

Map 10: Mount Clemens, Street Inventory Context

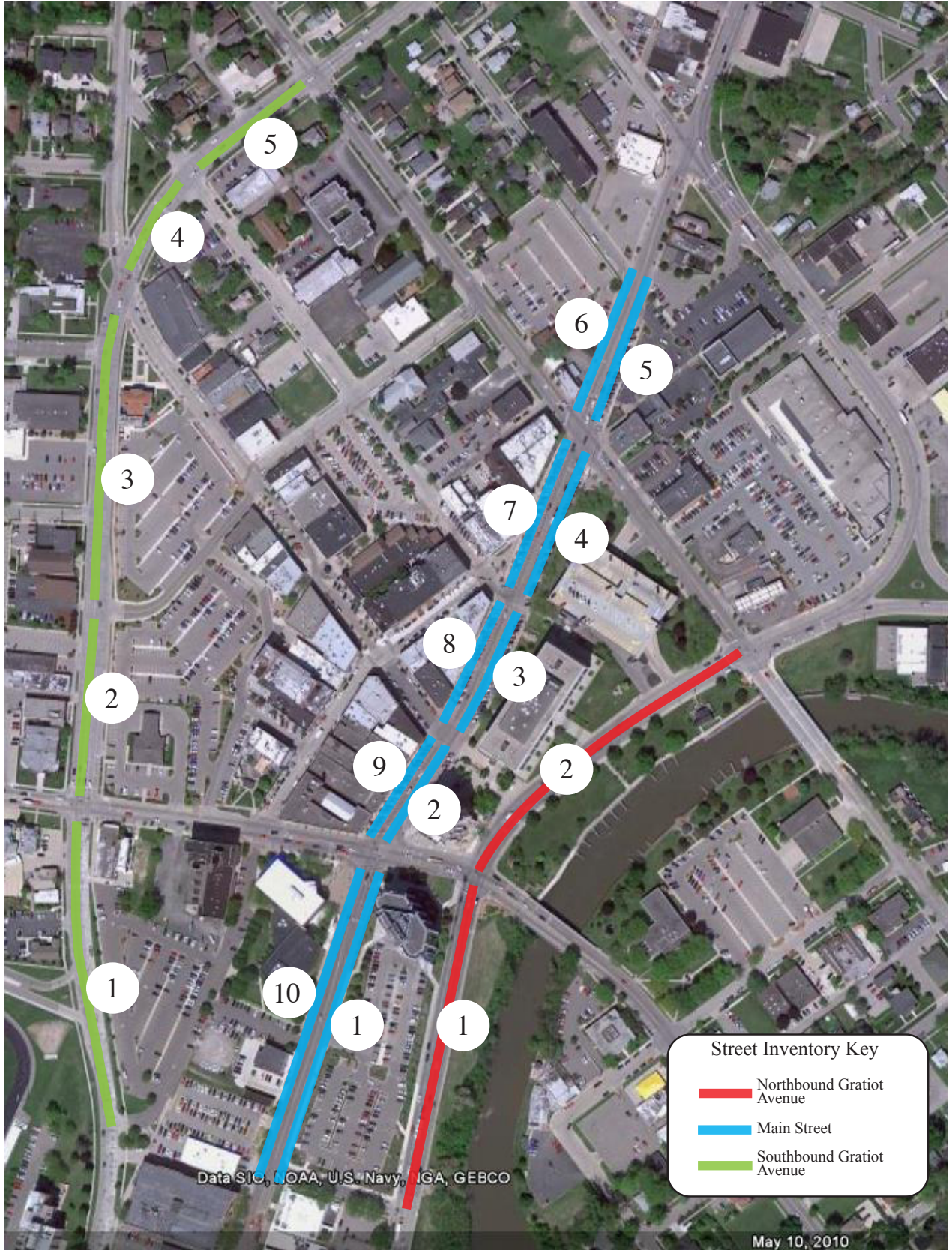


Figure 3.5

Roads	Starting Street	Ending Street	Section Number	Sidewalk Width	Sidewalk Surface Condition	Sidewalk Grade	Sidewalk Obstructions	Sidewalk/Curb Cuts	Sidewalk Tactile Strips	Pedestrian Buffer	Crosswalk Signal	Crosswalk Timer	Audible Crosswalk	Comfortable Crossing Time	Crosswalk Activation	Bike Lanes	Bus Stop	Bus Route Signage	Bus Shelter	Bus Stop Benches	Bus Lanes/Pull Outs	Vehicle Wayfinding	Easy Access to Parking	Safe Street Speed for All Users	Building Facades	Adequate Landscaping
NB Gratiot	Terry St	Cass Ave	1	E-5” W-8”	W-Good E-Avg	flat	yes	yes	no*	no	no	n/a	n/a	no	n/a	no	no	n/a	n/a	n/a	n/a	yes	yes	35mph-no	Lack Diversity	no
NB Gratiot	Cass Ave	Market St	2	E-5” W-8”	avg	slopped	yes	yes	no	no	yes	no	no	no	no	no	yes	yes	no	no	no	no	yes	35mph-no	Lack Diversity	no
SB Gratiot	Walnut Ave	Cass Ave	1	6”	good	flat	no	yes	no	8”	no	n/a	n/a	n/a	n/a	no	yes	no	no	no	no	no	yes	35mph-no	Lack Diversity	yes
SB Gratiot	Cass Ave	Pine St	2	6”	good	flat	no	yes	no*	5”	yes	yes	no	yes	no	no	no	n/a	n/a	n/a	n/a	yes	yes	35mph-no	Lack Diversity	yes
SB Gratiot	Pine St	Macomb Plc	3	6”	good	flat	no	yes	no*	varies	no	n/a	n/a	n/a	n/a	no	no	n/a	n/a	n/a	n/a	no	yes	35mph-no	Lack Diversity	yes
SB Gratiot	Macomb Plc	New St	4	6”	good	flat	no	yes	no	varies	yes	no	no	no	no	no	no	n/a	n/a	n/a	n/a	n/a	yes	35mph-no	Lack Diversity	no
SB Gratiot	New St	Market St	5	6”	good	flat	no	yes	no	varies	no	n/a	n/a	n/a	n/a	no	no	n/a	n/a	n/a	n/a	no	yes	35mph-no	Lack Diversity	yes
East Side Main	Terry St	Cass Ave	1	10”	good	flat	no	yes	no*	no	no	n/a	n/a	n/a	n/a	no	no	n/a	n/a	n/a	n/a	no	yes	30mph-yes	Lack Diversity	yes
East Side Main	Cass Ave	Macomb Plc	2	5-20”	good	flat	yes	yes	no	on-street parking	yes	yes	no	yes	no	no	yes	no	yes	yes	no	no	yes	15mph-yes	Lack Diversity	yes
East Side Main	Macomb Plc	New St	3	5”	poor	uneven	yes	yes	no	on-street parking	no	n/a	n/a	yes	n/a	no	no	n/a	n/a	n/a	n/a	no	yes	15mph-yes	Lack Diversity	yes
East Side Main	New St	Market St	4	5-9”	avg	uneven	yes	yes	no	on-street parking	no	n/a	n/a	yes	n/a	no	no	n/a	n/a	n/a	n/a	yes	yes	15mph-yes	Lack Diversity	yes
East Side Main	Market St	Clinton St	5	9”	avg	flat	yes	yes	no	yes	yes	yes	no	yes	yes	no	no	n/a	n/a	n/a	n/a	no	yes	25mph-yes	Lack Diversity	yes
West Side Main	Clinton St	Market St	6	8”	good	flat	yes	yes	no	no	no	n/a	n/a	no	n/a	no	no	n/a	n/a	n/a	n/a	no	yes	25mph-yes	Lack Diversity	yes
West Side Main	Market St	News St	7	6-18”	good	flat	yes	yes	no	yes	yes	yes	no	yes	yes	no	no	n/a	n/a	n/a	n/a	no	yes	15mph-yes	Use Diversity	yes
West Side Main	New St	Macomb Plc	8	9”	good	flat	yes	yes	no	yes	no	n/a	n/a	yes	n/a	no	no	n/a	n/a	n/a	n/a	no	yes	15mph-yes	Use Diversity	yes
West Side Main	Macomb Plc	Cass Ave	9	9”	good	flat	yes	yes	no	yes	no	n/a	n/a	yes	n/a	no	no	n/a	n/a	n/a	n/a	no	yes	15mph-yes	Use Diversity	yes
West Side Main	Cass Ave	Terry St	10	5-20”	good	flat	yes	yes	no	yes	no	no	no	yes	no	no	yes	no	yes	no	no	no	yes	30mph-no	Lack Diversity	yes

Street Inventory

Northbound Gratiot Avenue Street Inventory (Reference: Map 10, Color Bar Red, Sections 1-2)

Northbound Gratiot Avenue is four lanes between Terry Street and Cass Avenue with a posted speed of 35 miles per hour, with no turn lanes, bike lanes, or bus pull-out lanes. The 560/565 Smart Bus operates on this section of Gratiot and serves: Chesterfield Township, Target and K-mart, downtown Mount Clemens, Macomb Mall, Roseville Plaza, Eastgate Shopping Center, and the Rosa Parks Transit Center (See figure 3.18). However, the stop in the evaluated section lacked a basic shelter or seating for transit users. The sidewalks in the evaluated section of Gratiot Avenue ranged anywhere from 5 feet to 10 feet with no buffer to protect pedestrians from fast-moving traffic on Gratiot. The sidewalk was in good condition in most areas but some areas were sloped toward the roadway. Tactile response strips to warn pedestrians with disabilities of upcoming hazards were not available at most crosswalks in the evaluated sections. Crosswalk signals were available in some sections, though, they did not provide pedestrians with an adequate crossing time. The majority of uses were parking and government facilities. Landscaping was also limited. Wayfinding was available in this section but lacked a unifying theme and was inadequate overall.

The four lanes of 35 mile per hour traffic in this section of northbound Gratiot Avenue prevent pedestrian access to the Clinton River. No midblock crossings exist to provide easy access to the riverfront forcing pedestrians to the nearest signalized intersections. Inadequate crossing times at crosswalk signals significant crossing distances, and inadequate sidewalk facilities reduce pedestrian safety and comfort in this section of northbound Gratiot Avenue.

The following figures provide examples of inadequate or missing facilities along southbound Gratiot Avenue:



Figure 3.6 *Missing Midblock Crossing from pedestrian plaza to connect to the Clinton River*



Figure 3.8 *Narrow Sidewalk and missing pedestrian buffer.*



Figure 3.7 *Missing Tactile Strips*



Figure 3.9 *Wayfinding*

Southbound Gratiot Avenue has a posted speed of 35 miles per hour in the evaluated section. Southbound Gratiot is four lanes between New Street and Macomb Place becoming four lanes with a right-hand turn lane just before Pine Street with the turn lane ending at Cass Avenue. The section between Cass Avenue and Walnut Street is three lanes with no turn lanes, bike lanes, or bus pull-outs. The 560/565 Smart Bus operates on this section of Gratiot and serves: Chesterfield Township, Target and K-mart, downtown Mount Clemens, Macomb Mall, Roseville Plaza, Eastgate Mall, and the Rosa Parks Transit Center (See figure 3.18). However, the stop in this section lacks a basic bus shelter, benches, and transit map for transit users. The sidewalks in the evaluated sections are all an inadequate 6 feet with a buffer that varies from 5 to 8 feet. The buffer was mostly made up of landscaping. Tactile response strips to warn pedestrians with disabilities of upcoming hazards were not available at most crosswalk areas in the evaluated sections. The section offers drivers access to four public parking lots. Landscaping was adequate in most of the evaluated sections though the area lacked a diversity of uses with parking making up the majority of uses. Wayfinding was available in this section but lacked a unifying theme and was inadequate overall.

The four lanes of 35 mile per hour traffic in this section of southbound Gratiot Avenue prevent pedestrian access to the residential, business, religious and institutional uses to the west of downtown. No midblock crossings exist to provide easy access to uses to the west of southbound Gratiot Avenue forcing pedestrians to the nearest signalized intersections. Inadequate crossing times at intersections and sidewalk facilities, and significant crossing distances reduce pedestrian safety and comfort in this section of southbound Gratiot Avenue.



Figure 3.10 Lack of Building Diversity



Figure 3.11 Narrow Sidewalk and excessive block length.



Figure 3.12 Wayfinding



Figure 3.13 Bus Stop with No Shelter or Route Guide

Main Street Inventory (Reference: Map 10, Color Bar Blue, Sections 1-10)

Main Street is a four lane road from Terry Street to Cass Avenue with a left turn lane at Cass Avenue. Main Street narrows to two lanes with a center turn lane after Cass Avenue. This configuration continues until Market Street. The section from Market Street to Clinton Street is a two lane road with a center turn lane and a right hand turn lane that ends at Market. The posted speed throughout the section varies from 35 miles per hour to 15 miles per hour between Cass and Market. No bicycle facilities or bus pull outs exist in the evaluated section. The 560/565 Smart Bus operates on this section of Gratiot and serves: Chesterfield Township, Target and K-mart, downtown Mount Clemens, Macomb Mall, Roseville Plaza, Eastgate Mall, and the Rosa Parks Transit Center (See Figure 3.18). A bus shelter was available in this section however, benches and route maps were not available. Some portions of the evaluated sections of sidewalk were made up of pavers. However, inconsistent use of this material contributed to a lack of unity in design. Sidewalks in the evaluated sections on the east and west sides of Main Street varied from 5 to 20 feet. Pedestrian buffers to protect pedestrians from moving traffic existed in most evaluated sections, often in the form of on-street parking and landscaping. Crosswalk signals were missing between New Street and Macomb Place but slow speeds in these sections made street crossing more comfortable. Pedestrian bump-outs were available between Cass Avenue and Market Street but were at the same level with the street reducing their effectiveness. Use diversity was limited overall on the east side of Main Street, though the west side had a variety of uses. Drivers have direct access to one public parking lot and numerous metered spaces along the east and west sides of Main Street. Wayfinding was available in this section though it lacked a unifying theme and was inadequate overall.



Figure 3.14 Pedestrian Bump out

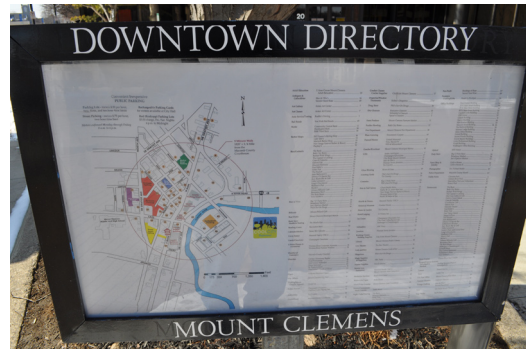


Figure 3.16 Pedestrian Wayfinding



Figure 3.15 Building Diversity



Figure 3.17, Pedestrian Actuated Crosswalk Signal

Regional Context

Gratiot Avenue Corridor Improvement Plan 2009: Summary of Plan Vision

The access management vision along the Gratiot Avenue corridor is to “restore and preserve road capacity, improve safety conditions, and support the long-term vision for expanded regional transit, non motorized systems and community sustainability” (Gratiot Avenue Corridor Improvement Plan). “Communities, county agencies, Southeast Michigan Council of Governments (SEMCOG) all acknowledged the need for a coordinated approach to promote efficient and safe travel and livable streets along a vibrant business corridor” (Gratiot Avenue Corridor Improvement Plan). The plan hopes to achieve the community vision through successful implementation of access management strategies. The plan includes guidelines, regulations, and site-specific recommendations to achieve the vision. Implementation of the plan will be a coordinated effort between the Michigan Department of Transportation (MDOT), The Road Commission of Macomb County, Macomb County Planning, SEMCOG, and the nine participating communities.

Components of the Gratiot Avenue Corridor Improvement Plan

1. An access management plan with guidelines and site-specific recommendations.
2. Accompanying guidelines for coordinating improved transit, non-motorized and community sustainability.
3. Zoning ordinance amendments for corridor communities to adopt and apply for consistent standards.
4. Consistent protocol for an inter-agency communication, coordination and to seek funding.

What is Access Management?

The purpose of access management is to maximize the existing street capacity and reduce potential for crashes. This is achieved by limiting the number of access points, improving access point placement and spacing, as well as other enhancements. (Gratiot Corridor Improvement Plan).

Mount Clemens Roadway Conditions and Concepts

Gratiot Avenue through Mount Clemens is split into northbound and southbound components typically referred to as “one-way pairs”. While this configuration eliminates the potential for crashes while turning left across traffic, it can contribute to confusing circulation at high speeds. Previous planning efforts have looked at the potential for returning the one-way pairs back to two-way roads, but high traffic volumes and the roadways status as an emergency bypass for I-94 have made this alternative unlikely. A viable alternative to returning north and southbound Gratiot to two-way roads is what is known as a road diet. A road diet would allow for increased sidewalk widths, the creation of green space, and the reduction of pedestrian crossing distance. A road diet that reduces one or more travel lanes should be considered during any major future road project.

Access Conditions and Recommendations

Existing Access Conditions

A number of commercial driveways are wider than modern standards and are poorly delineated from Gratiot, the sidewalk, and off-street parking areas. Most uses are served by at least one dedicated driveway. The plan states that the city should close excess driveways and encourage shared access between adjacent properties when opportunities arise. Including cross streets, Gratiot Ave in Mount Clemens has about 74 access points per mile as compared to MDOT’s standard 57 access points per mile for the same posted speed. The plan recommends a 49% reduction in driveways.

Access Recommendations

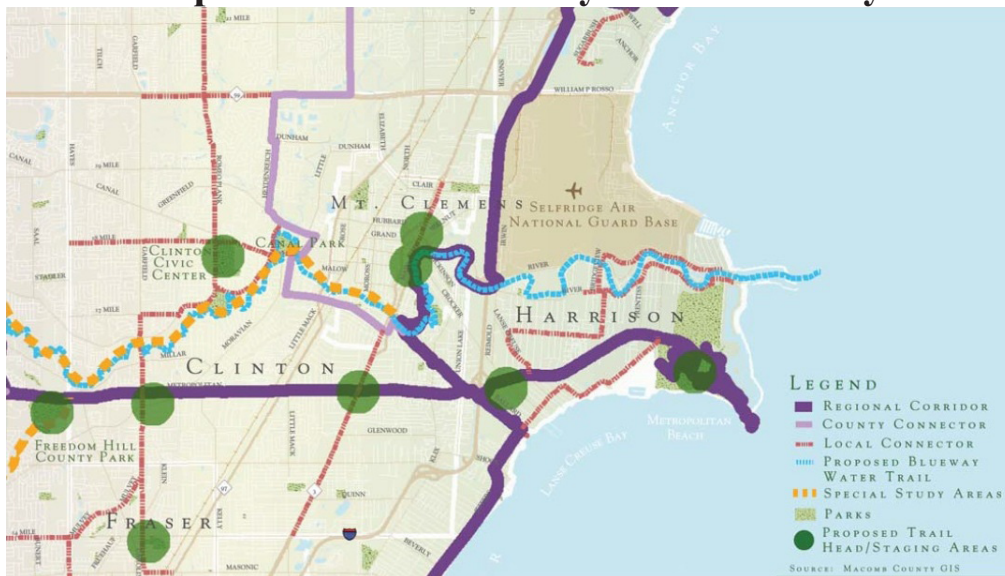
Because most of the Gratiot corridor area within city is built out with constrained lots and abutting land uses, the recommendations focus on eliminating excess driveways and joining adjacent use access. Recommendations outlined in maps 22 through 24 (See appendix H-J) of the Gratiot Avenue Corridor Improvement Plan suggest improvements to Cass Ave and River Road to reduce confusion and congestion that can contribute to crashes.

Non-Motorized Plan

Several locations exist in Downtown Mount Clemens where pedestrians have to cross large commercial driveways that do not include defined pedestrian crosswalks. Driveways should be removed or reconstructed as opportunities arise to reduce pedestrian crossing distance, increase visibility, and decrease crash potential.

In coordination with Macomb County and Clinton Township, a non-motorized pathway is planned to connect the Stony Creek- Metro Beach Trail at 16 mile road north to the Clinton River trail in Downtown Mount Clemens. The plan is to route the pathway up the eastern side of northbound Gratiot Avenue from 16 mile road to Remick Dr. and continue along the northbound one-way pair up to the Clinton River. At this point, the pathway will split into two pathways. One pathway will connect to an existing bridge and the main pathway will continue on northbound Gratiot (See Map 11).

Map 11: Macomb County River Trailway



Transit

SMART (Suburban Mobility Authority for Regional Transportation) offers a fixed line service through Mount Clemens along Gratiot Avenue. The 2008 Regional Transit Service Plan designates Gratiot as one of the three key “spokes” in Metro Detroit for transit, increasing the likelihood of more intense transit service in the future. This plan states that MDOT and the city should consider how site design, including access placement and design, can support safe and convenient transit for the community.

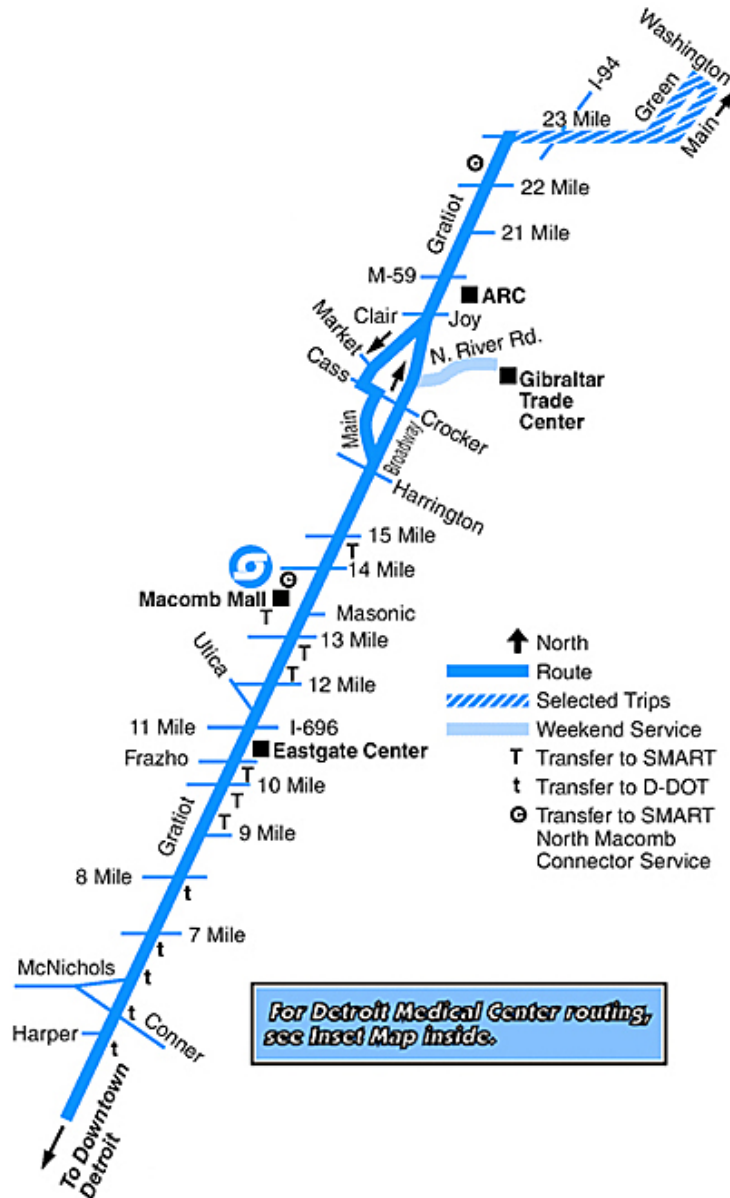


Figure 3.18 SMART Transit Route, Mount Clemens Area

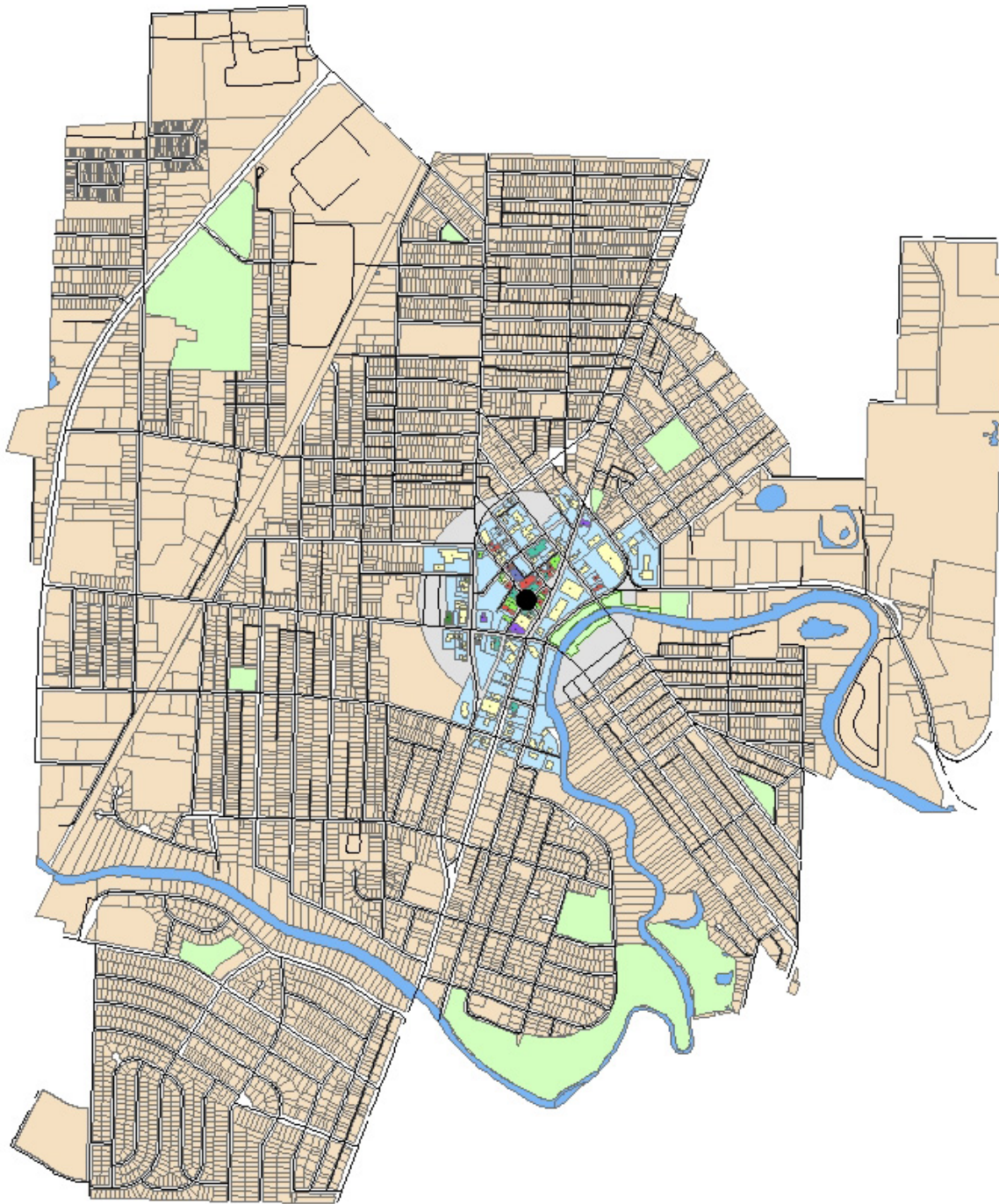
Walkability

Background

A walk score provides a number ranging from 0 to 100, 100 being the most walkable indicates it is easier to live a “car-lite” lifestyle. The walk score for downtown Mount Clemens was produced to gain more information on how “car-lite” the downtown currently is and what can be improved. When carrying out a walk score study, 9 different amenities are taken into account. These amenities include banks, places that provide books such as libraries or book stores; coffee shops, entertainment which could include businesses such as movie theaters, art gallery’s, museums, etc. Additional amenities include grocery stores, parks, restaurants, schools, and shopping venues. Using the methodology outlined at walkscore.com the project team located the amenities in the downtown. Following this a quarter mile radius is set from a selected location and the amenities within that radius are used to calculate the walk score. A quarter mile radius is specifically used because .25 miles is equivalent to a 5 minute walk. This located all of the amenities in the downtown that are in a 5 minute walking distance from the center of the downtown. The location pinpointed for the .25 mile radius was at the intersection of North Walnut and Macomb Place. The location of the radius point was chosen due to its central location in the downtown core. The point for the radius was also chosen because it allowed the radius to encompass the largest amount of amenities. After a walk score is produced there are descriptions of what the studied location can be described as. The descriptions are as follows:

- 90-100 Walker’s Paradise- Daily errands do not require a car.
- 70-89 Very Walkable- Most errands can be accomplished on foot.
- 50-69 Somewhat Walkable- Some amenities within walking distance.
- 25-49 Car-Dependent- A few amenities within walking distance.
- 0-24 Car-Dependent- Almost all errands require a car.

Map 12: Downtown Mount Clemens Walk Score .25 Mile Radius



Map 12 demonstrates the walk score area of the .25 mile radius from the location point of North Walnut and Macomb Place calculated by the MSU project team. The map shows the relationship between the walk score boundary to the rest of the city.

Method of Analysis

This walk score was conducted using an algorithm and methodology developed by the website Walkscore.com. This organization aids in the calculation of walkability and has an advisory board that includes experts from The Sightline Institute and The Brookings Institution.

The initial step in calculating the walk score was data collection. Parcel information, as well as current business condition data was made available through the Mount Clemens DDA’s business directory. Businesses within the downtown were classified by type and organized into one of the 9 amenity classifications by the project team. Each amenity type was also assigned a number and a color for easy mapping and recognition. For example, a bank would fit into category 1 and was assigned the color green. Once data was sorted into amenity types, the locations of these amenities were assigned to appropriate parcels and mapped using a global information system (GIS) program. (See Map 13)

When calculating the walk score only amenities within the .25 mile radius were considered. Amenities within the radius were then counted. Different amenities were assigned different values based on their importance and impact on a walkable community. These values were weighted to take into account the frequency of the amenity. This weighting system ensures that if a certain category of amenity is well represented within the radius, it does not skew the analysis by over emphasizing the multiple presence of specific amenities. After weighted values were assigned, each category was summed and then multiplied by 6.67 to produce a score. The number, 6.67 is used because with the number of amenities it creates a factor of 100. Finally, the 9 amenity scores were added to produce a final walk score for the location. (See Figure 3.19)

Figure 3.19

MOUNT CLEMENS WALK SCORE CALCULATION																		
Category #	Category Name	# Of Counts	Count Weights														Sum of Count Weights	Score (Counts Sum *6.67)
			1	2	3	4	5	6	7	8	9	10	11	12	13	14		
1	Banks	3	1	0	0												1	6.67
2	Books	1	1														1	6.67
3	Coffee	2	1.25	.75													2	13.34
4	Entertainment	8	1	0	0	0	0	0	0	0							1	6.67
5	Grocery	0	(3)														0	0
6	Parks	4	1	0	0	0											1	6.67
7	Restaurants	14	.75	.45	.25	.25	.225	.225	.225	.225	.2	.2	0	0	0	0	3	20.01
8	Schools	1	1														1	6.67
9	Shopping	12	.5	.45	.4	.35	.3	0	0	0	0	0	0	0	0		2	13.34
Total																		80.04

Figure 3.19 illustrates the walk score calculation. Amenity 5 “Grocery” was not present within the established radius, but had a potential assigned weight of 3 on first occurrence.

Map 13: Downtown Mount Clemens Walk Score Amenities



Map 13 illustrates the downtown with the walk score radius showing, the categories of amenities located in the downtown.

Findings

Walk score analysis demonstrated that the downtown provides eight of the 9 essential amenities; this is illustrated in Figure 3.19 The key of Map 13 shows that the downtown is lacking the essential amenity of a grocery store. After carrying out a walk score study on Mount Clemens downtown, it was found that the downtown has a calculated walk score of 80.04. With a walk score of 80.04, downtown Mount Clemens can be described as “Very Walkable”. By adding a grocery store, Downtown Mount Clemens can increase their walk score by nearly 20 points which would bring their walk score to 100; allowing patrons in the downtown area to run day to day errands without the use of a car.

Business Conditions

An assessment of the current business conditions in Mount Clemens and the surrounding area was conducted by analyzing potential consumer spending trends, tapestry segmentation trends and a retail market gap analysis. Each of the three assessment techniques specifies a trade area with a central point at the intersection of Macomb Place and Walnut Avenue radiating outward in 1, 3 and 5 mile increments.

To understand a retail markets activity, two economic principles were examined: supply and demand. Consumer spending will determine the markets demand, while business revenues determine the market supply. Estimates are presented in dollar values using the North American Industry Classification System used by federal statistical agencies when reporting data on U.S. economic conditions. In total, there are 27 industry groups in Retail Trade sector, and four industry groups in the Food & Drink sector.

ESRI uses the most updated form of the Census of Retail Trade (CRT) from the U.S. Census, Infogroup business database, the Bureau of Labor Statistics database and individual unincorporated business data to present the most up-to-date estimate of retail sales of businesses. ESRI uses the Bureau of Labor Statistics annual Consumer Expenditure Surveys to to estimate retail demand. These surveys provide consumer spending potential for hundreds of goods and services and enable the most accurate estimate of retail demand of a market. (See Figure 3.20, next page)

Map 14: Trade Area



Figure 3.20

MOUNT CLEMENS RETAIL MARKET GAP ANALYSIS									
Industry Group	1 Mile			3 Mile			5 Mile		
	Retail Gap (\$,000's)	Surplus/Leakage Factor	Number of Businesses	Retail Gap (\$,000's)	Surplus/Leakage Factor	Number of Businesses	Retail Gap (\$,000's)	Surplus/Leakage Factor	Number of Businesses
Automobile Dealers (NAICS 4411)	\$2,482	6.4	7	-\$280,123	-46.6	34	-\$204,664	-19.6	56
Furniture Stores (NAICS 4421)	\$1,659	59.5	1	\$15,488	77.8	3	-\$26,460	-21.9	15
Electronics & Appliance Stores (NAICS 4431)	\$1,037	22.2	7	\$6,695	18.3	19	\$786	1.7	33
Lawn & Garden Equipment/ Supplies (NAICS 4442)	\$475	86.9	1	\$2,860	56.5	9	-\$3,797	-15.4	24
Grocery Stores (NAICS 4451)	\$7,977	74.2	5	\$37,245	38.0	16	\$88,679	34.0	40
Specialty Food Stores (NAICS 4452)	\$838	43.3	2	\$4,682	30.5	5	\$4,647	9.9	19
Beer, Wine and Liquor Stores (NAICS 4453)	-\$1,892	-41.9	3	-\$1,092	-5.4	12	\$4,294	9.5	30
Health & Personal Care (NAICS 4461)	\$581	6.3	7	\$17,805	33.6	31	\$28,347	18.3	86
Clothing Stores (NAICS 4481)	\$461	10.5	8	\$12,795	54.5	16	-\$27,252	-22.4	84
Shoe Stores (NAICS 4482)	\$381	100	0	\$2,594	86.3	1	\$1,051	7.8	17
Jewelry, Luggage, Leather Goods Store (NAICS 4482)	-\$1,967	-64.7	8	\$424	5.4	12	\$1,040	4.9	31
Sporting Goods/ Hobby/ Music Instrument Stores (NAICS 4511)	\$430	48.7	3	\$1,359	15.7	20	-\$4,790	-15.4	60
Book, Periodical, and Music Stores (NAICS 4512)	\$686	70.0	1	\$5,783	91.8	2	\$5,007	19.1	9
Dept. Stores Excluding Leased Depts. (NAICS 4521)	\$8,446	84.5	1	\$57,903	72.1	4	-\$280	-0.1	17
Other General Merchandise Stores (NAICS 4529)	\$2,912	10.2	3	35,039	18.1	11	\$193,299	48.5	20
Florist (NAICS 4531)	-\$21	-6.0	2	\$44	1.7	6	-\$5,254	-43.3	21
Office Supplies, Stationery and Gift Stores (NAICS 4532)	-\$573	-23.1	11	\$3,972	37.9	23	\$8,453	28.6	57
Used Merchandise Stores (NAICS 4533)	-\$112	-31.7	4	\$152	9.3	11	\$1,328	39.5	16
Other Miscellaneous Store Retailers (NAICS 4539)	-\$111	-5.7	9	\$1,641	14.0	28	\$4,654	15.7	62
Full-Service Restaurants (NAICS 7221)	\$250	1.3	24	\$41,073	38.1	79	\$84,943	28.1	215
Limited-service Eating Places (NAICS 7222)	-\$1,440	-11.0	10	-\$4,552	-5.0	46	-\$28,542	-11.2	132
Special Food Services (NAICS 7223)	-\$1,892	-42.8	6	\$3,053	19.4	12	-\$6,092	-11.1	34
Drinking Places (NAICS 7224)	-\$1,551	-41.7	9	\$327	2.0	18	\$6,754	18.2	35

Source: ESRI and Infogroup

Retail Market Gap Analysis

The retail market gap analysis assessed the current conditions that exist in Mount Clemens retail demand and supply. Further, the amount of money spent inside or outside the trade area is expressed in terms of a surplus and leakage factor which ranges from -100 (total surplus) to 100 (total leakage). Market surpluses indicate that consumers are entering from outside the trade area- supply is higher than the market demand. Therefore, there is a “surplus” in the market supply within the given trade area. Market leakages indicate that consumers are leaving the trade area to acquire goods or services- demand is “leaking” to markets outside of the indicated trade area. For each specific “surplus/leakage factor”, values which have negative numbers are highlighted in red, this represents an industry group is experiencing a sales surplus. Values which have positive numbers are highlighted in blue, this represents an industry group experiencing a sales leakage. Market leakages can be interpreted as positive, because they represent potential opportunity for market growth within the specific trade area. While market surpluses indicate that there is an established industry group within the trade area which should be supported to maintain the industry group’s strong presence.

Currently, \$26,133,000 dollars are leaving the 1 mile radius trade area which encompasses all of downtown Mount Clemens and a significant majority of Mount Clemens as a whole. The three industries with the largest gross dollar leakages are department stores, grocery stores and general merchandise stores. The three industries within this trade area with the largest leakage factors are shoe stores, lawn and garden stores and department stores , these factors are either due to an insufficient supply in the given industry or an uncompetitive nature of the existing industries within the trade area (Figure 3.21, 3.22)

Figure 3.21

1 Mile Trade Area Largest Gross Dollar Leakage	
Department Stores	\$8,446,000
Grocery Stores	\$7,977,000
General Merchandise Stores	\$2,912,000
Source: ESRI and Infogroup	

Figure 3.22

1 Mile Trade Area Largest Leakage Factor	
Shoe Stores	+100
Lawn and Garden Stores	+86.9
Department Stores	+84.5
Source: ESRI and Infogroup	

Within the 3 mile trade area, \$251,534,000 dollars are leaving this specific trade area. This trade area represents all of Mount Clemens and includes adjacent surrounding townships and communities. The three industries with the largest gross dollar leakages are department stores, full-service restaurants and grocery stores. The industries with the largest leakage factors include book, periodicals and music stores, shoe stores and furniture stores (Figure 3.23, 3.24).

Figure 3.23

3 Mile Trade Area Largest Gross Dollar Leakage	
Department Stores	\$57,903,000
Full-service Restaurants	\$41,073,000
Grocery Stores	\$37,245,000
Source: ESRI and Infogroup	

Figure 3.24

3 Mile Trade Area Largest Leakage Factor	
Book, periodicals and music stores	+91.8
Shoe Stores	+86.3
Furniture Stores	+77.8
Source: ESRI and Infogroup	

Within the 5 mile trade area, \$433,282,000 dollars are leaving this specific trade area. The 5 mile trade area represents all of Mount Clemens and expands beyond adjacent townships and communities further. The three industries with the largest gross dollar leakages are general merchandise stores, grocery stores and full-service restaurants. The three industries with the largest leakage factors include general merchandise stores, used merchandise stores and grocery stores (Figure 3.25, 3.26)

Figure 3.25

5 Mile Trade Area Largest Gross Dollar Leakage	
General Merchandise Stores	\$193,299,000
Grocery Stores	\$88,679,000
Full-service Restaurants	\$84,943,000
Source: ESRI and Infogroup	

Figure 3.26

5 Mile Trade Area Largest Leakage Factor	
General Merchandise Stores	+48.5
Used Merchandise Stores	+39.5
Grocery Stores	+34.0
Source: ESRI & Infogroup	

Conversely, industries which exhibit market surpluses within all three of the 1,3 and 5 mile trade areas only include limited-service restaurants with a total gross dollar surplus of \$28,542,000 and market surplus factor of -11.2. This indicates that this specific market draws consumers in from outside the trade area, representing an established industry group within Mount Clemens. Industries with consistent surpluses within the 1 and 3 mile trade area include limited-service restaurants and beer, wine and liquor stores. Industries which exhibit a market surplus within the 1 mile trade area include beer, wine and liquor stores, jewelry, luggage and leather goods stores, florist stores, office supplies, stationary and gift stores, used merchandise stores, limited-service restaurants, special food places and alcoholic drinking places (Figure 3.27).

Figure 3.27

Gross Dollar Market Surplus	
1,3,5 Mile Trade Area	
Limited-service Restaurants	\$28,542,000
1,3 Mile Trade Area	
Limited-service Restaurants	\$4,552,000
Beer, Wine and Liquor Stores	\$1,092,000
1 Mile trade Area	
Jewelry, Luggage & Leather Goods Store	\$1,967,000
Beer, Wine and Liquor Stores	\$1,892,000
Special Food Places	\$1,892,000
Alcoholic Drinking Places	\$1,551,000
Stationary and Gift Stores	\$573,000
Used Merchandise Stores	\$112,000
Florist Stores	\$21,000
Source: ESRI and Infogroup	

Consumer Spending Potential Index

The second analysis of business conditions within downtown Mount Clemens was conducted by an assessment of consumer spending potentials. ESRI determines this assessment from surveys distributed by the Bureau of Labor and Statistics in 2005 and 2006 with broad budget categories that are not mutually

exclusive nor do they represent revenue generated by businesses. In addition, dollars amounts represented in Appendix E are translated to an index, with 100 being the national average. Trade areas are identical to those used when conducting the retail gap analysis. This data allows for added insight into which products consumers want, profitable consumer types and tailoring of promotions to fit customer demand.

Within the 1 mile trade area, all consumer indexes in each category are below the national average. The consumer budget categories with the index scores above 80 are education, health care, food at home and TV/video/audio. Total spent by all consumers in the education, health care, food at home and TV/video/audio categories are \$5,611,655 and \$20,328,164 dollars respectively.

Within the 3 mile trade area, all consumer budget categories were below the national average index of 100 with the exception of education which reported an index of 103. The total consumer budget for education within the 3 mile trade area was \$49,978,797 with an average per household budget of \$1,253.87. The next highest budget categories after education, were computer & accessories and food away from home which gathered an index of 99 for each category. While these index scores are below the national average of 100, they are extremely close. This should not be interpreted as market segments that are low in demand, but instead as segments that are fulfilling demand required by local consumers.

Within the 5 mile trade area, education, entertainment/recreation and shelter scored above the national average with index scores of 110, 107 and 107 respectively. The total consumer spending for education was \$110,149,340, \$281,412,860 for entertainment/recreation and \$1,386,149,497 for shelter. The average budget was \$1,344.17 in education, \$3,434.48 in entertainment/recreation and \$16,915.70 in shelter. Within the 5 mile trade area, 12 market segments of the possible 13 hold Consumer Spending Potential indexes above 90. This contrast's to 10 within the 3 mile trade area and 0 within the 1 mile trade area. This indicates that consumers demands are increasingly being met as you move further from Downtown Mount Clemens. When compared to the retail gap analysis conducted previously, correlations begin to show as market leakage factors decrease significantly when comparing the sum leakage factor of 617.6 for the 1 mile trade area to 297.7 within the 5 mile trade area (Figure 3.28).

Figure 3.28

MOUNT CLEMENS CONSUMER SPENDING POTENTIAL INDEX			
Goods & Services	1 Mile	3 Mile	5 Mile
	Index	Index	Index
Apparel & Services	55	69	74
Computers & Accessories	79	99	106
Education	84	103	110
Entertainment/ Recreation	77	98	107
Food at Home	80	98	104
Food Away from Home	79	99	106
Health Care	80	96	103
Household Furnishings & Equip.	66	85	92
Investments	71	90	99
Retail Goods	73	93	100
Shelter	78	98	107
TV/Video/Audio	80	98	105
Travel	74	87	106

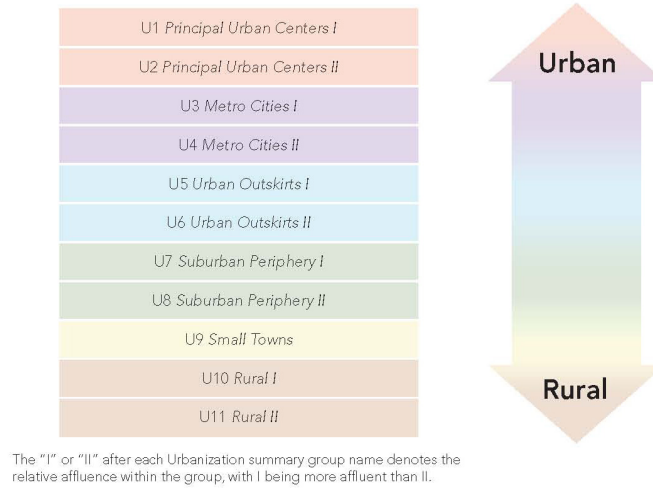
Sources: 2005 and 2006 Consumer Expenditure Surveys, Bureau of Labor Statistics.

Tapestry Segmentation Profile

The final assessment of business conditions used tapestry segmentation data that was developed by the Environmental Systems Research Institute. Similar to the Composite Socioeconomic Index, ESRI Tapestry segmentations use social and economic data to provide a detailed and accurate description of United States neighborhoods. They differ in that Tapestry segmentation data provides consumer lifestyle characteristics- the way groups of similar opinions, attitudes and activities spend their time and money within a business perspective. ESRI tapestry segmentation has been used for over 30 years by agencies, corporations and education institutions to more precisely target customers and residents. There are over 65 distinct tapestry segments and uses the principal that those who have similar tastes, lifestyles and behaviors will express the same need for certain tures. This information can then be used to access which businesses may be the most successful and indentify increasing trends among younger tapestry segments. There are two categories that each segmentation is separated into “lifemode groups” and “urbanization groups” (Figure 3.29). Lifemode groups (L) describe those who share the same experience, such as being born in the same period or a trait such as affluence (see Map 15). Urbanization groups (U) share a locale, from the urban canyons of America’s largest cities to rural lanes of our villages or farms.

Figure 3.29

Levels of Urbanization Summary Groups



Tapestry segments which appear throughout the 1, 3 and 5 mile trade area are: “Cozy and Comfortable”, “Great Expectations”, “Rustbelt Traditions”, “Main Street, USA”, “Young and Restless” and “Sophisticated Squires” (Figure 3.30). Next is a brief summary of each tapestry segmentation:

Figure 3.30

MOUNT CLEMENS TAPESTRY SUMMARY			
Rank	1 Mile	3 Mile	5 Mile
1	Great Expectations	Cozy and Comfortable	Cozy and Comfortable
2	Rustbelt Traditions	Main Street, USA	Sophisticated Squires
3	Main Street, USA	Young and Restless	Main Street, USA
Source: ESRI			