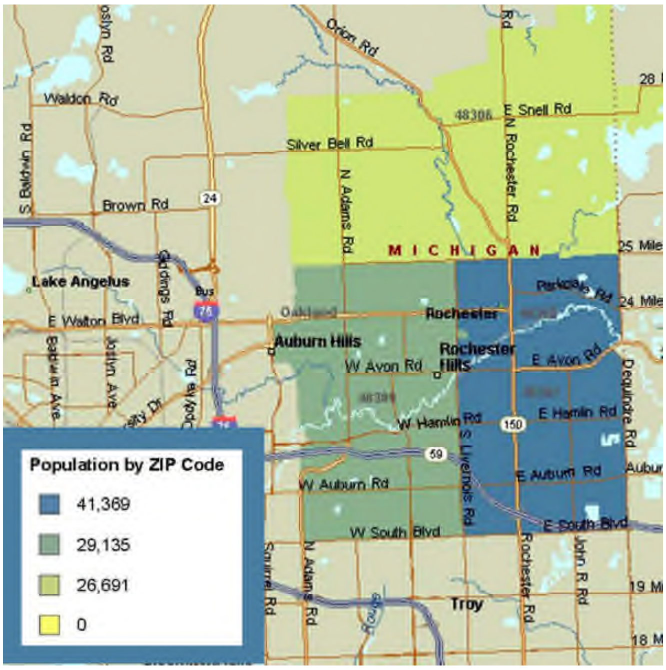
Introduction

Rochester Hills has long been a community serving populations in areas that stretch beyond its political boundaries. Rochester Hills is a growing community that has both nearby interstate access as well as a major trafficked corridors such as Auburn Road. It is a current and future employment generator for residents of the City, surrounding areas and Oakland County.

The following market analysis and strategic suggestions with respect to implementation for the Auburn Road study area in Rochester Hills was prepared by The Chesapeake Group, Inc. (TCG) under contract to LSL Planning.

The study identifies existing conditions, contains the analyses appropriate to describe economic opportunities, defines the opportunities shown to be sustainable, and, finally, provides the methods to move forward and seize these opportunities in the Auburn Road study area. The purposes and intent are to provide guidance for updating the area's plan and enhance economic development efforts.



Auburn Road's assets include underutilized and underdeveloped land, a reasonable number of well recognized food service establishments, new business investment, and limited first floor vacancies.

While these assets are critical to the past, present and future of Auburn Road in Rochester Hills; there are also some fundamental economic issues. These include relatively low achievable rent levels for commercial space that hinders reinvestment, dispersed pattern of building structures, and signs of disinvestment in non-residential spaces providing market uncertainty.

All of the estimates of potential that are defined in the analyses are conservative in nature and tend to understate the demand and economic opportunity. The estimates and suggested additional development are based on conservative assumptions and represent only The Chesapeake Group's opinion based on the conducted surveys, analyses and experiences of the organization.

At times in the document specific names of organizations and businesses are mentioned. This neither reflects any endorsement by The Chesapeake Group, LSL Planning, and Rochester Hills, or any expression of interest by the entities.

Thank You

The Chesapeake Group, Inc. is truly thankful to the staff support provided by the City of Rochester Hills. We would also like to thank those who were interviewed during the process and the more than 400 households that participated in the survey.

Context

There are demographic and other changes within the United States and Michigan that impact the current and future opportunities for Rochester Hills and the Auburn Road study area. These issues include the following:

Demographics.

- Birth and fertility rates have fallen to the lowest level in the history of the country.
- The marriage rates continue to decline and are also at the lowest level in the country's history.
- Michigan is continuing to lose its youth. Once finishing education at all levels, they often seek employment opportunities outside of the state. The pattern is more prevalent in northern areas but is a problem in Oakland County as well.
- The average age of residents continues to increase. "Baby Boomers" are seeking different housing options, shopping experiences and living environments than those associated with past generations of seniors.
- The two fastest growing components of the population - the Baby Boomer and the "Millennials" - are increasingly seeking and participating in passive and other recreational activity and new forms of entertainment.
- The young adult population relocates and shifts employment at a faster pace than any previous generation.
- As a result of fewer individuals having children at early stages of life, the large number of Baby Boomers past child rearing age, and increased wellness consciousness, the desire for walkable environments in which to live has increased and will continue to be a desirable lifestyle in the future.

Manufacturing and Technology.

Technological advances are dramatically changing the way goods are processed and assembled. Robotics and artificial intelligence are revolutionizing production and assemblage. Additive manufacturing (3D printing) is a breakthrough production technology enabling functional end-products or product feathers to be grown from materials such as conductive inks and metal powders in a layer-wise manner. The approach is inherently more efficient and flexible than subtractive manufacturing methods; the benefits are compelling in terms of reduced manufacturing and material costs, reduced process time, reduced environmental impact and improved product performance. New technology is reducing the demand for workers per unit produced.

The additive manufacturing coupled with new materials, artificial intelligence and robotics is resulting in manufacturing migrating toward locations that are close to markets or area reasonable distances from larger population centers.

Retail.

The face of retail is changing. The National Retail Federation predicts that in 2016, retail sales will grow by 3.1% overall, with online sales projected to grow 6 to 9%. The growth rate is expected to exceed the 10-year average of 2.7% growth. The International Data Corporation (IDC) estimates that 3.2 billion people, or 44% of the world's population, will have access to the Internet in 2016. Retailing Today, an online resource for the retail trade, discusses the impact of technology on the form of retail. They project that smart mobile devices will increasingly enable consumers to shop online anywhere and anytime.

Other technological innovations such as electronic payment, automatic checkouts, rapid delivery by drone, and virtual reality enhancements such as virtual showrooms and 3D display of merchandise will continue to change the shopping experience and drive future expansion and growth. Uber already brings vehicles to people without dispatchers.

On-demand production utilizing 3D printing and other noted technologies will change the basic retail fabric. Successful "bricks and mortar" retail is increasingly dependent upon merging shopping with a variety of forms of entertainment, creating places that people want to go to buy goods and services instead of having to go to bricks and mortar based areas.

Housing.

Associated with the noted demographic changes are changes in the housing market. Due to mobility of younger segments of the population and household fiscal and physical changes for an aging population, changes in ownership patterns, locations for living, and living environments have and will continue to occur. The size and types of housing desired are also impacted along with associated service needs. Smaller units, those where exterior maintenance is not the responsibility of the homeowner and rentals are and will be increasingly in demand.

Methodology

Auburn Road is within driving distance to population concentrations throughout the Detroit Metropolitan Area and beyond making it an attractive place to potentially live and operate a full range of businesses. To the west of the study area along Auburn is substantial shopping opportunities. To the east along Auburn Road in Shelby Township is commercial activity that can be characterized as older and shares many of the issues associated with the Rochester Hills section.

The challenge for the community moving forward is to recognize how the population and economy are changing and to set policies and take actions that expand activity and vibrancy of the study area section of Auburn Road. The market assessment developed is based on information gathered through a variety of means including:

- A review of secondary information, Independent research and proprietary computer modeling.
- Interviews with stakeholders.
- Cluster Analyses.
- A survey of residents of the Rochester Hills area.
- Demand Forecasting defining opportunities for various activity for the study area.

The assessment summary includes salient information and the definition of future opportunities that impact housing, office and technology driven industrial activity as well as retail goods and related services.

Resident Survey Review

More than 400 households interested in the future of the Auburn Road area responded to the survey. The survey indicates that:

- The average household spends about $130 per week on groceries. More than four of ten households sepnd more than $125.
- About 82% of the households frequent either Meijer, Kroger or Hollywood Market for grocery purchases. Meijer is in a dominant market position with 47% of the households.
- About two-thirds eat lunch or dinner outside the home at least as once per week. The majority of both lunch and dinner trips for food purchased or consumed at food service operations is made somewhere other than within the Auburn Road study area of Rochester Hills. Yet, Johnny Black's Public House is identified by 6.7% of the market as the preferred food service establishment for dinner which is the largest market share identified by respondents.

- Local non-chain food service establishments are the preference when eating dinner and lunch outside the home. (The study area has had significant recent investment by these types of operations.)
- About 43% of the households purchases fresh items from non-box or non-supermarket chains at least twice per month. Baked goods, meats, produce, and fruit are the products purchased by most in non-box or non-supermarket operations or settings.
- About one-third of all residents make apparel purchases at Kohl's.

*Table 1 - Primary Operation for Apparel Purchases**

Store	Percent
Kohl's	37.2%
Carson's	8.1%
Target	5.8%
Marshalls	3.8%
Nordstrom	3.8%
Macy's	3.5%
Online	3.2%

*Developed by The Chesapeake Group, Inc., 2016.

Auburn Road & Study Area Patron Characteristics and Opinions.

With respect to study area patrons:

- About six out of every ten households have someone who comes to Auburn Road in Rochester Hills at least once each week. About two-thirds comes for shopping or food service establishments.
- On the other hand, only about one-fourth of the households have someone who comes to the study area section of Auburn Road at least once per week. About one quarter of the households rarely or never come to the study area section of Auburn.
- The difference in the frequencies reflects the noted substantial concentration of retail along Auburn west of the study area.

*Table 2 - Frequency of Trip to Auburn and Study Area Section of Auburn Road**

Frequency of trips	Auburn Road Percent	Study Area Section of Auburn Percent
A few times/week	45.2%	14.5%
About once/week	13.9%	11.4%
About twice/month	10.8%	12.6%
Once/ month	8.4%	10.8%
4 to 9 times/year	7.4%	12.3%
Once or twice/year	7.7%	12.9%
Less often than once/year	6.5%	25.5%

*Developed by The Chesapeake Group, Inc., 2016.

- The most frequent users of the study area section of Auburn come from a smaller geographic area than those who come infrequently.

*Table 3 - Frequency of Trips to Study Area by Zip Code Areas**

Zip Code	Percent Who Come Once-Twice/Yr.	Percent Who Come 4 to 9 Times/Yr.	Percent About Once/Mon.	Percent About Twice/Mon.
48306	21.9%	2.9%	7.1%	80.6%
48307	53.1%	74.3%	64.3%	9.7%
48309	25.0%	22.9%	21.4%	9.7%
48317	0%	0%	7.1%	0%
All	100.0%	100.0%	100.0%	100.0%

*Developed by The Chesapeake Group, Inc., 2016.

- Generally, patrons come to the study area section of Auburn Road for shopping, food services or vehicle/machinery parts and services reflecting the tenant mix.
- Those who come most frequently are generally older than those who come less often. Almost three-fourths of those who come with the greatest frequency are over 55.

*Table 4 - Age of Patrons By frequency of Trip to Study Area**

Age	Percent Coming Once-Twice/Yr.	Percent Coming 9 Times/Yr.	Percent Coming About Once/Mon.	Percent Coming At Least Once/Week
25 to 34	9.7%	8.3%	12.5%	15.2%
35 to 44	32.3%	25.0%	16.7%	6.1%
45 to 54	35.5%	36.1%	33.3%	6.1%
55 or over	22.6%	30.6%	37.5%	72.7%

*Developed by The Chesapeake Group, Inc., 2016.

- For those who come frequently, the older the person the lower the average income.

*Table 5 - Age and Income of Most Frequent Patrons**

Age	Income	Percent
25 to 34	$50,000 to $74,999	33.3%
25 to 34	$100,000 to $149,999	33.3%
25 to 34	$200,000 or more	33.3%
35 to 44	Less than $10,000	4.8%
35 to 44	$30,000 to $49,999	19.0%
35 to 44	$50,000 to $74,999	14.3%
35 to 44	$75,000 to $99,999	19.0%
35 to 44	$100,000 to $149,999	23.8%
35 to 44	$150,000 to $199,999	4.8%
35 to 44	$200,000 or more	14.3%
45 to 54	$10,000 to $14,999	8.3%
45 to 54	$15,000 to $19,999	8.3%
45 to 54	$30,000 to $49,999	8.3%
45 to 54	$50,000 to $74,999	25.0%
45 to 54	$75,000 to $99,999	8.3%
45 to 54	$100,000 to $149,999	25.0%
45 to 54	$150,000 to $199,999	16.7%
55 or over	$10,000 to $14,999	10.0%
55 or over	$30,000 to $49,999	20.0%
55 or over	$50,000 to $74,999	20.0%
55 or over	$75,000 to $99,999	20.0%
55 or over	$100,000 to $149,999	10.0%
55 or over	$150,000 to $199,999	20.0%

*Developed by The Chesapeake Group, Inc., 2016.

- The shopping options and shopping experience along Auburn Road does not fair well in the opinion of the respondents. More than one-half of all define the shopping options and experience along Auburn Road as being "poor" or 'fair." On the other hand, they find the shopping options and experience elsewhere in Rochester Hills as being either "very good" or "excellent."

*Table 6 - Quality of Shopping Options and Experience Along Auburn Road and Rochester Hills**

Characteristic	1 Poor	2 Fair	3 Good	4 Very Good	5 Excellent	Total
Rochester Hills shopping options	0.7%	5.5%	27.3%	33.6%	32.8%	100.0%
Auburn Road corridor shopping options	25.6%	31.1%	27.8%	8.9%	6.7%	100.0%
Rochester Hills shopping experience	0.4%	6.3%	34.3%	33.9%	25.1%	100.0%
Auburn Road shopping experience	22.6%	29.7%	28.2%	12.0%	7.5%	100.0%

*Developed by The Chesapeake Group, Inc., 2016.

- In general, restaurant options, housing options, personal and professional services and walking experience are viewed favorably.

*Table 7 - Quality of Restaurants**

Characteristic	1 Poor	2 Fair	3 Good	4 Very Good	5 Excellent	Total
Restaurant options	5.2%	12.5%	28.0%	30.3%	24.0%	100.0%

*Developed by The Chesapeake Group, Inc., 2016.

*Table 8 - Quality of Housing Options, Availability of Personal & Professional Services & Walking Experience in Rochester Hills**

Characteristic	1 Poor	2 Fair	3 Good	4 Very Good	5 Excellent	Total
Housing Options	1.8%	12.2%	29.9%	32.5%	23.6%	100.0%
Availability of professional and personal services	0.7%	3.3%	22.8%	36.4%	36.8%	100.0%
Walking experiences that are safe, comfortable & interesting	8.2%	21.2%	21.6%	24.5%	24.5%	100.0%

*Developed by The Chesapeake Group, Inc., 2016.

- Table 9 includes activities, infrastructure and businesses people defined as those that they would like to see in the study area. (In some cases, the types of activity can be found in the Shelby Township adjacent section of Auburn Road.)

*Table 9 - Activities, Businesses & Infrastructure Desired by Respondents**

Activities/Businesses	Percent
Bakery	1.6%
Café	1.8%
Dog Park	1.8%
Entertainment/Activities for Children	3.0%
Farmers' Market	2.8%
Grocery Store	2.5%
Improve Infrastructure	1.8%
Movie Theater	1.2%
Non-Chain Restaurants	1.4%
Outdoor Dining	1.2%
Parking	1.6%
Public Park	5.8%
Restaurants/Bars	16.4%
Sidewalks	2.1%
Walking/Biking Path	6.5%

*Developed by The Chesapeake Group, Inc., 2016.

Analyses

Current & Future Overall Economy.

Cluster analyses were performed to identify economic gaps which could be served by Rochester Hills and if appropriate the study area section of Auburn Road. The analyses were performed at both the zip code and county levels to determine where Rochester Hills has a lesser number of businesses when compared to other zip code or county areas that have similar demographics and location and transportation factors. The following are clusters of business activity that generally do similar things or are interconnected in some way for which gaps have been identified that could be appropriate for the study area.

Retail. (Including Retail Bakeries, Wineries, Wholesale Trade Agents and Brokers, New Car Dealers, Boat Dealers, Motorcycle, ATV, and All Other Motor Vehicle Dealers, Furniture Stores, All Other Home Furnishings Stores, Household Appliance Stores, Electronics Stores, Home Centers, Paint and Wallpaper Stores, Hardware Stores, Other Building Material Dealers, Fruit and Vegetable Markets, Baked Goods Stores, Beer, Wine, and Liquor Stores, Pharmacies and Drug Stores, Cosmetics, Beauty Supplies, and Perfume Stores, Optical Goods Stores, Food (Health) Supplement Stores, All Other Health and Personal Care Stores, Gasoline Stations with Convenience Stores, Men's Clothing Stores, Women's Clothing Stores, Children's and Infants' Clothing Stores, Family Clothing Stores, Clothing Accessories Stores, Shoe Stores, Jewelry Stores, Sporting Goods Stores, Hobby, Toy, and Game Stores, Sewing, Needlework, and Piece Goods Stores, Book Stores, Office Supplies and Stationery Stores, Gift, Novelty, and Souvenir Stores, Pet and Pet Supplies Stores and All Other Miscellaneous Store Retailers.)

Communications & Production. (Including Motion Picture and Video Production, Teleproduction and Other Postproduction Services, Other Sound Recording Industries, Cable and Other Subscription Programming, Wireless Telecommunications Carriers except Satellite Telecommunications Resellers, All Other Telecommunications, Data Processing, Hosting, and Related Services, Internet Publishing and Broadcasting and Web Search Portals, All Other Information Services and Software and Other Prerecorded Compact Disc, Tape, and Record Reproducing.)

Finance, Insurance & Real Estate. (Including Commercial Banking, Savings Institutions, Credit Unions, All Other Non-depository Credit Intermediation, Mortgage and Nonmortgage Loan Brokers, Securities Brokerage, Miscellaneous Intermediation, Portfolio Management, Trust, Fiduciary, and Custody Activities, Miscellaneous Financial Investment Activities, Insurance Agencies and Brokerages, Claims Adjusting, All Other Insurance Related Activities, Offices of Real Estate Agents and Brokers, Nonresidential Property Managers and Offices of Real Estate Appraisers.)

Other Professional Services. (Including Offices of Lawyers, Offices of Certified Public Accountants, Tax Preparation Services, Architectural Services, Engineering Services, Drafting Services, Testing Laboratories, Interior Design Services, Graphic Design Services, Other Specialized Design Services, Custom Computer Programming Services, Computer Facilities Management Services, Human Resources Consulting Services, Marketing Consulting Services, Dental Laboratories, Other Management Consulting Services and Veterinary Services.)

Entertainment. (Including Theater Companies and Dinner Theaters, Other Spectator Sports, Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures, and All Other Amusement and Recreation Industries.)

Education. (Including Computer Training, Other Technical and Trade Schools, Fine Arts Schools, Sports and Recreation Instruction and Exam Preparation and Tutoring.)

Miscellaneous. (Including General Warehousing and Storage, Formal Wear and Costume Rental, Home Health Equipment Rental, All Other Consumer Goods Rental, General Rental Centers, Commercial and Industrial Machinery and Equipment Rental and Leasing Process, Physical Distribution, and Logistics Consulting Services, Direct Mail Advertising, Advertising Material Distribution Services, Photography Studios, Portrait, Commercial Photography, Translation and Interpretation Services, Employment Placement Agencies, Temporary Help Services, Telemarketing Bureaus and Other Contact Centers, Travel Agencies, Security Systems Services, Locksmiths, Landscaping Services, Carpet and Upholstery Cleaning Services, Child and Youth Services, Services for the Elderly and Persons with Disabilities, Other Individual and Family Services, Community Food Services, Other Community Housing Services, Hotels and Motels, Full-Service Restaurants, Barber Shops, Beauty Salons, Other Personal Care Services, Funeral Homes and Funeral Services, Dry cleaning and Laundry Services except Coin-Operated, and Pet Care Services except Veterinary.)

In addition, the following clusters have been identified that are unlikely to be accommodated in the corridor due to depth of property but whose location nearby could stimulate substantial employment benefiting contiguous residential areas.

Medical. (Including Offices of Physicians except Mental Health Specialists, Offices of Mental Health Specialists, Offices of Dentists, Offices of Chiropractors, Offices of Mental Health Practitioners (except Physicians), Offices of Physical, Occupational and Speech Therapists, and Audiologists, Offices of Podiatrists, Offices of All Other Miscellaneous Health Practitioners, Freestanding Ambulatory Surgical and Emergency Centers, All Other Outpatient Care Centers, Diagnostic Imaging Centers, Home Health Care Services, All Other Miscellaneous Ambulatory Health Care Services, General Medical and Surgical Hospitals, Specialty (except Psychiatric and Substance Abuse) Hospitals, Nursing Care Facilities/Skilled Nursing Facilities and Residential Intellectual and Developmental Disability Facilities.)

Manufacturing. (Including Ice Cream and Frozen Dessert Manufacturing, Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing, Perishable Prepared Food Manufacturing, Footwear Manufacturing, Wood Window and Door Manufacturing, Pharmaceutical Preparation Manufacturing, Custom Compounding of Purchased Resins, All Other Miscellaneous Chemical, Product and Preparation Manufacturing, Polystyrene Foam Product Manufacturing, Plastics Plumbing Fixture Manufacturing, All Other Plastics Product Manufacturing, Rubber Product Manufacturing for Mechanical Use, All Other Rubber Product Manufacturing, Glass Product Manufacturing Made of Purchased Glass, Metal Window and Door Manufacturing, Power Boiler and Heat Exchanger Manufacturing, Hardware Manufacturing, Other Fabricated Wire Product Manufacturing, Machine Shops, Precision Turned Product Manufacturing, Metal Heat Treating, Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers, Heating Equipment (except Warm Air Furnaces) Manufacturing, Heating Equipment (except Warm Air Furnaces) Manufacturing, Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing, Industrial Mold Manufacturing, Special Die and Tool, Die Set, Jig, and Fixture Manufacturing, Cutting Tool and Machine Tool Accessory Manufacturing, Rolling Mill and Other Metalworking Machinery Manufacturing, Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing, Elevator and Moving Stairway Manufacturing, Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals, Other Measuring and Controlling Device Manufacturing, Current-Carrying Wiring Device Manufacturing, Motor Vehicle Electrical and Electronic Equipment Manufacturing, Motor Vehicle Transmission and Power Train Parts Manufacturing, Motor Vehicle Seating and Interior Trim Manufacturing, Motor Vehicle Metal Stamping, Other Motor Vehicle Parts Manufacturing, Wood Office Furniture Manufacturing and Surgical Appliance and Supplies Manufacturing.)

Wholesaling. (Including Automobile and Other Motor Vehicle Merchant Wholesalers, Motor Vehicle Supplies and New Parts Merchant Wholesalers, Furniture Merchant Wholesalers, Home Furnishing Merchant Wholesalers , Roofing, Siding, and Insulation Material Merchant Wholesalers, Office Equipment Merchant Wholesalers, Computer and Computer Peripheral Equipment and Software Merchant Wholesalers, Household Appliances, Electric Housewares, and Consumer Electronics Merchant Wholesalers, Other Electronic Parts and Equipment Merchant Wholesalers, Hardware Merchant Wholesalers, Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers, Farm and Garden Machinery and Equipment Merchant Wholesalers, Industrial Machinery and Equipment Merchant Wholesalers, Industrial Supplies Merchant Wholesalers, Industrial Supplies Merchant Wholesalers, Service Establishment Equipment and Supplies Merchant Wholesalers, Toy and Hobby Goods and Supplies Merchant Wholesalers, Printing and Writing Paper Merchant Wholesalers, Stationery and Office Supplies Merchant Wholesalers, Industrial and Personal Service Paper Merchant Wholesalers, Drugs and Druggists' Sundries Merchant Wholesalers, Piece Goods, Notions, and Other Dry Goods Merchant Wholesalers, Men's and Boys' Clothing and Furnishings Merchant Wholesalers, Women's, Children's, and Infants' Clothing and Accessories Merchant Wholesalers, General Line Grocery Merchant Wholesalers, Dairy Product (except Dried or Canned) Merchant Wholesalers, Plastics Materials and Basic Forms and Shapes Merchant Wholesalers, Other Chemical and Allied Products Merchant Wholesalers, Farm Supplies Merchant Wholesalers, Flower, Nursery Stock, and Florists' Supplies Merchant Wholesalers and Other Miscellaneous Nondurable Goods Merchant Wholesalers.)

Current & Future Housing Findings.

Rochester Hills has seen significant growth in housing in recent years. Since 2010, the City has issued about 100 new permits annually. With the exception of 2014, all have been single-family units. Prior to the Great Recession in the early 2000's during the housing boom in the country, Rochester Hills issued new housing unit permits ranging from a low of 173 to a high of 554 annually with the overwhelming majority of units permitted being single-family homes except for in the peak permit years of 2003 and 2004.

Based on historical patterns and the relatively constant rate of housing permits since the end of the Great Recession, Rochester Hills is expected to permit about 100 units per year for the foreseeable future.

The survey of residents indicates that there is now and will be changes in desired preferences for housing by residents of the area well into the foreseeable future. The overwhelming majority of households in all communities spend their incomes on three basic commodities. These are housing, food and transportation. The survey of area residents indicates:

- Roughly nine out of ten households own their homes (including those with mortgages).
- About 60% of all households have lived in their current home for at least ten years, with almost one-half of these living in their homes for at least 20 years.
- About one-fourth of the households have no monthly rent or mortgage. (This is generally a result of having paid off mortgages or living in extended family situations.)
- The average household spends roughly $1,033/month on rent or mortgage payment, including those with no monthly payments.
- The average household spends roughly $1,230/month on rent or mortgage payment, excluding those with no monthly payments.

*Table 10 - Tenure at Current Address**

Years	Percent
2 years or less	10.0%
3 to 4 years	13.2%
5 to 9 years	15.4%
10 to 19 years	33.6%
20 or more years	27.9%

*Developed by The Chesapeake Group, Inc., 2016.

*Table 11 - Monthly Mortgage or Rent Payments**

Payment	Percent
None	16.0%
Less than $400/month	2.0%
$400 to $599/month	6.1%
$600 to $799/month	8.2%
$800 to $999/month	12.9%
$1,000 to $1,249/month	16.3%
$1,250 to $1,499/month	18.0%
$1,500 to $1,749/month	8.5%
$1,750 to $1,999/month	6.1%
$2,000 to $2,499/month	4.4%
$2,500 to $2,999/month	1.4%
$3,000 or more/month	0.0%

*Developed by The Chesapeake Group, Inc., 2016.

- Many current residents are likely to move within the next five years for reasons ranging from household demographic changes to fiscal and physical issues. As few as one-fourth and as many as one-half of residents may move within a five years period.
- When moving, at least one-third of all household will seek a significantly different unit than that in which they currently reside, including small units.
- The average (mean) annual household income is $118,200 in Rochester Hills . (The median income utilized by the Census Bureau does not accurately correlate to purchasing power and is substantially below this figure.)

*Table 12 - Size of the New Unit When a Move Is Made**

Size of New Unit	Percent
Larger	21.8%
Smaller	36.4%
Same	32.4%
Uncertain	9.5%

*Developed by The Chesapeake Group, Inc., 2016.

- 59% of those likely to move want a walkable environment for recreation, shopping and other activity.

The Auburn Road study area of Rochester Hills is a reasonable option for many of those area residents who desire to move at present and the foreseeable future that want walkability and a different scale unit.

- For market rate housing, the greatest potential for the study area is to meet the needs of those 45 to 64 with incomes generally split between those $50,000 to $75,000, $75,000 to $100,000 and $100,000 and above.
- Based on historical permit pattern for Rochester Hills as well as the movement of existing households defined through the survey, the study area could add between 45 and 55 new market rate housing units between 2016 and 2026.
- The majority of the units are expected to rents or associated mortgage (and if applicable condominium) payments in the range of $1,100 to $1,250.

*Table 13 - Share of New Units for Corridor by Rent/Mortgage Payments**

Share of units @ lowest end of rent/mortgage scale	Percent
$800 -$999	22.5%
$1000-$1249	27.5%
$1250-$1499	34.5%
1500-$1650	15.5%
Total	100.0%

*Developed by The Chesapeake Group, Inc., 2016.

- There is no discernable housing demand for market rate units with less than two bedrooms. Seven out of ten units should have either two bedrooms and den or work space or three bedrooms.

*Table 14 - Number of Bedrooms for New Units in Corridor**

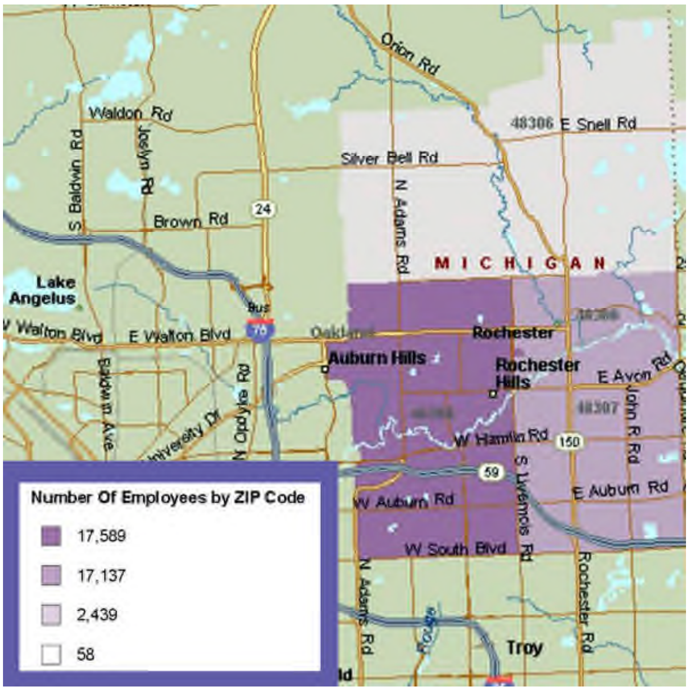
Bedrooms	Percent
1	1.5%
2	27.0%
More than 2	71.4%
Total	100.0%

*Developed by The Chesapeake Group, Inc., 2016.

- For townhouse or other multi-story unit style housing, 50% of the units should have master bedrooms on first floors.

Projected Future Non-Retail Goods and Related Service Space.

As defined, new housing units are expected for Rochester Hills in general and for the study area corridor. Additional "roof tops" and households create additional demand for employment activity within the area. Based on current employment patterns, underutilized land and space in the study area, the emerging noted technology that provides opportunities for new "industrial" activity, and growing service needs of residents as a result of continued aging of the population, the study area is a good location from which to capture some proportion of additional demand. It is estimated that:



- 11,500 square feet of additional traditional professional and personal service office space could be marketable.
- Medical "urgent care services" or "outpatient" service space is likely to create demand for an additional 4,000 to 5,500 square feet of space.
- In addition and assuming that the study area can create incubator space opportunities for emerging technology driven activity such as 3D printing which will also occupy "office" space, 5,000 to 10,000 square feet of additional space could be added.

*Table 15 - Office Space Potential In Auburn Road Study Area or Rochester Hills**

Space	Total to 2026
Traditional Office	11,500
Medical	4,000 to 5,500
Non-Traditional Industrial Activity	5,000 to 10,000
Combined Activity	**20,500 to 27,000**

*Developed by The Chesapeake Group, Inc., 2016.

Commercial Demand & Spending on Retail Goods & Related Services.

The forecasting of retail goods and related services space is based on the objective of meeting the needs of the current and future residents of the study area and surrounding areas as well as the ability to capture such space in the corridor without negatively impacting other businesses within Rochester Hills and the Auburn Road study and adjacent areas.

The forecasting of retail goods and related services space concluded:

- There are two markets served by area retail goods and related service activity. The first is the local market, generally residents of Rochester Hills and Shelby Township that reside in close proximity to the study area and some employees who work but do not live in either Rochester Hills or Shelby Township. The second is a market composed of those who come to the area from outside of the immediate area. These markets were confirmed by the survey of residents.
- Residents of the combined markets will generate or spend about $125 million in sales for retail goods and related services in 2016. These sales go to establishments both within and outside of Rochester Hills, the County and even Michigan. It is estimated that these sales support more than 367,000 square feet of space at any and all locations.
- By 2026, the combined market area residents will spend roughly another $2 million in sales based on growth. This will support an additional 6,000 square feet of space.
- The Auburn Road study area is expected to able to capture roughly 6,000 square feet of retail goods and related services space associated with the growth in the market as well as roughly 35,000 square feet from the current spending. The total of just over 40,000 square feet is in addition to the existing space in the study area and contiguous areas of Auburn Road in Shelby Township.

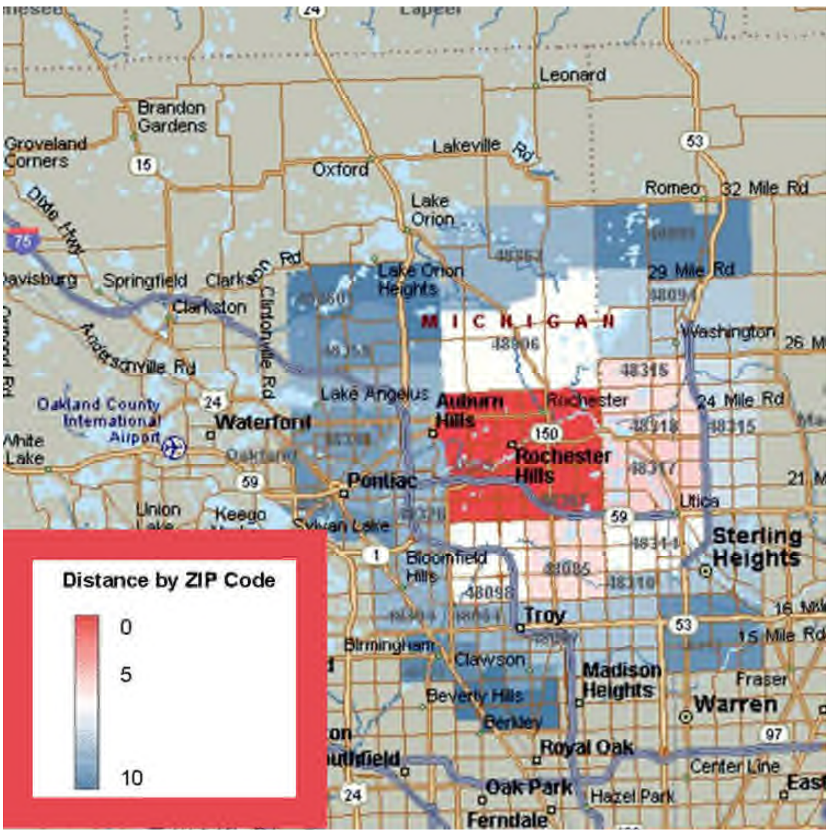


Table 16 - Generated Combined Market Retail Sales and Supportable Space (Space in Sq.Ft.)

Category	2016 Sales	2025 Sales	Sales Change 2016-25	2016 (Sq. Ft.)	2025 (Sq. Ft.)	Sq. Ft. Change 2016-25
Food	$18,849,000	$19,149,000	$312,000	29,984	30,460	496
Eat/Drink	12,624,000	12,825,000	209,000	30,057	30,536	498
General Merchandise	9,124,000	9,270,000	151,000	54,154	55,020	897
Furniture	4,500,000	4,571,000	74,000	10,358	10,522	170
Transportation	22,586,000	22,945,000	374,000	74,023	75,199	1,226
Drugstore	8,587,000	8,724,000	142,000	8,345	8,478	138
Apparel	8,012,000	8,139,000	133,000	22,230	22,584	370
Hardware	11,862,000	12,050,000	196,000	48,337	49,103	799
Vehicle Service	16,286,000	16,545,000	270,000	39,648	40,279	657
Miscellaneous	12,562,000	12,761,000	208,000	50,167	50,963	830
TOTAL	**$124,992,000**	**$126,979,000**	**$2,069,000**	**367,303**	**373,144**	**6,081**

*Developed by The Chesapeake Group, Inc., 2016.

The following represent potential opportunities for new operations or for expanded product lines for existing operations for the study area.

Tire & Vehicle Parts Dealers
Floor Covering Stores
Nursery, Garden Center and Supply Stores
Pharmacies and Drug Stores
Cosmetics, Beauty Supplies, and Perfume Stores
Shoe Stores
Specialty Grocery Store

Food Service Contractors
Full-Service Restaurants
Limited-Service Restaurants
General Automotive Repair
Reupholstery and Furniture Repair
Miscellaneous Personal Services

Auburn Road Study Area Market Opportunities

(Not necessarily linked to physical holding capacity)

The following are the collective development opportunities identified for the Auburn Road study area.

*Table 17 - Identified Auburn Road Study Area Market Opportunities**

Type of Activity	Units of Square Footage
New Housing Units	45 to 64
Office and Tech-driven "Industrial Space	20,500 to 27,000
Retail Goods and Related Services Space	41,000

*Developed by The Chesapeake Group, Inc., 2016.

There are two approaches that can be taken to the enhanced development of the study area section of Auburn Road based on the market opportunities. One is to develop a mixed-use corridor composed of retail, offices and residential. The other could be to focus on purposeful niche "branding" of the area such as a focus on an individual identified "gap" defined in the cluster analysis. The latter option is possible but could prove take longer and be more difficult to achieve returns within a five to ten year period.

Examples of Opportunities Linked to Sites

A fundamental issue in areas like Auburn Road where achievable rent levels at present are relatively low, property depth associated with the corridor is not great, corridor property abut residential to the rear and other factors often hinder the ability to generate investment necessary to secure opportunities. Success in such areas often requires "thinking out of the box" and with design and requirements that differs from surroundings and perhaps even elsewhere in the City.

To illustrate opportunities, two sites were selected to visualize the type of development that could occur. The two sites were selected for the following reasons.

- One is owned by Rochester Hills and the other is currently for sale.
- The primary or only structures on each are neither of historic or architectural significance nor unique.
- Both are located at an intersection.
- Each is likely to be capable of accommodating greater mass than currently or previously existed.
- The sites are not dissimilar to others in the study area.

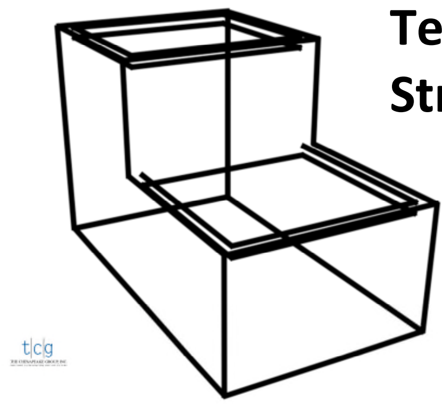
The first site addressed is that which is municipally owned. Located at the intersection of Auburn Road and Emmons Avenue. The structure on the site is being demolished.

By intent, the western most portion of the site is not considered for redevelopment as it could be sold or leased to the adjacent property owner for expanded parking, recouping some immediate revenue to Rochester Hills.

The second site is the current party store whose owner has placed it for sale and is located at the intersection of Auburn Road and Longview Avenue.

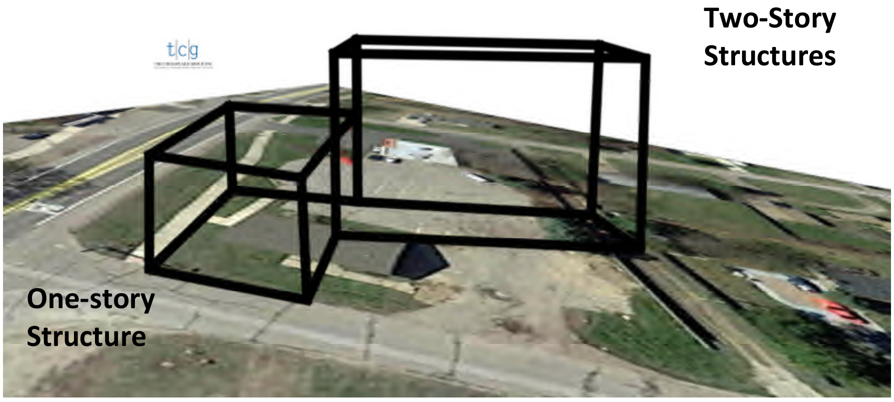
For both sites and with due consideration to both rent levels and the desire for walkability, it is suggested that:

- Frontage of the commercial be along Auburn Road,
- New structures be placed close to the property line on Auburn Road adjacent to sidewalks and proposed street improvements.
- Street level activity be either retail or office and be one story.
- Deliveries and drive in activity be located on the side of the structure.
- Additional structures or additional levels of development within one structure be built in a terraced situation to the rear of the structure facing either the side of the structure or residential properties to the north, negating the need for first floor space to bear added construction costs and associated rents.



Terraced Structures

- New development would include about a 50% increase in commercial space over and above what existed on the site before.
- Non-Auburn Road frontage structures would be two-stories taking a duplex or semi-detached form.
- Non-Auburn Road structures could house additional retail, office or tech-driven industry space or housing.



- To facilitate a transition from the residential neighbors to the north, the facades should be compatible with residential activity even if use differs.
- The sites could support relocation of existing non-retail activity along the corridor freeing other sites for more intensive development while facilitating the continued operation of the viable non-retail in the study area.
- The two-story structures could be buffered from other activity on the site in a number of ways if desired. The cost effective means could include fencing, landscaping, fencing and landscaping or unique design elements as in the examples that follow. Design could take advantage of views from various directions based on the added height of the structures through the use of balconies and other mechanisms.

- Limited parking for units could be accommodated within the structure design or shared with other activity on the site.

Economic Opportunity Policy Issues

There are six potential objectives that that could be accomplished through the pursuit of the economic opportunities for the Auburn Road study area of Rochester Hills.

1. Hold current residents within the Auburn Road contiguous communities as they age, both Baby Boomers and young adults who grew up in the community.
2. Expand available services affording the opportunity to walk to those services.
3. Provide for employment activity that meets the needs of current and future residents.
4. Capture growth opportunities that will enhance short and long-term viability of the community.
5. Create enhanced walkability and synergy within the study area.

To achieve these objectives, the land use/development pattern and processes should:

- Work in a cooperative manner with Shelby Township to create one common image and functioning economic unit along the contiguous sections of Auburn Road.
- Expand the opportunity for development of technology driven space and housing.
- Seek partnerships to secure opportunities or recruit interests that further quality development.
- Require private sector investment to match public sector investment in infrastructure.

Further brief explanations of potential implementation activity follows.

Public Private Partnerships.

Public-private partnerships as well as private sector partnerships are essential to achieve objectives. Public-private and private-private partnerships will be essential to overcome specific issues including potentially site development that ensures existing businesses can relocate either permanently or on a temporary basis. Public involvement in parking and lighting through lease arrangements may be necessary to allow for some short-term Return-On-Investment (ROI) in order to focus on long-term ROI or simply to provide capital to finance private development.

Regulations to Support Tech Driven Business and Housing Options.

New regulations will be required to create unique settings with modifications to parking requirements, setbacks, etc. Potentially an overlay district or small site PUDs may be necessary. These regulations must be carefully developed to achieve objectives but not be onerous to ROI and processes. Housing regulations must accommodate development on commercial sites with potentially shared parking as residential peak times and commercial peak times are likely to differ.

Recruitment.

Two forms of recruitment maybe essential to seize the range of opportunities. These are investor/developer and tenant recruitment.

It may well be that additional interests need to be attracted to Auburn Road to accomplish the objectives for specific sites. In many cases, developer recruitment will be more cost-effective and less time-consuming than individual tenant recruitment. Redevelopment of some parcels and development of other parcels may require partnerships between the current owners and others, someone to buy the property, and/or other investors to bring it to fruition. This maybe necessary for many reasons including insufficient interests by current property owners, insufficient fiscal capacity, and inexperience. Recruiting other local and outside interests can result in purchase agreements, shared development of property with dual equity positions and other arrangements.

The need for and level of “pre-screening” potential contacts for any recruitment is a fundamental issue in the process. Consideration must be given to the available data bases, the cost-effectiveness of the “pre-screening,” and the likelihood of success with obtaining accurate information from a “pre-screening” process. Generation of the initial list of developers essentially involves pre-qualification as the developers sought should have experience doing similar projects as well as appropriate fiscal capacity. Thus, the research involves identifying developers through their projects. The most appropriate ways of doing this for non-local interests are through:

- Contact with professional organizations that track creative development.
- Tapping libraries associated with professional organizations that deal with unique situations like the American Planning Association.
- Review of focused development publications.
- Internet research based on articles about desired types of efforts from around the country and world.

Matching Public & Private Investment.

Previous investment in added infrastructure in the Auburn Road area was perceived as a disappointment to some of the property owners and tenants. The previous experience as reported involved private interests investing money in amenities that was perceived as being unmatched by the public sector. This is somewhat unique as generally the public sector often invests money without seeing a similar investment by the private sector.

All indications are that the public sector would like to facilitate enhancement of the area through added investment in infrastructure. Assuming that this assumption is correct or that at some point in time such an investment is likely to be made, matching investment in buildings, operations, and other capital by the private sector will be required to create a return to both the public and private sectors. It is suggested that a dollar for dollar match (each dollar in public sector infrastructure is matched by a dollar in the private sector "infrastructure") or another leverage formula be set or required in order to achieve objectives and ROI for all. If public sector dollars are the only dollars spent, enhanced activity will not occur. The reverse is also true.