Figure 3.4.4.1 Flint MTA Primary Routes
Source: Flint MTA; retrieved February 2012

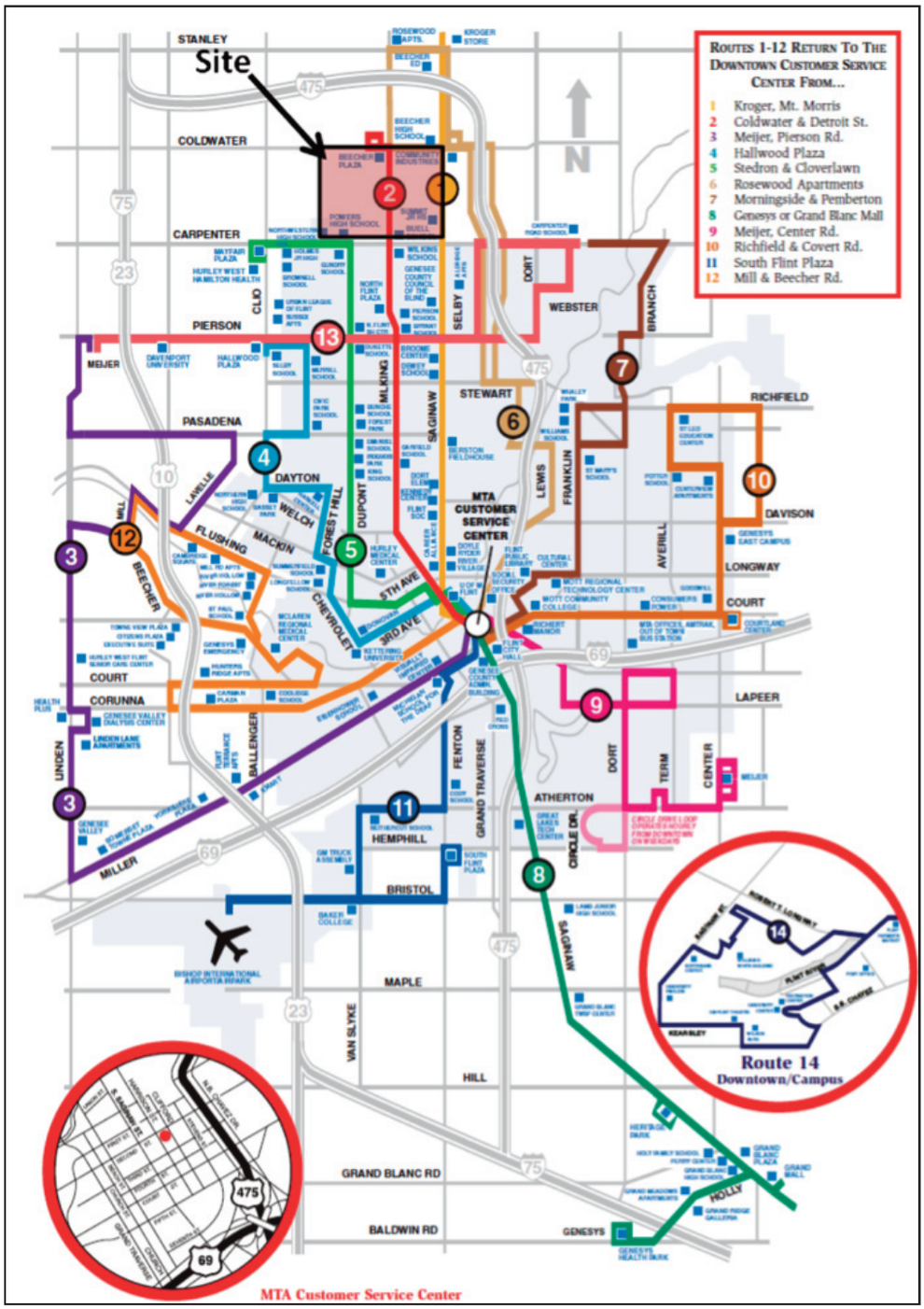


Table 3.4.4.1 Local Bus Routes
Source: Flint MTA; retrieved February 2012

Route #	Name	Location	Schedule
Route 1	Kroger, Mount Morris	Eastern border, Saginaw Rd.	M-S: 6:30am-12:00pm Sun: 9:00am-7:25pm
Route 2	Coldwater & Detroit Street St.	Center of site, Coldwater & Detroit St.	M-S: 6:30am-12:00pm Sun: 9:00am-7:25pm
Route 5	Stedron & Cloverlawn	Southern border, Carpenter Rd.	M-S: 6:30am-12:00pm Sun: 9:00am-7:25pm
Route 6	Rosewood Apartments	Northern Border, Coldwater Rd.	M-S: 6:30am-12:00pm Sun: 9:00am-7:25pm

MTA reports that general ridership for the 14 primary routes has increased steadily from 2003 to 2008, as depicted in Figure 3.4.4.3. From 2003 to 2008 ridership on these routes increased by 84%. This increase in ridership numbers, accompanied by commuting patterns of the Beecher CDP population, demonstrates a supported need for public transit in the area. Furthermore, the well documented link between public transit and economic development may prove to be an asset to the future land use development of the Beecher Site.

Figure 3.4.4.2 Beecher Site Bus Stops
Source: ESRI Business Analyst, March 2012

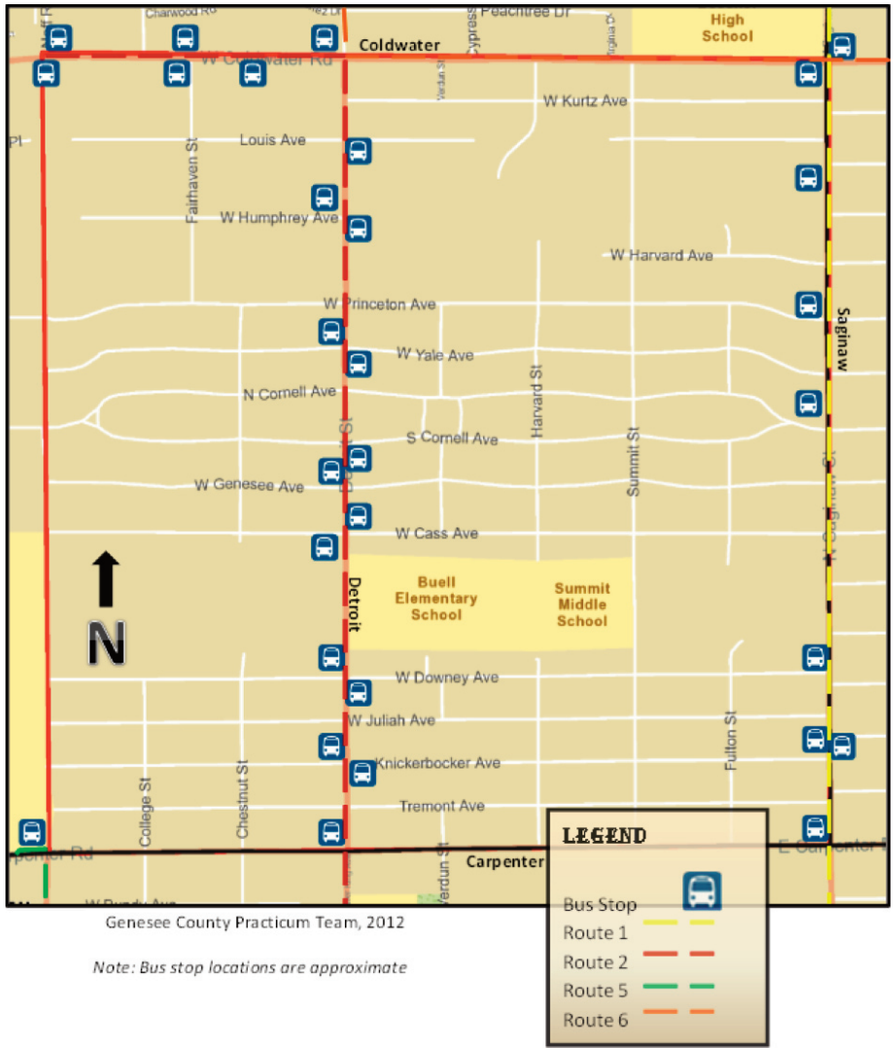
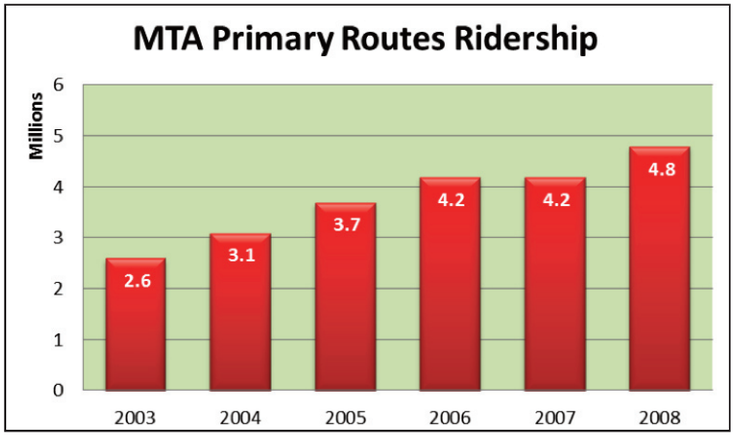


Figure 3.4.4.3 MTA Primary Routes Ridership
Source: Flint MTA



3.5 Market Profile

A market profile analysis was conducted to assess the potential for commercial development in the area. The analysis was conducted against the backdrop of the Spending Potential Index (SPI) and the Surplus/Leakage Factor.

SPI is a measurement of spending per consumer household for a product within a specific area. Measurements are based on a value of 100 which represents the US national SPI average. A SPI value above 100 represents a higher rate of spending than the national average on a specific product for the area. A SPI value below 100 represents a lower rate of spending from the national average on a specific product for the area.[31]

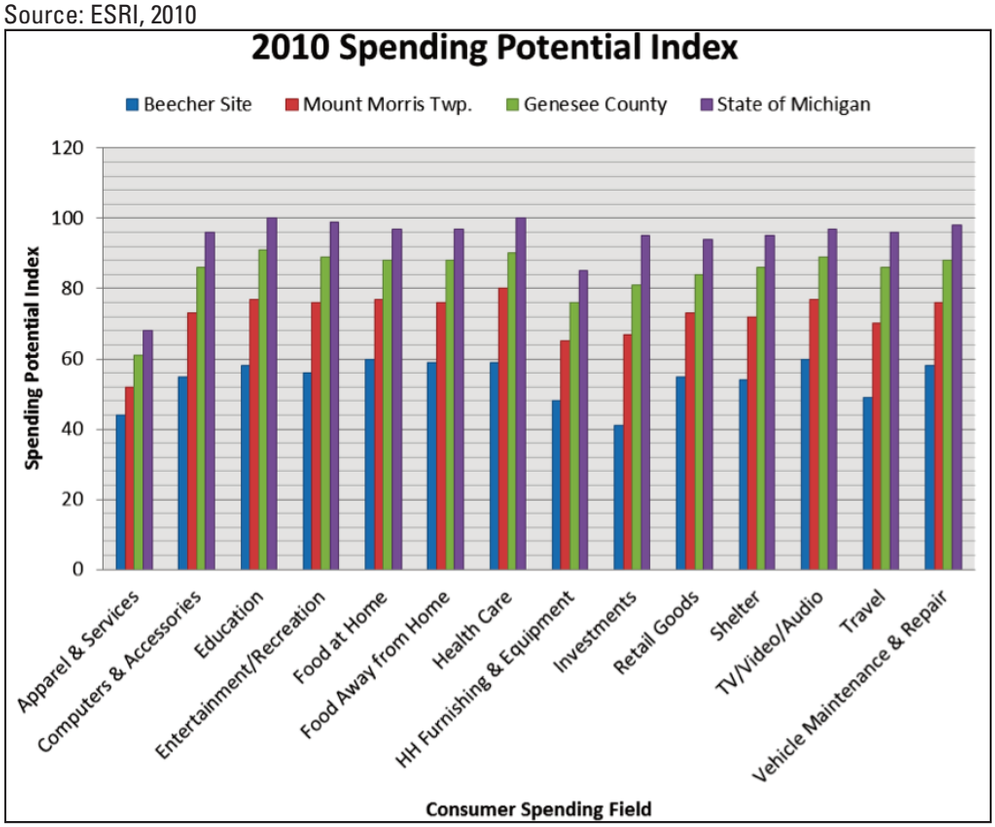
The Surplus/Leakage Factor provides a single measurement of the supply, retail/commercial sales; and demand, retail/commercial potential. A retail industry reporting a leakage or positive value indicates that demand for a product or service within the specified area is being fulfilled by retail industries outside of the specified region; therefore demand for a product or service is larger than supply. While a surplus or negative value indicates that supply exceeds the demand for a product or service.[32]

Table 3.5.1 represents the average spending amount and SPI for Beecher Site, Mount Morris Township, Genesee County, and the State of Michigan in 2010. Figure 3.5.1 represents a breakdown of the SPI for these geographies.

Table 3.5.1 Average Spending Potential Index
Source: ESRI, 2010

	Beecher Site		Mount Morris Twp		Genesee County		State of Michigan	
2010 Consumer Spending	Average Spent	SPI	Average Spent	SPI	Average Spent	SPI	Average Spent	SPI
Average	$2,605	54	$3,480	72	$4,063	85	$4,512	94

Figure 3.5.1 2010 Spending Potential Index
Source: ESRI, 2010



The average spending potential for Beecher Site is half that of the national average with an SPI 54. Comparatively, Mt. Morris Township, Genesee County, and the State of Michigan though still below the national average are still significantly higher than that of Beecher Site. Within Beecher Site, healthcare, food at home, food away from home, and TV/audio/video represent the highest SPI values, suggesting that most consumers purchase those products most often, and investments, apparel & services, and travel the least.

Overall the data indicates the existence of little disposable income for residents of the Beecher site. As a result the potential for retail development servicing residents of this area based on values of the SPI alone is marginal. It is important to note however that the SPI does not account for what exists currently within the area, therefore a final conclusion on the potential for commercial development cannot be concluded. To satisfy this need, Figures 3.5.2 to 3.5.4 presents the Surplus/Leakage Factor for retail industries within one (1) mile radius, three (3) mile radius, and five (5) mile radius of the center of the Beecher site.

Figure 3.5.2 Surplus/Leakage Factor 1 mile radius
Source: ESRI, 2010

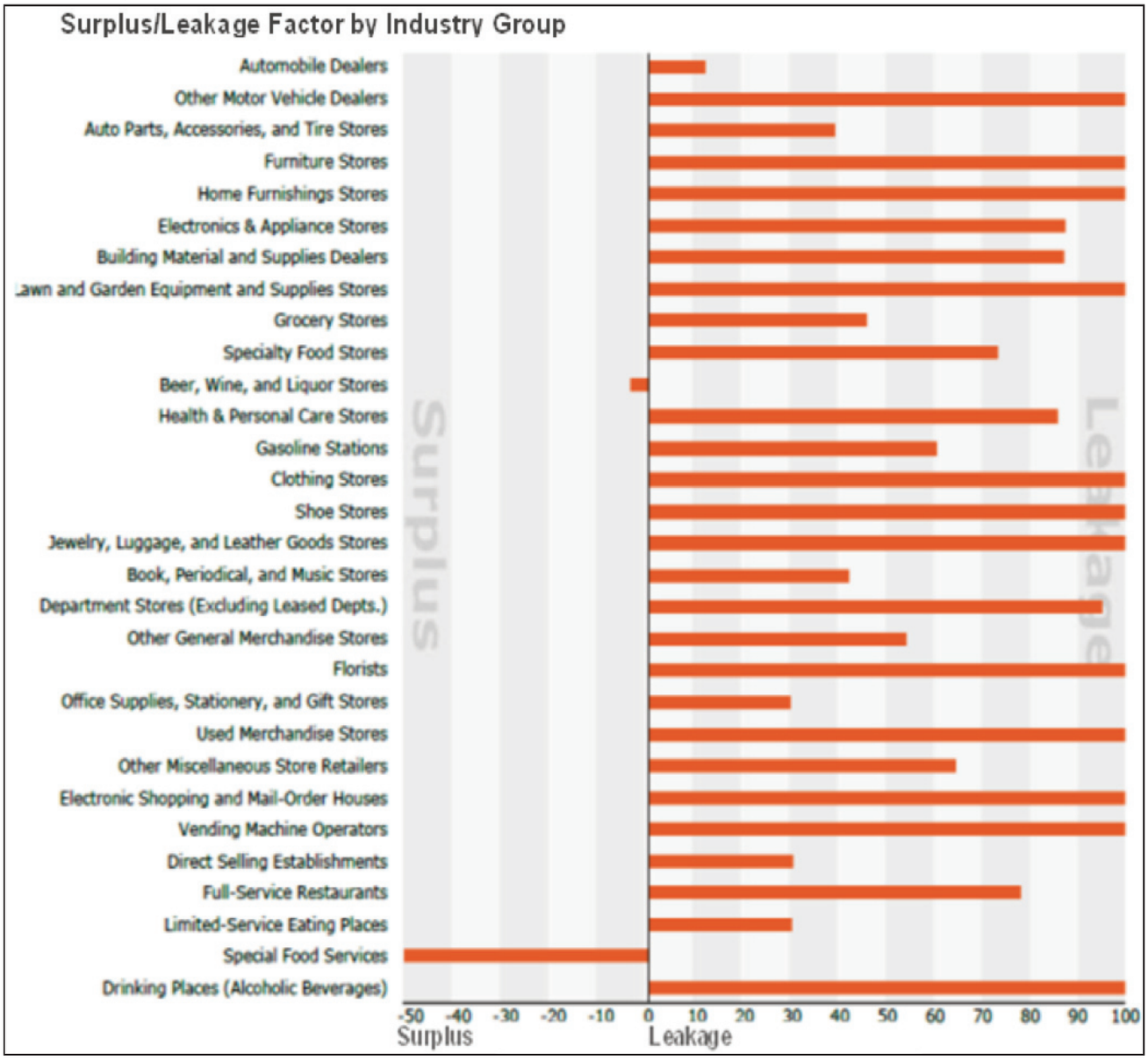


Figure 3.5.3 Surplus/Leakage Factor 3 mile radius
Source: ESRI, 2010

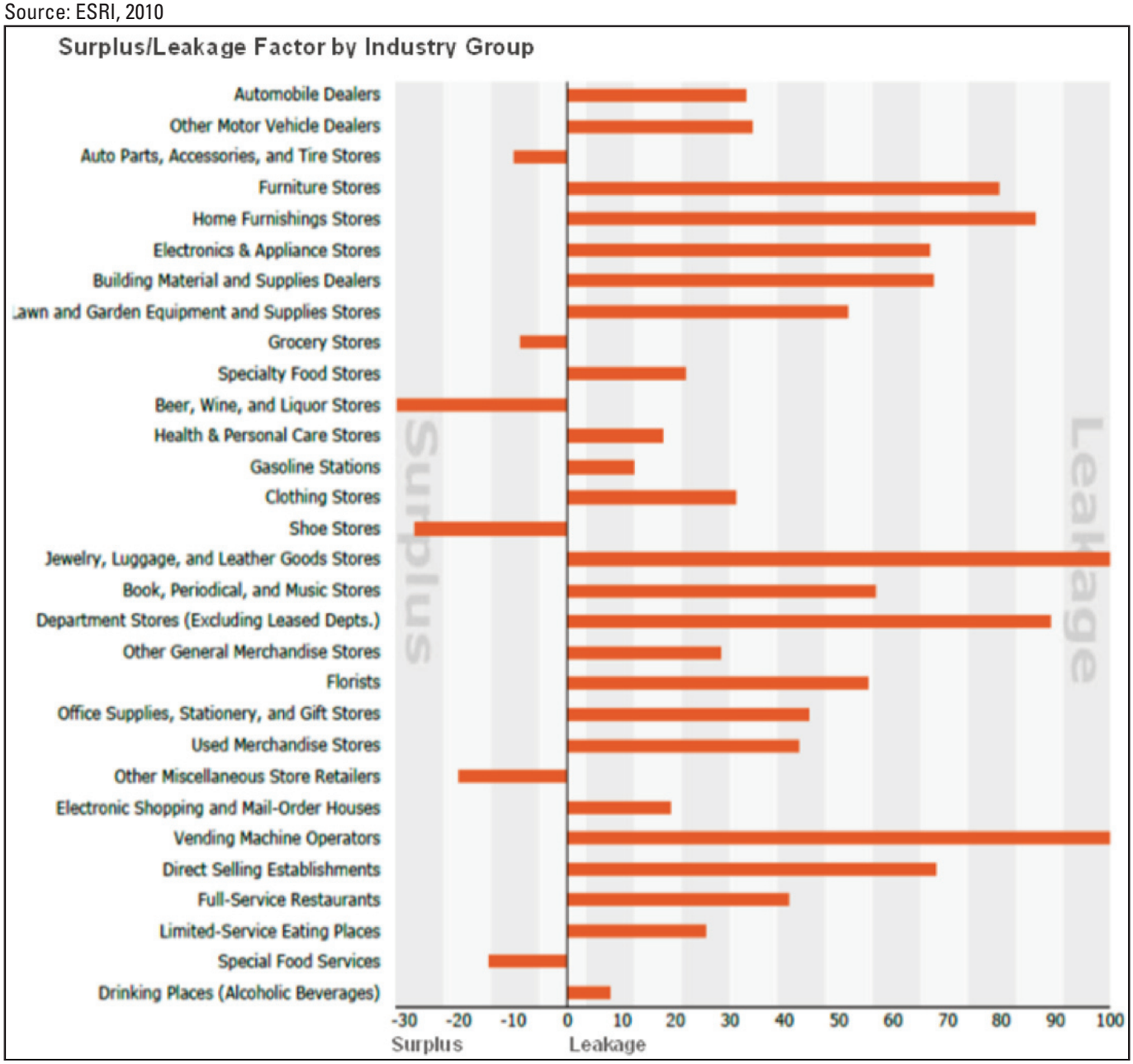
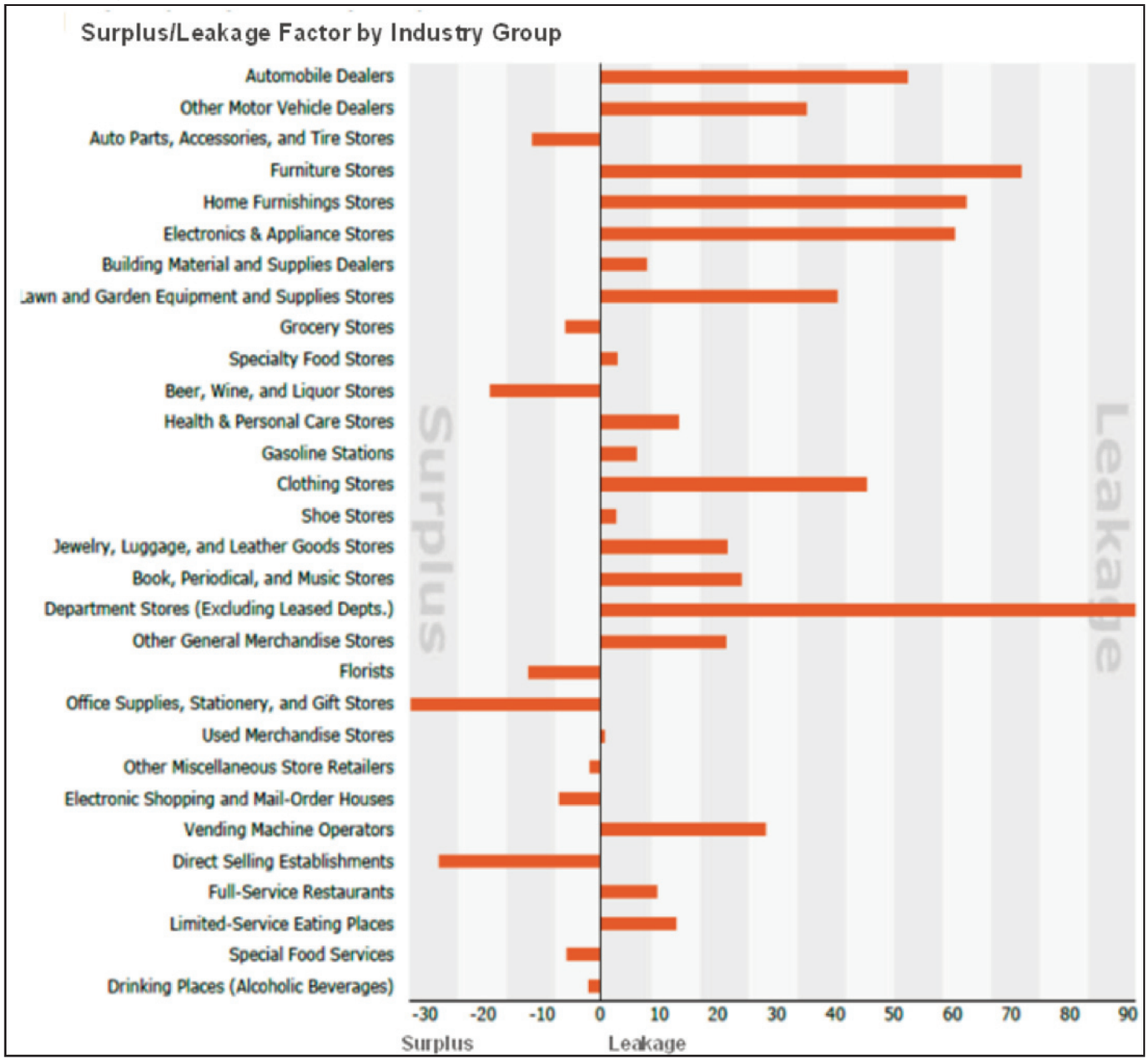


Figure 3.5.4 Surplus/Leakage Factor 5 mile radius
Source: ESRI, 2010



The presented data illustrates leakage on virtually all industries within a one mile radius of the center of Beecher Site; a slight increase in surplus within a three mile radius, and a greater increase in surplus within a five mile radius. Surplus among the three analyzed geographic distances exists for the following industries:

- Auto parts, accessories, and tire stores
- Grocery stores
- Beer, wine, and liquor stores
- Shoe stores
- Florists
- Office supplies, stationary, and gift stores
- Other miscellaneous store retailers
- Electronic shopping and mail-order houses
- Direct selling establishment
- Special food services
- Drinking places (alcoholic beverages)

Due to a larger supply than demand curve for the above industries, the development of such retail stores in and around Beecher Site is not recommended. Following a process of elimination, from this analysis there may be potential for retail development for other retail industries. Among retail industries showing leakage, the following four industries are most significant, based on aggregate leakage/surplus factor across all three geographic units:

- Furniture stores
- Home furnishing stores
- Electronic & appliance stores
- Department stores (excluding lease depts.)

In conclusion, the analysis provided based on the SPI and leakage factor illustrates a potential demand for commercial development in Beecher Site. It is important to note that this demand is likely marginal due to the lower than national average SPI of households residing in Beecher Site, Mount Morris Township, and Genesee County, and represents a regional demand for commercial development and is not necessarily limited to Beecher Site alone.

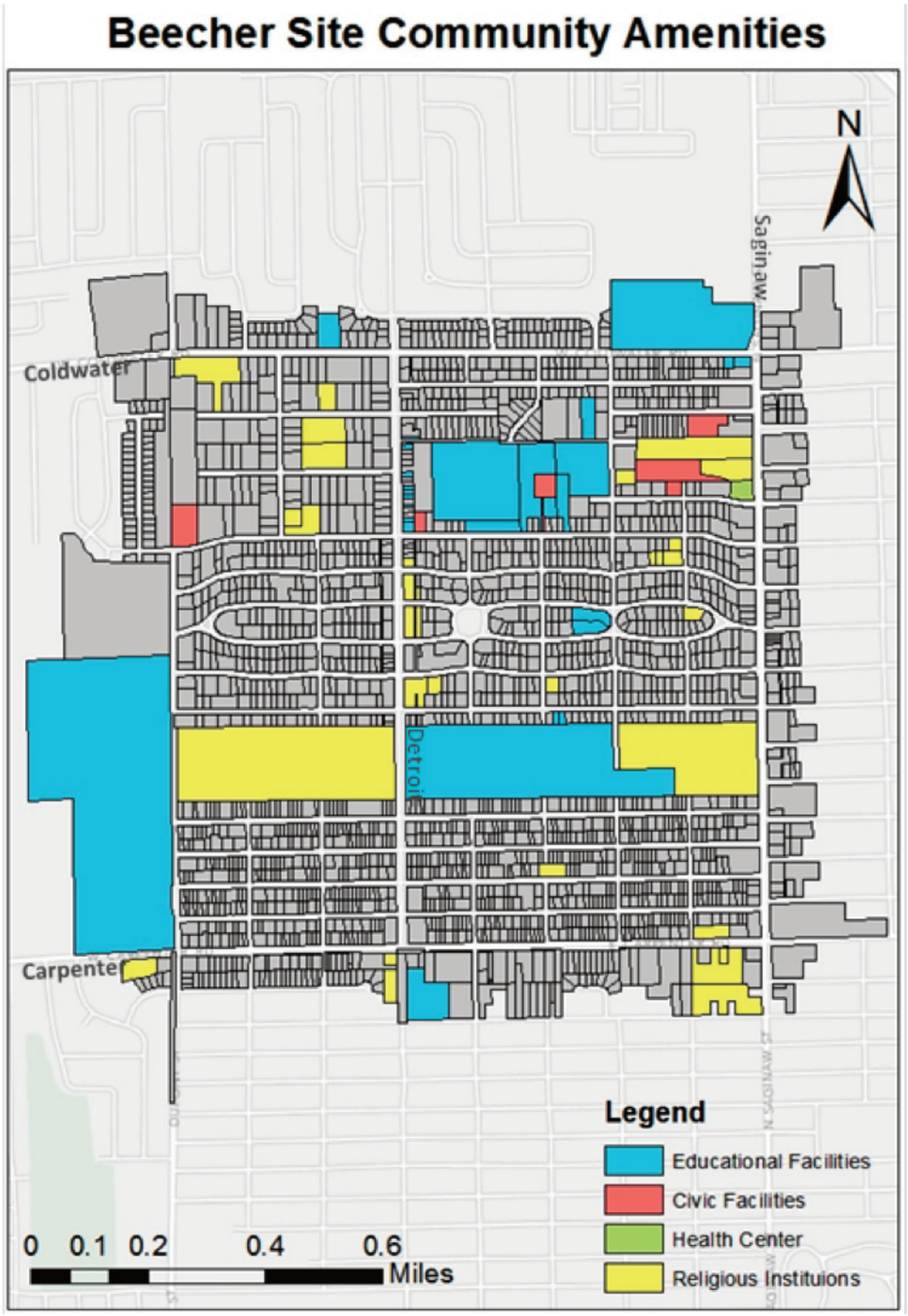
3.6 Community Amenities

Community amenities represent those establishment within Beecher site which serve a specific purpose other than a commercial/retail development and which are open to the general public. The purpose of listing these features is to identify possible viable community anchors and/or assets which may be used to support the future land use development of the area.

Community amenities have been divided into four categories depending on what is available and they function they play. These include Educational facilities representing schools and structures whose main purpose is education; Civic facilities representing government run amenities such as fire department, water department etc; Health center representing those facilities whose main role is health related services; and Religious institutions which includes places of worship. Data has been collected and assembled from field work in March 2012 and GIS databases provided by Genesee County.

According to the data presented, there are 23 educational related parcels, 6 civic related parcels, 1 health related parcel, and 25 religious related parcels within the boundaries of the Beecher site. Their general distribution follows no cluster pattern as they spread out throughout the region. The only individual exception is provided by the civic facilities which are located in the northern portion of the site.

Figure 3.7.1 Beecher Site Community Amenities
Source: Generated from field work and Genesee County GIS data



3.7 Sewer & Water Infrastructure

The following section is introduced to analyze current conditions of the sewer and water infrastructure within Beecher site. These utilities are provided by the Beecher Metropolitan Water and Sewer District, established in 1938. Sewer and water infrastructure can be an indicator of conditions of public underground utilities within the area of Beecher site. An aging sewer and water infrastructure can indicate the inability of the region to support future development within the area, and possible deteriorating conditions for existing development. An updated and well maintained system can indicate the opposite for the region.

Regretfully, sewer & water infrastructure for this site could not be obtained in time to be considered in this

report. It is recommended however that such data be reviewed in the future if additional studies on the site are conducted in order to determine current conditions of the infrastructure and the role it can play on prospective revitalization efforts of the site.

3.8 Site Factors Summary

The site factors summary is presented to provide a summation of the physical characteristics analyzed in the Beecher site.

Zoning – Beecher site is zoned mostly R-1 and R-2 which allows for residential development. Commercial units (C-1, C-2) are zoned for east of the site along Saginaw Road and partially along Detroit Street. Office services districts (OS) are zoned for on small sections along Coldwater Road and Saginaw Road.

Land Use – Existing land use in Beecher site is characterized mainly by residential units. Commercial units are located primarily along Saginaw Road and partially along Detroit Street. Public or Exempt activities comprise a large section of the southern side of the target area and also comprise small parcels which spread out throughout the area.

Nonconforming Uses – Beecher site is characterized by slight nonconformance of uses as based on the zoning map and current land uses. Nonconforming uses are primarily located along Detroit Street, Saginaw Road, and Central Beecher site.
Transportation

Broad Infrastructure – Transportation in Beecher site and its surrounding area is provided through several main arterial roads, thoroughfares, and highways. Major transportation routes include several highways (e.g. I-75, I-475, M-54), and the CSX transportation Rail which is rail freight system.

Internal Infrastructure - Street configuration of Beecher site is mainly characterized by irregular, rectangular oblong grid patterns. Most streets act mainly as a conduit for journeys from residencies to regions outside of the Beecher Site. Detroit Street runs north and south and is the only thoroughfare which crosses through the neighborhood. Based on field observations, sidewalks are nearly absent from Beecher site; pedestrian mobility both in the surrounding area and within Beecher site is marginal.

Commuting Patterns – The primary mode of transportation to work for the Beecher CDP is by driving alone (76%), carpooling (16%), public transportation (2.4%), walking (1.2%). On a comparative perspective, these variations are most distinct between residents who carpooled, used public transportation, and walked to work. Approximately 9% of the population in the CDP own no vehicle, while 42% own one vehicle. In terms of commuting time, population in the CDP generally travels further to their place of employment than the population of Genesee County and the State of Michigan.

Public Transit - Public Transit in Genesee County is provided by the Flint MTA. The MTA operates 14 main fixed routes. Out of these, four fixed routes run adjacent or through the Beecher site. According to data provided by the MTA, these routes have experienced an 84% increase in ridership numbers from 2003 to 2008. This increase in ridership numbers, accompanied by commuting patterns of the Beecher CDP population, demonstrates a supported need for public transit in the area.

Market Profile - The market profile conducted to assess the potential for commercial development in the area was analyzed against the backdrop of the SPI and the leakage/surplus factor. Based on data analyzed on these

two elements, the study illustrates a potential demand for commercial development in Beecher site. It is important to note that this demand is likely marginal due to the lower than national average SPI of households residing in Beecher site, Mt. Morris Twp., and Genesee County.

Community Amenities – Community amenities within Beecher site were identified in terms of availability and the functions they play. Based on these criteria, with exception of the omission of commercial/retail development, 23 educational related parcels, 6 civic related parcels, 1 health care related parcel, and 25 religious related parcels were identified within the boundaries of Beecher site.

Sewer & Water Infrastructures - Sewer & water infrastructure for this site could be obtained for consideration in this report. It is recommended however that such data be reviewed in the future to determine current conditions of the infrastructure and the role it can play on prospective revitalization efforts of the site.

IV. Land Use Analysis

The following section presents data gathered by this MSU practicum team, referred to in this section as "Team Genesee," on land use, status of the housing stock, and occupancy of all structures found on a parcel of land within Beecher Site. These data are analyzed for the effects of parcel vacancy and abandonment both at present and in the near future.

4.1 Housing Stock

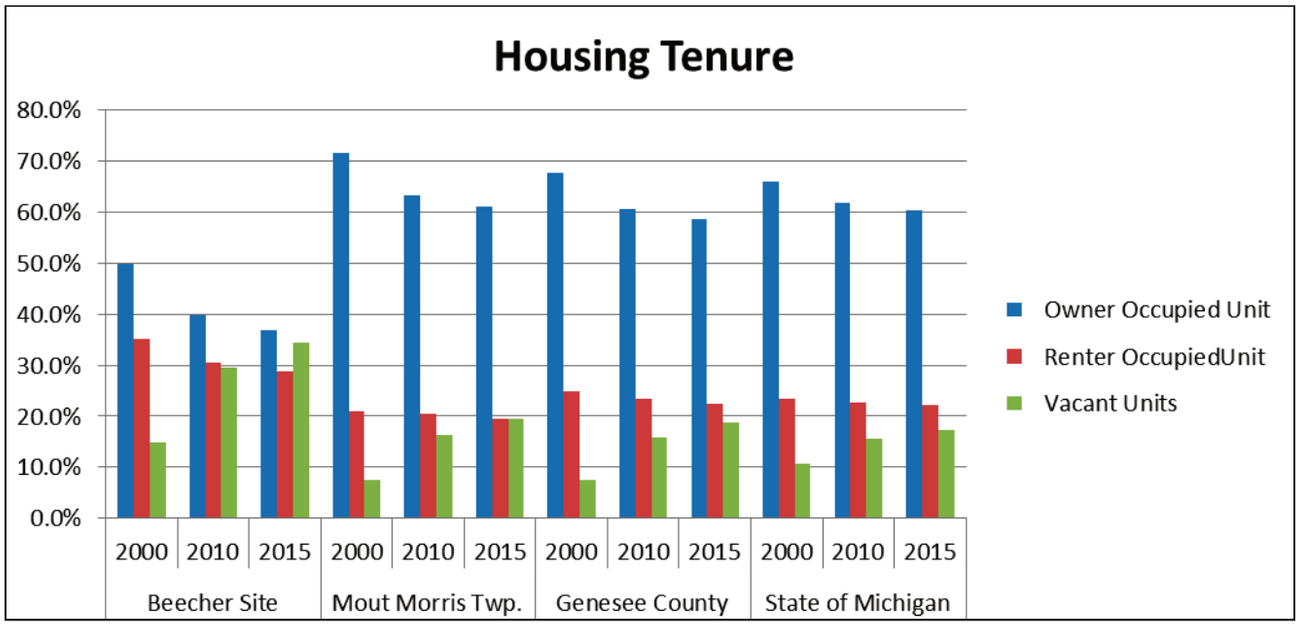
The housing stock section presents a general perspective on the housing conditions for households located within Beecher site. Data were collected through ESRI Business Analyst Online (BAO) which bases its findings upon data provided by the U.S. Census Bureau. It is important to note that such data include a margin of error, therefore figures are not completely accurate. Due to this factor this section has as its intent to act as a supplementary introductory role to the land use inventory and land use ownership following this analysis.

4.1.1 Housing Tenure

Vacancy rates are an important marker of a region's economic status. A high vacancy rate entails the existence of a housing surplus. In comparison, a decline in housing vacancy suggests that the economic activity of a region is improving, consequently increasing housing demand. In the latter instance, existing vacant units are occupied and undesired units are renovated for future uses.[34]

Table 4.1.1.1 in Appendix 1 presents housing tenure trends for 2000, 2010, and projections for 2015 for the Beecher site, Mount Morris Township, Genesee County, and the State of Michigan. Figure 4.1.1.1 provides data for these characteristics in graph form.

Figure 4.1.1.1 Housing Tenure
Source: U.S. Census Bureau, 2000 Census of Population and Housing; ESRI, forecasts for 2000 and 2015



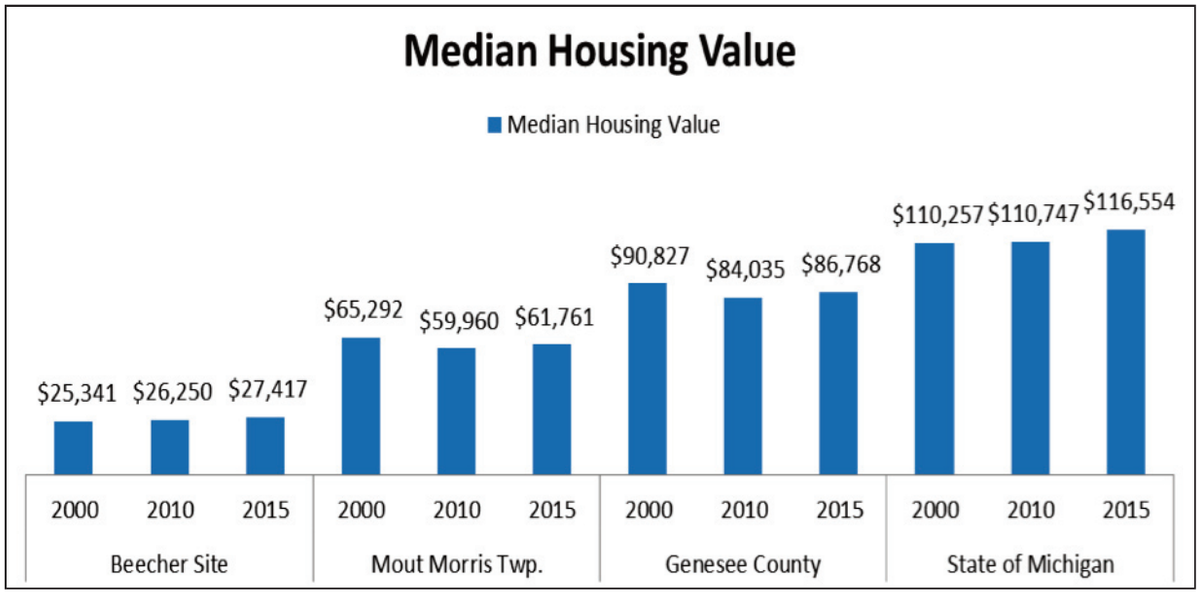
Presented data indicates that the Beecher site is characterized by a slightly larger rental housing market than the other geographic units analyzed. Renter occupied housing as of 2010 comprised approximately 30% of the total housing stock, while approximately 40% was characterized as owner-occupied housing, In comparison, Mount Morris Township, Genesee County, and the State of Michigan consist of a different housing tenure breakdown, where rental housing units comprise approximately 21% to 23% of their total housing stock; while owner occupied housing comprise approximately 61% to 64% of the housing stock.

In terms of vacancies, housing units in Beecher site comprise a larger proportion of the housing stock than those of the other geographic units analyzed. As of 2010, vacancies comprised approximately 30% of the housing. These figures are nearly double what they were in 2000 and are projected to continue to rise going in into 2015. As a result of these trends and comparisons, data suggests the existence of a housing surplus in the Beecher site.

4.1.2 Median Housing Value

Median housing value reflects the median assessed price of housing units within a specific geography. Figure 4.1.2.1 illustrates median housing value for 2000, 2010, and projections for 2015 for Beecher site, Mount Morris Township, Genesee County, and the State of Michigan.

Figure 4.1.2.1 Median Housing Value
Source: U.S. Census Bureau, 2000 Census of Population and Housing; ESRI, forecasts for 2000 and 2015

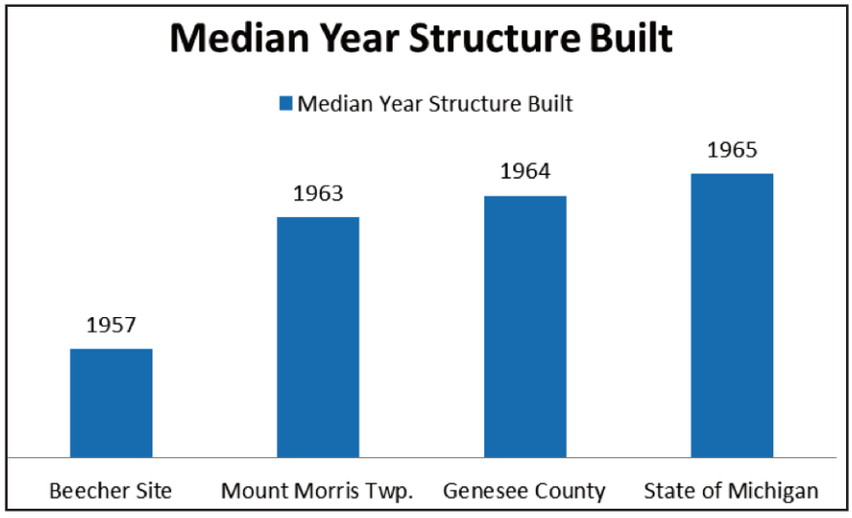


Median housing values in Beecher site have been experiencing a slight increase since 2000. Nevertheless, on a comparative perspective, these values are lower than those of the other geographic units analyzed. As of 2010, median housing values in Beecher site were approximately half of those of Mount Morris Township, 1/3 of the median housing value in Genesee County, and 1/5 of the median housing value in the State of Michigan.

4.1.3 Median Year Structure Built

Median year structure built represent the average age of the housing stock. Figure 4.1.3.1 illustrates median year structure built for Beecher site, Mount Morris Township, Genesee County, and the State of Michigan as of 2000. It should be noted that 2000 data was used instead of 2010 due to lack of accurate data for the geography of Beecher site.

Figure 4.1.3.1 Median Year Structure Built
Source: ESRI BAO



Data presented illustrates that the age of the housing stock in Beecher site is older than that of other units analyzed. As of 2010, the median year structure built for this area was 1957. Comparatively, the housing stock of Mount Morris Township, Genesee County, and the State of Michigan was reported as 8 to 10 years younger at approximately 1963-1965. Consequently, in terms of the median year structure built, Beecher site can be said to be an outlier.

4.2 Land Inventory

A windshield inventory of parcels was conducted at the beginning of the project. Parcels were classified as one of the following:

occupied: possessing one or more man-made structures on the parcel

vacant: an empty parcel of land with no man-made structures present

abandoned: a parcel of land which appears to have been previously occupied but has since fallen into disrepair; a parcel of land which contains unkempt structures or yards; a parcel of land which contains a partially or completely destroyed structure, by fire, water or Act of God

Parcels judged to be abandoned were photographed for later analysis. Data tables extracted from ArcGIS shapefiles provided by GCMPC officials were parsed into a Google Docs spreadsheet. Inventory was collaboratively coded onto this spreadsheet and parsed back into ArcGIS 9.2 and GRASS GIS for analysis and representation.

Initial inventory was taken on February 1, 2012. A second team of students were dispatched on February 22, 2012 to verify these data, assuring their consistency. Figure 4.2.1 presents the data collected and processed on March 18, 2012.

Of the 1,712 parcels within Beecher Site, inventory count as determined by Team Genesee is listed below in Table 4.2.1

For in-depth analysis, Beecher Site was divided into nine regions. These regions share similar characteristics and often exhibit clustering of inventory classifications. The nine regions are displayed below in Figure 4.2.2. Each of these regions is analyzed in detail on the following pages.

Table 4.2.1 Beecher Site Inventory Count
Source: Team Genesee

Class	Count	%
Occupied	1,178	68.8%
Vacant	326	19.0%
Abandoned	208	12.2%
Total	**1,712**	**100%**

Figure 4.2.2 Inventory Regions
Source: Team Genesee

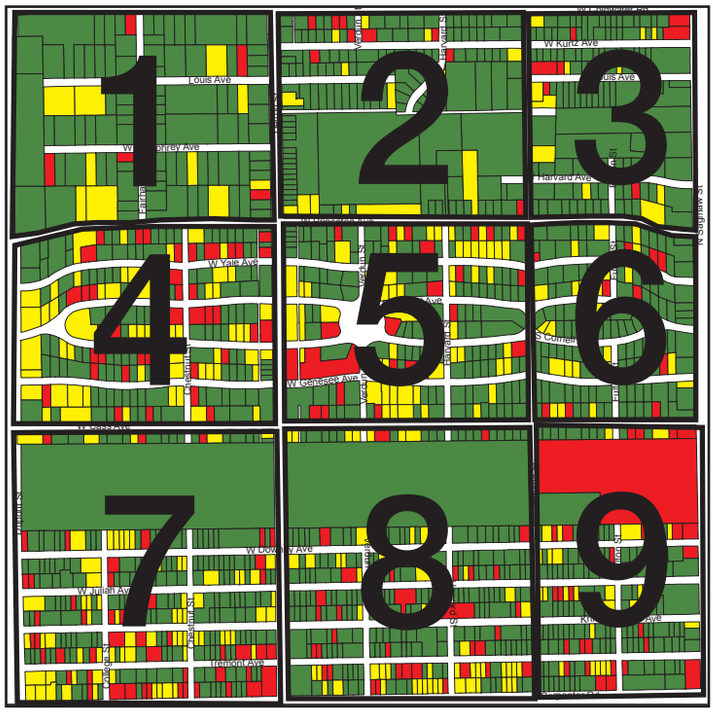
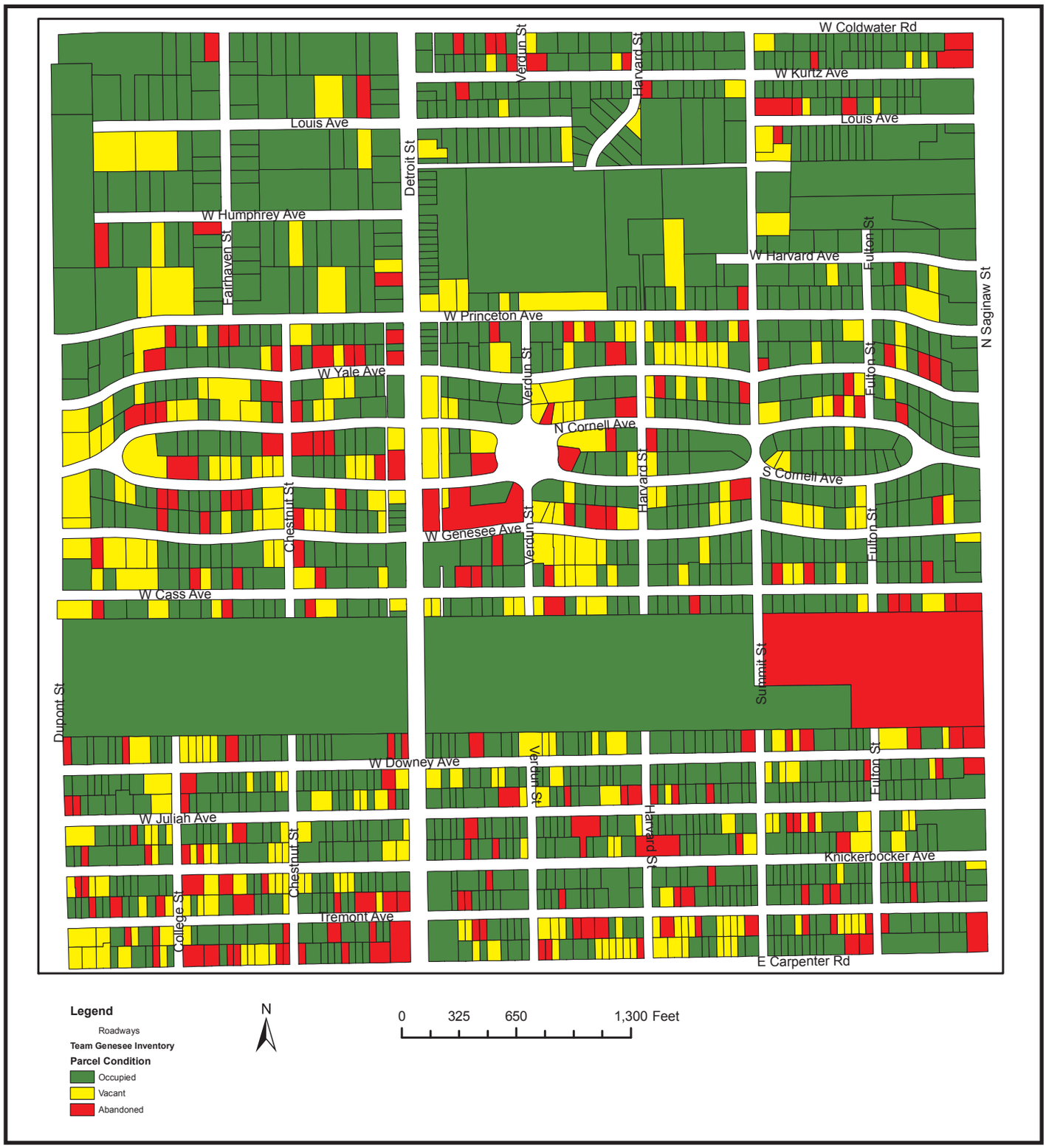


Figure 4.2.1 Parcel Inventory
Source: Team Genesee



4.2.1 Region 1

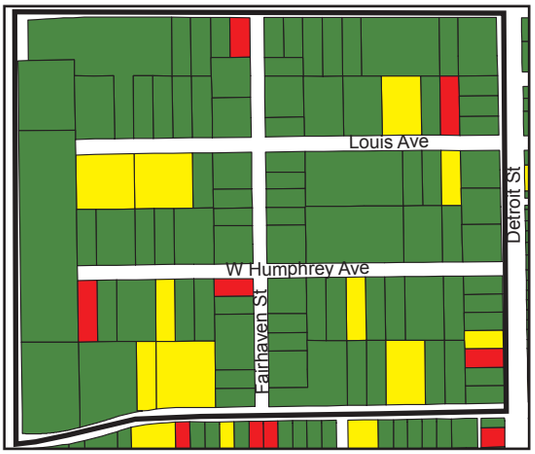


Table 4.2.1 Region 1 Count
Source: Team Genesee

Class	Count	%
Occupied	84	84.8%
Vacant	10	10.1%
Abandoned	5	5.1%
Total	99	100%

Region 1 is characterized by the lowest proportion of abandoned parcels and the highest proportion of occupied parcels. The region is the northeastern corner of Beecher Site, with W Coldwater Road bordering to the north and Dupont Street to the west; W Princeton Avenue to the south and Detroit Street to the east. Two sets of vacant parcels lie adjacent to one another, while a third vacant parcel is adjacent to an abandoned parcel. The remaining three vacant parcels are scattered along W Humphrey Avenue and Louis Avenue.

4.2.2 Region 2

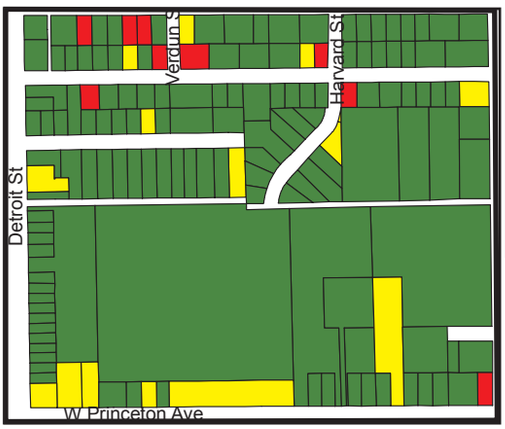


Table 4.2.2 Region 2 Count
Source: Team Genesee

Class	Count	%
Occupied	130	84.5%
Vacant	15	9.7%
Abandoned	9	5.8%
Total	154	100%

Region 2 is characterized by a below-average number of abandoned and vacant parcels. The region is the northern central segment of Beecher Site, with W Coldwater Road bordering to the north and Detroit Street to the west; W Princeton Avenue to the south and Summit Street to the east. The large occupied parcel in the southwestern-central area belongs to Beecher Community School District, while the surrounding parcels are nearly entirely residential, with the exception of commercial parcels on the corner of W Kurtz Avenue and Detroit Street; and the corner of W Coldwater Road and Detroit Street. Several vacant and abandoned parcels are surrounded by occupied parcels, but the majority of the few are adjacent to one another.

4.2.3 Region 3

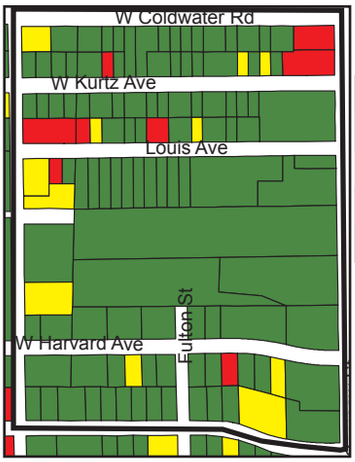


Table 4.2.3 Region 3 Count
Source: Team Genesee

Class	Count	%
Occupied	102	84.3%
Vacant	11	9.1%
Abandoned	8	6.6%
Total	121	100%

Region 3 is characterized by the highest proportion of occupied parcels. The region is the northeastern corner of Beecher Site, with W Coldwater Road bordering to the north and N Saginaw Street to the east; W Princeton Avenue to the south and Summit Street to the west. The area is primarily residential. The parcels bordering with N Saginaw Street are almost entirely commercial. Two exceptions to this are the Macedonia Missionary Baptist Church and Hamilton Community Health Network. Nearly all parcels between W Harvard Avenue and W Kurtz Avenue are unoccupied, with abandoned parcels in the center of unoccupancy.

4.2.4 Region 4

Table 4.2.4 Region 4 Count
Source: Team Genesee

Class	Count	%
Occupied	121	56.3%
Vacant	57	26.5%
Abandoned	37	17.2%
Total	215	100%

Region 4 is characterized by the highest proportion of vacant parcels and the second-highest proportion of abandoned parcels. The region is the eastern-central segment of Beecher Site with Dupont Street as its western border and Detroit Street as its eastern; W Princeton Avenue to the north and W Cass Avenue to the south. The region is primarily residential with several parcels owned by the land bank scattered throughout. Two commercial lots exist along Detroit Street. Several abandoned or vacant parcels are surrounded by occupied parcels. The majority of vacant and abandoned parcels are tightly clustered together.

4.2.5 Region 5

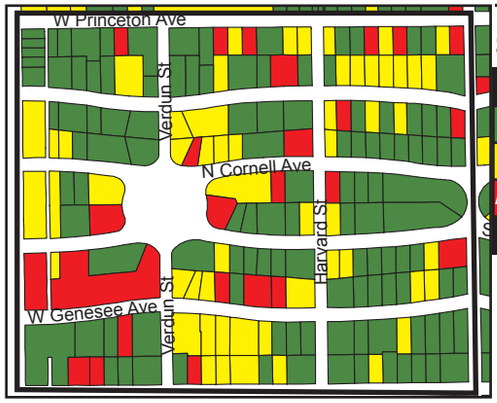


Table 4.2.5 Region 5 Count
Source: Team Genesee

Class	Count	%
Occupied	118	60.2%
Vacant	54	27.6%
Abandoned	24	12.2%
Total	196	100%

Region 5 is characterized by the second highest proportion of vacant parcels. The region is at the center of Beecher Site with Detroit Street as its western border and Summit Street as its eastern; W Princeton Avenue to the north and W Cass Avenue to the south. While primarily residential, several vacant commercial parcels exist at the corner of Detroit Street and run along W Genesee Avenue to Verdun Street. Beecher School District owns two parcels at N & S Cornell Avenues at Summit Street. Almost an entire block along W Genesee Avenue is abandoned while another is vacant. Almost all abandoned or vacant parcels are adjacent and tightly clustered together.

4.2.6 Region 6

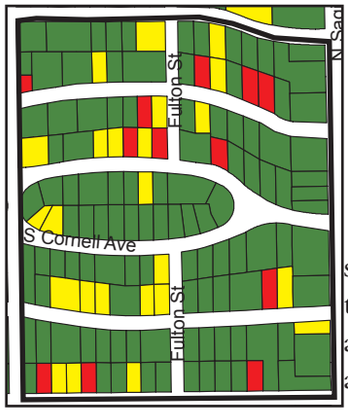


Table 4.2.6 Region 6 Count
Source: Team Genesee

Class	Count	%
Occupied	108	75.0%
Vacant	24	16.7%
Abandoned	12	8.3%
Total	144	100%

Region 6 is characterized by the second-lowest proportion of abandoned parcels. The region is the western-central segment of Beecher Site with Summit Street as its western border and N Saginaw Street as its eastern; W Princeton Avenue to the north and W Cass Avenue to the south. A strip of commercial parcels lie along Detroit Street while the remainder of the region is residential with several land bank owned parcels. While a few abandoned or vacant parcels are isolated, the majority are adjacent to another abandoned or vacant parcel.

4.2.7 Region 7

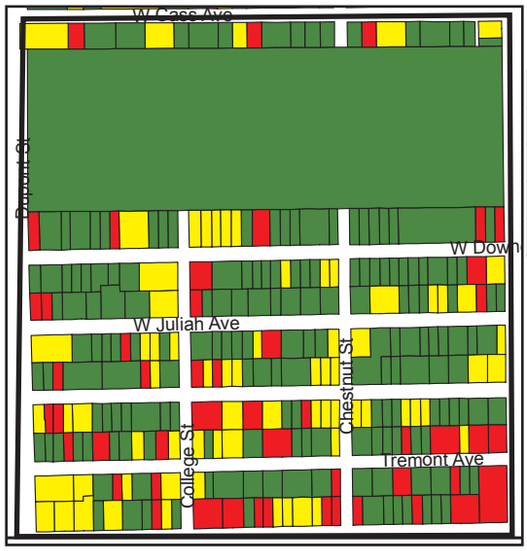


Table 4.2.7 Region 7 Count
Source: Team Genesee

Class	Count	%
Occupied	184	60.3%
Vacant	72	23.6%
Abandoned	49	16.1%
Total	305	100%

Region 7 is characterized by the second lowest proportion of occupied parcels. It also contains the greatest number of parcels. The region is the southwest corner of Beecher Site with Dupont Street bordering to the west, W Carpenter Road to the south; W Cass Avenue to the North and Detroit Street to the east. With the exception of Express Mart of MI, LLC on the southeast corner of the region at the intersection of W Carpenter Road and Detroit Street, the area is entirely residential. The large parcel stretching the width of this region in the northern segment is currently occupied by Greater Friendship Azusa Ministries. Several vacant and abandoned parcels exist, but the majority are tightly clustered.

4.2.8 Region 8

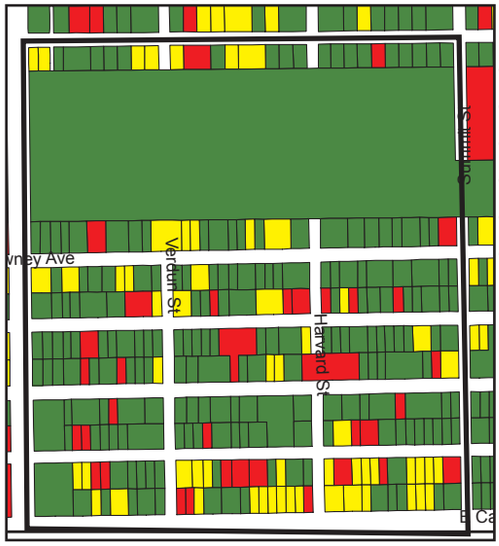


Table 4.2.8 Region 8 Count
Source: Team Genesee

Class	Count	%
Occupied	203	68.8%
Vacant	57	19.3%
Abandoned	35	11.9%
Total	295	100%

Region 8 is characterized by containing the second greatest number of parcels. The region is the southern central segment of Beecher Site with Detroit Street bordering to the west, E Carpenter Road to the south; E Cass Avenue to the north and Summit Street to the west. One commercial parcel exists on the southwestern corner of the region, at the intersection of Detroit Street & E Carpenter Road. Beecher School District currently occupies the large parcel that stretches the length of the region in the northern segment. The remainder of the parcels are residential. While some abandoned parcels are isolated, the majority along Knickerbocker Avenue are tightly clustered.

4.2.9 Region 9

Table 4.2.9 Region 9 Count
Source: Team Genesee

Class	Count	%
Occupied	128	70.0%
Vacant	26	14.2%
Abandoned	29	15.8%
Total	183	100%

Region 9 is characterized by nearly equal proportions of vacant and abandoned parcels. The region is the southeastern corner of Beecher Site with N Saginaw Street bordering to the east, E Carpenter Road to the south; Summit Street to the west, and E Cass Avenue to the north. This region possesses the most diverse land use of all regions analyzed. An industrial parcel lies along E Carpenter Road next to Grace Tabernacle Missionary. With the exception of the large vacant El Bethel Evangelical Baptist Church in the northern segment of this region, commercial parcels lie entirely along N Saginaw Street. The remainder of parcels are residential with tight clustering of vacant and abandoned parcels.

4.2.10 Inventory Regions Summary

The majority of parcels within Beecher Site are occupied. Despite this, the majority of vacant and abandoned parcels are densely concentrated in the central regions 4, 5, and 6 between W Cass Avenue and W Princeton Avenue. This region is marked by a greater proportion of vacant parcels in a tightly clustered pattern. In contrast, the southern regions 7, 8, and 9 between W Downey Avenue and W Carpenter Road possesses more abandonments and fewer vacancies in a less defined clustered pattern. While there are some clusters of abandoned and vacant parcels adjacent to each other, there are few, if any, whole blocks of parcels that might be demolished for extensive redevelopment.

The reader is advised to consider the time of year during which this inventory was taken. Initial inventory was taken in late winter where a significantly greater number of parcels were judged to be abandoned. Upon revisiting the site in warmer weather during early spring, several parcels previously judged as abandoned were rejudged to be occupied. While this practicum team has done everything under their control to ensure data quality, error was measured consistently throughout this project at 1% or less for each inventory journey. This has been corrected as much as humanly possible through a number of relational databases and human perseverance.

Further study of regional occupancy must consider the proportion of vacancy and abandonment to the number of parcels in a studied region.

4.3 Land Ownership and Occupancy

Land occupancy often plays a role in the upkeep of a property. Owner occupied properties tend to be well-kept and maintained over the years. In contrast, absentee owned properties tend to be less well maintained. To determine whether a parcel is resident owned or absentee owned, data were analyzed with ArcGIS 9.2.

Land ownership was analyzed from data provided by Genesee County Metropolitan Planning Commission. Parcel attributes were queried across several fields provided in the shapefile. A large amount of data was provided, including parcel postal address; its parcel ID number; zoning district classification; type of parcel based on zoning district, including commercial, industrial, residential, and exempt; acreage; school district; the parcel's owner and address; the taxee's name and address; whether the parcel is exempt from taxation; the parcel's assessed value; and the CAP and state-equalized values of structure(s) residing upon the parcel. All operations performed in ArcGIS 9.2 were later verified with GRASS GIS.

It was noted early in the analysis that 166 of 1712 parcels within the Beecher Site area possessed no taxee information. It is unclear why these fields are null. We based this analysis on the potential difference between the owner's address, the taxee's address, and the parcel's address. It is assumed that the tax bill is sent to the taxee, and that their difference signifies a parcel being occupied by someone other than the owner of the parcel.

Parcels were selected by the following criteria:

```
IF owner's street = taxee's street AND owner's city = parcel's city
THEN the parcel is occupied by its owner
```

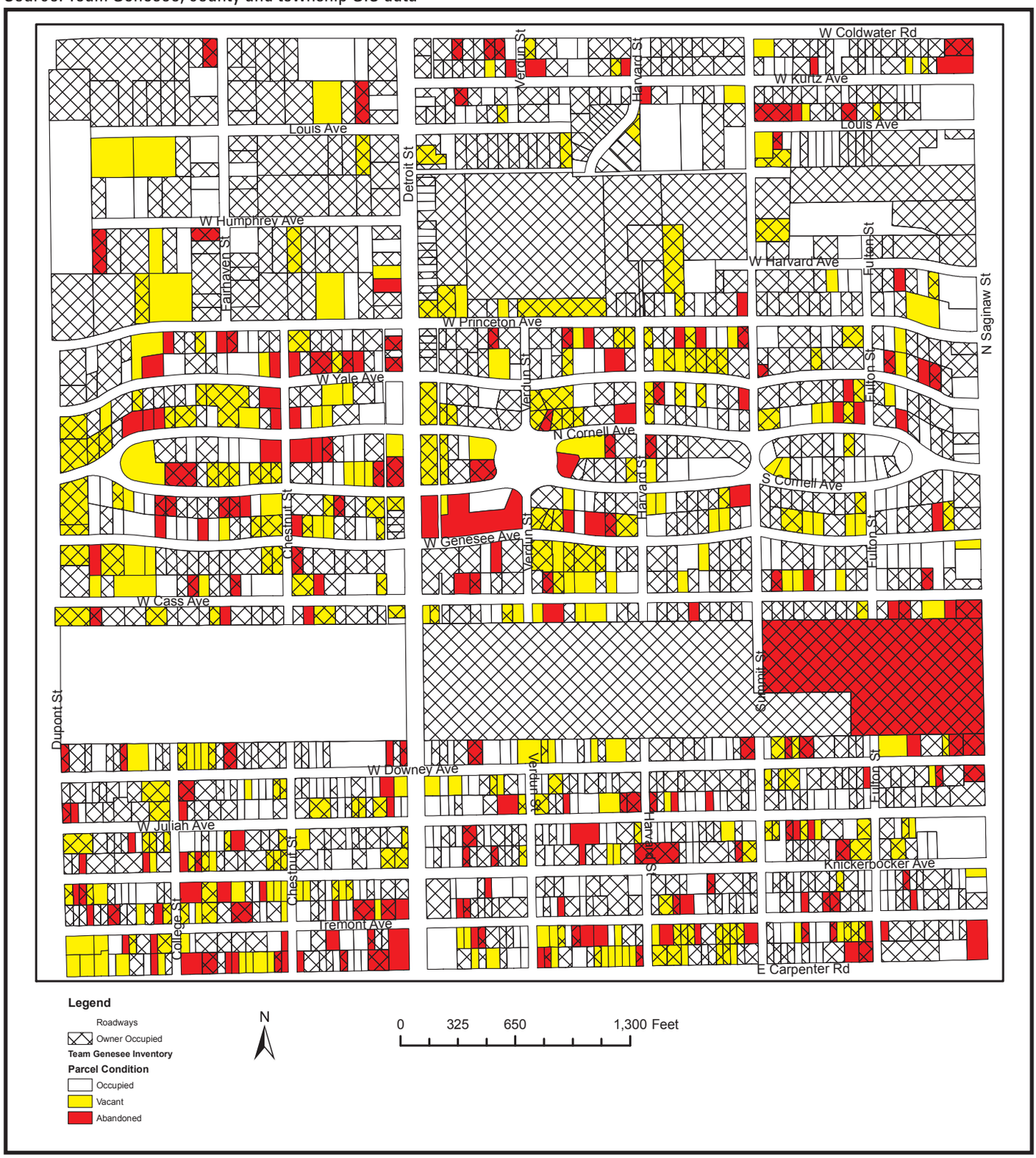
1,067 of 1,712 parcels were returned, approximately 62.2% of all parcels in Beecher Site. Figure 4.3.1 displays parcel occupancy.

It is difficult to determine the accuracy of this method to identify parcels owned by their occupant. Several parcels identified as abandoned and vacant are marked as owner occupied. However, the majority of abandoned parcels are uninhabitable. The general trend seems to indicate that parcels not occupied by their owner tend to become vacant or abandoned. It seems likely that this trend will continue, and parcels currently classified as occupied by an absentee owner may become abandoned in the near future.

4.4 Land Use Summary

Beecher Site is characterized by a significant proportion of residents who live in rental housing and an increasing number of vacancies. Housing values are estimated at one-third of the surrounding area while the average age of a residential structure is ten years older than this same surrounding area. An inventory of land revealed that almost twenty percent of land parcels are vacant with another twelve percent abandoned. While determination of owner occupancy is not perfect, it is a window into the future where the central and southern areas of Beecher Site may be abandoned. We now turn to an assessment of demolition possibilities to free up unused land for new uses.

Figure 4.3.1 Owner Occupied Parcels
Source: Team Genesee; county and township GIS data



V. Demolition Assessment

The topic of demolition will be utilized by this study to identify and prioritize those abandoned structures which may be appropriate for redevelopment under future proposed land use plans in this report. Creation and analysis of the demolition criteria is closely based on the NSP guidelines for demolition, as it represents the funding program currently driving the redevelopment plan in the Beecher site.

5.1 Demolition Policy Overview

Demolition is an eligible activity under the NSP enacted by the Department of Housing and Urban Development (HUD). As most federal, state, and local laws, this activity is defined by specific guidelines and regulations. Consequently, to ensure conformance and compliance with its rules, the activity of demolition needs to follow the guidelines and meet the definitions as described under the NSP.

Following are the definitions provided under this program which acts as guidance in defining properties which are eligible for demolition. This presented information will serve as the basis of the creation of the demolition criteria in this report. Information has been extracted from the Housing and Economic Recovery Act (HERA) Title III Sec. 2301 & the NSP Explanation of Property Types under Each Eligible Use, released by the Department of Housing and Urban Development (HUD) as of December 3rd, 2009.

The following are the definitions and guidelines related to the activity of demolition, an eligible use under the NSP.

"NSP Notice Definition: Blighted structure. A structure is blighted when it exhibits objectively determinable signs of deterioration sufficient to constitute a threat to human health, safety, and public welfare.

For "blighted structures":

The NSP Notice defines "blighted structures", as shown above. HUD has taken the position that any type of structure that is blighted may be demolished with NSP funds. This means that commercial, industrial or other types of structures may be demolished in addition to homes and residential structures in areas of greatest need.

In general, demolition must have an end use that meets a national objective (National Objectives: Benefiting low and moderate (L/M) income person; Addressing slums or blight; or meeting a particularly urgent community development need). There are a couple of cases in which the demolition can be an end itself. First, in a low moderate and middle income (LMMI) area, if the property creates an extreme danger to public health or safety (like a meth lab or collapsing structure), then it can be considered an area benefit (LMMA, Low/mod area benefit: the service area identified for activities is primarily low/mod income.). Second, if the demolition is done in concert with a coordinated program of redevelopment and/or rehab and/or new construction and/or other improvements, including other demolition, in a target area, which together can reasonably be expected to improve the area, then it can also qualify as LMMA.

In all other cases, as with property in a land bank, it should lead to an end use that is eligible and meets a national objective in NSP. In this respect, land banked property and demolished property are just interim uses for which end uses must be planned. Such eligible end uses could include housing (redeveloped on the property), sale (or donation) of the property as side lots to LMMI neighbors, donation of the property to a community garden group, or use of the property as a public facility like a park (in NSP1 only). If the property is acquired, it could temporarily be placed in a land bank, but the same requirements will ultimately apply to both types of property.

Redevelopment for "demolished or vacant properties":

This Eligible Use allows communities to address the broadest range of property types. Because the legislation does not limit this use to homes and/or residential properties, HUD will permit grantees to acquire and redevelop ANY property type. This includes commercial or industrial property in addition to all types of residential property. Note that property acquired under Redevelopment need not be abandoned or foreclosed upon.

However, it MUST be vacant. Vacant properties include both vacant land and properties with vacant structures on the land. However, HUD understands redevelopment to imply that properties were once developed or are surrounded by existing development. Therefore undeveloped or greenfield sites, at the edge of development, may not be defined as an eligible use. Previously undeveloped in-fill sites are generally eligible."[85]

To provide for a more practical use of these definitions which will than assist the creation of the demolition criteria, demolition practices in previous NSP cases were reviewed. Specifically demolition practices for NSP 2, in the City of Pontiac, MI were reviewed.

Currently the City of Pontiac is redeveloping a neighborhood in central Pontiac utilizing NSP 2 funding. The project is being run by the City of Pontiac in cooperation with multiple local and statewide non-governmental organizations (NGO). According to C.J. Felton, Program Development Supervisor at Community Housing Network, Inc. (CHN), one of the involved NGO's, demolition practices in the NSP 2 for the City of Pontiac are generally based on two factors

- Does the property have significant foundation damage where the dollar amount necessary to rehabilitate the structure is more expensive than demolition and new-construction?
- Is the demolition process conducted in concert with a comprehensive neighborhood revitalization plan?[36]

5.2 Demolition Assessment

The following demolition assessment has been created based on the definitions provided under the NSP guidelines, and general methodology for identification of demolition eligible properties in the case of the City of Pontiac NSP 2 activity. The criteria created follows a scoring system of 1 to 3 where 1 presents the lowest value and 3 presents the highest value. Scores are provided for five categories: roof, door, window, siding, and lot & driveway. These categories represent the external feature of a structure, whose conditions can be visually analyzed without the need to inspect internal conditions of the unit. According to Kay Shull, Housing Inspector at CHN, visual inspections of these features provides a general perspective of internal structural foundation conditions (e.g. if structure is characterized by extreme fire damage on roof, water damage on sidings, windows and doors, the property likely suffers from internal structural foundation damage; if external conditions appear health, than the structure is less likely to be characterized by internal structural foundation damage).[37] Consequently, the creation, and analyses conducted based on this demolition criteria, assumes that extreme external damage upon these categories and correlated with internal structural foundation damage. As a result, as these assessments are observational, a thorough condition assessment, including interior assessment, is advised prior to taking any action in regard to these properties.

The following is the demolition criteria based upon, the definitions provided under the NSP guidelines, general methodology for identification of demolition eligible properties in the case of the City of Pontiac NSP 2, and the probable correlation between foundation damage and external structural features (e.g. roof, door, window, siding, lot & driveway) as classified Saturday 31 March 2012.

Criteria	Score	Description
Roof	3	No major damages. Roofing materials appear largely intact.
	2	Minor damages. Lack of maintenance is apparent but partial. Existing damages do not appear to act as a risk to public health.
	1	Severe damages from fire and/or water damage, other damage (e.g. termite), and possible acts of God. Roof conditions are further characterized by possible cave-ins and are likely to pose a risk to public health.
Door	3	Present, with no to very minor damages (e.g. paint damage).
	2	Boarded up or present but in poor condition. Damages do not appear to need complete door replacement.
	1	Not present. When existent, damage repair may only include complete door replacement.
Window	3	Present, with no to very minor damages. (e.g paint damage) No glass damage.
	2	Boarded up or present but in poor conditions. Damages do not appear to need complete window replacement.
	1	Not present. When existent, damage repairs may only include complete window replacement.
Siding	3	No major damages. Siding materials appear largely intact.
	2	Partially present or need some maintenance. Existing damage do not appear to act as a risk to public health.
	1	Severe damages from fire and/or water damage, other damages (e.g termite), and possible acts of God. Siding repairs are likely to require full replacement and may pose a risk to public health.
Lot & Driveway	3	Well kept lawn. Well maintained driveway.
	2	Overgrown lawn; lack of maintenance.
	1	Damaged lawn, over grown weeds, and in need of maintenance and clean up over period of time.
Raw Score	5-15	All five categories' scores are summed to create the parcel's raw score. Possible points are from 5 to 15.
Final Score	Good Condition	Houses with a final score of Good Condition have a raw score between 13 and 15. Houses appear in good condition with a probability of little to no structural damage. No major noticeable maintenance problems.
	Fair Condition	Houses with a final score of Fair Condition have a raw score between 9 and 12. Houses appear in need of repairs, however existing damages can be replaceable and are not likely to pose a risk to public health.
	Poor Condition	Houses with a final score of Poor Condition have a raw score between 5 and 8. Structural foundation damages are likely existent and replacement of exterior features and materials are likely not a viable solution. Houses further pose a risk to public health and are recommended for demolition.

5.3 Examples

5.3.1 Building A

Source: http://4.bp.blogspot.com/_3QgxQKIS4kk/SwdGJ4xDVoI/AAAAAAAANyM/kMPHlZhKZi8/s1600/100_5657.jpg

Parcel #	Roof	Door	Window	Siding	Lot & Driveway	Raw Score	Final Score
Building A	3	2	3	3	2	13	Good Condition

No damages in the roof and siding. Windows are well maintained. The lot and driveway are in good condition. Despite the door being boarded up, Building A is overall in habitable condition.

5.3.2 Building B

Source: http://daddu.net/wp-content/uploads/2009/09/house5.jpg

Parcel #	Roof	Door	Window	Siding	Lot & Driveway	Raw Score	Final Score
Building B	1	2	2	2	2	9	Fair Condition

Severe damage to the roof. Door is present but likely in need of repair. Several windows boarded up while others appear in good condition. Siding will require repair on the front of house. Driveway is usable and the lot is not intensely overgrown. Building B will need some repairs to achieve habitable condition.

5.3.3 Building C

Source: http://cdn.boooooooom.com/wp-content/uploads/2009/05/abandoned_houses_06.jpg

Parcel #	Roof	Door	Window	Siding	Lot & Driveway	Total	Final Score
Building C	1	1	1	1	1	5	Poor Condition

Building C has been partially destroyed by fire damage. The roof has partially fallen in, and doors and windows are not present. Some siding still exists but the majority has been damaged or destroyed beyond repair. The lot is not kept and litter has begun to collect in the front yard. The parcel on which Building C resides is not habitable until Building C is demolished.

5.4 Abandoned Parcel Condition

Presented on the following page in Figure 5.4.2 is a map of demolition classifications in Beecher Site. This map depicts the condition of structures on parcels of land previously classified in Section 4.2 as abandoned.

For in-depth analysis, Beecher Site was again divided into nine regions. The nine regions are displayed below in Figure 5.4.2. Each of these regions is analyzed in detail on the following pages.

Condition	Count	%
Good	58	27.9%
Fair	106	50.9%
Poor	44	21.2%
Total	208	100%

Figure 5.4.1 Abandoned Parcel Regions
Source: Team Genesee

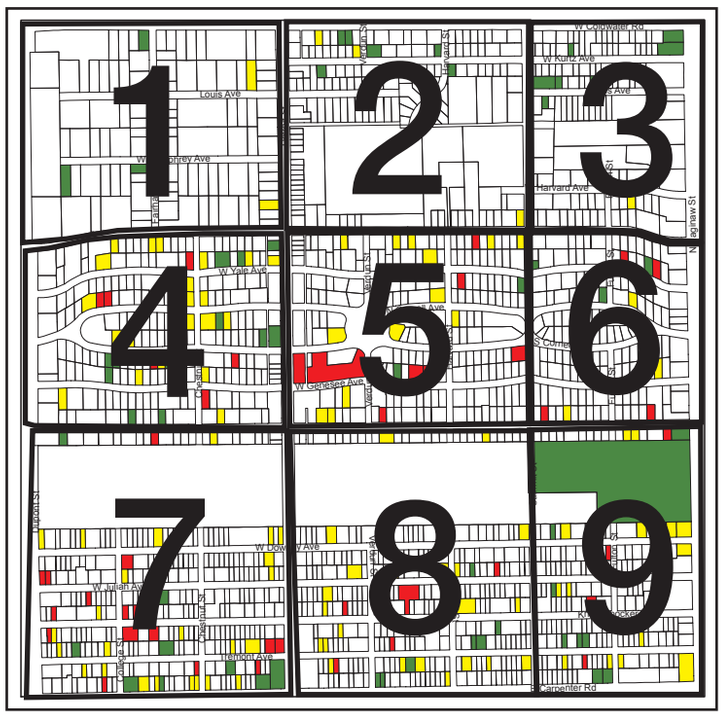
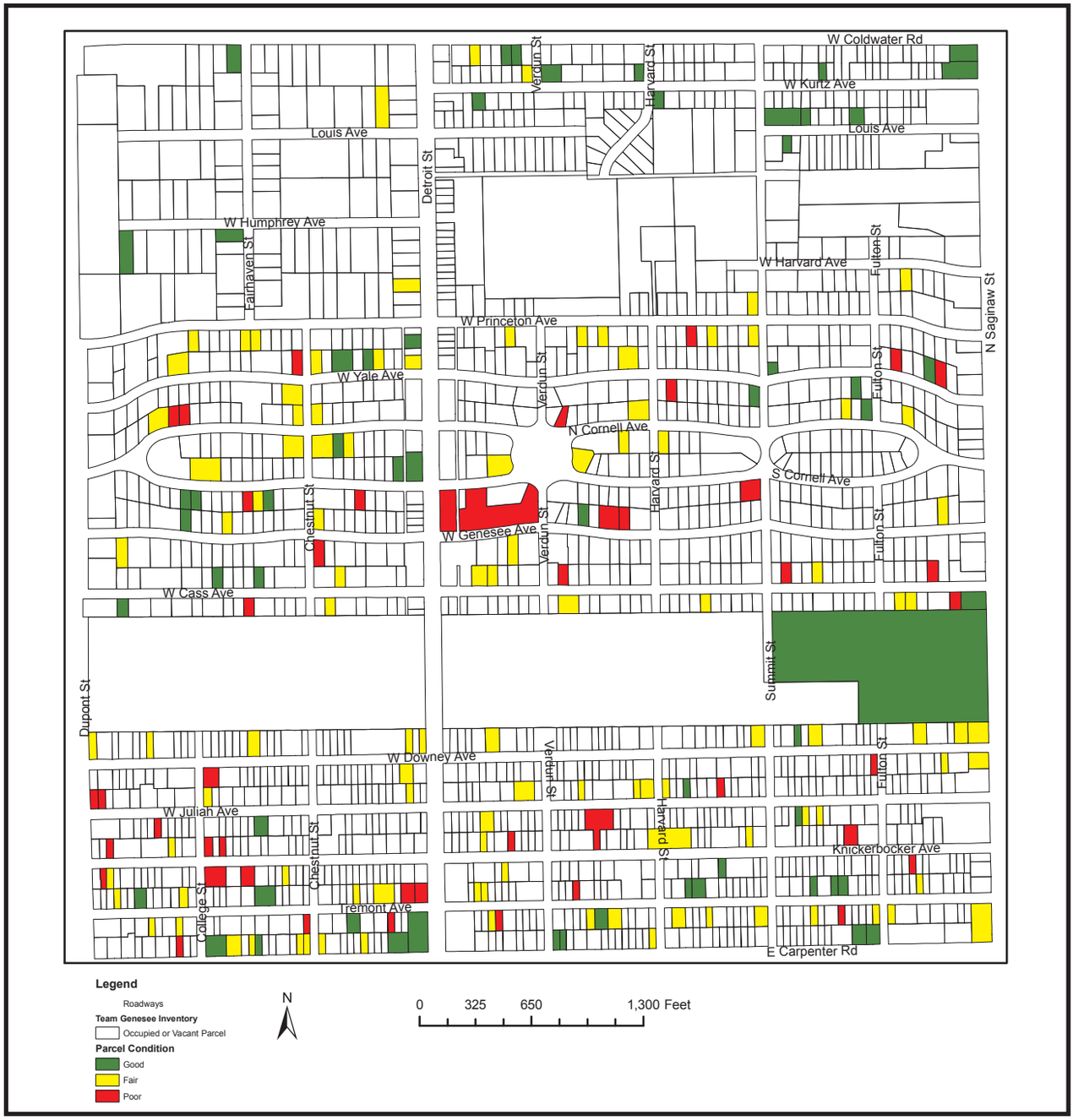


Figure 5.4.2 Abandoned Parcel Condition
Source: Team Genesee



5.4.1 Region 1

Table 5.4.1 Region 1 Count
Source: Team Genesee

Condition	Count	%
Good	3	60.0%
Fair	2	40.0%
Poor	0	0.0%
Total	5	100%

Region 1 is characterized as the least abandoned area of Beecher Site. Over half of the vacant parcels in this region are suitable for habitation, while the remaining two could be occupied with minimal repairs. These parcels are scattered throughout this region amongst the other occupied parcels. This lack of clustering and overall habitable condition of these parcels likely renders demolition ineffective in this area.

5.4.2 Region 2

Table 5.4.2 Region 2 Count
Source: Team Genesee

Condition	Count	%
Good	6	66.7%
Fair	3	33.3%
Poor	0	0.0%
Total	9	100%

Region 2 is characterized as an area with sparse abandonment, concentrated mostly in the northern quarter along Coldwater Road and Louis Avenue. Some abandoned properties in good and fair condition are clustered around the intersection of Verdun Street and Louis Avenue. Other parcels in good condition lie further east at the intersection of Harvard Street and Louis Avenue. One parcel in fair condition lies in the southeastern corner of this region. There may be some advantage to demolishing homes along Coldwater Road with these parcels facing areas external to Beecher Site. With the overall habitable condition of these parcels, demolition is likely ineffective in this area. However, demolition of structures on parcels facing Coldwater Road may improve the external image of the neighborhood to the surrounding community.

5.4.3 Region 3

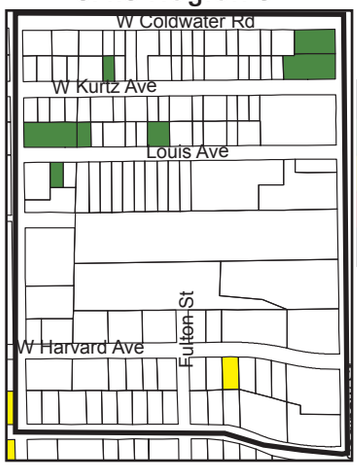


Table 5.4.3 Region 3 Count
Source: Team Genesee

Condition	Count	%
Good	7	87.5%
Fair	1	12.5%
Poor	0	0.0%
Total	8	100%

Region 3 is characterized by the highest proportion of abandoned parcels in good, habitable condition. One of these commercial parcels in good condition directly faces Saginaw Street and likely requires minor repairs to become hospitable to commercial users. The remaining parcels in good condition lie along W Kurtz Avenue and Louis Avenue. Several of these parcels along Louis Avenue are clustered together on the western edge of region 3. The sole parcel in fair condition lies along W Harvard Avenue near the intersection of Fulton Street. With the overall habitable condition of these parcels, demolition is also likely ineffective in this area.

5.4.4 Region 4

Table 5.4.4 Region 4 Count
Source: Team Genesee

Condition	Count	%
Good	11	29.7%
Fair	20	54.1%
Poor	6	16.2%
Total	37	100%

Region 4 is characterized by its significant clustering pattern of parcels in good and fair conditions. The largest concentration of these abandonments is focused along the northern segment of Chestnut Street, where they fan out along every street. Several parcels in fair and good condition sit at the intersection of Chestnut Street and N Cornell Avenue, with two parcels in poor condition at the north and south ends of Chestnut. Demolition in areas where one parcel in poor condition sits adjacent to other abandoned parcels, such as S Cornell Avenue near the intersection of Chestnut Street, and near the end of N Cornell Street may help temper adjacent abandonments.

5.4.5 Region 5

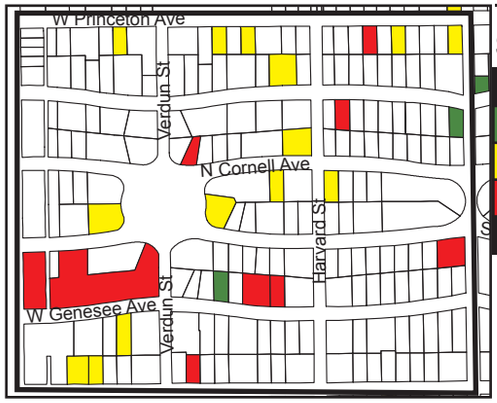


Table 5.4.5 Region 5 Count
Source: Team Genesee

Condition	Count	%
Good	2	8.3%
Fair	14	58.3%
Poor	8	33.3%
Total	24	100%

Region 5 is characterized by its significant clustering of parcels in poor condition along W Genesee Avenue and S Cornell Ave. One parcel in fair condition lies across the street from this cluster with another parcel in fair condition kitty corner. The remaining parcels in fair condition are scattered through the central and northern areas of region 5. With a high concentration of parcels in poor condition along W Genesee Avenue and S Cornell Avenue, demolition in this corridor may be effective. This cluster pattern also provides an opportunity for a civic, community, or commercial use for the demolished land.

5.4.6 Region 6

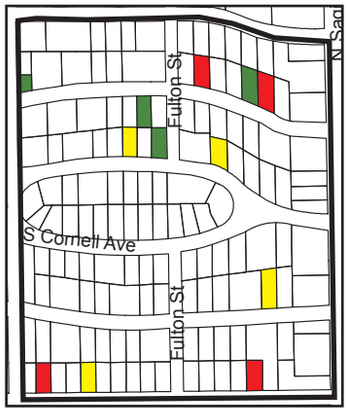


Table 5.4.6 Region 6 Count
Source: Team Genesee

Condition	Count	%
Good	4	33.3%
Fair	4	33.3%
Poor	4	33.3%
Total	12	100%

Region 6 is characterized by an even distribution of parcels in good, fair, and poor condition. Two of these parcels, one in poor condition and the other in good condition, lie adjacent to each other. A cluster of three parcels along N Cornell and W Yale Avenue touch only by their corners. Three other parcels in poor and fair condition lie along W Cass Avenue, with the remaining parcels scattered about the region. These parcels all lie well within the residential area of Beecher Site. Demolition of parcels adjacent to other parcels in good condition may help temper further abandonments.

5.4.7 Region 7

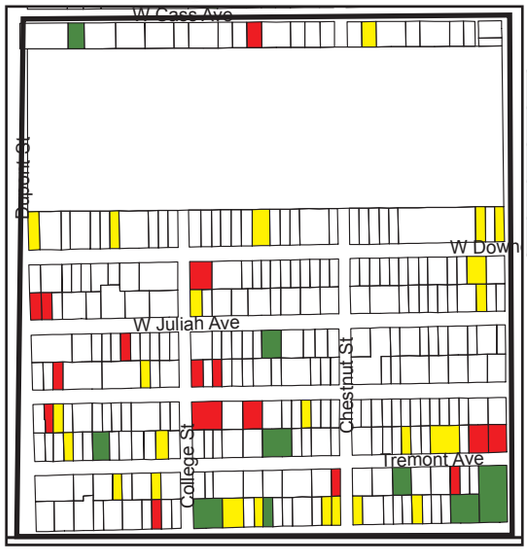


Table 5.4.7 Region 7 Count
Source: Team Genesee

Condition	Count	%
Good	9	18.4%
Fair	24	49.0%
Poor	16	32.6%
Total	49	100%

Region 7 is characterized by greatest proportion of parcels in fair and poor condition at 81.6%. None of these parcels in poor condition sit directly adjacent to each other; all sit with either an occupied or vacant parcel between them. As with the northern regions, this southern region sits facing the community outside Beecher Site. Many abandonments have occurred along W Carpenter Road; though they are in good and fair condition, demolitions in this area may help bolster the image that Beecher Site projects to the outside community. Additionally, demolition of parcels in poor condition along College Street may be effective in tempering abandonments in this region.

5.4.8 Region 8

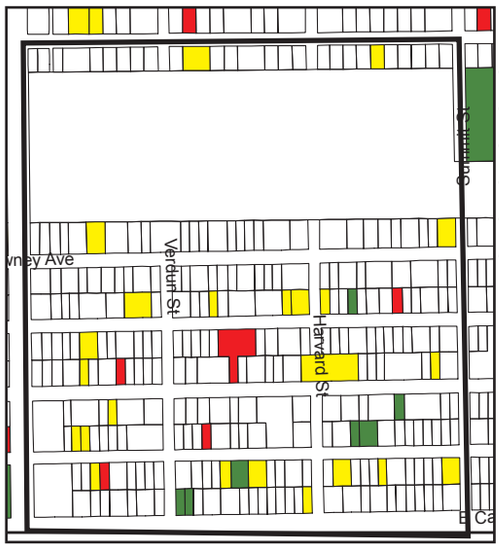


Table 5.4.8 Region 8 Count
Source: Team Genesee

Condition	Count	%
Good	7	20.0%
Fair	23	65.7%
Poor	5	14.3%
Total	35	100%

Region 8 is characterized by containing the greatest number of abandoned parcels in fair condition. The majority of these parcels are scattered throughout the region. Several lie adjacent to a parcel of good or poor condition; one exception to this is the set of parcels in poor condition in the center of this region along Tremont Avenue and Knickerbocker Avenue. The majority of abandoned parcels seem to be clustered around these parcels in poor condition. Demolishing the cluster of abandoned parcels along Tremont Avenue and Knickerbocker Avenue may halt further abandonment of property.

5.4.9 Region 9

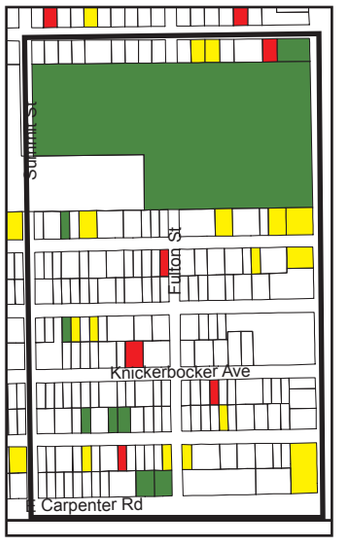


Table 5.4.9 Region 9 Count
Source: Team Genesee

Condition	Count	%
Good	9	31.0%
Fair	15	51.7%
Poor	5	17.3%
Total	29	100%

Region 9 is characterized by a large abandoned parcel facing Saginaw Street in good condition. Adjacent to this parcel are several others in fair condition and one in poor condition. Another outward facing abandoned parcel lies on the corner of Saginaw Street and W Carpenter Avenue. With its excellent street access, demolition may be effective on this parcel to bring future commercial development. Within region 9 lie five parcels in poor condition, along W Cass Avenue, Knickerbocker Avenue, Tremont Avenue, and Fulton Street. Demolishing parcels in poor condition along Knickerbocker Avenue may be effective in halting abandonment.

5.5.10 Abandoned Parcel Condition Summary

Abandoned parcels in the northern third regions 1, 2, and 3 are in overall habitable condition, while parcels in the central regions 4, 5 and 6 and southern regions 7, 8, and 9 exhibit fair and poor habitable qualities. From this assertation, demolition of abandoned parcels seem most effective in the central and southern regions of Beecher Site. These regions also exhibit the greatest number of abandoned parcels in all of Beecher Site. Some abandoned sites in poor condition tend to follow these criteria which may prove effective later in identifying strategic demolition sites:

- Regions with greater numbers of abandonments tend to exhibit clustering patterns around parcels in poor condition
- Abandoned parcels which face the community outside of Beecher Site tend to be adjacent to other abandoned parcels
- Abandonment along major thoroughfares tends to trickle into adjacent collector streets
- Abandoned commercial or public parcels tend to be good or fair in condition
- Abandoned residential parcels in areas with few abandonments tend to be in good or fair condition
- Areas with small parcel sizes tend to have more abandonments in fair and poor conditions

As before with the parcel inventory, the reader is advised that the condition of these parcels may change with the seasons. Several parcels initially judged to be in especially poor, abandoned condition were later observed to be in the process of renovation. While this practicum team has done everything under their control to ensure data quality, error was again consistently measured throughout this project at 1% or less for each inventory journey. This has been remediated as thoroughly as humanly possible under project time constraints through a number of relational databases and human perseverance.

Further study of parcel abandonment must compare proportion of abandonments to number of parcels in a studied region.

VI. Case Studies

Case studies were conducted as part of this report to assist this study in identifying proven used strategies in neighborhood rehabilitation related efforts. Four cases were collected and analyzed. These are presented further in this section in the following order:

- Voluntary Associations in Grand Boulevard Neighborhood
- Toronto's Abandonment Issue Campaign for Affordable Housing
- Sideyard Expansion in Detroit
- The Church Brew Works (Pittsburgh, Pennsylvania)

6.1 Voluntary Associates in Grand Boulevard Neighborhood

The case study, Voluntary Association in Low-Income Neighborhoods, was based in the Grand Boulevard Neighborhood located near Chicago in 1996. This case study concerned the community, encouraging them to get involved and assist each other with the many challenges they face.

Grand Boulevard has a population of 36,000 residents. The area has experienced loss of manufacturing jobs similar to the Flint area and its auto industry. In effect, Grand Boulevard experienced a steady decline in housing conditions and in average income of the residents residing there. To alleviate these issues, various activities to understand these conditions were undertaken on a local level. Members of the group conducting these activities were largely citizens of the region. Multiple surveys were conducted to gather input utilizing a variety of methods such as phone usage, a block to block survey to gather information on the residents, interviews with the area's influential leaders, and also community based activities addressing the issues that residents had. In addition, maps were created which highlighted areas of opportunity. Some of the major questions answered were the communities thoughts on neighborhood projects, how to address the different issues that the community faces, and also inquiries contributing to economic development in the area.

In conclusion, the case study in Grand Boulevard found that citizens "could be encouraged to contribute even more than they already do to the economic and human development of their neighborhoods."[38] Through community leaders, surveys, and local encouragement, previously unknown creativity and support was unveiled. In light of the findings of this case study, the integration of the Beecher community, and general community involvement in the revitalization plans of the Beecher site, may prove beneficial to the future land use plans of the area. Although an initiative similar to the one undertaken in the Grand Boulevard case study is outside the scope of this study, modest community input inclusion may still prove beneficial to the overall goals of this project. This input may take the form of a town hall focus group, charette and similar, with the findings collected by conducting this activity holding weight towards the creation of future land use plans.

6.2 Toronto's Abandonment Issues Campaign for Affordable Housing

David Wachsmuth, and Shiri Pasternak compiled several cases of abandonment issues in the city of Toronto. A campaign developed seeking to help address the city's housing crisis through the introduction of a "Use It or Lose It" bylaw that would see abandoned buildings expropriated and converted to affordable housing. After our inventory, we found the Beecher neighborhood in the same abandonment situation. David Wachsmuth and Shiri Pasternak conducted this study to examine this campaign and abandonment issue, but also to suggest the radical potential this bylaw has to address the basic needs for shelter. The case study was conducted for the entire city of Toronto, Canada in 2006. homes in Toronto, only a few hundred were found fully or partly vacant, boarded-up, or in poor repair. The reason for the Abandonment Issues campaign is an effort to get the City of Toronto to adopt a Use It or Lose It bylaw, which would see abandoned buildings converted by the City into affordable housing. The idea used here is social expropriation, which is, in the simplest terms, confiscation of private land for the establishment of social equality. "In 2006 a single social expropriation occurred in Toronto: a former rooming house on the major thoroughfare Queen Street West that had been damaged in a fire in 1998 and stood vacant ever since was expropriated by the municipal government. This building is now in the process of being redeveloped as affordable housing by the Parkdale Activity-Recreation Centre (PARC; a nearby non-profit community center and a member of the Abandonment Issues coalition) with federal and provincial subsidies." This was the first example of what was to be done throughout the entire city. By expropriating the vacant building, the city set an inspiring precedent for the expropriation of private property for the explicit social aim of providing more affordable housing in Toronto, as would be the case in Genesee County. The situation with some abandoned properties in the Beecher neighborhood relate to Toronto's abandonment situation. If private property is

abandoned and not being utilized, it should be confiscated, and possibly used for more affordable housing units. This is just an example of possible considerations dealing with the abandonment situation in the Beecher neighborhood, and furthermore, Genesee County.

The problem we run into is the United States' eminent domain law which allows the government to seize a citizen's property without his or her consent, as long as they are compensated. A type of eminent domain that could work in this situation would be easement of right away. For an example, a utility company may obtain an easement over private land install and maintain power lines. The property owner remains free to use the property for any purpose which does interfere with the right of way or easement. Another possible solution strays away from eminent domain and instead uses market forces. If zoning requirements were more flexible and acknowledged market principles, new projects could move forward without taking the rights of the existing landowners.

6.3 Sideyard Expansion in Detroit, Michigan

Blotting, or side yard expansion as it used to be called, is a technique, which involves homeowners in largely vacant neighborhoods purchasing adjacent lots at a reduced price. The homeowners can then use that extra land in a variety of ways. These uses can include gardens, garages, basketball courts, green space, and a variety of other uses. This in turn helps to get rid of vacant land, which can attract crime, illegal dumping of trash, and unsightly or unkempt parcels. It also helps to create a neighborhood that is more inviting and visually pleasing by having larger lots that are well maintained. Figure 6.3.1 below shows how a variety of different types of blots can transform a once partly vacant block.

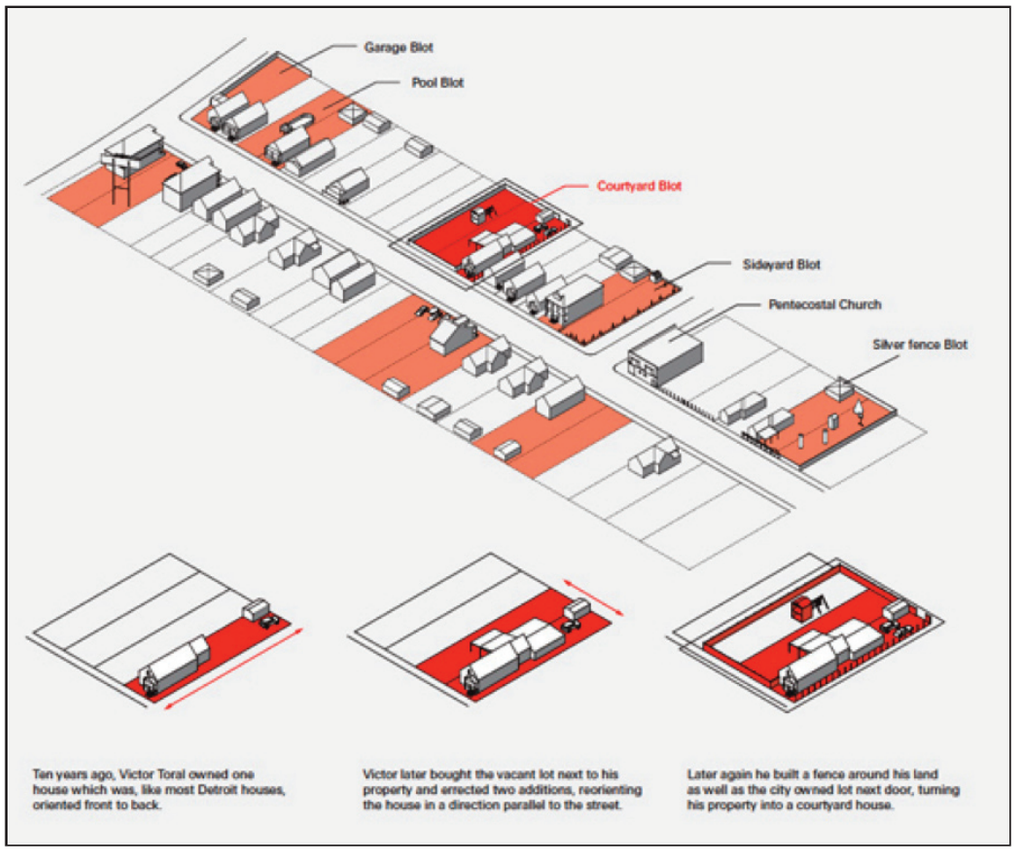


Figure 6.3.1: Blotting in Detroit
Source: http://shrinkingcities.files.wordpress.com/2009/12/rebuilding-detroit-22.jpg

Blotting is a technique that has been around for a while as a redevelopment and urban decline solution. The city of Detroit is one of the areas where this has been taking place. Interboro a research and design firm out of New York City conducted a study on blotting in the Detroit area neighborhoods. They outlined several different examples of blotting, but most notably was the story of the Anderanin family. In this case the several properties surrounding the Anderanin family home became vacant. Jean Anderanin decided to purchase two of the properties directly next to the family home. Then seven years later in 1999, her son purchased the two vacant lots next to those already purchased by Jean. And in 2002 purchased another lot from the city of Detroit, extending the yard space to six parcels. The Anderanins then built a fence clearly marking the property line and began to work on making their backyard oasis. The yard contains a large garden, basketball hoop, gazebo, and several bird houses (2008). "The result, according to University of Michigan urban planning professor Margaret Dewar, is a better safer neighborhood" (2011).

There are certain criteria that need be met to allow land to be used for blotting. The requirements for sideyard expansion, according to the Genesee County Land Bank's Side Lot Program are:
(1.) The property requested is currently owned by the Genesee County Land Bank.
(2.) The property requested is vacant real property with no structure on the site.
(3.) The property requested is next to the applicant's property with at least a 75% common boundary line on the right or left side.
(4.) The applicant is the owner and living in the property next to the requested property.
(5.) The applicant has never received a lot through the Side Lot Program.

Once it has been determined that a lot meets these requirements, the side lot can then be purchased for $25.00, plus the foreclosure year's taxes (if foreclosed in 2003 or before), a $25.00 administration fee, and a $14.00 filing fee. This program brings properties back onto the tax roll, while reducing the public costs associated with property maintenance (Side Lot Transfer, 2004). Homeowners are only allowed to purchase one lot under the Side Lot Program. If a homeowner would like to purchase additional lots they must fill out the Residential Property Insert Application – For Property with or without a Structure (Side Lot Transfer, 2004).

The technique of blotting may be a viable short-term solution for the Beecher neighborhood of Mount Morris Township. There are large number of vacant, abandoned and Land Bank owned parcels in the neighborhood, which are both in clusters and next to well-kept homes. These findings will be analyzed and used to create our final analysis where they are viable.

6.4 The Church Brew Works (Pittsburgh, Pennsylvania)

Adaptive reuse is the process of reusing an old structure for new purposes. It is implemented as a means for conserving land and reducing urban sprawl. On a larger scale, adaptive reuse is often a key factor in urban renewal programs that aim to revive dilapidated and often historic city centers. In residential terms, adaptive reuse commonly involves the purchase and conversion of old barns into modern living spaces. Old buildings often outlive their original purposes. Adaptive reuse, or re-use, is a process that adapts buildings for new uses while retaining their historic features. An old factory may become an apartment building. A rundown church may find new life as a restaurant... And a restaurant may become a church. Through adaptive reuse old, unoccupied buildings can become suitable sites for many different types of use. In Pittsburgh, Pennsylvania, St. John Baptist Church was built in 1902. Louis Beezer, Michael Beezer, and John Combs were the architects that designed the church/convent/school. By the 1950s, Pittsburgh was beginning to change and the church's traditional Northern Italian Architectural style became outdated. Factories were closing up and shifting operations elsewhere and due to financial and organizational considerations, the Diocese (supervision) deconsecrated (removal of religious blessing) the church in 1993.

Redeveloper Sean Casey purchased St. John for $191,200. The entire adaptive reuse project utilized 10,000 square feet of a new restaurant and brewery. Although it opened in the summer of 2006, the restaurant and brewery are currently still undergoing renovations. Since the opening of the Church Brew Works, 44 full-time and 40 part-time positions have been created. Also, while the surrounding neighborhood has not changed from the mixture of residential and commercial properties, the value of these properties has increased. Surrounding apartment complexes were sold to New York investors. One of the primary advantages of adaptive re-use projects is the time savings associated with working with an existing structure. Rather than demolishing an existing building and building a new one from scratch, the design and building team can re-use the building's foundations and external shell, and sometimes even some of the mechanical and electrical systems. Mount Morris Township could use adaptive reuse for most of the stagnant churches in the neighborhood. Reusing the once churches to act as a libraries or learning centers for the young growing families would have great potential for this community. These centers could improve test grades and decrease dropout rates, which in term reduces crime.[33]

VII. Community Input Study

This community input section is introduced to garner the knowledge of residents in Beecher Site, and identify possible strengths, weaknesses, opportunities, and threats of the region. These may be incorporated to improve the intended results of the future proposed land use plans of Beecher Site.

7.1 SWOT Analysis 1

A community input study was conducted on March 16th, 2012 at the Vera B. Rison Library in Mt. Morris Township, MI. The study, which took the form of a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis, was held at the monthly meeting of the Beecher Community Development Group. This group is comprised of concerned citizens and people who work in the community. To start the meeting, a brief overview of data findings and land inventory analysis was presented to the individuals attending the meeting. The presentation was followed by a question and answer session where some suggestions were given on who might be valuable to contact for more information on the community. A SWOT analysis was then conducted where the community input group was asked to identify the strengths, weaknesses, opportunities, and threats (SWOT) of the community. Only two members of the group completed the SWOT analysis.

The following is their aggregate response:

Strengths	**Weaknesses**
Strong sense of community	Lack of jobs Poverty Declining property values
Opportunities	**Threats**
Low land and property values	Declining population in the northern area and south of I-69

7.2 Public Forum

In addition to the conducted SWOT analysis, a secondary public forum conducted at a School District Improvement Marketing Meeting on March 30th, 2011 and reflecting the typical process of a SWOT analysis, was provided to this practicum team. It should be noted that this analysis revolved primarily on the conditions of schools in the Beecher Community School District. Therefore, not all elements enlisted may apply to the conditions of the Beecher site as a whole. The following are the results of this forum:

Strengths		**Weaknesses**
Strong partnership	Strong, determined parents	
Dual enrollment	Strong sense of community	
Marketing/partnership meeting	Students	
Town hall meeting	Code of conduct	
Credit recovery	Head start	
Meets needs of community/food service	Mott's Children's Health Center	Weaknesses were not analyzed in this meeting
Leadership by example	Expressway	
Word of mouth	Desire to succeed	
Local libraries	GISD Gennet	
Recycling program	Student of the month	
Student council	Wade McCree Program	
Salvation Army	College tours	
Student support	Sports	
Improved curriculum	Beecher Business Association	

Strengths contd.

Boys and Girls Clubs
Momentum
Hard working, dedicated, strong teachers
AP classes
21st century
Positive initiatives
Adult ed
Want to do better
Information center
Local colleges
Land
Community service
Training center
New superintendent
High quality teacher
Tight knit community
Athletics
BSIP
Business district
Technology
Added funding
Up Ward Bound
Scholarships
Board of Education
Parent facilitators
Evaluations

Weaknesses

Weaknesses were not analyzed in this meeting

Opportunities

Church
Head start
Marketing to parents
Grow our own students with skilled trades
Market/create image
Community influence/youth advisory
More people involved in curb appeal
Transportation used for funding
Educate parents
After school activities held by police department
Motivational speakers
Students mentoring
Bring students back from other schools
Strengthen curriculum instruction
Bring competence and self-esteem to students
Collaboration
Have best district
Strong partnership
Role models
Business growth
Focus on standardized test scores
BHS transformational plan
Captive staff
Opportunity with fine arts auditorium
Athletics
After school program
Facebook and tech
Potential for growth
Safe district with PD
Vision come to life
Media
Community influence
Potential for growth
Swimming pool
Just do it
Vocational opportunities
100% graduation rate

Threats

Lack of parent participation
Charter schools
Unemployment rate
Continued bad press
Teen pregnancy
Lack of technology
Inappropriate cellphone use
Law enforcement
Other community problems become ours
Television
Threat of annexation of other districts
Legislation
Community influence
Lack of curb appeal
Standardized test
Single-parent family
Parent training
Beecher negative image
Poverty
Environment around school
Curb appeal
Rumors
Violent behaviors
Stability
Cuts in funding
Bullying
Dropout rates
Homeless
Social network
Violence
Bussing to others
School of choice
Lack of control
Lack of school value
Lack of marketing
Role models
Lack of core apathy
Lack of trust
Media
Religion out of school
Lack of dress code
Transient community

7.3 SWOT Analysis - Practicum Team

A third SWOT analysis was completed by members of this practicum team to supplement the Beecher community provided SWOT analysis. This SWOT analysis was completed in March 19th, 2012 and was conducted with the purpose of identifying recurring strengths, weaknesses, opportunities, and threats. The following are the results of the March 19th SWOT analysis:

Strengths	Weaknesses
Sense of community Community partnerships Compact development Transit Beecher Business District development involvement	Low participation Vacancy/Abandonment Housing conditions Property values Pedestrian unfriendly Poor and/or declining socio-economic status
Opportunities	**Threats**
Community partnerships Churches Potential for commercial growth Available land Transit	Vacancy/Abandonment Crime School dropout rate Aging infrastructure Lack of funding Blight Poor and/or declining socio-economic status

7.4 Combined Analysis

The combined analysis aims to identify those elements in the previous SWOT analysis and public forum which are repeated in least two of the datasets. Conclusions and final analysis in this report will incorporate these findings where they are deemed as an appropriate and viable solution. The following are the results:

Strengths	Weaknesses
Strong sense of community Partnerships Transit Beecher Business District development involvement	Unemployment Poverty Declining property values
Opportunities	**Threats**
Community partnerships Churches Transit Potential for commercial growth	Vacancy/Abandonment Crime School dropout rate Property values Lack of funding Aging infrastructure Blight Poor and/or declining socio-economic status

VIII. Recommendations

In accordance with the findings presented in this study, two land use scenarios were formulated to provide feasible and transformative redevelopment plans for Beecher site. These land use plans consider both short-term and long term land uses and present two different visions for the future direction of Beecher site.

8.1 Future Land Use Scenario 1 - Preservation

Land use scenario 1 focuses on land preservation with no population growth. The no growth scenario applies to areas with concentrations of vacancy and/or property abandonment. This scenario assumes that redevelopment efforts and current conditions are not likely to change; preservation of the land may be a more viable alternative. This method is conducted on a parcel by parcel basis with land use activities applied on parcels that were determined to be either vacant or abandoned. The characteristics considered for land use plan 1 are as follows:

- Site socioeconomic trends and comparisons
- Current Zoning, existing land uses and location of site amenities
- Regional and internal transportation conditions, including infrastructure and related trends
- Commercial viability
- Vacancy/Abandonment & blight concentration
- Affordable infill housing development
- Blotting activities
- Adaptive reuse activities considerate of existing land use
- Strengthen the sense of community

From these considerations, criteria were created for each land use activity. These criteria serve as rules or guidelines to decide which land use activities may be applicable to a specific parcel of land based on the land use plan. Six land use activities were created to realize this plan: infill housing, blotting, commercial, adaptive reuse, public transit infrastructure, and green space. Their definition, rules, and guidelines are as follows:

- Infill Housing – represents the new construction or rehabilitation of existing housing units into affordable housing dwellings. This land use activity is applied when the following criteria are met:
  - Property is abandoned with some structure on the site, AND
  - Property is zoned residential, AND
  - Abandoned parcel concentration consists of less than three (3) parcels in a horizontal row, AND
  - Blotting, adaptive reuse, commercial, and public transit infrastructure activities cannot be applied on parcels because of the criteria set up under these activities, AND
  - When blotting, adaptive reuse, commercial, and public transit infrastructure are applied, they reduce the concentration of abandoned and/or vacant parcels to less than three (3) parcels in a horizontal row

- Blotting – represents the Side Lot Program operated through the Genesee County Land Bank. This land use activity is applied when the following criteria are met:
  - Property is vacant with no structure on the site, AND
  - Property is zoned residential, AND
  - Property is next to an occupied residential property with at least 75% common boundary line on the right or left side, AND
  - Receiving property is limited to one (1) blotting activity, AND
  - Property lot is less than twice the size of the receiving property lot

- Commercial – consists of commercial activities on abandoned or vacant parcels. This land use activity is applied when the following criteria are met:
  - Property is either vacant or abandoned, AND
  - Property is adjacent to parcels zoned or used for commercial purposes, AND
  - Property is located along Saginaw, Coldwater, Carpenter, or Detroit streets, AND

- Property is located in close proximity to a proposed Public Transit Infrastructure activity, AND
- Property receives priority for commercial usage if zoned commercial

• Adaptive Reuse – the rehabilitation of abandoned civic, educational, or religious facilities into development which provides potential services usually delivered by libraries, community centers, or learning centers. This land use activity is applied when the following criteria are met:

- Property is abandoned with some structure on the site, AND
- Abandoned structure is either a civic, educational, or religious facility and was used for either a civic, educational, or religious related purpose

• Public Transit Infrastructure – consists of the development of infrastructure which supports public transit (e.g. bus shelters; adequate, safe bus stops). This land use activity is applied when the following criteria are met:

- Property is either vacant or abandoned, AND
- Property is located along Saginaw, Coldwater, Carpenter, or Detroit streets, AND
- Property is located along a MTA fixed bus route, AND
- Property is located at a central, enclosed location, or has the potential to be enclosed by several parcels with commercial or other non-residential use activities

• Green Space – controlled and aesthetically pleasing vegetation (e.g. trees) or parks. This land use pattern is applied to parcels where no other feasible solution could be introduced. Such parcels are characterized by excessive concentrations of vacancy and/or abandonment. Green space represents the "no growth" approach of this land use alternative. This land use activity is applied when the following criteria are met:

- Commercial, adaptive reuse, and public transit infrastructure activities are not applicable on parcels based on their criteria under these activities, AND
- Green space takes precedence over properties applicable under infill housing and/or blotting activities if property is adjacent to a cluster of three (3) parcels designated as green space based on the previous rule, AND
- Green space takes precedence over properties applicable under infill housing and/or blotting activities if the parcel is adjacent to a dead end

In addition to these land use activities, current occupied land uses are also presented in the following land use map. These represent existing parcels which are not vacant or abandoned. These are labeled as "occupied residential" for occupied residential dwellings; "occupied public/exempt" for occupied civic, educational, or religious facilities; "occupied commercial" for occupied commercial units; and "occupied industrial" for occupied industrial facilities. No changes were committed to these parcels.

Figure 5.1.1 illustrates the Beecher Site Land Use Scenario 1. Land use presented under this proposal appears fragmented in irregular patterns within the residential zones. These patterns result from the use of green space in areas of extreme vacancy or abandonment as configured under the criteria presented above. Commercial units proposed under this land use are located primarily along Detroit Street, Saginaw Road and Carpenter Road. Adaptive reuse is utilized on those properties already utilized for civic, educational, and religious facilities but may be vacant. Public transportation infrastructure is located on two parcels along Detroit Street near Cornell and Knickerbocker Road.

Figure 8.1.1 Beecher Land Use Plan 1 Map
Source: Team Genesee

Beecher Land Use Scenario 1

Note: This map is prone to human error; crosschecking of proposed land use against existing conditions is advised.

8.2 Future Land Use Scenario 2 - Growth

Land Use Scenario 2 focuses on a pro-growth approach to land use. This approach considers redevelopment of vacant and abandoned parcels into new or similar uses as a viable alternative. This plan does not consider financial viability. Similar to Land Use Scenario 1, all land use patterns were developed through parcel by parcel analysis. The following are the characteristics on which this land use plan is based upon:

- Site socioeconomic trends and comparisons
- Development conscious of land use patterns and community amenities
- Transportation infrastructure development and related trends
- Commercial development
- Affordable infill housing development
- Blotting activities
- Adaptive reuse activities considerate of existing land uses
- Strengthen the sense of community

Similar to land use scenario 1, criteria were created for each land use activity. These criteria serve as rules and guidelines to decide which land use activities may be applicable to a specific parcel of land. Six land use activities were created for the realization of this plan: infill housing, blotting, commercial, adaptive reuse, public transit infrastructure, and green space. Their definition, rules, and guidelines are as follows:

- Infill Housing – new construction or rehabilitation of existing housing units into affordable housing dwellings. This land use activity is applied when the following criteria are met:
  - Property is abandoned with some structure on the parcel, AND
  - Property is zoned residential, AND
  - Blotting, adaptive reuse, commercial, and public transit infrastructure activities cannot be applied to parcels because of the criteria set up under these activities

- **Blotting** – represent the Side Lot Program operated through the Genesee County Land Bank. This land use activity is applied when the following criteria are met:
  - Property is vacant with no structure on the site, AND
  - Property is zoned residential, AND
  - Property is next to an occupied residential property with at least 75% common boundary line on the right or left side, AND
  - Receiving property is limited to one (1) blotting activity, AND
  - Property lot is less than twice the size of the receiveing property lot, AND
  - Blotting is applied if infill housing occurs on a previously abandoned parcel, and the newly developed infill housing fulfills all other blotting criteria

- Commercial – consists of commercial activities on abandoned or vacant parcels. This land use activity is applied when the following criteria are met:
  - Property is either vacant or abandoned, AND
  - Property is adjacent to parcels zoned or used for commercial purposes, AND
  - Parcel receives priority for commercial if located along Saginaw, Coldwater, Carpenter, or Detroit streets, AND
  - Parcel is located in close proximity to a proposed Public transit infrastructure activity, AND
  - Property receives priority for commercial usage if zoned for commercial use

- Adaptive Reuse – the rehabilitation of abandoned civic, educational, or religious facilities into development

which provides potential services usually delivered by libraries, community centers, or learning centers. This land use activity is applied when the following criteria are met:

- Parcel is either vacant or abandoned, AND
- For vacant properties, the parcels are located in areas characterized by a clustering of civic, educational, or religious facilities; for abandoned structures, the facility is either a civic, educational, or religious facility and was used for either a civic, educational, or religious related purpose

• Public Transit Infrastructure – consists of the development of infrastructure which supports public transit (e.g. bus shelters; adequate, safe bus shelters). This land use activity is applied when the following criteria are met:

- Property is either vacant or abandoned, AND
- Property is located along Saginaw, Coldwater, Carpenter, or Detroit streets, AND
- Property is located along a MTA fixed bus route, AND
- Property is located at a central location enclosed or has the potential to be enclosed by parcels used for commercial or other non-residential activities

• Green Space – controlled and aesthetically pleasing vegetation (e.g. trees) or parks; a secondary option utilized in extreme cases of concentrated vacancy or abandonment. This land use activity is applied when the following criteria are met:

- Commercial, adaptive reuse, public transit infrastructure activities are not applicable on parcels based on the criteria configured under these activities, AND
- Green space takes precedence over properties applicable under infill housing and blotting activities if property is adjacent to a dead end

In addition to these land use activities, occupied land uses are also presented in the following land use map. These represent existing parcels which are not vacant or abandoned. These are labeled as “occupied residential” for occupied residential dwellings; “occupied public/exempt” for occupied civic, educational, or religious facilities; “occupied commercial” for occupied commercial units; and “occupied industrial” for occupied industrial facilities. No changes were committed to these parcels.

Figure 8.2.1 illustrates the Beecher Site Land Use Scenario 2. Land use presented under this alternative consists of minimal parcel fragmentation. Green space has been limited to the edges of large parcel groups. Infill housing and blotting are utilized to a greater degree. Commercial usage is located primarily along Detroit, Saginaw, and Carpenter roads. Frequency of Adaptive reuse is increased and concentrated on existing similar facilities to create a possible “anchor” effect. Public transportation infrastructure is located on two parcels along Detroit Street near Cornell and Knickerbocker Roads.

Figure 8.2.1 Beecher Land Use Plan 2 Map
Source: Team Genesee

Beecher Land Use Scenario 2

Note: This map is prone to human error; crosschecking of proposed land use against existing conditions is advised.

8.3 Land Use Scenario 1 vs. Land Use Scenario 2

The two land use plans differ based on the general theme each presents. Whereas land use scenario 1 considers growth unlikely and implements intensive utilization of green space, land use scenario 2 considers redevelopment a viable alternative. These differences are illustrated by the rules presented under each land use activity criteria.

The two plans differ primarily through their use of green space, which is used more prominently in land use scenario 1. Residential blocks are fragmented by this green space to keep maintenance and financial investment required to implement such changes at a minimum. In contrast, land use scenario 2 controls green space distribution to minimize block fragmentation while requiring a higher degree of financial investment and maintenance. Scenario 2 assumes that the population decline of the past several decades will reverse and new residents will move into Beecher site. Infill housing and blotting are more prominent in land use plan 2 while maintaining the residential identity of the neighborhood while requiring a higher degree of financial investment for its realization. Commercial and adaptive reuse activities are also more prominent in land use plan 2. Public transit infrastructure is the sole activity kept identical in both land uses. This activity is considered viable and located on the same parcels in both land use plans. Scenario 1 is a more likely implementation based on current trends and economic conditions of the region. In contrast, scenario 2 may act as a preparatory land use plan should economic conditions within the region experience increased growth.

Based on these comparisons and the maps provided, a SWOT analysis of each land use is as follows:

	Land Use Scenario 1 **Preservation**	**Land Use Scenario 2** **Growth**
Strengths:	Low development cost Low infrastructure maintenance cost Elimination of vacancies and abandonment Commercial growth	Elimination of vacancies and abandonment Enhanced commercial growth Public transit improvements Development of community service anchors Preserve residential identity Compact development
Weaknesses:	Residential fragmentation Irregular residential blocks	High development cost High infrastructure maintenance cost
Opportunities:	Improved socio-economic status Increased income for Mt. Morris Township Strengthening of the Beecher commercial area Improved school performance Improved property values	Improved socio-economic status Transit oriented development Larger increase in income for Mt. Morris Twp Strengthening of the Beecher commercial area Improved school performance Improved property values
Threats:	Disinterest in blotting activities Lack of funding Aging infrastructure Elimination of blight may not result in economic development Potential decline for properties effected by residential fragmentation	Disinterest in blotting activities Lack of funding Aging infrastructure Elimination of blight may not result in economic development

8.4 Land Use Discussion "Sending & Receiving"

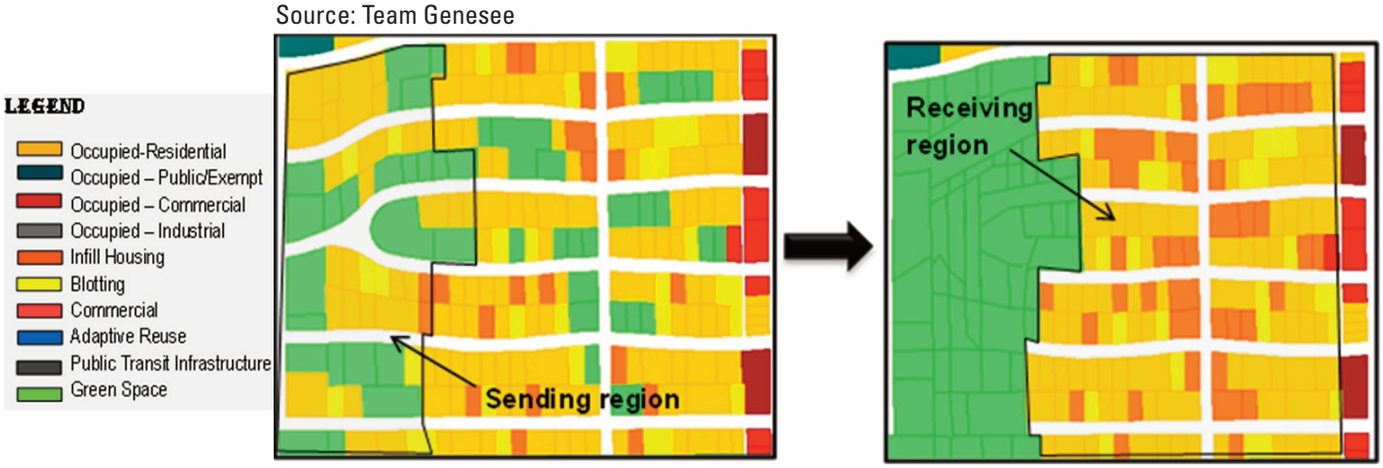
In concluding this project, the MSU Practicum team would like to offer a third scenario. This scenario is introduced as a discussion piece due to the previous scenarios. Through offering this alternative scenario, the team recognizes that complete underground physical infrastructure analysis should be conducted, and substantial community engagement in the process should be undertaken. Because of the time constraints of a fifteen week course the team was not able to conduct this analysis nor able to engage the community in substantial discussion. It is with these major caveats that this alternative is presented.

In this scenario, two regions exist within Beecher site: a sending region, the most distressed region within a specified district with a high rate of vacancy and abandonment; and a receiving region, a region within a specified district with a lower rate of vacancy and abandonment. Unoccupancies within the receiving region may be recent occurrences, but the receiving region is still taken care of in relative terms. With the two regions identified, a preservation approach is applied to the sending region while a redevelopment approach is applied to the receiving region. Under the preservation approach, vacancy and abandonment in the sending region are converted into green space. Occupied parcels and owners remaining within the area are transferred (sending) to the existing vacant and abandoned parcels in the redeveloping (receiving) region. The formerly occupied properties within the sending region are then converted to green space as well. Roads are closed off and any public infrastructure is taken offline. What results is one small, compact district preserving the residential identity of the area while eliminating vacancy, abandonment, and blight. This new compact district requires less maintenance of public infrastructure from the municipality, while the sending region remains green space until future redevelopment opportunities arise.

An example of how this process might be utilized in Beecher site is illustrated below. Figure 8.4.1 shows the section of the site cornered by Princeton, Genesee, and Detroit Streets. The first image shows this section before the sending & receiving approach is applied. This land use map has been taken from the proposed future land use scenario and is selected as a sample image based on the high number of vacancy and abandonment in the area. The second image illustrates how this section would appear if the sending & receiving process was applied to this area. This sequence is presented solely as a demonstration.

As illustrated from this example, the sending and receiving land use approach may prove viable in the elimination of blight, vacancy, and abandonment in Beecher site. As this process requires relocation of residents, extreme due diligence must be followed if this scenario is explored further. Community input must be a large part of the process and needs to guide the decision-making process, with emphasis placed on those residents who are most likely to be affected by this approach.

Figure 8.4.1 Sending & Receiving Land Use
Source: Team Genesee



IX. Endnotes

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X. Table of Figures

XI. Appendix 1

Table 2.4.2.1: Age Distribution

Source: U.S. Census Bureau, 2000 Census of Population and Housing; ESRI forecasts for 2010 and 2015

	Beecher Site			Mount Morris Twp			Genesee County			State of Michigan		
Population by Age	2000	2010	2015	2000	2010	2015	2000	2010	2015	2000	2010	2015
Total	**3,378**	**3,037**	**2,893**	**23,725**	**22,200**	**21,427**	**436,141**	**424,800**	**414,605**	**9,938,444**	**10,104,633**	**10,039,343**
0-4	10.2%	10.4%	10.7%	7.4%	7.4%	7.6%	7.3%	7.0%	6.9%	6.8%	6.7%	6.5%
5-9	11.5%	10.0%	9.9%	9.3%	7.6%	7.5%	8.1%	7.1%	7.0%	7.5%	6.7%	6.7%
10-14	8.8%	7.8%	8.2%	8.4%	7.1%	7.4%	7.7%	6.9%	7.1%	7.5%	6.7%	6.8%
15-24	14.7%	17.3%	16.4%	13.9%	14.9%	13.9%	13.3%	13.2%	12.8%	13.7%	13.8%	13.3%
25-34	13.6%	12.8%	13.8%	12.5%	12.7%	13.1%	13.6%	12.5%	12.5%	13.7%	12.6%	12.7%
35-44	15.2%	12.3%	11.5%	14.9%	12.4%	12.0%	16.0%	13.4%	12.7%	16.1%	13.5%	12.8%
45-54	10.4%	11.8%	10.2%	12.6%	13.4%	11.8%	13.7	15.0%	13.4%	13.8%	15.0%	13.7%
55-64	7.0%	9.4%	10.2%	9.4%	11.6%	12.5%	8.7%	12.1%	13.1%	8.7%	12.1%	13.0%
65-74	5.4%	4.9%	5.7%	7.2%	7.3%	8.6%	6.6%	6.9%	8.5%	6.5%	6.9%	8.5%
75-84	2.6%	2.5%	2.5%	3.6%	4.2%	4.2%	3.8%	4.2%	4.2%	4.4%	4.2%	4.1%
85+	0.6%	0.8%	0.8%	0.8%	1.3%	1.5%	1.2%	1.7%	1.7%	1.4%	1.9%	1.9%
18+	**64.6%**	**66.2%**	**66.5%**	**69.9%**	**72.8%**	**73.5%**	**72.6%**	**74.5%**	**75.0%**	**73.9%**	**75.8%**	**76.1%**
Median Age	**28.3**	**28.1**	**28.1**	**33.8**	**35.3**	**35.4**	**35.0**	**37.4**	**38.0**	**35.0**	**37.8**	**38.1**

Table 3.1.3.1: Racial Composition

Source: U.S. Census Bureau, 2000 Census of Population and Housing; ESRI forecasts for 2010 and 2015

	Beecher Site			Mount Morris Twp			Genesee County			State of Michigan		
Population by Race/Ethnicity	2000	2010	2015	2000	2010	2015	2000	2010	2015	2000	2010	2015
Total	**3,378**	**3,307**	**2,893**	**23,725**	**22,200**	**21,427**	**436,141**	**424,800**	**414,605**	**9,938,444**	**10,104,343**	**10,039,343**
White alone	48.8%	46.7%	47.0%	54.5%	53.8%	54.2%	75.3%	75.9%	76.2%	80.2%	79.0%	78.2%
Black or African-American alone	41.7%	42.5%	41.5%	40.2%	40.1%	39.3%	20.4%	19.1%	18.4%	14.2%	13.9%	14.0%
American Indian alone	1.4%	1.4%	1.5%	0.6%	0.6%	0.7%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
Asian or Pacific Islander alone	0.0%	0.0%	0.0%	0.3%	0.3%	0.4%	0.8%	1.0%	1.1%	1.8%	2.5%	2.9%
Some Other Race alone	3.2%	3.6%	3.8%	1.3%	1.4%	1.5%	0.8%	0.9%	0.9%	1.3%	1.7%	1.9%
Two or More Races	4.9%	5.8%	6.2%	3.1%	3.7%	4.0%	2.2%	2.6%	2.8%	1.9%	2.3%	2.4%
Hispanic Origin	6.8%	7.6%	8.0%	3.0%	3.5%	3.7%	2.3%	2.6%	2.8%	3.3%	4.3%	4.9%
Diversity Index	**64.0**	**65.7**	**66.5**	**56.8**	**58.0**	**58.4**	**41.9**	**41.8**	**41.8**	**37.9**	**40.9**	**42.7**

Table 3.1.4.1: Educational Attainment
Source: U.S. Census Bureau, 2000 Census of Population and Housing; ESRI forecasts for 2010 and 2015

	Beecher Site	Mount Morris Twp	Genesee County	State of Michigan
Total	**1,655**	**13,988**	**279,199**	**6,687,894**
Less than 9th Grade	5.9%	3.1%	2.7%	3.6%
9th to 12th Grade, No Diploma	29.1%	13.1%	9.0%	8.3%
High School Graduate	35.1%	39.0%	34.7%	31.9%
Some College, No Degree	21.9%	27.4%	25.7%	23.0%
Associate's Degree	4.7%	7.3%	8.9%	8.1%
Bachelor's Degree	2.4%	7.7%	12.4%	15.5%
Graduate/Professional Degree	0.8%	2.4%	6.6%	9.7%
Post-Secondary Education (Associate's +)	**7.9%**	**17.4%**	**27.9%**	**33.3%**

Table 3.1.5.1: Household Income
Source: U.S. Census Bureau, 2000 Census of Population and Housing; ESRI forecasts for 2010 and 2015

	Beecher Site			Mount Morris Twp			Genesee County			State of Michigan		
Households by Income	**2000**	**2010**	**2015**	**2000**	**2010**	**2015**	**2000**	**2010**	**2015**	**2000**	**2010**	**2015**
HH Income Base	**1,205**	**1,058**	**1,011**	**8,844**	**8,413**	**8,160**	**170,030**	**167,786**	**164,321**	**3,788,780**	**3,885,903**	**3,871,714**
<$15,000	27.2%	21.8%	20.7%	17.5%	14.2%	12.2%	16.0%	12.0%	10.2%	14.1%	10.6%	8.9%
$15,000 - $24,999	23.7%	18.3%	15.5%	16.5%	12.6%	9.8%	13.3%	11.0%	8.4%	12.4%	9.5%	7.2%
$25,000 - $34,999	22.3%	20.4%	18.1%	14.6%	12.7%	10.7%	12.7%	9.8%	7.9%	12.4%	9.5%	7.7%
$35,000 - $49,999	11.4%	19.6%	17.6%	16.8%	16.6%	13.5%	15.8%	15.0%	11.7%	16.5%	15.1%	12.0%
$50,000 - $74,999	5.6%	9.0%	12.3%	19.1%	25.0%	29.6%	20.1%	25.5%	29.0%	20.6%	24.8%	27.2%
$75,000 - $99,999	3.8%	4.3%	5.6%	8.5%	10.3%	12.1%	11.4%	12.8%	14.3%	11.4%	13.5%	14.9%
$100,000 - $149,999	4.4%	3.9%	6.0%	5.1%	6.2%	8.7%	7.8%	9.8%	13.0%	8.6%	11.4%	14.8%
$150,000 - $199,999	0.5%	1.5%	2.5%	1.0%	1.3%	2.0%	1.5%	2.4%	3.2%	2.1%	3.0%	3.9%
$200,000+	1%	1.1%	1.7%	0.9%	1.1%	1.5%	1.4%	1.7%	2.2%	2.0%	2.7%	3.5%
Median HH Income	**$24,622**	**$30,603**	**$32,669**	**$36,011**	**$43,635**	**$52,123**	**$42,134**	**$51,734**	**$58,062**	**$57,400**	**$67,356**	**$75,782**
Average HH Size	**2.88**	**2.85**	**2.84**	**2.68**	**2.63**	**2.61**	**2.54**	**2.50**	**2.49**	**2.56**	**2.53**	**2.53**

Table 3.1.6.1: Civilian Population 16+ in Labor Force
Source: U.S. Census Bureau, 2000 Census of Population and Housing; ESRI forecasts for 2010 and 2015

	Beecher Site		Mount Morris Twp		Genesee County		State of Michigan	
	2010	2015	2010	2015	2010	2015	2010	2015
Civilian Employed	62.6%	68.0%	76.0%	80.0%	81.3%	84.7%	84.0%	87.0%
Civilian Unemployed	37.4%	32.0%	24.0%	20.0%	18.7%	15.3%	16.0%	13.0%

Table 3.1.6.2: Employment Population 16+ by Industry
Source: U.S. Census Bureau, 2000 Census of Population and Housing; ESRI forecasts for 2010 and 2015

	Beecher Site	Mount Morris Twp	Genesee County	State of Michigan
Total	**781**	**7,424**	**158,766**	**4.052,572**
Agriculture/Mining	1.2%	0.4%	0.4%	1.4%
Construction	2.0%	4.2%	5.1%	4.9%
Manufacturing	15.0%	18.6%	16.8%	15.6%
Wholesale Trade	2.2%	1.5%	2.6%	3.0%
Retail Trade	13.1%	14.2%	12.7%	11.8%
Transportation/Utilities	2.4%	4.2%	3.3%	3.9%
Information	2.7%	1.5%	1.7%	1.7%
Finance/Insurance/Real Estate	3.8%	5.5%	5.2%	5.8%
Services	53.4%	46.5%	48.9%	47.6%
Public Administration	4.2%	3.5%	3.2%	4.3%

Table 4.1.1.1 Housing Occupancy
Source: U.S. Census Bureau, 2000 Census of Population and Housing; ESRI forecasts for 2010 and 2015

	Beecher Site			Mount Morris Twp			Genesee County			State of Michigan		
Housing Tenure	2000	2010	2015	2000	2010	2015	2000	2010	2015	2000	2010	2015
Total Housing Units	**1,396**	**1,505**	**1,541**	**9,521**	**10,043**	**10,137**	**183,630**	**199,542**	**202,435**	**4,234,279**	**4,602,736**	**4,688,323**
Owner Occupied Units	49.9%	39.9%	36.8%	71.6%	63.4%	61.1%	67.7%	60.7%	58.7%	66.0%	61.7%	60.4%
Renter Occupied Units	35.2%	30.5%	28.8%	21.0%	20.4%	19.4%	24.8%	23.3%	22.5%	23.4%	22.7%	22.2%
Vacant Units	14.9%	29.6%	34.4%	7.4%	16.2%	19.5%	7.5%	15.9%	18.8%	10.6%	15.6%	17.4%

XII. Appendix 2: Parcel Scores

ID	PARCELID	ROOF	DOOR	WINDOW	SIDING	LOTDRIVE	RAWSCORE	FINAL	CLASS
27226	14-24-200-021	3	3	3	3	3	15	3	Good
27267	14-24-529-079	3	2	2	3	3	13	3	Good
27268	14-24-529-080	3	2	2	3	3	13	3	Good
27271	14-24-529-083	2	2	2	3	3	12	2	Fair
27304	14-24-502-011	3	2	2	3	3	13	3	Good
27373	14-24-530-068	3	3	3	3	3	15	3	Good
27391	14-24-530-028	3	2	2	3	3	13	3	Good
27409	14-24-529-049	3	3	3	2	2	13	3	Good
27421	14-24-529-044	3	2	2	3	3	13	3	Good
27429	14-24-529-043	2	2	2	2	2	10	2	Fair
27585	14-24-529-032	3	2	2	3	3	13	3	Good
27615	14-24-501-023	3	2	3	2	3	13	3	Good
27655	14-24-503-001	1	2	2	3	2	10	2	Fair
27734	14-24-530-048	3	3	3	3	2	14	3	Good
27739	14-24-530-053	3	3	3	2	2	13	3	Good
27741	14-24-529-020	3	3	3	2	3	14	3	Good
27917	14-24-529-019	3	3	2	3	3	14	3	Good
28604	14-24-504-033	3	2	2	3	3	13	3	Good
28741	14-24-504-026	3	2	2	3	3	13	3	Good
28896	14-24-526-024	2	2	2	1	3	10	2	Fair
28951	14-24-502-038	3	2	3	1	2	11	2	Fair
29080	14-24-529-007	2	3	3	2	2	12	2	Fair
29265	14-24-553-038	2	3	3	2	2	12	2	Fair
29270	14-24-553-034	3	2	2	2	2	11	2	Fair
29273	14-24-553-032	1	1	1	1	1	5	1	Poor
29279	14-24-553-024	3	2	2	3	2	12	2	Fair
29281	14-24-553-022	2	1	2	3	3	11	2	Fair
29283	14-24-553-019	2	2	2	3	3	12	2	Fair
29329	14-24-552-298	2	3	3	2	2	12	2	Fair
29330	14-24-552-297	2	2	2	3	3	12	2	Fair
29340	14-24-552-292	2	3	3	2	2	12	2	Fair
29344	14-24-553-010	3	2	2	3	3	13	3	Good
29447	14-24-552-245	3	2	2	2	3	12	2	Fair
29465	14-24-552-265	3	3	2	2	2	12	2	Fair
29468	14-24-552-266	3	3	3	2	2	13	3	Good
29474	14-24-552-226	1	1	1	1	1	5	1	Poor
29481	14-24-552-268	3	3	3	3	3	15	3	Good
29498	14-24-552-270	3	2	2	2	2	11	2	Fair
29500	14-24-552-262	3	2	2	2	2	11	2	Fair
29503	14-24-552-271	1	1	1	1	1	5	1	Poor
29508	14-24-552-279	2	3	2	1	2	10	2	Fair
29530	14-24-552-233	2	3	3	3	2	13	3	Good
29545	14-24-552-223	3	3	3	3	2	14	3	Good
29567	14-24-552-222	2	2	2	1	1	8	2	Poor
29660	14-24-552-208	3	3	2	2	3	13	3	Good
29689	14-24-552-194	2	1	2	1	2	8	2	Poor
29749	14-24-552-176	2	2	2	2	2	10	2	Fair
29761	14-24-552-202	3	2	2	3	3	13	3	Good
29845	14-24-552-110	2	1	2	2	2	9	2	Fair
29848	14-24-552-108	3	3	3	2	3	14	3	Good
29855	14-24-552-126	3	2	2	2	2	11	2	Fair
29904	14-24-552-147	2	2	2	1	3	10	2	Fair
29913	14-24-552-156	1	1	1	1	1	5	1	Poor
29918	14-24-552-148	2	2	2	2	2	10	2	Fair

29926	14-24-552-157	2	1	1	2	2	8	2	Poor
29927	14-24-552-106	2	3	2	1	1	9	2	Fair
29941	14-24-552-132	3	1	1	1	2	8	2	Poor
29956	14-24-552-158	2	2	2	2	2	10	2	Fair
30127	14-24-552-082	2	3	3	3	1	12	2	Fair
30132	14-24-552-084	3	1	3	2	2	11	2	Fair
30163	14-24-552-069	2	1	1	2	2	8	2	Fair
30169	14-24-552-068	3	3	3	3	2	14	3	Good
30180	14-24-552-067	2	3	3	2	2	12	2	Fair
30259	14-24-552-301	2	2	3	2	2	11	2	Fair
30309	14-24-552-037	2	3	3	2	2	12	2	Fair
30323	14-24-552-311	2	3	3	3	3	14	3	Good
30344	14-24-552-057	2	3	1	3	2	11	2	Fair
30491	14-24-551-298	1	1	1	1	2	6	1	Poor
30581	14-24-551-260	3	2	3	3	3	14	3	Good
30588	14-24-551-274	1	1	1	1	1	5	1	Poor
30590	14-24-551-261	2	2	3	3	3	13	3	Good
30592	14-24-551-268	3	3	3	3	2	14	3	Good
30597	14-24-551-267	2	1	2	2	2	9	2	Fair
30602	14-24-551-266	1	1	1	1	1	5	1	Poor
30668	14-24-551-191	2	2	1	2	2	9	2	Fair
30670	14-24-551-317	2	1	1	1	1	6	1	Poor
30696	14-24-551-216	3	3	3	3	2	14	3	Good
30709	14-24-551-214	1	2	1	2	2	8	2	Poor
30719	14-24-551-213	3	1	1	1	1	7	1	Poor
30727	14-24-551-236	2	3	3	2	2	12	2	Fair
30731	14-24-551-247	3	3	3	3	2	14	3	Good
30757	14-24-551-243	3	2	2	1	2	10	2	Fair
30943	14-24-551-153	2	3	2	1	2	10	2	Fair
30970	14-24-551-311	1	2	2	2	2	9	2	Fair
30976	14-24-551-143	1	2	2	1	1	7	1	Poor
31087	14-24-551-071	1	1	1	1	1	5	1	Poor
31102	14-24-551-081	2	2	2	2	3	11	2	Fair
31107	14-24-551-084	1	1	1	1	2	6	1	Poor
31129	14-24-551-100	1	2	2	1	2	8	2	Poor
31135	14-24-551-105	3	2	2	2	1	10	2	Fair
31136	14-24-551-106	3	1	2	1	2	9	2	Fair
31145	14-24-551-113	1	3	3	2	2	11	2	Fair
31152	14-24-551-118	3	3	3	3	3	15	3	Good
31157	14-24-551-122	2	3	3	2	3	13	3	Good
31275	14-24-551-315	3	3	2	2	3	13	3	Good
31278	14-24-551-066	1	1	1	1	1	5	1	Poor
31285	14-24-551-063	3	1	2	2	3	11	2	Fair
31286	14-24-551-062	2	2	2	2	3	11	2	Fair
31309	14-24-551-046	2	2	2	2	1	9	2	Fair
31324	14-24-551-035	3	2	2	1	2	10	2	Fair
31352	14-24-551-017	2	1	3	2	2	10	2	Fair
31363	14-24-551-011	1	2	1	1	2	7	1	Poor
31374	14-24-551-002	2	3	3	3	3	14	3	Good
31664	14-24-400-002	2	3	3	3	3	14	3	Good
32147	14-24-576-001	2	3	3	2	2	12	2	Fair
32148	14-24-578-060	3	2	2	1	2	10	2	Fair
32152	14-24-578-063	2	2	2	2	2	10	2	Fair
32170	14-24-578-071	3	2	2	2	1	10	2	Fair
32176	14-24-578-073	3	3	3	3	2	14	3	Good

32185	14-24-578-076	2	2	2	1	3	10	2	Fair
32256	14-24-578-102	2	2	2	1	3	10	2	Fair
32276	14-24-578-109	1	2	3	3	2	11	2	Fair
32280	14-24-578-111	2	2	3	1	2	10	2	Fair
32300	14-24-578-123	2	3	2	1	2	10	2	Fair
32319	14-24-578-134	2	2	2	2	2	10	2	Fair
32332	14-24-578-140	1	3	3	1	2	10	2	Fair
32442	14-24-576-002	2	2	2	1	2	9	2	Fair
32468	14-24-578-058	3	2	3	1	3	12	2	Fair
32495	14-24-578-052	1	1	1	1	1	5	1	Poor
32607	14-24-578-010	1	3	2	2	3	11	2	Fair
32669	14-24-577-287	1	1	1	1	2	6	1	Poor
32756	14-24-577-220	2	2	2	1	1	8	2	Poor
32763	14-24-577-224	3	3	3	2	3	14	3	Good
32767	14-24-577-227	3	2	2	2	3	12	2	Fair
32771	14-24-577-228	2	2	2	1	2	9	2	Fair
32773	14-24-577-229	2	1	2	3	3	11	2	Fair
32787	14-24-577-234	2	2	1	1	3	9	2	Fair
32797	14-24-577-239	2	2	2	2	3	11	2	Fair
32815	14-24-577-248	2	2	2	2	2	10	2	Fair
32864	14-24-577-269	3	3	2	2	2	12	2	Fair
32884	14-24-577-276	1	1	2	1	2	7	1	Poor
32885	14-24-577-277	1	2	1	1	2	7	1	Poor
32999	14-24-577-186	2	2	2	1	2	9	2	Fair
33002	14-24-577-184	2	2	2	2	2	10	2	Fair
33003	14-24-577-183	3	3	3	3	2	14	3	Good
33073	14-24-577-152	3	2	2	2	2	11	2	Fair
33086	14-24-577-071	1	2	2	2	1	8	2	Poor
33122	14-24-577-132	3	3	3	2	3	14	3	Good
33159	14-24-577-120	2	1	2	2	1	8	2	Poor
33225	14-24-577-044	1	2	2	1	2	8	2	Poor
33240	14-24-577-055	2	2	3	2	2	11	2	Fair
33258	14-24-577-305	2	2	2	1	2	9	2	Fair
33290	14-24-577-079	2	1	1	1	2	7	1	Poor
33297	14-24-577-082	2	2	2	1	2	9	2	Fair
33346	14-24-577-103	2	1	2	1	2	8	2	Poor
33349	14-24-577-105	2	1	2	1	2	8	2	Poor
33352	14-24-577-108	2	2	2	1	2	9	2	Fair
33362	14-24-577-111	1	1	1	1	2	6	1	Poor
33567	14-24-577-010	3	3	3	3	3	15	3	Good
33678	14-24-576-274	2	2	1	2	2	9	2	Fair
33685	14-24-576-270	2	2	1	1	2	8	2	Poor
33691	14-24-576-268	1	2	1	2	2	8	2	Poor
33721	14-24-576-257	1	1	1	1	2	6	1	Poor
33725	14-24-576-258	2	3	2	2	2	11	2	Fair
33777	14-24-576-182	3	2	2	3	3	13	3	Good
33779	14-24-576-183	3	3	3	1	3	13	3	Good
33786	14-24-576-185	3	3	3	2	3	14	3	Good
33812	14-24-576-198	2	3	2	3	3	13	3	Good
33859	14-24-576-219	2	2	2	3	3	12	2	Fair
33867	14-24-576-222	1	1	2	1	2	7	1	Poor
33871	14-24-576-223	1	2	2	1	2	8	2	Poor
33878	14-24-576-225	3	2	2	2	3	12	2	Fair
33885	14-24-576-228	3	3	2	2	2	12	2	Fair
33909	14-24-576-237	3	2	2	3	3	13	3	Good

33961	14-24-576-244	3	3	1	2	3	12	2	Fair
33972	14-24-576-249	2	3	3	2	3	13	3	Good
33976	14-24-576-252	2	1	1	2	3	9	2	Fair
34051	14-24-576-161	2	2	2	3	3	12	2	Fair
34055	14-24-576-160	2	2	2	2	3	11	2	Fair
34065	14-24-576-155	1	2	2	1	2	8	2	Poor
34072	14-24-576-152	1	2	3	1	2	9	2	Fair
34088	14-24-576-147	2	2	2	2	1	9	2	Fair
34100	14-24-576-141	3	2	2	2	3	12	2	Fair
34106	14-24-576-137	3	2	2	2	3	12	2	Fair
34114	14-24-576-131	3	3	2	2	2	12	2	Fair
34116	14-24-576-130	3	3	3	2	3	14	3	Good
34118	14-24-576-129	2	2	2	2	2	10	2	Fair
34139	14-24-576-119	2	2	1	1	2	8	2	Poor
34141	14-24-576-118	2	2	2	1	2	9	2	Fair
34155	14-24-576-111	1	2	2	2	1	8	2	Poor
34159	14-24-576-305	3	2	2	2	3	12	2	Fair
34164	14-24-576-108	3	3	3	1	3	13	3	Good
34172	14-24-576-105	1	2	2	1	2	8	2	Poor
34192	14-24-576-096	2	2	2	1	3	10	2	Fair
34197	14-24-576-093	3	2	2	1	2	10	2	Fair
34230	14-24-576-301	3	3	3	2	3	14	3	Good
34257	14-24-576-013	3	2	2	3	3	13	3	Good
34261	14-24-576-014	2	3	3	3	2	13	3	Good
34302	14-24-576-035	2	2	2	1	2	9	2	Fair
34313	14-24-576-046	3	3	3	3	3	15	3	Good
34315	14-24-576-047	3	2	2	3	3	13	3	Good
34335	14-24-576-058	2	3	3	3	3	14	3	Good
34345	14-24-576-062	1	2	2	1	3	9	2	Fair
34357	14-24-576-067	3	3	2	1	2	11	2	Fair
34362	14-24-576-068	2	1	3	1	3	10	2	Fair
34364	14-24-576-069	2	1	3	1	3	10	2	Fair
34375	14-24-576-074	3	3	3	2	3	14	3	Good
34376	14-24-576-075	2	3	3	1	3	12	2	Fair
34381	14-24-576-077	2	3	2	2	3	12	2	Fair
34384	14-24-576-078	2	3	3	3	2	13	3	Good
34392	14-24-576-081	2	1	2	1	1	7	1	Poor
33522	14-24-577-030	1	1	1	1	1	5	1	Poor
33594	14-24-576-294	2	2	2	2	2	10	2	Fair
33858	14-24-576-218	3	2	2	3	2	12	2	Fair
33837	14-24-576-209	1	1	2	1	3	8	1	Poor
33815	14-24-576-199	3	3	3	3	2	14	3	Good
33753	14-24-576-173	2	2	2	3	2	11	2	Fair
30184	14-24-552-066	2	2	2	3	2	11	2	Fair