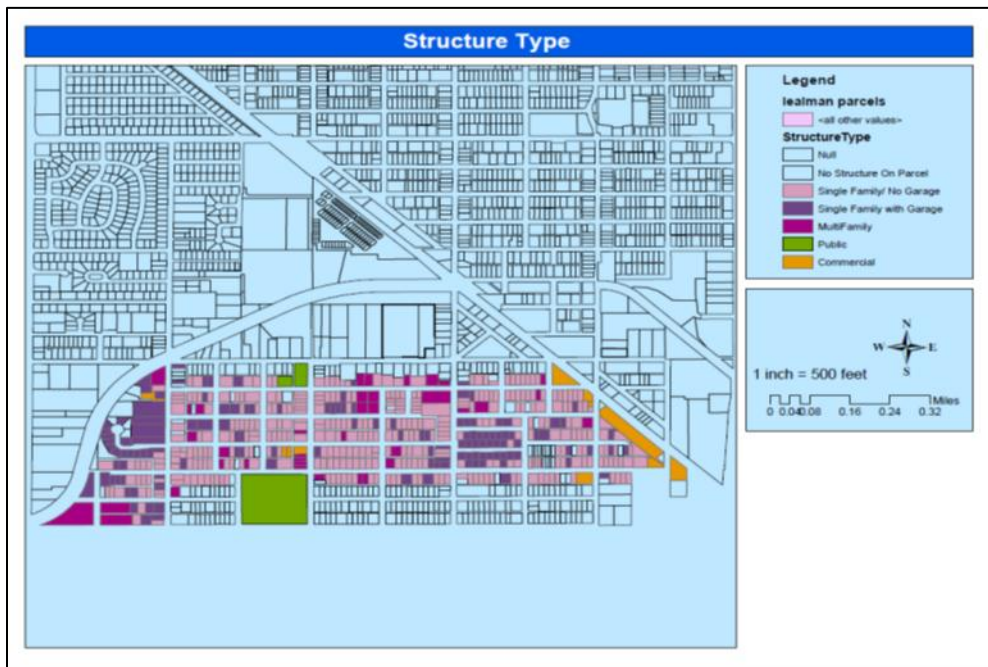
The housing in the sample area appeared to be mainly wood and concrete block. Stucco is a popular siding for a number of these homes, but as mentioned before, it prevented the group from being able to determine what the home is constructed of. Most of the wood homes tended to have white shingle siding. Construction type for most of the homes in the area appears to be wood. Two hundred thirty eight (238) properties were identified as wood. As mention above, the stucco classification was made because of the difficulty in identifying homes covered in stucco as wood or concrete block. Stucco properties were observed one hundred ninety two (192) times in the sample area. However, not all stucco covered properties fell into this category. There were some concrete block/brick properties that had stucco for siding. Some of these properties had stucco on the front but the side of the property was painted block or brick. Some properties had a mix of bricks and stucco which were labeled as brick. The total properties labeled concrete block/brick were one hundred forty five (145).

Figure 1: Construction Type



Only one property was labeled mobile/trailer. There was one large property with multiple trailers in the far southwest corner of the Lealman community. The survey form used by the group during the survey did not allow for quantifying the number of structures on a single property. While the trailers were in good condition, they did not adversely affect the sample area in a negative way. Trailers were under represented as a result of only one property having a trailer on it. The group did not see any properties that appear to have any modular homes. Commercial metal structure buildings were seen on four properties. Again, some of these properties also had multiple structures on them, resulting in a lower than total structure count for the sample area. There were also a number of properties that had small metal sheds in the backyards that could be seen from the road. The survey form did not allow the group to take into account the secondary structures on the survey.

Figure 2: Structure Type Map Distribution



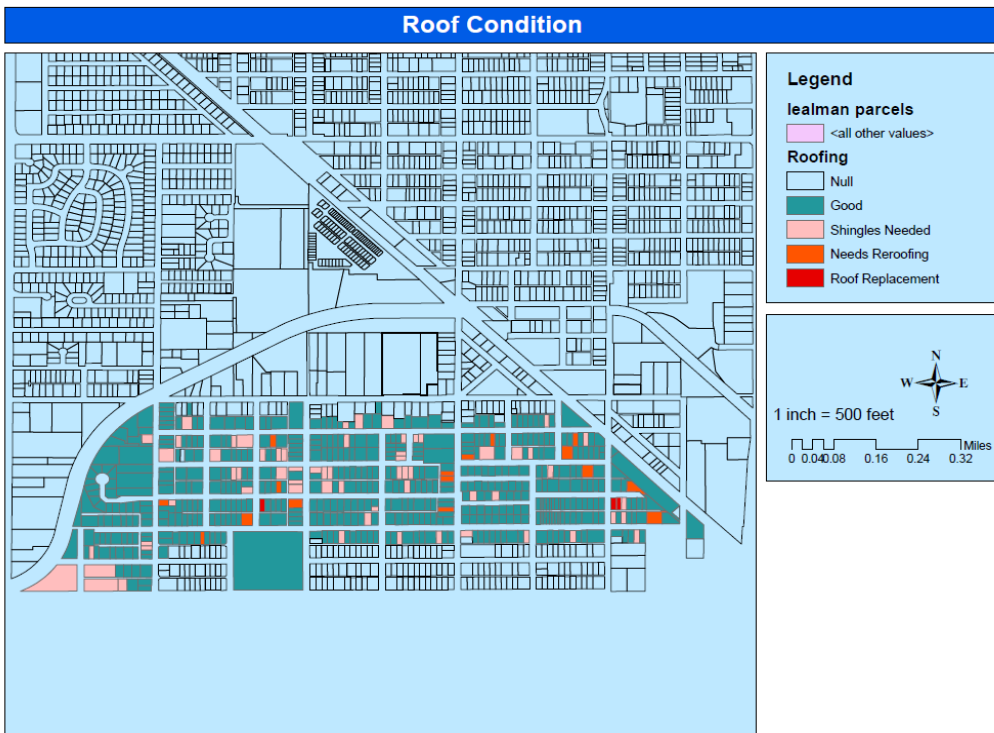
In the structure type category an overwhelming 73.1% of the structures appeared to be single-family homes without garages. Some of these homes were originally built with garages

but the garages were turned into additions to the home for additional living space for the owners. The group could not tell what type of rooms based on the groups view from the street. The survey form did not have a category for carports; so carports were not counted. It appeared to the group that most homes had either garages or carports, and in some cases both. 26.9% of the single-family homes with garages came in different forms. A few of the garages were detached garages, however, it is noted that most of the properties with garages were attached to the home.

There were thirty five (35) other structure types observed, such as multi-family properties. These properties were spread out through the whole study area. Some of the properties had multiple structures on one lot. Only two structures were public; one was a school, another was a church. Eleven (11) properties were for commercial use. One business was on three properties and was surrounded by residential property.

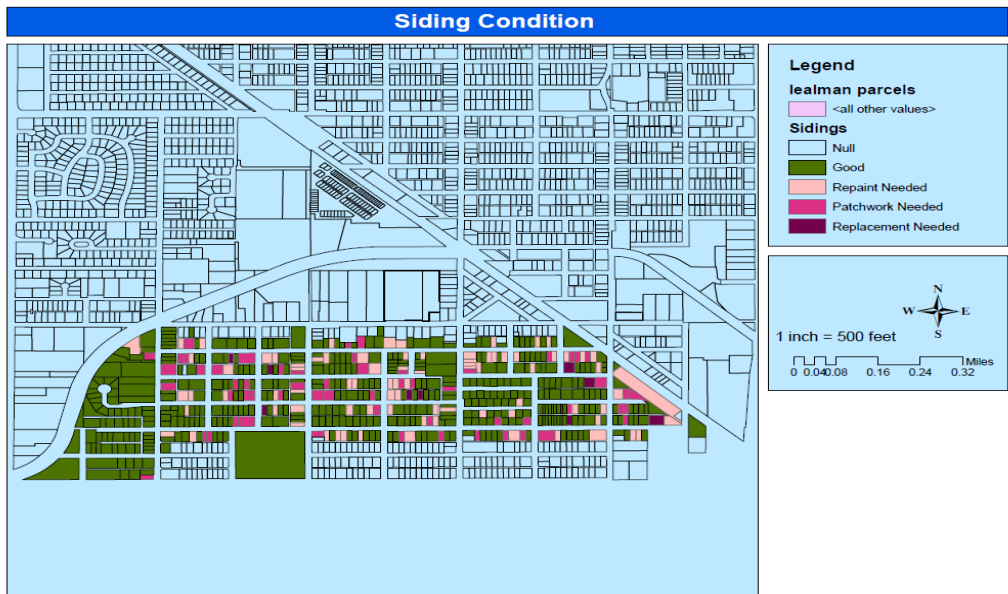
Roofs were the first graded feature on the properties. The survey findings for the roofs found that most roofs were in very good condition and were fairly new. 500 properties or 86.2% had roofs in good condition and only 10.5% needed minor repair to the roofs. 16 properties or 2.8% showed signs of needing re-roofing as a result of the damage to the roof observed from the street. These roofs needed quite a bit of maintenance to them but could easily be saved from needing a replacement. If no maintenance is done on those roofs, they could deteriorate to a point that they need to be totally replaced. The most strongly weighted deficiency was the roof replacement designation, and three properties were found to have badly damaged roofs. Half of one percent of properties fit into this designation.

Figure 3 Roof Condition



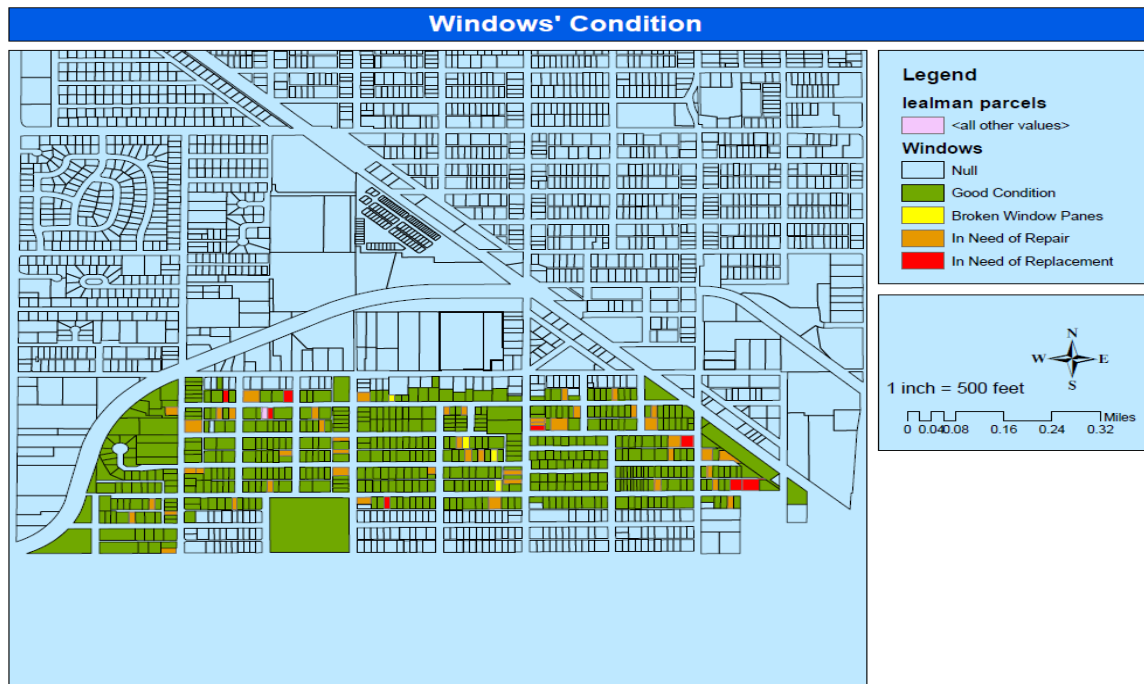
The next graded feature the group reviewed was siding. Of the five hundred eighty (580) properties the group reviewed, four hundred twenty eight (428) properties were classified as good. This means that 73.8% of the properties had no visible issues with their siding. Most of the properties had great siding, however, 14.1% showed signs of needing repainting. Most of the properties that needed just painting were at a state that they could wait until the owners were ready for the project. 10.5% needed some patch work with the repainting due to some form of damage to the siding. The group did find nine (9) properties that the siding was so deteriorated that the property appeared to need replacement of the siding. Of the three graded structural deficiencies the group looked at, siding was the most numerous of the major and minor deficiencies.

Figure 4: Siding Condition Map



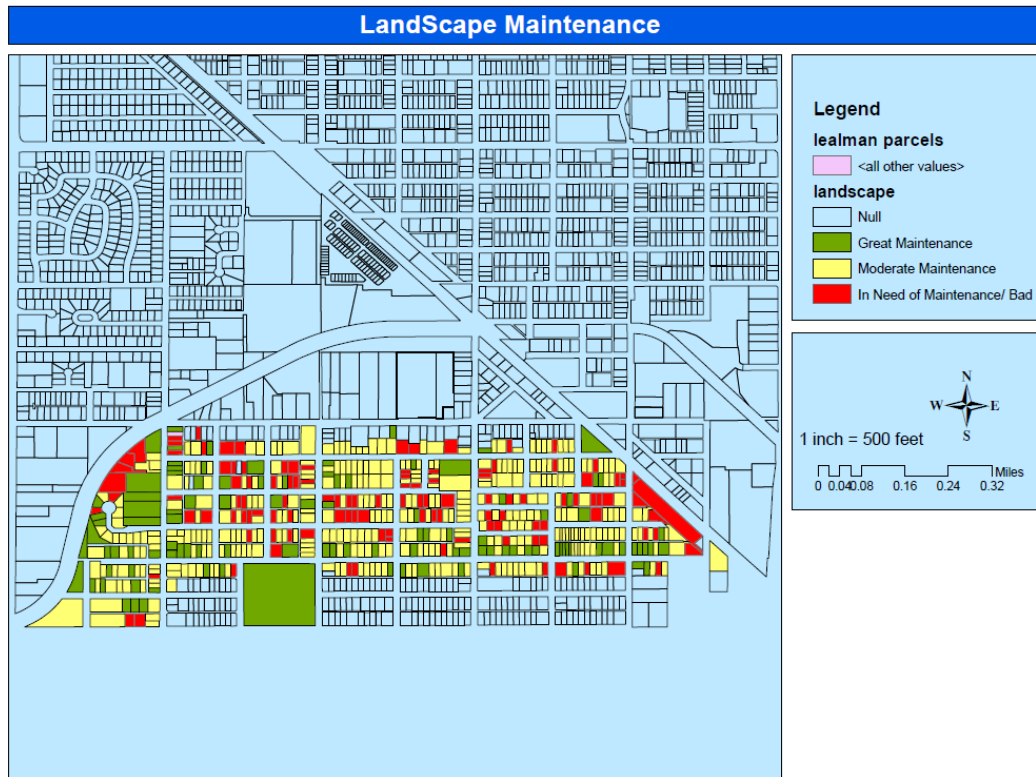
Windows had the least amount of deficiencies of the 3 structural graded features. An amazing 89.7% of the properties had no sign of window issues with the property. Only four properties fit the broken window pane category and forty seven (47) properties, or 8.1% of the total properties showed signs of needing windows needing repair work. Almost 99% of all the properties had windows in good or fixable condition, but 1.4% of properties had windows that needed a window replacement. There were 8 properties that needed windows to be replaced as a result of being badly damaged. The deficiencies with windows with minor and major issues were close numerically with siding.

Figure 5: Windows Condition



The final graded feature the group looked at was landscape. The section will be discussed in more detail later in the paper. Out of a total of five hundred and eight (508) properties reviewed one hundred eight (108) properties or 18.6% received the top score of zero. Most of the properties were graded a five by the group, for a total of 351 properties or 60.5%. Then 84 or 14.5% of the properties was graded as bad.

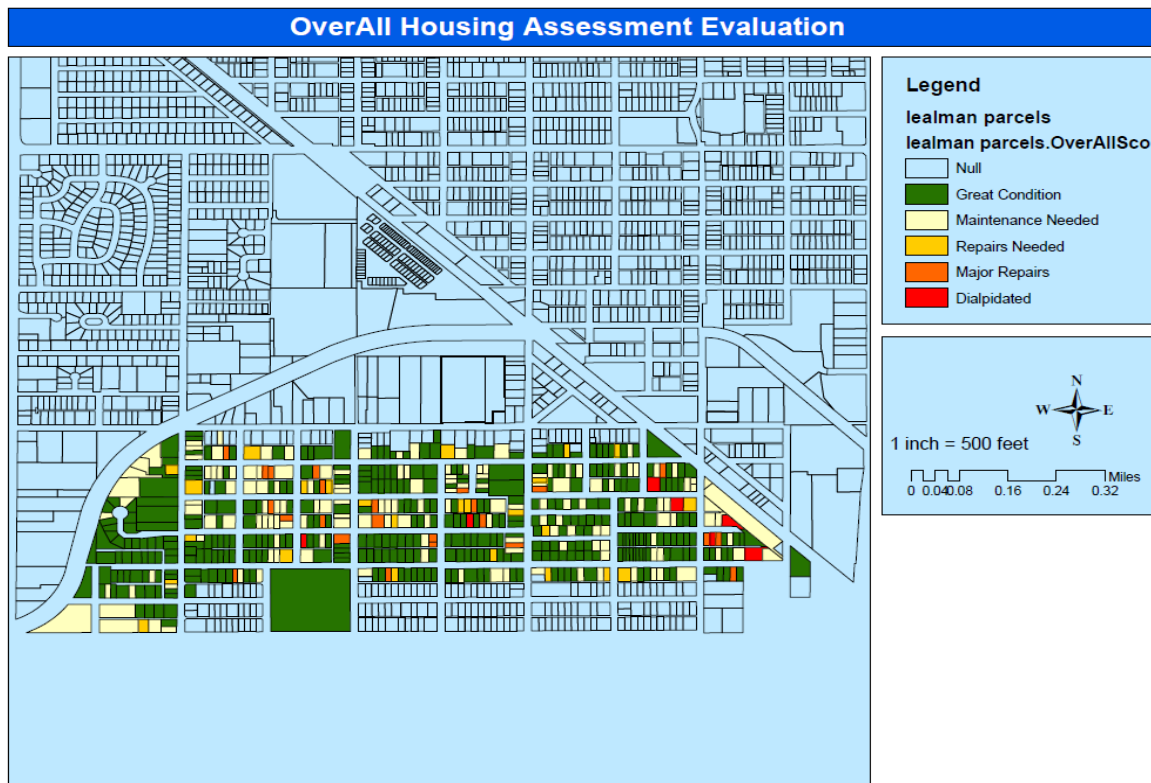
Figure 6: Landscape Maintenance



Score Range	Condition	Color
7 or less	Great/Good Condition	Green
8-16	Maintenance Needed	Beige
17-22	Repairs Needed	Orange
23-31	Major Repairs Needed	Dark Orange/Brown
32-50	Dilapidated	Red

Table 4: Score Criteria, Condition and Color on the Overall Assessment Map (look at figure 7).

Figure 7: Overall Housing Assessment Evaluation Map:



VI. DISCUSSION

There are number issues that need to be discussed with conducting a windshield survey on the local housing conditions in Lealman. By bringing out these issues, future housing condition surveys may yield more information. It is also beneficial to reflect on what was useful and what could be done better. For the members of this group, this was the first housing condition survey they performed. The group learned a great deal from past projects, planning the windshield survey, conducting the survey, and finally combing through all the information produced by the survey.

In planning for the survey, the group chose the method of entering the data straight into an Excel like software package called Numbers. This was an attempt to reduce the amount of time for data entry. Past projects used paper forms that were filled out in the field and then all the data was entered in the

office. The group tried to combine these two steps in an attempt to reduce time and to be more efficient. However, this did not happen and resulted in some errors in the data that had to be fixed later. While the group tried to relay accurate information so that the data was entered in the correct cells, incorrect cells were found to have been filled out.

In retrospect, the paper form allows project members to go back and review surveyed properties and find out where the error occurred. This backup data source can reduce time spent having to resurvey properties. The paper method can possibly reduce the overall error in the database by allowing quality control methods to be used. For example, by reviewing field collected data to the data base will allow a greater degree of reliability. This data can also be inspected by outside people to prove reliability.

In evaluating homes, the group noticed that some features of the homes were being blocked from view by landscaping. This required the group to formulate a grade on a property with little knowledge of the overall condition. On some of the properties only part of a single window could be seen. Since there was nothing wrong with that small piece of the window, all the windows were given a grade of 0, meaning nothing wrong. There was one home that the group could not see a single window. As a result of the surveyors views being blocked the overall conditions of the homes are artificially increased.

This is a basic error that is built into a windshield survey. Due to the limitations of the surveyor there is a general error in favor of the property being inspected. This also creates a general reliability issue to the overall survey results. Since the survey was not conducted to the strict and detailed standards of the Northern Ireland survey mentioned above. The amount of information can be extracted is reduced. This does allow people to extract general trends and changes in the sample area.

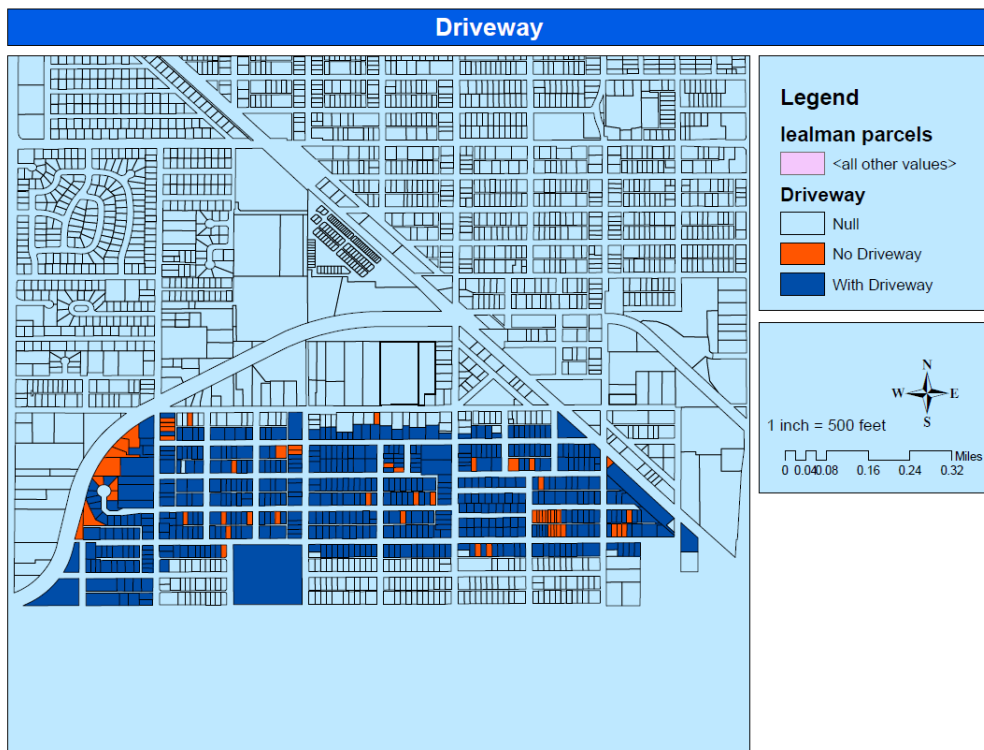
There's also an issue with the survey form. When looking at deficiencies on properties, the survey form does not allow the surveyor to quantify the amount of deficiencies. So a house that needs one window replaced gets the same score as a house that needs all of the windows replaced. This example shows that the degree of deficiencies can widely range with homes that are given the same score. Also a

property can have a number of small minor deficiencies on its roof, but the roof is not damaged enough to need re-roofing, it will receive the same score as the roof with a single deficiency. A possible solution would be to add categories such as multiple minor deficiencies and multiple major deficiencies. This will allow for better understanding of the structural issues that property owners are dealing with in the Lealman community.

Other housing condition surveys looked at other features of properties that this survey did not. One was fences. The group noticed a number of fences in the study area in need of repair. By looking at fences in need of repair, the community might be able to focus its attention to this issue and correct it. Another feature some studies looked at was doors. The group noticed a number of properties that doors were in disrepair. Damaged doors did give the impression of a poorly maintained property.

Driveways were a feature that most homes have. However, different people have different definitions as to what a driveway is. Some people have a very loose definition that includes grass and dirt. While some people view this as people parking on their yard. A solution to this is to have driveway as more than a yes or no question. But allow the surveyors to check off grass, dirt, gravel, paved, or even hybrid. The group noticed a number of driveways that started off paved for five to ten feet and changed into grass to the garage. So the driveway is not really grass or paved.

Figure 8: Driveway Distribution Map



The Hillsborough County survey allowed the surveyor to give an overall score to the property on a scale of 1 through 8. This allows the office staff to check how well the graded features compared with how people view the property. A future survey may want to include this category as a check to see how well blighted properties show up in the finals score.

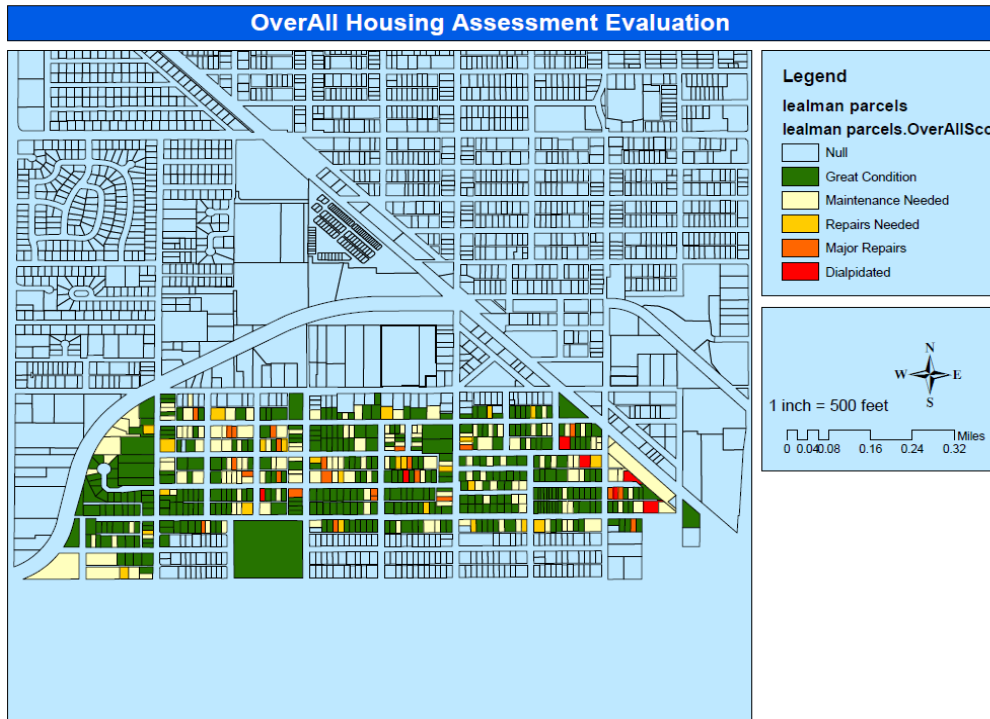
The score scale should be reviewed to reflect cost of fixing the deficiencies. The California survey scale stressed what needed to be fixed and how bad. This allowed painting a property to be scored a one. This is not a small task or cheap even when done by the owner on a small home. Also fixing a small window pane on an old window may be a small job for a handy man. A lot of newer windows are now double pane and are difficult to repair the glass. While the cost of fixing a window is not an expense most people want, painting a whole house is more. The California scale scored fixing the window a five, while the more costly painting project was scored a one. By bring the cost of the projects into account

with the scoring, the financial burden of the projects on the property owners could then be looked with the results of the survey.

Definitions should be reviewed for consistency and how well they reflected the local conditions. Local input may better serve Lealman, as well as, respectful of the local community. People with different backgrounds can view the same thing very differently. The group noticed this when grading landscape in the survey area. One group member is from a rural background, while another has an urban background. This sometimes led to one group member seeing a beautiful mature manicured landscape that allows for privacy and lots of flowering plants. While another member sees an overgrown landscape that needs a lot of work. So, the group members met in the middle and explaining the large number of properties graded with a five. Both members used the same definition listed above, and relied on their backgrounds to understand what was in front of them. The different backgrounds resulted in conflicting grades. A more detailed landscape definition could prevent conflicting grades in the future.

Past projects with housing surveys trained all field surveyors with multiple days of training. This training was a combination of visual and field inspections to have a more constant data from the field crews. The group did notice the training that the past field crews did before going out to do housing condition surveys. But, it was only after the project was well under way that definitions began to become an issue. Most of the survey is what the property is, and what is wrong with the property. Landscape, needs a better definition to yield better results.

Figure 9: Over All Housing Assessment



VII. CONCLUSION:

Housing conditions does affect the overall vitality and value of a neighborhood. Well-kept and maintained neighborhoods tend to make the community more desirable for stakeholders' investments, hence create more jobs. After surveying and evaluating about 10% of the Lealman Community parcels, the housing conditions evaluation reveals a decent distribution of the dilapidated properties that required major repairs. However, this may be due to the area we concentrated on and the demographic distribution of the property owners. The houses were mostly well kept and the neighborhood was safe and pedestrian friendly. Landscape maintenance affected the total scores of the assessments and we believe it does affect how the neighborhood is perceived. Hence, we recommend a stricter front yard maintenance requirement for the neighborhood. Moreover, we recommend future surveyors incorporate more items on the evaluating scale to include: door conditions, number of windows needing of repairs and

foundation evaluation (if applicable). We also recommend establishing a different index for the evaluation of commercial properties because this assessment is mostly for Residential properties. In conclusion, the team hopes this report be a framework for assessing the Lealman housing conditions and recognizing the vulnerable areas in Lealman. The Lealman Community Association can use this survey as the basis to identify and assist those in the community to improve the housing conditions in Lealman. Moreover, Pinellas County can expand on this work to the other neighborhoods.

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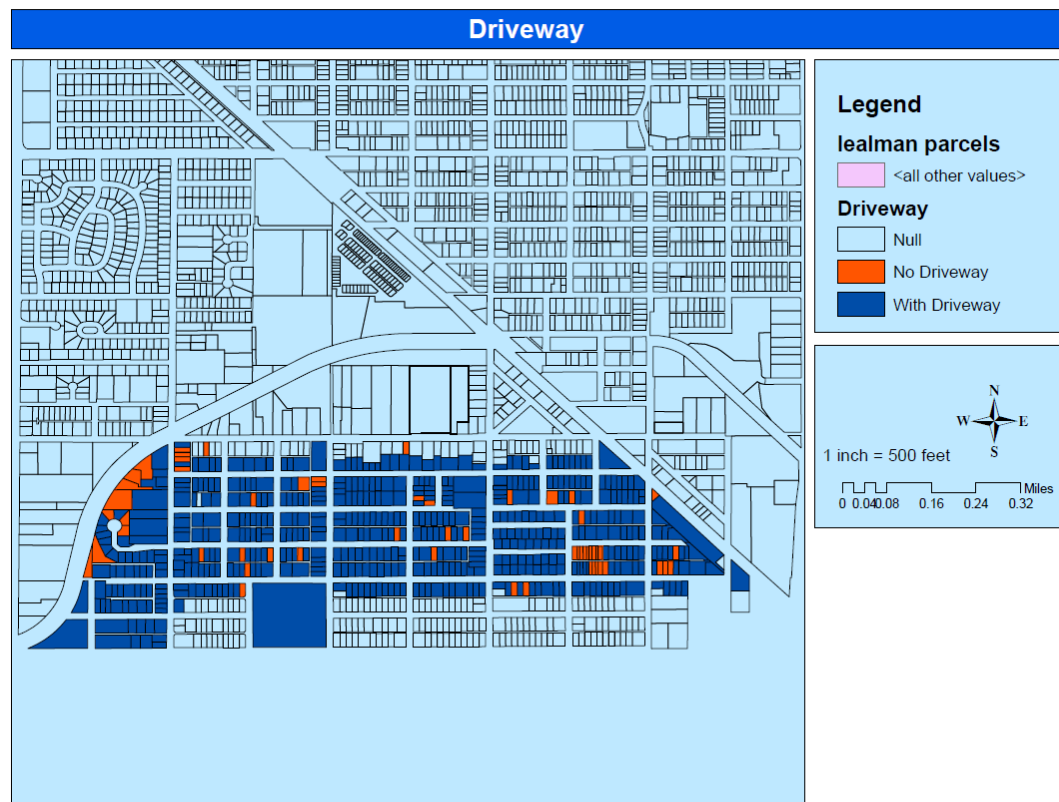
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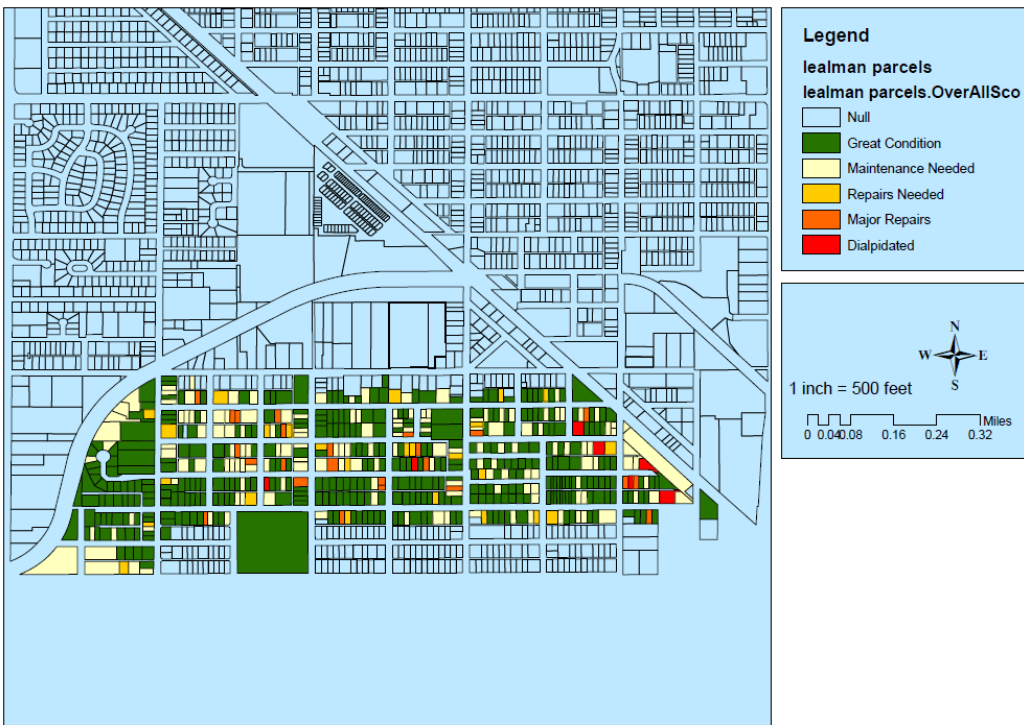
Sirgy, J. M., & Cornwell, T. (2002). How Neighborhood Features affect Quality of Life. *Social Indicators Research*, 59(1), 79-114.

IX. APPENDIX:

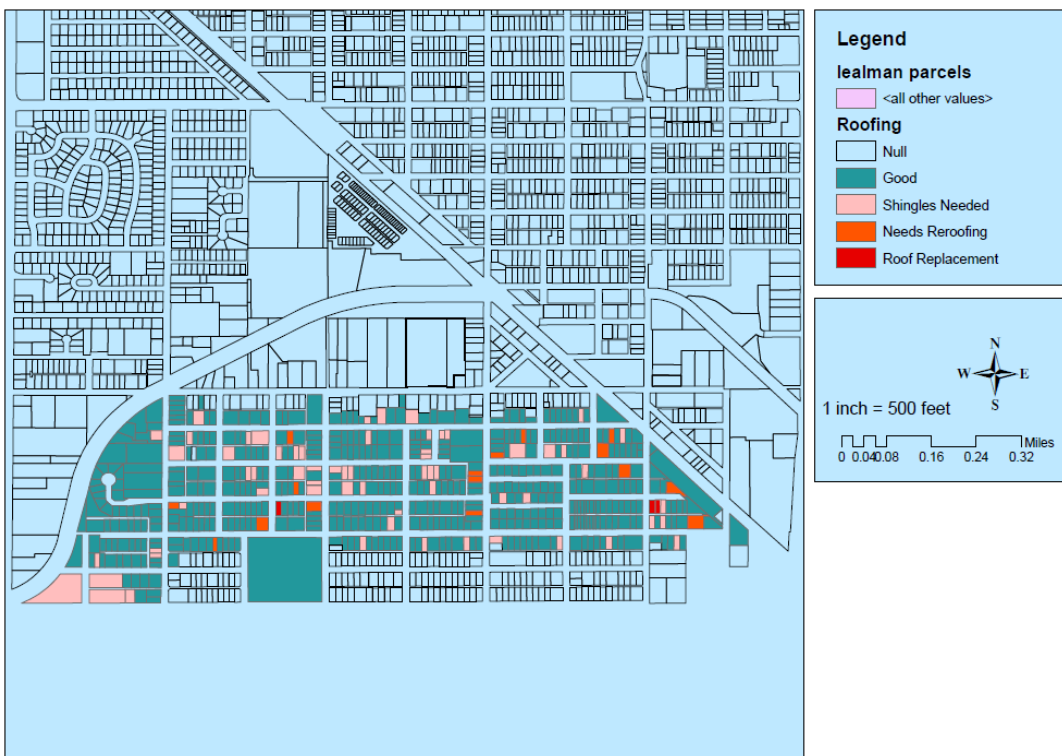
Forms and other pictures



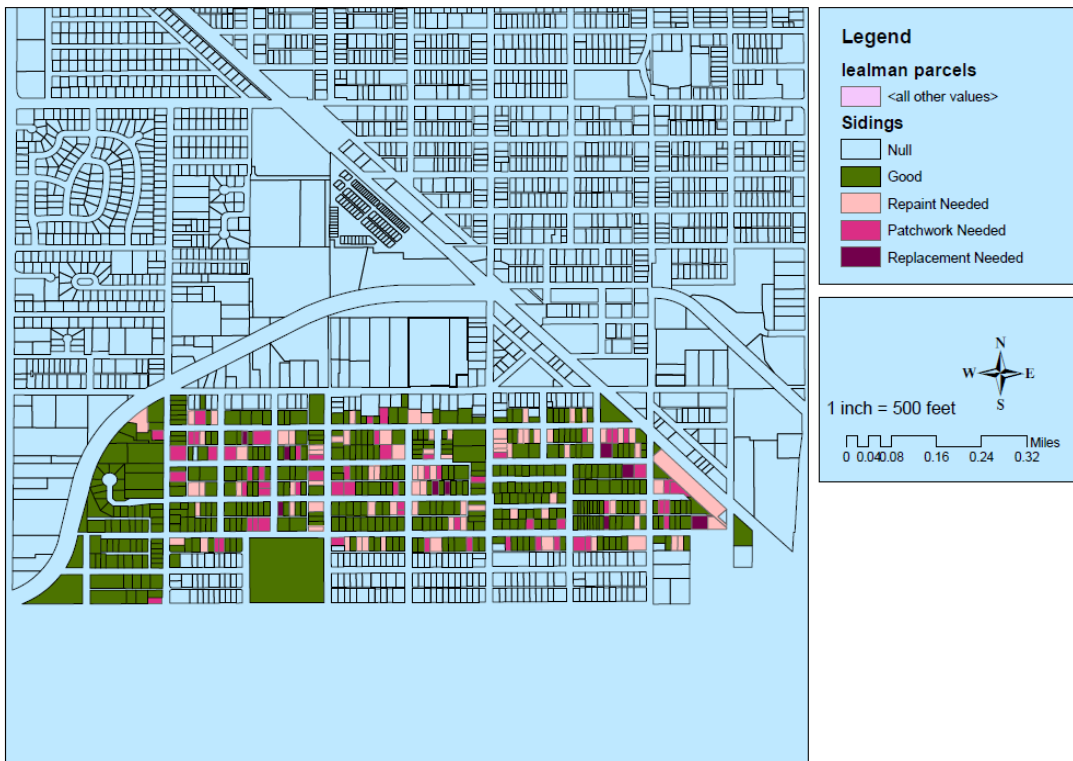
OverAll Housing Assessment Evaluation



Roof Condition

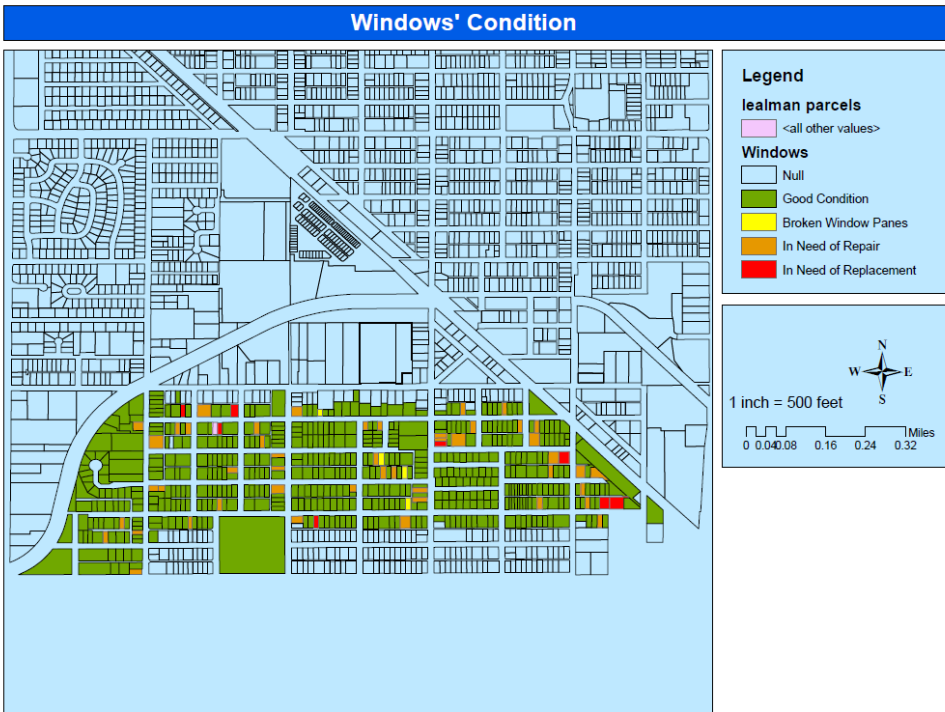
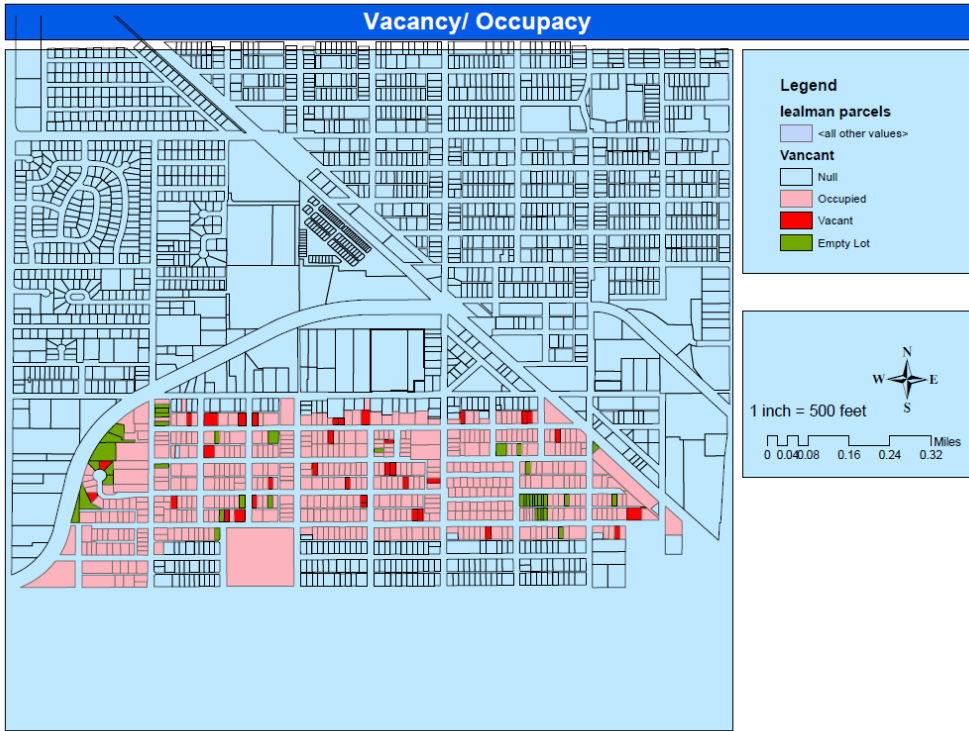


Siding Condition

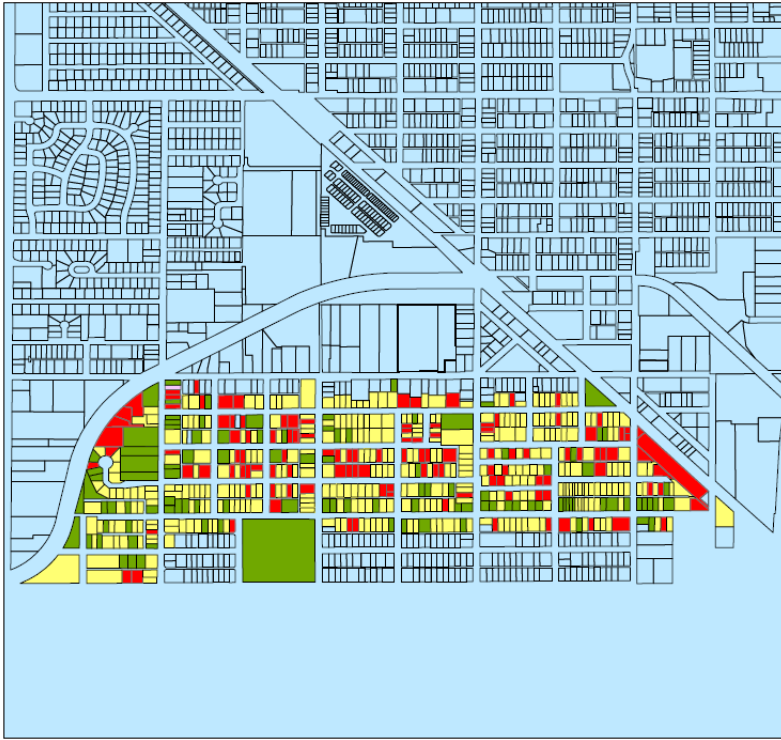


Structure Type





LandScape Maintenance



Legend

lealman parcels

<all other values>

landscape

Null

Great Maintenance

Moderate Maintenance

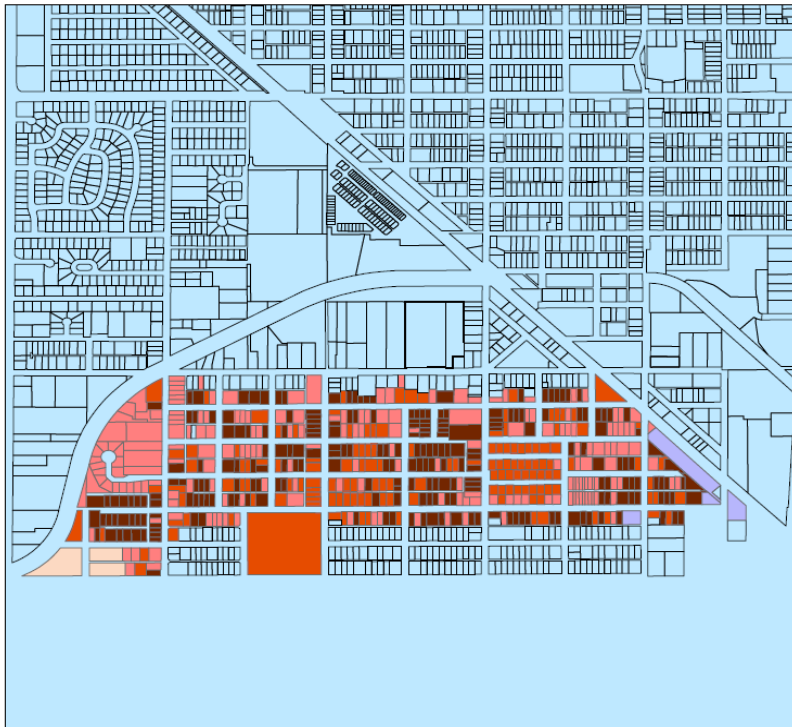
In Need of Maintenance/ Bad



1 inch = 500 feet

0 0.04 0.08 0.16 0.24 0.32 Miles

Construction Type



Legend

lealman parcels

- <all other values>

ConstructionType

- Null
- Stucco
- Brick/Concrete Block
- Wood Frame
- Mobile/Trailer
- Other

1 inch = 500 feet

A north arrow is positioned above a scale bar. The scale bar is marked with 0, 0.04, 0.08, 0.16, 0.24, and 0.32 miles.

