

KENT COUNTY TRANSIT NEEDS ASSESSMENT

TECHNICAL MEMORANDUM #1

INTRODUCTION

EXISTING SERVICE

POPULATION AND DEMOGRAPHICS

PREVIOUS STUDIES

JUNE 7, 2010



Table of Contents

I. Introduction	1
Study Goals	1
Kent County Description	3
Study Approach	4
Technical Memorandum Contents	4
II. Existing Service	5
Interurban Transit Partnership	5
Hope Network	10
Other Transportation Providers.....	18
III. Population and Demographics	20
Demographics	20
Senior and Disabled Population Projection.....	27
Projections of Employment.....	34
III. Previous Studies	39
Hudsonville/Easter Ottawa Impact Study	39
West Michigan Transit Linkages Study.....	39
Grand Valley Metro Council Long Range Transit Plan.....	40
Grand Valley Metro Council Framework.....	41
Grand Rapids Master Plan	42

I. INTRODUCTION

Introduction

The Kent County Transit Needs Assessment is a study to determine the overall demand for transportation service in areas of Kent County Michigan with minimal public transportation service or without service altogether. This study will assess the transportation needs of Kent County by conducting a latent demand analysis and a feasibility study of improved transportation service in the County. RLS & Associates, Inc. (RLS) will work with the Grand Valley Metropolitan Council (GVMC), and Kent County Interurban Transit Partnership (ITP)/The Rapid to develop an accurate transportation needs assessment for Kent County, with a focus on areas not currently served by ITP.

STUDY GOALS

Goals for the Kent County Transit Needs Assessment are to: 1. Examine the current transit use and service provided and identify gaps in service; 2. Anticipate future transit demand by identifying areas that may need transit to meet demand, and finally: 3. If a latent demand is identified, to identify options and financial implications of future public transportation service.

Latent demand is demand unmet by current service. The demand may be “unmet” because service does not exist or because service is too limited to serve all the potential demand. Therefore, latent demand for transit service in Kent County includes:

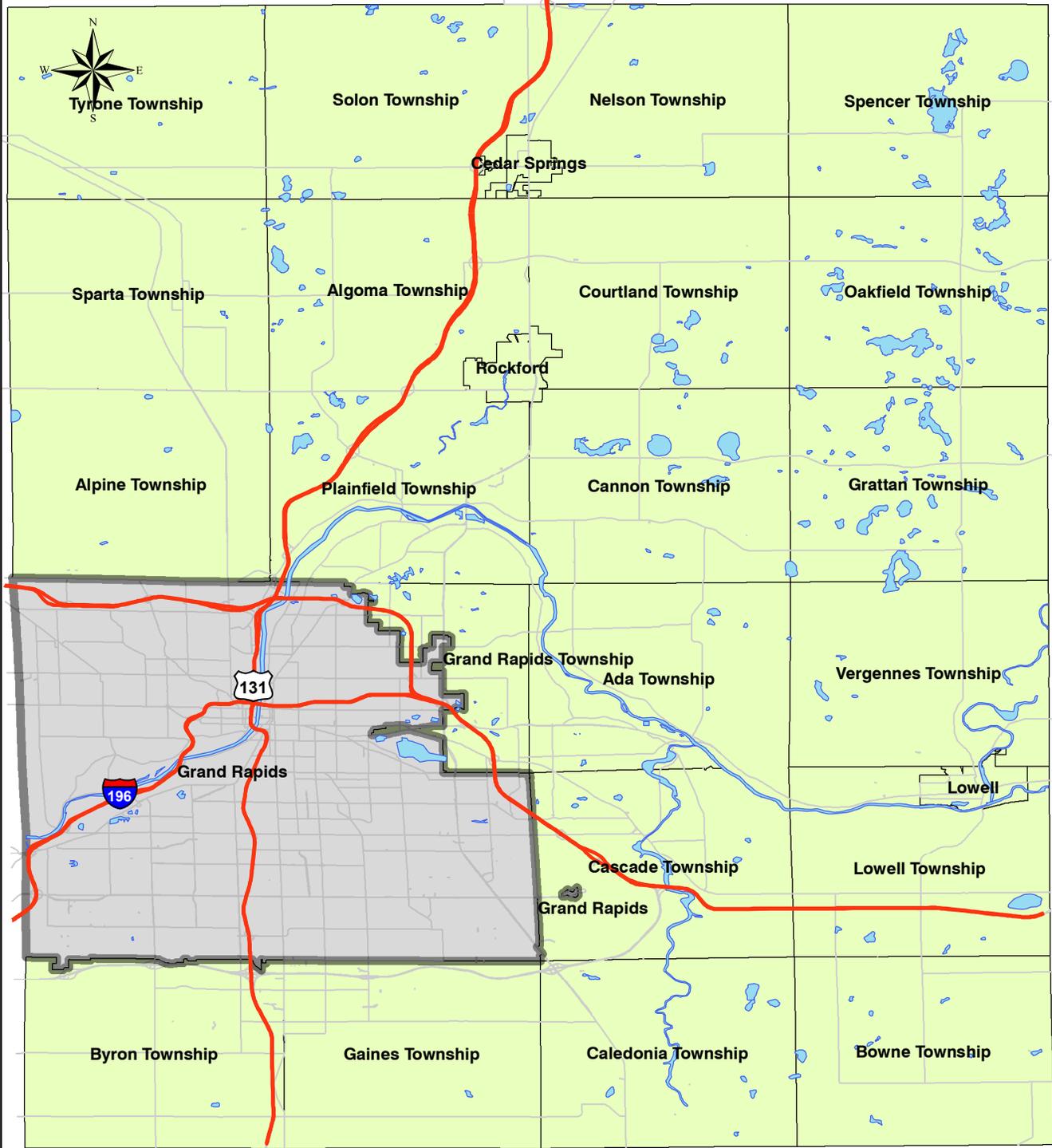
- ◆ *Latent demand among current users* for improvement of the services now available; and
- ◆ *Latent demand among current non-users* of transit service.

The collection of this information will be accomplished through a number of methods including a comprehensive telephone survey, focus groups, and surveys of current transportation providers.

Several existing transit service providers serve various portions of Kent County. The intent of this study is to analyze transit needs on a county-wide basis. Results from the demand analysis and assessment of needs for communities, transportation service providers, local businesses, human service agencies, and other key stakeholders must be comprehensive because they will be compiled and used as a foundation for developing the most efficient transit service model to satisfy future transportation needs.

This study will focus on the portion of Kent County located outside the ITP’s core service area. Therefore, the study area is defined as the portion of Kent County located outside of its six-city taxing district which includes the cities of Grand Rapids, East Grand Rapids, Walker, Grandville, Wyoming, and Kentwood. Exhibit I-1 shows this study area.

Exhibit I-1 Study Area



 ITP Service Area
 Study Area



Kent County Transit Needs Assessment

KENT COUNTY DESCRIPTION

Kent County is located in Western Michigan, near the intersection of Interstate 96 and 196. U.S. Route 131 runs north/south through the county. The Grand River, which is the largest river in Michigan, also traverses the county. According to the Grand Valley Metropolitan Council, Kent County has a population of 611,196 people in 2009. Founded in 1836 the county spans 864 square miles. It is divided into 21 townships, five villages, and nine cities. The largest city in the county is Grand Rapids with a population of 201,835. The population within the defined study area is 265,997. Exhibit I-2 shows the population of the cities and townships in Kent County.

**Exhibit I-2
Population of Kent County Municipalities**

Municipality	2000 Population
Ada Township	9,882
Algoma Township	7,596
Alpine Township	14,088
Bowne Township	2,755
Byron Township	17,611
Caledonia Village	1,122
Caledonia Township	8,964
Cannon Township	12,086
Cascade Township	15,107
Casnovia Village	299
Cedar Springs	3,163
Courtland Township	5,803
East Grand Rapids	10,783
Gaines Township	20,054
Grand Rapids City	197,846
Grand Rapids Township	14,035
Grandville	16,263
Grattan Township	3,540
Kent Village	1,034
Kentwood	45,239
Lowell	3,853
Lowell Township	5,201
Nelson Township	4,098
Oakfield Township	5,072
Plainfield Township	30,104
Rockford	4,626
Sand Lake Village	491
Solon Township	4,628
Sparta Village	4,142
Sparta Township	8,938
Spencer Township	3,748
Tyrone Township	4,314
Vergennes Township	3,777
Walker	21,795
Wyoming	69,366

Source: U.S. Census 2000

The greatest portion of Kent County's economy is manufacturing, with a significant amount of educational and health service sector employment. Manufacturing in Kent County is 1.63 times greater than the U.S. average. However, in recent times this industry has seen the loss of 2,600 jobs, totaling 26.3 percent of the county's employment. Jobs in Education and Health services have increased by 12.1 percent from 2003 to 2007.

Major employers in Kent County include Spectrum Health, Meijer Incorporated, Steelcase Incorporated, Alticor Incorporated, and Spartan Stores. There are several colleges within the county, including Aquinas College, Calvin College, Cornerstone University, Grand Valley State University, Grand Rapids Baptist College, Grand Rapids Community College, Ferris State University, Davenport University, Kendall College of Art and Design of Ferris State University, the University of Phoenix, and Western Michigan University. All of these colleges and universities have campuses located within the County.

STUDY APPROACH

The Kent County Transit Needs Assessment will be conducted in an eight step process. After the initial project "kick-off" meeting with GVMPC staff and the Study/Technical Team, a review of recent transportation studies in the Kent County vicinity was conducted. Following this will be an assessment of the existing transportation services in Kent County. This assessment will include information about the existing transportation services, costs, and ridership. The core task in this study is a transportation needs assessment and latent demand estimation. After this is completed potential transit services options will be developed. A range of readily implementable service options will be presented. Based on an analysis of the transit service options, a feasibility analysis of the proposed services will be conducted. The findings of the previous tasks will be compiled into a series of technical memoranda, a draft report, and after this is reviewed, a final report. Public and community involvement will be an important part of this study process.

TECHNICAL MEMORANDUM CONTENTS

This will be the first in a series of reports that will comprise the Kent County Transit Needs Assessment. Technical Memorandum #1 includes the information gathered in the inventory of current transportation services, the compilation of demographic data, as well as information obtained from previous studies and reports in the Kent County area. This information is summarized in the two sections that follow.

II. EXISTING SERVICES

Existing Services

INTERURBAN TRANSIT PARTNERSHIP

The Interurban Transit Partnership (ITP), otherwise known as The Rapid, is the public transportation provider in Kent County. Its primary service area includes the Cities of Grand Rapids, Walker, Grandville, Wyoming, Kentwood, and East Grand Rapids, which is known as the “six-city area.” It provides fixed route service, Passenger Adaptive Suburban Service (PASS), County Connection, and GO!Bus.

Fixed Route Service

The Rapid operates 26 fixed routes throughout Kent County on weekdays. It is a radial system based at its Central Station in downtown Grand Rapids. On weekday evenings, The Rapid operates 19 routes. On Saturday, the system operates 25 routes during the morning and midday. On Sundays, The Rapid operates 15 routes. These routes include three campus express bus routes and one campus connector to Grand Valley State University. The fixed route service had a total ridership of 6,203,880 in 2009. Exhibit II-1 shows the location of these routes within Kent County.

Exhibit II-2 show a summary profile of The Rapid’s fixed route service. For each of the Rapid’s routes, the table displays service span, vehicles required, frequency, revenue hours, and revenue miles. Most routes operate on a frequency of 30 minutes during the daytime and 60 minutes in the evenings and on weekends. Four routes have 15 minute peak frequencies. The peak vehicle requirement is 78 buses on weekdays, 33 on Saturdays, and 16 on Sundays. It operates about 1,000 revenue hours and 13,000 revenue miles on weekdays.

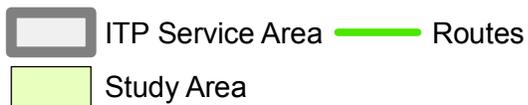
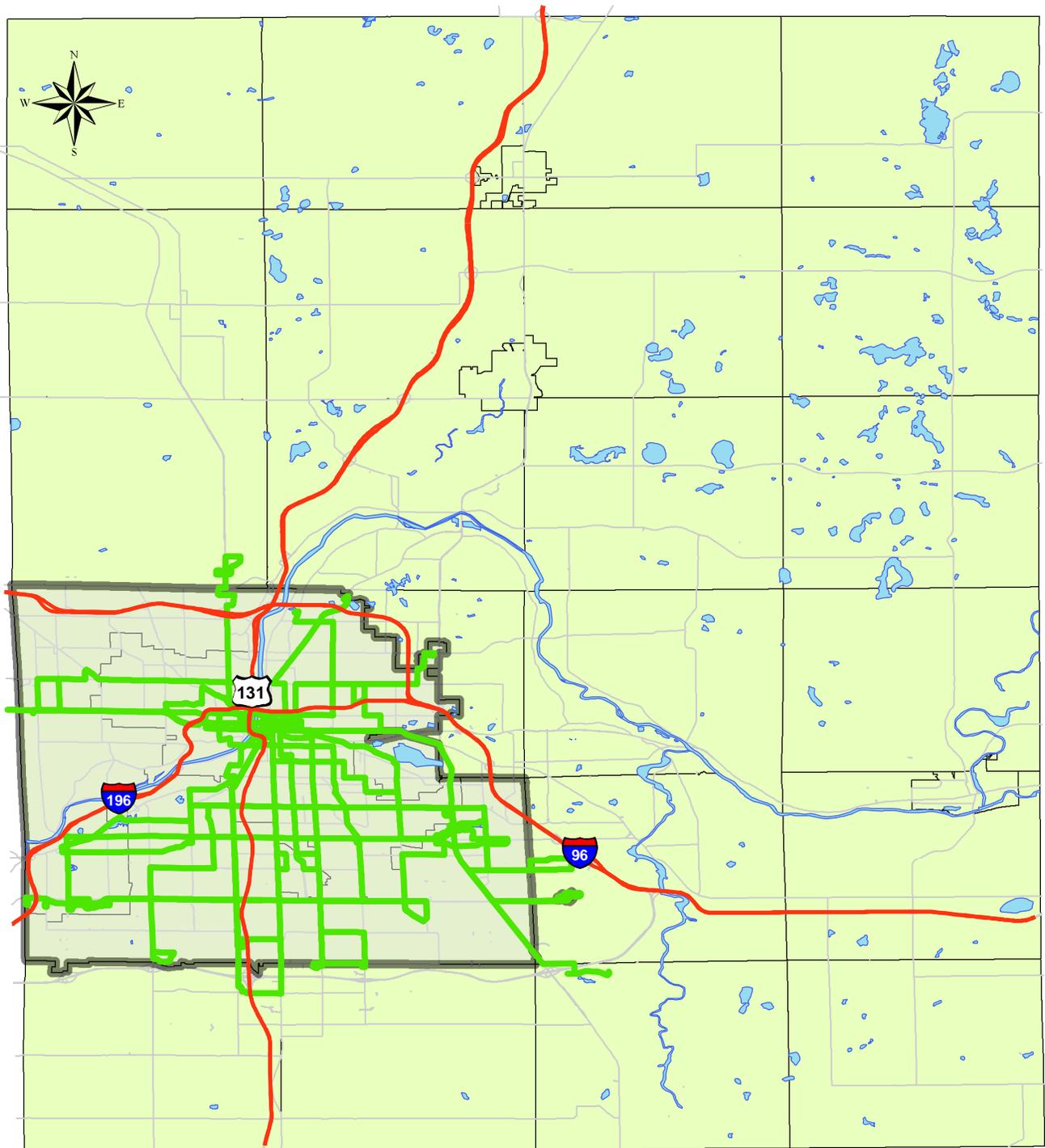
PASS

This service is a demand responsive service that is open to the general public. PASS serves the six city area, conducting trips to fill in gaps in the fixed route service. The majority of trips are feeder trips to the main fixed route service. In 2009, the total ridership for the PASS service was 14,659.

County Connection

County Connection is a demand response service that transports from the outlying county to Grand Rapids. The majority of service is defined by work trips. However, there are also a large number of medical trips to Rockford. This service is open to the general public, but service is limited to trips within Kent County. Exhibit II-3 shows the location of passenger pick-ups and drop-off for the week of April 6, 2010.

Exhibit II-1 The Rapid Fixed Route System



Kent County
Transit Needs Assessment

Exhibit II-2
The Rapid Route Profile

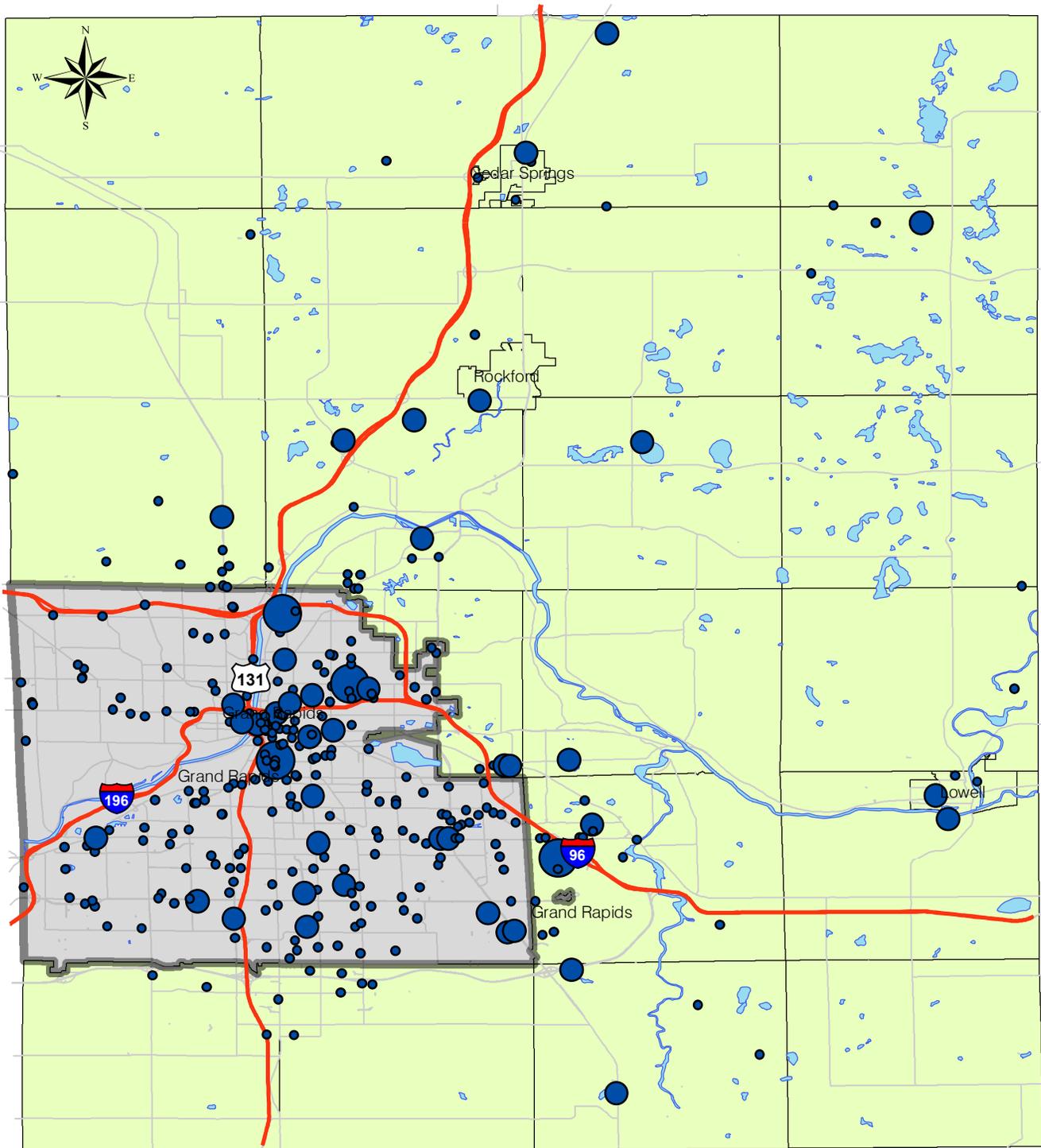
Route	Service Span		Vehicle Required				
	Weekday	Sat.	PK	MD	Eve.	Sat.	Sun.
1 Division	4:48a-11:49p	5:23a-10:28p	7:03a-7:19p	5.0	4.0	2.5	3.0
2 Kalamazoo	4:48a-11:54p	6:53a-7:24p	6:27a-7:05p	6.0	3.0	1.5	2.5
3 Madison	5:45a-7:39p	5:42a-8:05p	--	2.0	1.0	1.0	--
4 Eastern	4:35a-11:30p	5:20a-10:00p	6:57a-7:00p	5.0	3.0	1.5	1.0
5 Wealthy Woodland	4:31a-11:15p	6:34a-6:15p	--	4.0	3.0	1.0	--
6 Eastown Woodland	4:31a-11:51p	6:45a-10:20p	6:31a-7:05p	6.0	3.0	1.5	1.0
7 West Leonard	4:55a-11:11p	5:43a-10:08p	--	2.0	2.0	1.0	--
8 Grandville Rivertown Crossings	5:45a-11:52p	6:00a-9:52p	7:00a-6:52p	3.0	3.0	1.5	1.5
9 Alpine	4:33a-11:42p	5:06a-10:19p	6:38a-7:05p	5.0	3.0	1.5	1.5
10 Clyde Park	5:11a-11:36p	5:41a-6:36p	7:11a-6:36p	3.0	3.0	1.5	1.0
11 Plainfield	5:13a-11:33p	5:31a-9:33p	6:47a-6:33p	3.0	3.0	1.5	1.0
12 West Fulton	5:06a-11:41p	5:43a-10:08p	--	2.0	2.0	1.0	--
13 Michigan Fuller	5:22a-11:42p	5:42a-6:40p	--	2.0	2.0	1.0	--
14 East Fulton	5:12a-11:40p	5:42a-6:40p	--	2.0	2.0	1.0	--
15 East Leonard	4:56a-11:42p	6:07a-10:11p	6:38a-7:12p	2.0	2.0	1.0	1.0
16 Wyoming Metro Health Village	5:17a-11:20p	5:32a-10:20p	7:32a-7:05p	3.0	1.5	1.0	1.0
17 Woodland Airport	6:18a-10:25p	--	--	1.0	1.0	--	--
18 West Side	5:11a-7:39p	5:41a-10:05p	--	2.0	2.0	--	1.0
24 Burton	5:23a-7:48p	6:03a-6:49p	--	4.0	2.0	--	2.0
26 26th Street	5:30a-11:31p	7:07a-10:37p	7:14a-7:08p	3.0	3.0	1.5	1.5
37 GVSU North Campus Express	N/A	N/A	N/A	N/A	N/A	N/A	N/A
44 44th Street	5:22a-8:14p	5:22a-7:12p	--	2.0	2.0	--	2.0
48 GVSU South Campus Express	N/A	N/A	N/A	N/A	N/A	N/A	N/A
50 GVSU Campus Connector*	6:55a-11:45p	--	--	6.0	6.0	2.0	--
51 GVSU CHS Express*	5:30a-11:14p	7:00a-6:14p	--	5.0	3.0	1.0	1.0
60 GRCC Sneed Shuttle	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL				78	59	26	33

* Summer Schedule

Route	Frequency		Revenue Hours				Revenue Miles		
	PK	MD	Sat.	Sun.	Wday	Sat.	Sun.	Wday	Sat.
1 Division	15	15	30	60	88.7	51.0	33.0	994.5	575.4
2 Kalamazoo	15	30	30/60	60	83.6	54.0	39.0	987.7	638.4
3 Madison	30	30	30/60	60	18.5	36.0	--	225.7	--
4 Eastern	15	30	30/60	60	59.4	36.0	18.0	866.6	537.6
5 Wealthy Woodland	30	30	60	60	41.3	42.6	--	566.5	578.7
6 Eastown Woodland	15	30	60	60	65.8	42.0	30.0	722.3	333.6
7 West Leonard	30	60	60	60	40.3	23.8	--	669.5	339.9
8 Grandville Rivertown Crossings	30	30	60	60	46.1	24.0	18.0	644.8	332.8
9 Alpine	15	30	30/60	60	72.0	36.0	18.0	931.2	465.6
10 Clyde Park	30	30	60	60	48.4	20.6	10.8	552.5	280.5
11 Plainfield	15	30	60	60	40.3	20.0	18.0	487.5	240.0
12 West Fulton	30	30	60	60	30.8	16.0	--	396.8	204.8
13 Michigan Fuller	30	30	60	60	30.8	11.0	--	434.0	154.0
14 East Fulton	30	60	60	60	23.3	11.0	--	249.1	116.6
15 East Leonard	30	30	60	60	32.3	16.0	12.0	481.0	236.8
16 Wyoming Metro Health Village	30	30	60	60	48.4	24.0	18.0	617.5	304.0
17 Woodland Airport	60	60	--	--	18.5	--	--	162.8	--
18 West Side	30	60	60	60	21.0	16.0	--	180.0	142.0
24 Burton	30	30	60	60	52.0	24.0	--	676.0	312.0
26 26th Street	30	30	60	60	61.5	39.5	24.0	760.8	505.8
37 GVSU North Campus Express	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
44 44th Street	60	60	60	60	29.0	26.0	--	191.1	180.0
48 GVSU South Campus Express	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
50 GVSU Campus Connector*	varies	--	--	--	29.0	--	--	1670.8	--
51 GVSU CHS Express*	varies	--	--	--	27.0	14.0	--	186.3	275.1
60 GRCC Sneed Shuttle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL					1,008.0	583.5	238.8	13,655.0	6,420.0

* Summer Schedule

Exhibit II-3 County Connection Trips for the Week of 4/6/10



County Connection Trips

- 1 - 4
- 5 - 8
- 9 - 10
- ITP Service Area

Kent County Transit Needs Assessment

GO!Bus

GO!Bus is ADA complementary paratransit and service for senior citizens in the six city core service area. Additionally, Go!Bus operates to Alpine, Byron, Gaines, and ADA Townships on a contractual basis. GO!Bus ridership was 427,160 in 2009.

Costs and Revenues

The budgeted expenses for fiscal year 2010 are divided into 14 categories. Total labor is projected to be \$12,474,242, fringe benefits are \$923,172, and services are \$1,795,168. The expenditures for materials and supplies is \$4,141,399, utility expenses are \$569,492, and casualty and liability is \$918,539. Purchased transportation is projected at \$4,103,928, with \$2,421,683 for purchased transportation for community mental health, \$330,370 for suburban transit, and \$7,500 for other programs. These expenses along with a projected -\$1,300,000 in capitalized operating expenses bring the total expenditures to \$32,922,383 in 2010.

Total expenses are projected to grow to over \$37 million by 2015. Exhibit II-4 shows ITP projected expenditures for 2010 through 2015.

Exhibit II-4
ITP Costs

	FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
	Budget	Projected	Projected	Projected	Projected	Projected	Projected
Total Labor	\$12,474,242	\$12,474,242	\$12,786,098	\$13,105,751	\$13,433,394	\$13,769,229	\$14,113,460
Total Fringe Benefits	\$6,923,172	\$6,929,439	\$7,171,969	\$7,422,988	\$7,682,793	\$7,951,691	\$8,230,000
Total Services	\$1,795,168	\$1,769,768	\$1,787,466	\$1,805,340	\$1,823,394	\$1,841,628	\$1,860,044
Total Material & Supplies	\$4,141,399	\$4,059,077	\$4,221,440	\$4,390,298	\$4,656,910	\$478,546	\$4,938,488
Total Utilities	\$569,492	\$597,892	\$603,871	\$818,871	\$827,060	\$835,330	\$843,684
Total Casualty & Liability	\$918,539	\$723,515	\$737,985	\$752,745	\$767,800	\$783,156	\$798,819
Purchased Transportation	\$4,103,928	\$4,103,928	\$4,227,046	\$4,353,857	\$4,484,473	\$4,619,007	\$4,757,577
Purchased Transportation Community Mental Health	\$2,421,683	\$2,421,683	\$2,470,117	\$2,519,519	\$2,569,909	\$2,621,308	\$2,673,734
Purchased Transportation Other Programs	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500
Purchased Transportation Suburban Paratransit	\$330,370	\$248,352	\$253,319	\$258,385	\$263,553	\$268,824	\$274,201
Total Other Expenses	\$536,890	\$527,623	\$532,899	\$538,228	\$543,611	\$549,047	\$554,537
Net Surplus/(Deficit)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Transfer Out - Grant Budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating Expenses - Capitalized	(\$1,300,000)	(\$1,300,000)	(\$1,300,000)	(\$1,300,000)	(\$1,300,000)	(\$1,300,000)	(\$1,300,000)
Total Expenditures	\$32,922,383	\$32,563,019	\$33,499,709	\$34,673,482	\$35,669,397	\$36,695,265	\$37,775,044

Source: Interurban Transit Partnership

The sources of ITP revenues are a local property tax, state operating assistance, sale of transportation services, passenger fares, and other sources. For fiscal year 2010, a total of \$12,196,802 came from property tax revenues. State operating assistance totals \$9,382,879, and the sale of transportation service totals \$5,433,277 in 2010. Passenger fares provide a total of \$5,367,546. Other revenue and support are an estimated \$541,879. Exhibit II-5 shows the projected ITP revenues for the 2010 to 2015 period.

**Exhibit II-5
The Rapid Revenues**

ITP Operating Revenues by Category FY 2010-FY2015							
	FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
	Budget	Projected	Projected	Projected	Projected	Projected	Projected
Passenger Fares	\$5,367,546	\$5,329,353	\$5,489,234	\$5,653,911	\$5,823,528	\$5,998,234	\$6,178,181
Sale Of Transportation Services	\$5,433,277	\$5,633,277	\$5,858,608	\$6,092,952	\$6,336,670	\$6,590,137	\$6,853,743
State Operating Assistance	\$9,382,879	\$9,641,910	\$9,751,765	\$9,920,083	\$10,026,668	\$10,131,563	\$10,234,579
Property Taxes	\$12,196,802	\$11,569,018	\$11,337,673	\$11,451,014	\$11,565,524	\$11,912,490	\$12,269,864
Other Revenue & Support	\$541,879	\$541,879	\$552,717	\$563,771	\$575,045	\$586,546	\$598,277
Total	\$32,922,383	\$32,715,437	\$32,989,960	\$33,681,731	\$34,327,436	\$35,218,970	\$36,134,645
Deficit	\$0	\$152,418	(\$509,749)	(\$991,751)	(\$1,341,961)	(\$1,476,295)	(\$1,617,399)

Source: Interurban Transit Partnership

HOPE NETWORK

Hope Network is a non-profit organization that provides a variety of services to assist individuals with disabilities or disadvantages. The services provided by Hope Network include:

- ◆ Behavioral Health - This program works with individuals to help manage the symptoms of mental illness and co-occurring substance use to achieve a higher level of recovery. Services include crisis management, residential services, and respite care.
- ◆ Development services - This program provides specialized care for individuals with cognitive and physical disabilities. The program provides services to those who require 24-hour care, as well as individuals who require only minimal support.
- ◆ Rehabilitation services - This program provides treatment and support to help adults and children with brain injury, spinal cord injury, or other neurological conditions. Treatments work to restore maximum independence among individuals.
- ◆ Care coordination - This program provides assistance with housing, obtaining benefits, coordinating medical care, facilitating conational supports, and other needs as identified. This service enables individuals to manage their lives and achieve their goals while still ensuring a greater level of independence.
- ◆ Community services - By assisting individuals with budgeting, medication management, transportation, and other needs, this program allows individuals to live independently in their own environment.
- ◆ Subsidized housing - This program provides income-based apartment rentals for people with mobility needs, mental illness or, individuals of low income.
- ◆ Workforce development - This program is designed to expand individual independence, and allow participants to become contributing members of the community.
- ◆ Transportation - This program provides a higher level of independence for individuals in need of transportation. Door-to-door and door-through-door services are provided to assist individuals and ensure they have access to necessary appointments.

Transportation

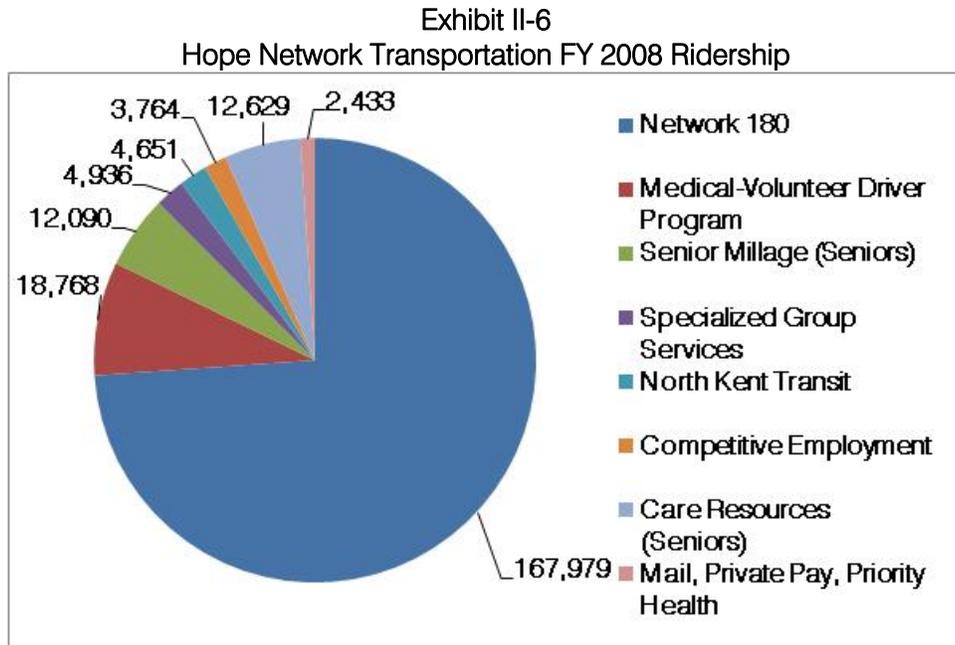
Hope Network is the second largest provider of transportation in Kent County, operating 120 vehicles per day with approximately 60 buses operating in Kent County. The system provides services to senior populations, individuals with disabilities, and those traveling to work or school. Service is available to individuals with disabilities and seniors.

In 2009, Hope Network provided 249,472 trips, and served 4,314 individuals throughout Kent County. These rides were provided in one of the categories listed below:

- ◆ Network 180 - Provided transportation to individuals with physical, developmental, mental, or emotional disabilities. It is the largest service provided by Hope Network. These rides were provided to Hope Network sites, Transitions/Touchstone, Goodwill Industries and Gerontology Network. In 2009, the Network 180 service provided 179,910 rides.
- ◆ Care Resources - Care Resources provided 22,113 trips in 2009. This service provides rides to seniors who attend programming at Care Tree Services, Family Life Center, and Care Resources.
- ◆ Medical-Volunteer Driver Program - This program provided 18,614 trips last year and served over 3,000 individuals.
- ◆ Ride Link - This service provided 14,423 rides in 2009. This service is funded by a senior citizen millage and is run in conjunction with The Rapid.
- ◆ Specialized Group Services - Transportation is provided to seniors or individuals with disabilities who need additional services such as respirators, wheelchair service, and door-to-door service. In 2009, this service provided 4,936 rides.
- ◆ North Kent Transit - This service is provided in Northern and Eastern Kent County for individuals 60 and over or individuals with disabilities. In 2009 4,239 trips were provided through the North Kent Transit service.
- ◆ Compleive Employment - This service is available to individuals who are competitively employed and have an initial sponsor. This service provided 3,347 rides in 2009.
- ◆ Mail, Private Pay, Priority Health - Individuals with disabilities who are authorized to pay for transportation with insurance or private funds use this service. In 2009, 2,319 rides were provided using this program.

Exhibit II-6 shows a breakdown of Hope Network's ridership for 2008. The chart indicates that Network 180 comprises the largest portion of riders at 167,979, or 74 percent. The second largest ridership is the Medical-Volunteer Driver Program, with 18,768 riders or 8 percent of total riders in 2008. Care Resources and Senior Millage (Ride Link) rides comprise 12,629 and

12,090 riders, respectively. The remaining programs each make up 2 percent or less of the total ridership for Hope Network.

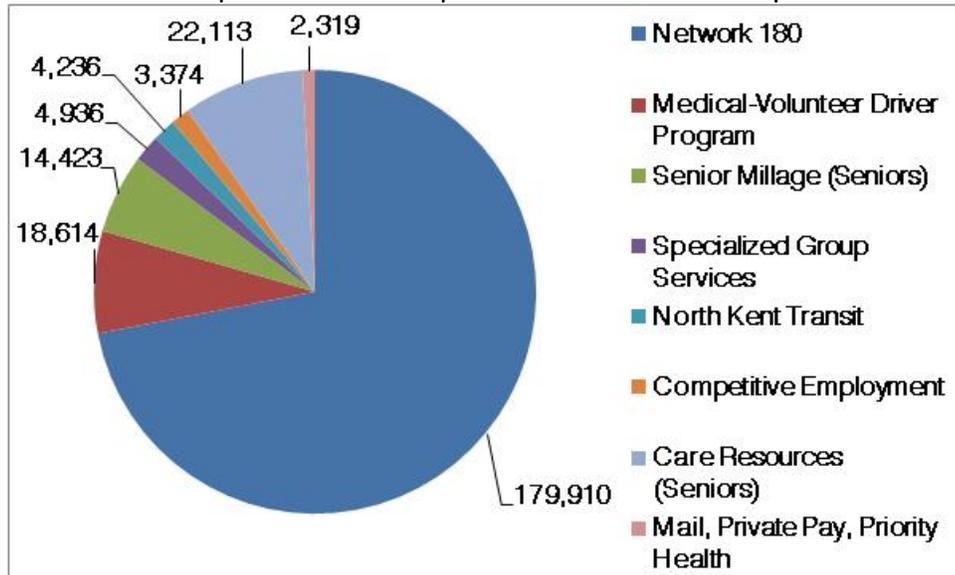


Source: Hope Network

The 2009 ridership for Hope Network is represented in Exhibit II-7. Network 180 comprised the largest ridership of Hope Network at 72 percent, or 179,910. In a change from 2008, Care Resources made up the second largest portion of riders in 2009 with 22,113, or 9 percent. The Medical-Volunteer Driver Program had 18,614 riders, totaling 7 percent of ridership. Ride Link reported 14,423 riders and totaled 6 percent of the total ridership. North Kent Transit and Specialized Group Services each comprised 2 percent of the total ridership. Competitive Employment and Mail, Private Pay, and Priority Health each made up one percent of Hope Network's Total Ridership.

Exhibit II-7

Hope Network Transportation FY 2009 Ridership



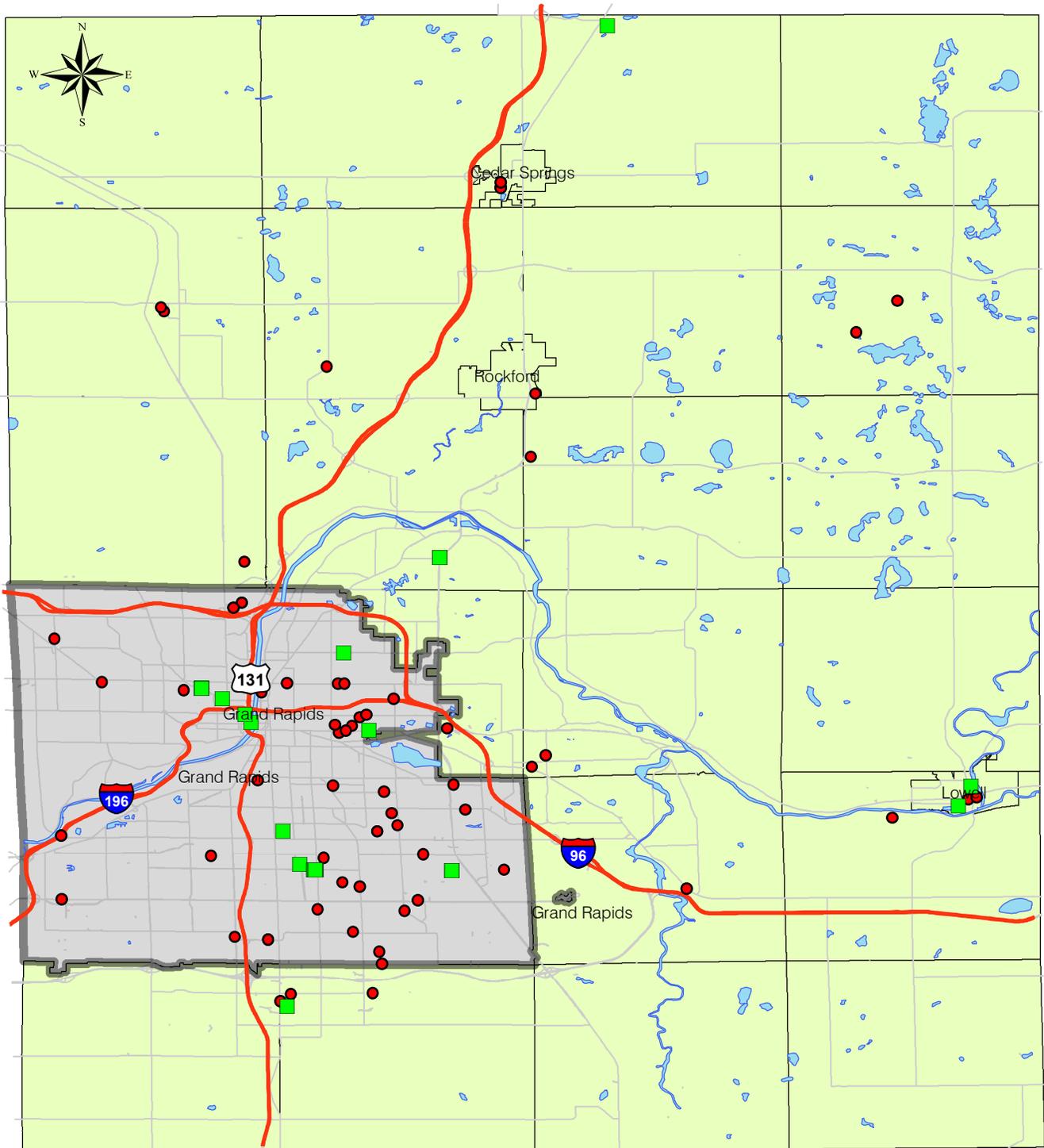
Source: Hope Network

Between 2008 and 2009 ridership grew by 22,219. This represents a 9.8 percent change in ridership. The largest increase in ridership was in the Network 180 transportation with an increase in rides from 167,979 to 179,910. Care resources (seniors) category was the second largest increase, with an increase from 12,629 to 22,113. 2009 saw a small decrease in ridership among the Medical-Volunteer Driver Program, North Kent Transit, Competitive Employment, and Mail, Private Pay, Priority Health. These services decreased by 150, 412, 390, 114 respectively.

Exhibit II-8 outlines the times of the current runs provided by Hope Network. This vehicle utilization chart indicates the operating times of Hope Network for the date May 11, 2010. This is considered representative of the peak day for Hope Network.

The map in Exhibit II-9 outlines the origins and destinations of the runs provided by Hope Network. The circles on the map represent residential location, while the squares represent the locations of centers in Kent County.

Exhibit II-9 Hope Network Facilities



- Hope Network Served Facilities (Centers)
- Hope Network Served Facilities (Residential)
- ▭ ITP Service Area

**Kent County
Transit Needs Assessment**

Exhibit II-10 represents an average month of Hope Network's ridership. As the chart illustrates, there is a peak demand on Thursday and a lower demand on the weekends. The table also shows a total of 23,513 reservations taken for the month. A total of 21,913 were subscription trips and 1,575 were demand responsive trips. No-shows totaled 308; there were 3,126 cancelled trips.

**Exhibit II-10
Hope Network Ridership Characteristics**

April 1-30	Subscriptions	Demands	Reservations Taken	Trips Cancelled	Trips No Show	Trips Scheduled
Sunday	132	45	177	51	64	117
Monday	3,946	201	4,148	377	55	3,716
Tuesday	3,988	227	4,215	442	48	3,725
Wednesday	4,112	278	4,391	407	38	3,946
Thursday	5,028	365	5,393	539	47	4,807
Friday	4,683	278	4,984	1,276	55	3,653
Saturday	24	181	205	34	1	170
Total	21,913	1,575	23,513	3,126	308	20,134

Source: Hope Network

Exhibit II-11 outlines the performance statistics of Hope Network for 2008 and 2009. The table shows an increase in total miles from 1,020,948 to 1,250,770. The table also indicates an increase in trips from 208,485 to 230,858. Individuals served also increased from 1,342 to 1,369. Vehicles in operation increased from 62 in 2008 to 80 in 2009. The number of preventable accidents decreased.

**Exhibit II-11
Hope Network 2008 and 2009 Operating Statistics**

2008			2009		
Miles	1,020,948		Miles	1,250,770	
Trips	208,485		Trips	230,858	
Individuals Served	1,342		Individuals Served	1,369	
Vehicles	62		Vehicles	80	
Preventable Accidents	13	(1.21 per 100,000 miles)	Preventable Accidents	6	(.48 per 100000 miles)

Source: Hope Network

Funding

Exhibit II-12 shows the transportation revenues and expenses for Hope Network in FY 2010. Revenues totaled nearly \$3.4 million during this period with the majority (\$2.3 million) provided through a contractual arrangement with ITP. Total operating expenses were just under \$3.1 million. The largest expense item was wages and benefits which totaled \$1.4 million. There are \$437,724 estimated for administrative expenses.

Exhibit II-12
Hope Network Budget 2009 and 2010

Description	FY 2009-2010 Budget
Grant Revenue-Senior Millage, CDBG (NKT)	\$ 336,000.00
Transportation Revenue-PACE (Senior), Private Pay, Insurance	\$ 541,368.00
Transportation Services	\$ -
Transportation - Consumer Pay-Fares-NKT, Com Emp	\$ 42,790.00
Transportation - CMH/ITP-The Rapid	\$ 2,374,200.73
Contractual Revenue-Specialized Services	\$ 84,173.00
Temp Restricted Revenue	\$ -
Affil Service Income-Contract	\$ -
Total Revenues	\$ 3,378,531.73
Staff Wages and Benefits	\$ 1,426,818.95
Staff - Training, Travel, Conferences, and Meals	\$ 7,230.68
Program Supplies and Uniforms	\$ 13,037.99
Postage and Freight	\$ 524.86
Office Supplies	\$ 1,708.03
Program Equipment Expense - Covered by Allocated Shared Adm.	\$ -
Office Equipment Expense - Covered by Allocated Shared Adm.	\$ -
Depreciation - Vehicle	\$ 12,570.85
Purchased, Intracompany and 3rd Party Transportation	\$ 86,011.06
Vehicle - Fuel	\$ 457,999.55
Vehicle - Maintenance	\$ 430,424.44
Vehicle - License	\$ 284.67
Dues and Subscriptions - Covered by Allocated Shared Adm.	\$ -
Building - Maint/Repairs	\$ 2,277.38
Insurance - Liability	\$ 5,756.89
Insurance - Vehicle	\$ 129,686.49
Software License/Contractual Expenses	\$ 31,148.84
Staff - Hiring Costs	\$ 4,263.31
Advertising/Promotional	\$ 3,416.07
Allocated Program Expenses, fares, scheduling, and IT	\$ 479,407.60
Total Operating Expenses	\$ 3,092,567.64
Adm. Expenses - HR, Accounting, Payroll, Finance, Legal, Purchasing, Quality, Compliance, Marketing, Leadership, and Facilities.	\$ 437,723.96
Total Expenses	\$ 3,530,291.60

Source: Hope Network

OTHER TRANSPORTATION PROVIDERS

Aids Care Network (G.R.A.C.E.)

Volunteers provide transportation to individuals living with HIV/AIDS. The transportation includes trips to medical treatments, grocery, and housing. To be eligible, the individual must be living with HIV/AIDS and have a referral form a case manager as St. Mary's McAuley Health Center or doctor's proof of HIV status. Transportation is available from 8:00 a.m. to 5:00 p.m. Other rides may be scheduled on a needs basis with a 48 hour call ahead required.

American Cancer Society – West Michigan Area Service Center

This organization provides a volunteer paratransit service to local cancer treatment centers for patients. Only cancer patients without transportation, who can walk by themselves, are eligible for service. Service is available from 8:30 a.m. to 4:00 p.m. Monday through Friday. Reservations require one week notice and the address of treatment. The average ridership of the agency can vary drastically. Currently the agency is providing 780 trips per year.

American Red Cross of West Central Michigan

The American Red Cross provides transportation to individuals who are financially or physically unable to provide their own transportation, with a focus on the elderly and disabled. Documentation of income is required as well as a proof of disability or Medicaid. The service is available to those in wheelchairs, and will travel outside of Kent County. Rides must be scheduled in advance, and are provided at a first come, first served basis. Transportation is available from 8:30 a.m. to 4:00 p.m. Monday through Friday.

Area Community Service Employment and Training Council (ACSET)

This organization provides transportation for individuals 55 and over and those with disabilities. The service area is limited to those who live in Northern Kent County, and will provide transportation to necessary medical appointments. Proof of income is required. Door to door service is available, and vehicles are wheelchair accessible. Transportation is available from 8 a.m. to 4:30 p.m. with an appointment scheduled 24 hours in advance. Currently, the service provides 480 trips per year.

Fish For My People (G.R.A.C.E.)

Volunteers provide transportation for medical appointments, FIA, WIC, grocery shopping, and other necessities. Transportation is not provided to nursing homes, and wheelchair users are only transported if the client has a travel companion. Priority is given to riders with medical needs. Services are available from 9:00 a.m. to 3:00 p.m., Monday through Friday and require a 24-hour notice.

Ready Ride Transportation, Inc.

Ready Ride Transportation provides transportation to medical appointments, therapy, church, educational events, senior activities, and social events. Drivers are professionally trained and provide service 24 hours a day 7 days a week. Weekend appointments must be scheduled by Thursday.

Senior Neighbors

Transportation is provided in the areas of Lowell and Grandville, and the Sparta area. Service is available to medical appointments, grocery and drug stores, and senior centers for social activities. One week's notice is preferred. The system currently provides 10,345 trips per year, and transports 5,667 individuals. The majority of funding for this service is obtained from United Way, private funding, and a senior millage. In 2009, \$283,183 was spent on transportation in the agency.

Sunshine Senior Assistance

Service is provided for seniors and individuals with special needs in Kent County up to 20 miles outside of Grand Rapids. Transportation is available for medical appointments, work trips, school trips, rehab and therapy, and grocery errands. The service operates based on client needs, and wheelchair accommodations can be handled if the individual can transfer to a vehicle seat pivot out of his or her wheelchair.

Demographics

III. POPULATION AND DEMOGRAPHICS

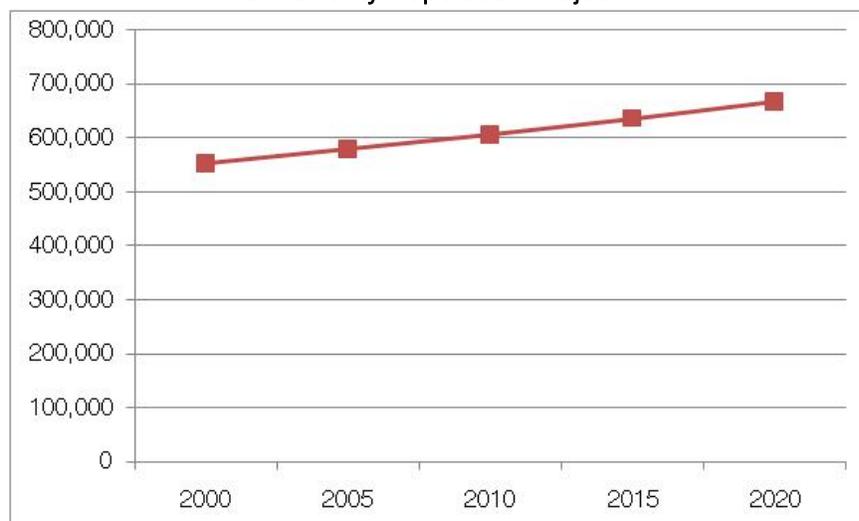
DEMOGRAPHICS

The demographics of an area are a strong indicator of demand for public transportation service. Relevant demographic data was collected and summarized in this section.

Population Projection

According to information provided by the Michigan Department of Information and Technology, it is estimated that the population of Kent County will increase to 667,367 by 2020. This is an increase of 9.9 percent from the year 2010. Exhibit III-1 shows this estimated increase in population, as well as the trend in population from 2000.

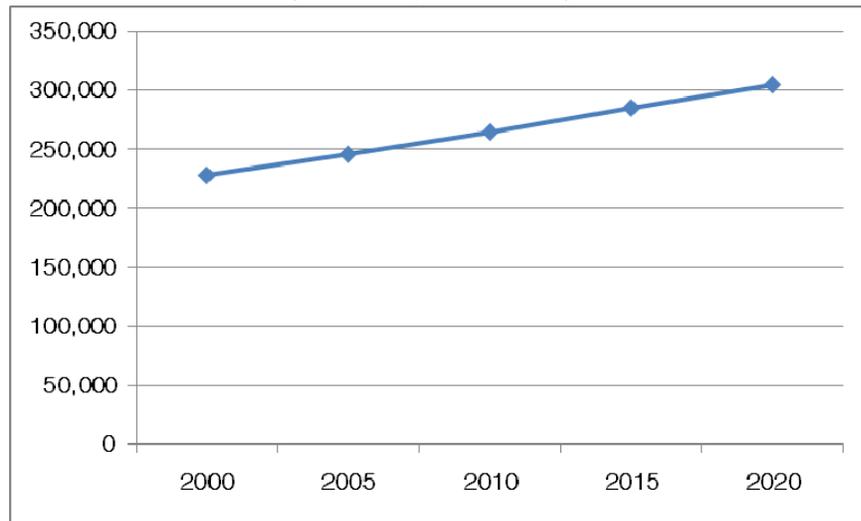
Exhibit III-1
Kent County Population Projection



Source: Michigan Department of Information and Technology

Exhibit III-2 shows the population trends of the communities within the study area. The growth rate from 2010 to 2020 is greater than Kent County as a whole with a 15.2 percent increase. This portion of Kent County is projected to grow from 265,046 to 305,313 during this period.

Exhibit III-2
Study Area Population Projection



Source: Michigan Department of Information and Technology

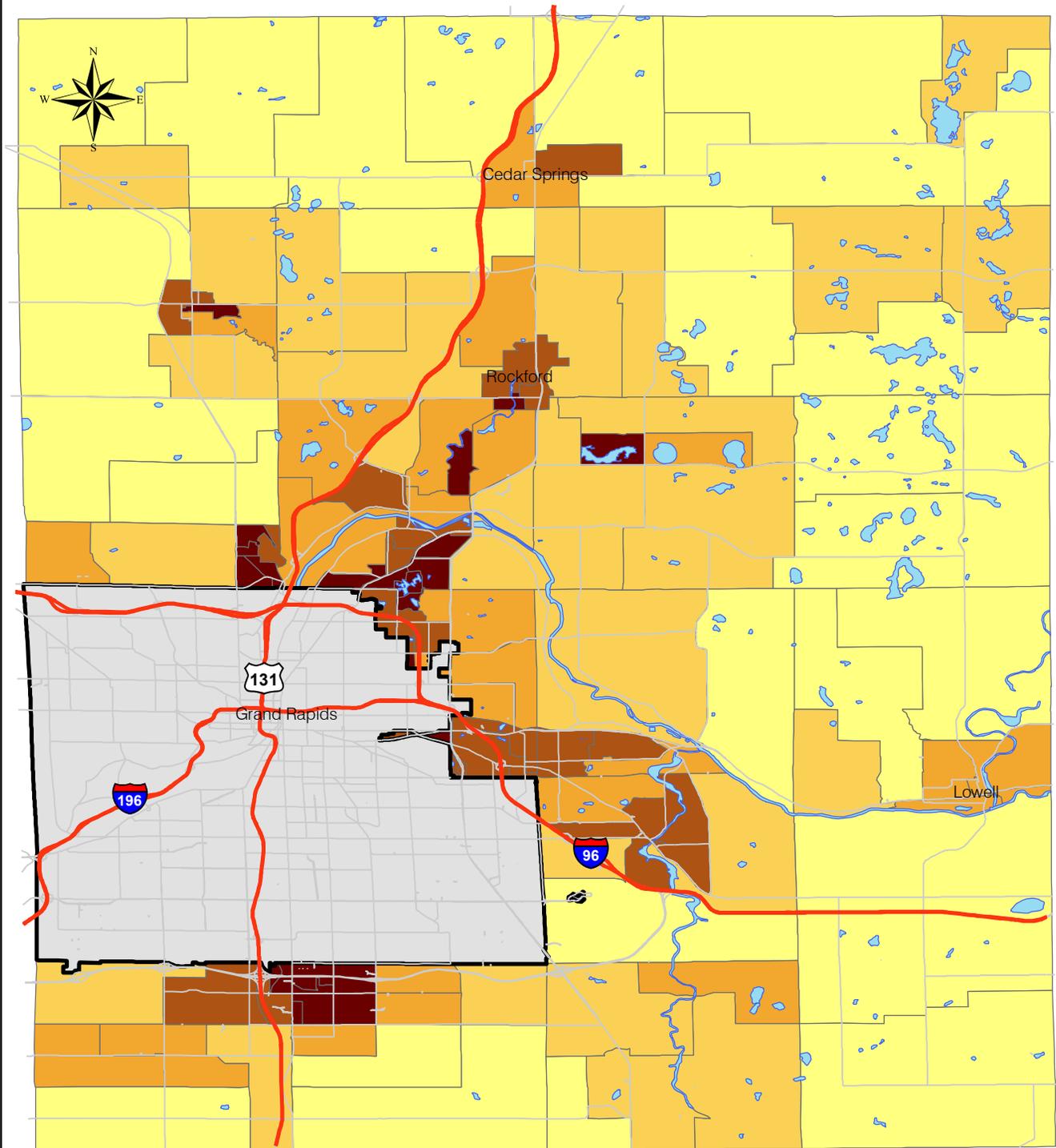
Population Density

The population density of the study area is depicted in Exhibit III-3. The block groups with the greatest population densities are located in Plainfield, Alpine, and Plaines Townships. These townships, which are located adjacent to the central six cities area, all have block groups with over 2,085 persons per square mile. Block groups in the second highest population density category (879 to 2,084 persons per square mile) are scattered among Cedar Springs, Rockford, as well as Cascade, Ada, Grand Rapids, Byron, Plainfield, Alpine, and Sparta Townships.

Population Distribution by Age

Exhibit III-4 shows the population growth estimates of four age groups in Kent County. The population of individuals between the ages 25 to 64 is the largest group and is projected to increase by 7.4 percent from 2010 to 2020. The age group that will experience the largest amount of growth is estimated for individuals aged 65 and older. It is predicted that this age group will increase by 40.5 percent between 2010 and 2020. The younger age group of individuals 0 to 14 is expected to increase by 10.3 percent. The population of individuals 15 to 24 is projected to decrease by 2.3 percent.

Exhibit III-3 Population Density

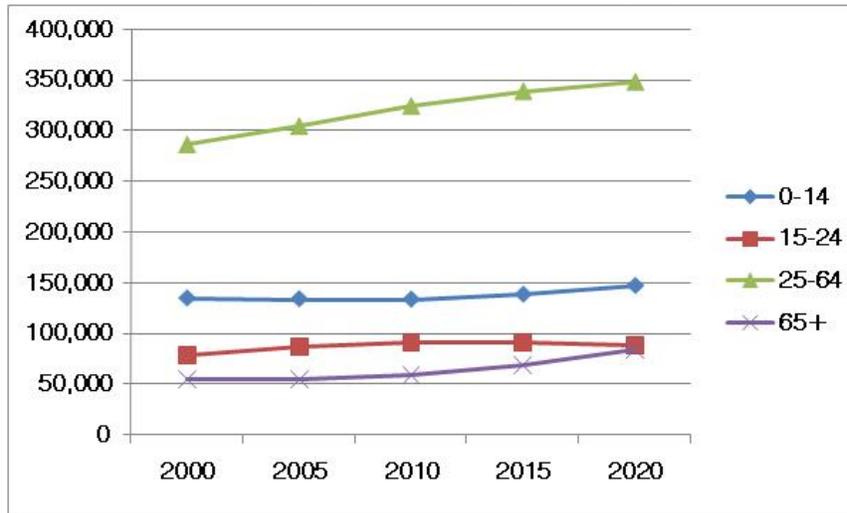


Persons Per Square Mile



Kent County Transit Needs Assessment

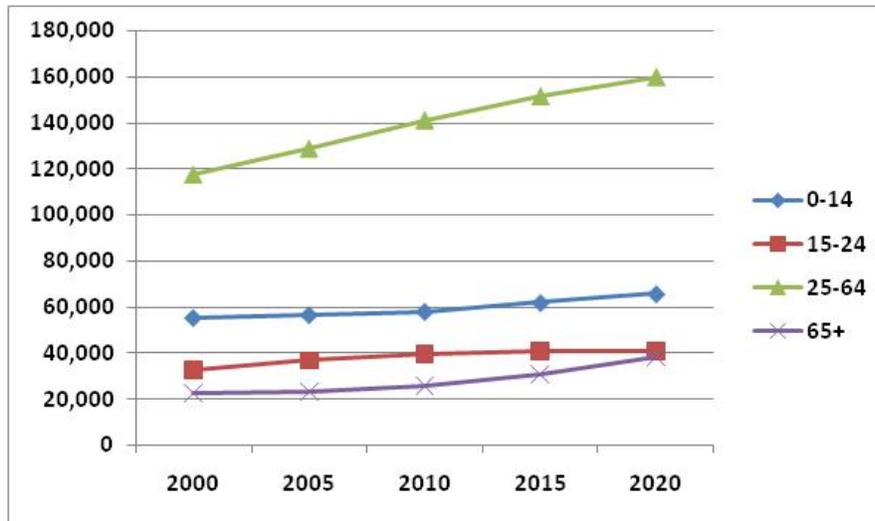
Exhibit III-4
Kent County Population Projection by Age



Source: Michigan Department of Information and Technology

The age distribution of the population within the study area is shown in Exhibit III-5. This shows an increase in population of 40.6 percent among individuals 65 and over between 2010 and 2020. The largest group, individuals 25 to 64, shows an estimated increase of 7.4 percent, from 107,124 to 115,051. The 0 to 14 age group shows a growth of 10.3 percent from 2010 to 2020, and the age cohort 15-24 shows a 2.2 percent decrease in population.

Exhibit III-5
Study Area Population by Age



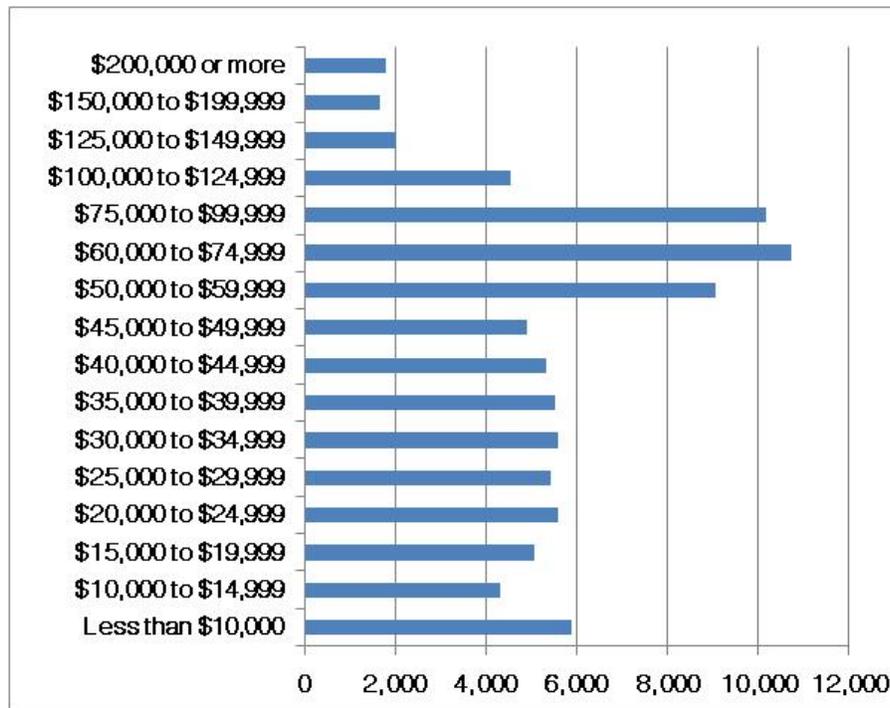
Source: Michigan Department of Information Technology

Household Incomes

Exhibit II-6 illustrates the household incomes for Kent County in 1999. According to the U.S. Census, 48.8 percent of households in Kent County earned less than \$45,000 annually. Of that, 48.8 percent 6.7 percent earned less than \$10,000, 4.9 percent earned between \$10,000 and \$14,999, and 5.8 percent earned between \$15,000 and 19,999. This indicates that almost 18 percent of Kent County lives in the first three categories of household incomes.

When focusing on only the area outside of The Rapid's service zone, the population exhibits similar trends. Exhibit 15 shows the household incomes for residents who live outside of the Grand Rapids Service area. The chart shows that 48.8 percent of households outside of the current service area earned less than \$45,000 in 1999. Of those households, 6.7 percent earned less than \$10,000, 4.9 percent earned between \$10,000 and \$14,999, and 5.8 percent earned between \$15,000 and \$19,999.

Exhibit III-6
Study Area Income 1999

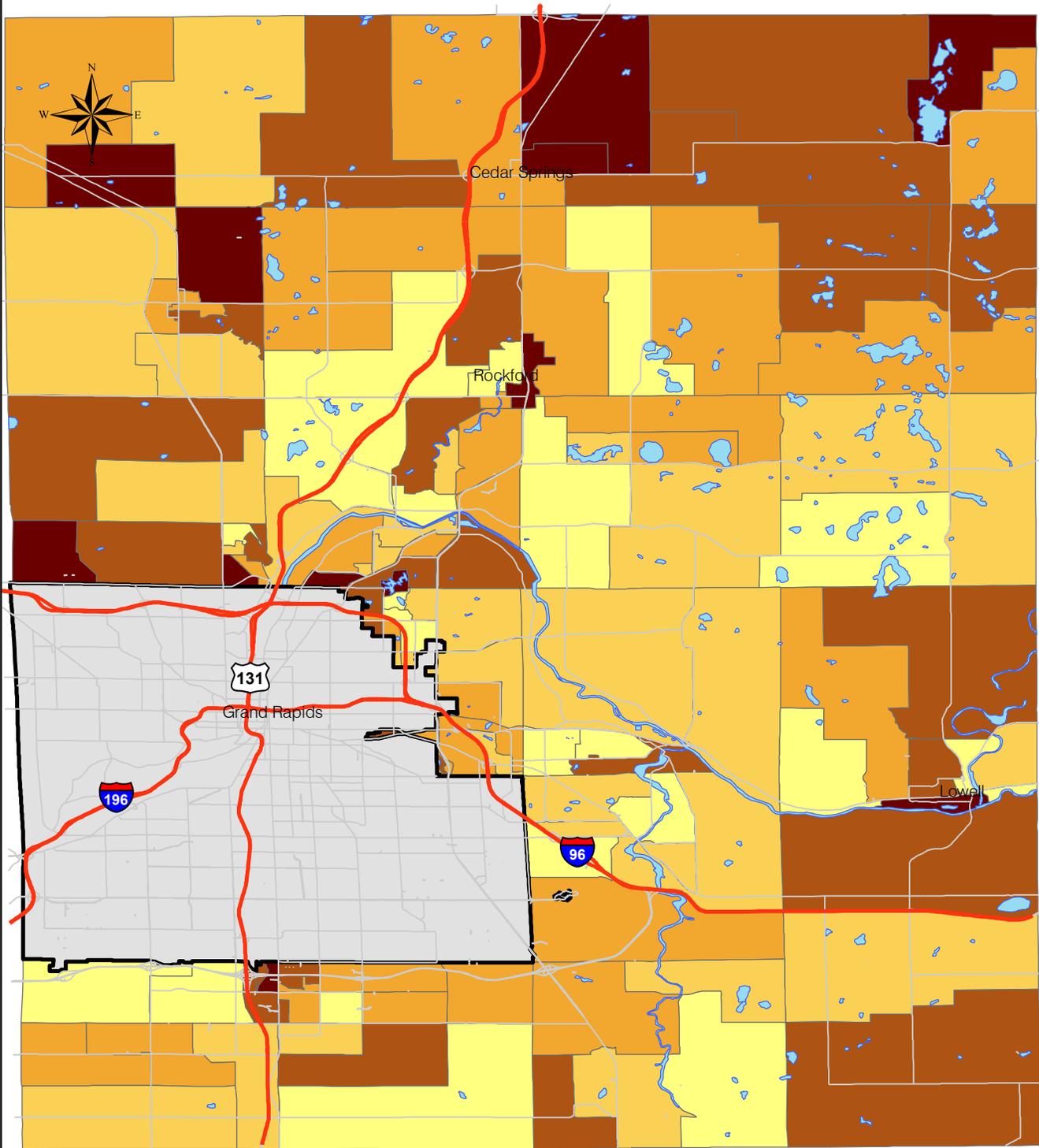


Source: U.S. Census 2000

Households Below the Poverty Level

Households below the poverty level are scattered throughout Kent County as depicted in Exhibit III-7. The block groups with greater than 9.9 percent of households under the poverty level are located in Rockford, Lowell, and Nelson, Alpine, Plainfield, and Byron Townships. Tyrone and Sparta Townships also have areas with relatively high numbers of these households.

Exhibit III-7 Households Below The Poverty Level



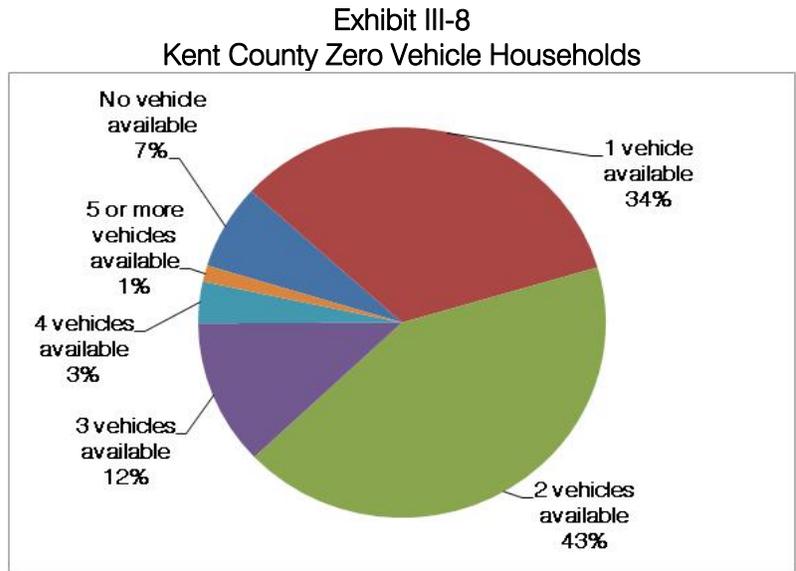
Percent of Households Below Poverty Level



Kent County Transit Needs Assessment

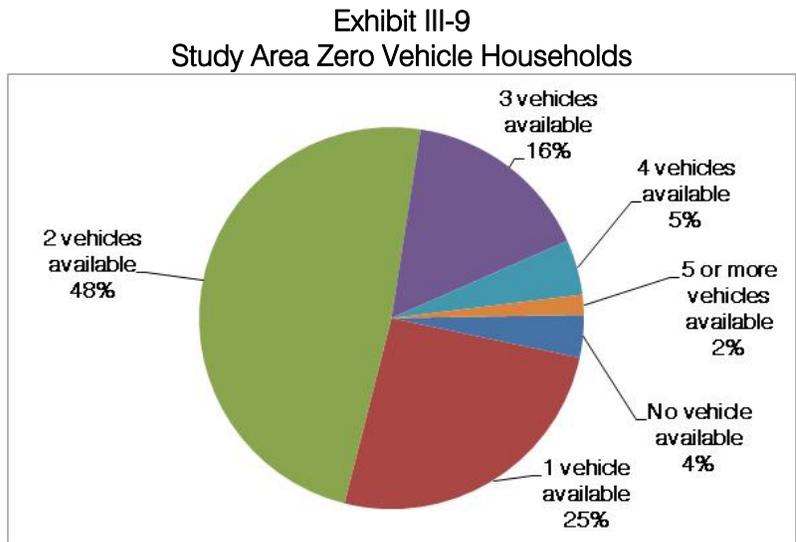
Zero-Vehicle Households

Zero-vehicle occupied housing unit status is another indicator of potential transit demand. According to the 2000 U.S. Census Data, there were a total of 1,528 out of 14,981, or 7.0 percent, of occupied housing units in Kent County with no vehicles available. Exhibit III-8 shows the percentage of households in six categories of vehicle availability in Kent County.



Source: U.S. Census 2000

Within the study area, the U.S. Census Data indicates that 4.0 percent of the households have no vehicles available, which is less than Kent County as a whole. Nearly three-fourths of these households have at least two vehicles available. Exhibit III-9 shows the six categories of vehicle availability within the study area.



Source: U.S. Census 2000

Exhibit III-10 shows a map of the concentrations of zero-vehicle households within the study area. The locations with the highest concentrations of these households are in Lowell and Grand Rapids Township. Other locations with relatively high numbers of zero-vehicle households are located in Rockford, and Nelson, Sparta, and Plainfield Townships.

SENIOR AND DISABLED POPULATION PROJECTION

Persons Over 65 Years of Age

There is a trend occurring in the United States relating to the aging of the population. The two age cohorts with the largest percentage of growth over the last decade were the 50-54 year old cohort and the 45-49 year old cohort. People in these two age groups were primarily born during the post-WWII “baby boom,” era defined by the Census Bureau as persons born from 1946 through 1964. As communities approach the year 2010, these baby boomers will begin turning 65 years of age.

Further, the Administration on Aging (U.S. Department of Health and Human Services) reports that, based on a comprehensive survey of older adults, longevity is increasing and younger seniors are healthier than in all previously measured time in our history. Quality of life issues and an individual’s desire to live independently will put increasing pressure on existing transit services to provide mobility to this population. This has great significance on the potential need to provide public transit and complementary paratransit services.

Exhibits III-11 includes population projections by age group for the study area. As shown, the portion of the population over 65 years of age is projected to increase from 19,747 in 2010 to 27,762 in 2020. This is a 40.6 percent increase, as compared to a 9.8 percent increase in the overall population during the same time period. As a result, persons over 65 years as a percent of the total population increase from 9.8 percent in 2010 to 12.6 percent in 2020. The increase in this age group accelerates through the decade and is expected to increase further after 2020.

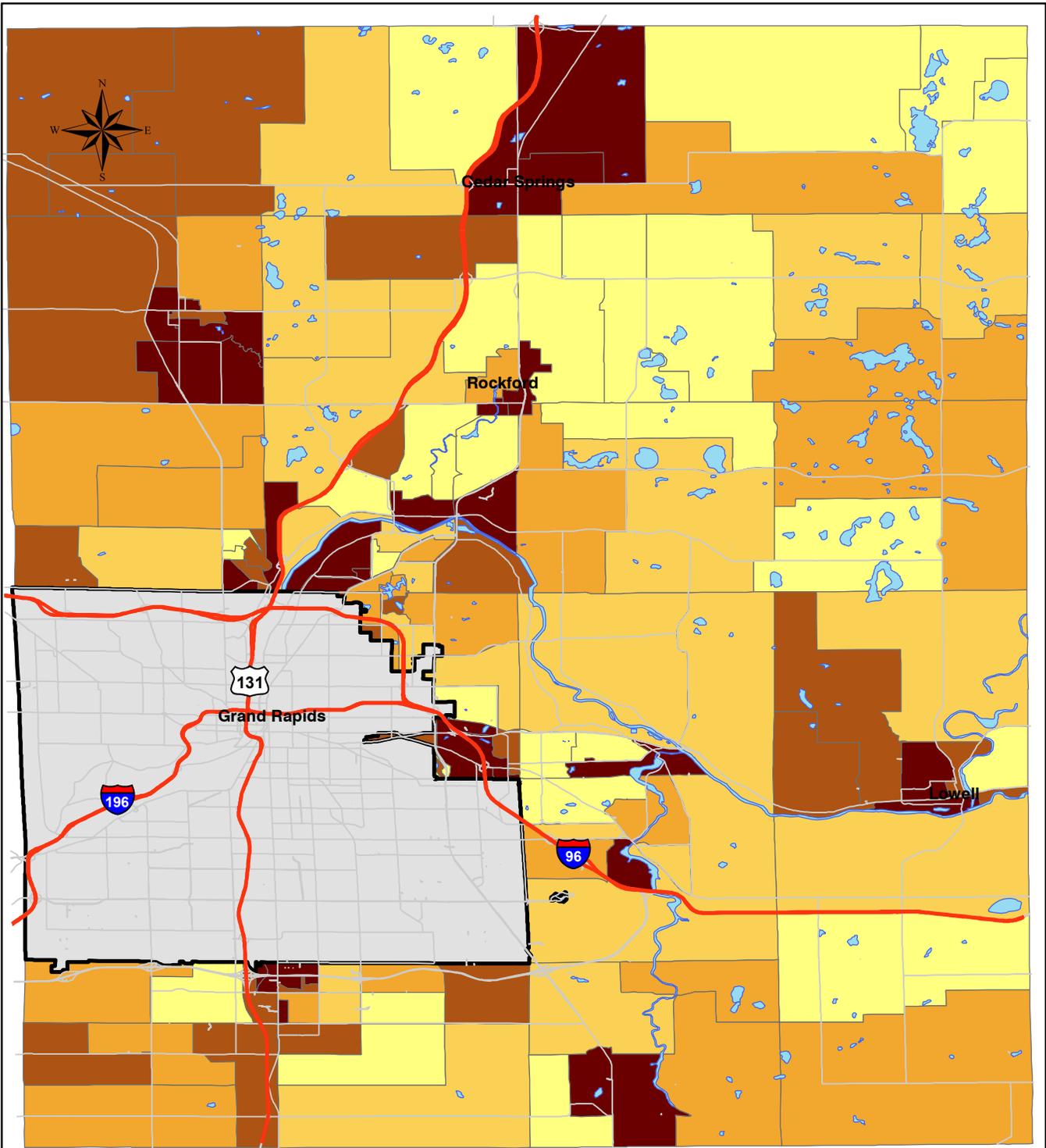
**Exhibit III-11
Study Area Population by Age**

	2010	2015	% Change	2020	% Change
Study Area					
0-14 Years	44,112	45,748	3.7%	48,675	6.4%
15-24 Years	30,087	30,156	0.2%	29,407	-2.5%
25-64 Years	107,124	111,980	4.5%	115,051	2.7%
65 Years and Over	19,747	22,956	16.3%	27,762	20.9%

Source: Michigan Department of Information Technology

Exhibit III-12 shows the percentage of persons over 65 years of age by block group. Concentrations of this age group are spread throughout the county. Block groups with the highest concentrations are located in Spencer, Solon, Sparta, Plainfield, Gaines, and Byron Townships.

Exhibit III-10 Households with No Available Vehicles

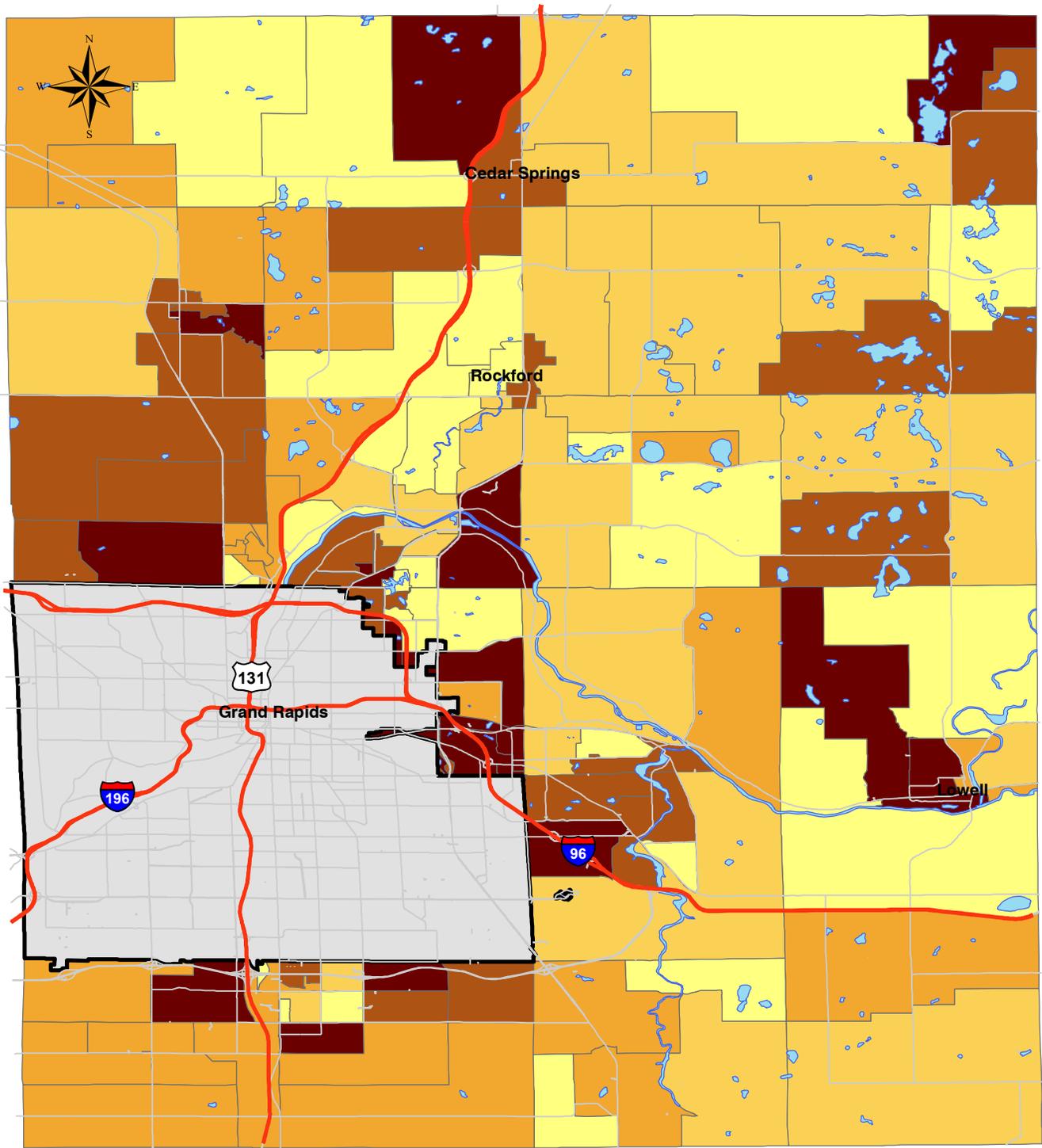


Percent of 0-Vehicle Households



**Kent County
Transit Needs Assessment**

Exhibit III-12 Population 65 and Over



Percent of Individuals 65+ Per Square Mile



**Kent County
Transit Needs Assessment**

Individuals with Disabilities

Enumeration of the disabled population in any community presents challenges. First, there is a complex and lengthy definition of a disabled person in the ADA implementing regulations, which is found in 49 CFR Part 37.3. This definition, when applied to public transportation applications, is designed to permit a *functional* approach to disability determination rather than a strict *categorical* definition. In a functional approach, the mere presence of a condition that is typically thought to be disabling gives way to consideration of an individual's abilities to perform various life functions. In short, an individual's capabilities, rather than the mere presence of a medical condition, determine transportation disability.

The Survey of Income and Program Participation (SIPP) is a national household survey that began in 1984. The SIPP is characterized by an extensive set of disability questions; generally, the SIPP is the preferred source for examining most disability issues. The reason for this preference is the similarities between questions posed on the SIPP survey and the ADA definition of disability.

The Americans with Disabilities Act of 1990 (ADA) defines disability as a "physical or mental impairment that substantially limits one or more of the major life activities." For persons 15 years old and over, the SIPP disability questions cover limitations in functional activities (seeing, hearing, speaking, lifting and carrying, using stairs, and walking); in Activities of Daily Living (ADL) such as getting around inside the home, getting in or out of a bed or chair, bathing, dressing, and eating; and in Instrumental Activities of Daily Living (IADL) such as going outside the home, keeping track of money or bills, preparing meals, doing light housework, and using the telephone. The SIPP also obtains information on the use of wheelchairs and crutches, canes, or walkers; the presence of certain conditions related to mental functioning; the presence of a work disability; and the disability status of children.

The SIPP provides extensive data and, more importantly, addresses multi-dimensional elements of a disability. The major drawback is that despite the fact the sample is drawn from more than 32,000 households, the Bureau cautions users who apply the various incidence rates of disability to levels of geography below the regional level. Use of SIPP data may or may not generate statistical confidence levels of 0.90 or greater when applied to the rural county or small urban area level. However, the application of these incidence rates to the Kent County study area with a population greater than 200,000 will achieve adequate statistical confidence levels. Using the indices or incidence rates for specific disabilities derived from the SIPP (2002), an estimate of the number of individuals with disabilities, by age group, has been calculated for Kent County as a whole for 2010. These estimates are found in Exhibit III-13.

Data collected in the SIPP do permit consideration of persons with multiple disabilities. Moreover, the definitions employed can be directly related to the concepts in 49 CFR Part 37.3 definitions with respect to "activities of daily life." Exhibit III-13 also provides a summary of the number of persons with one or more activities of daily living or instrumental activities of daily living for which assistance was needed. Using the criteria that only one major limitation in activities of daily life is necessary to trigger ADA eligibility for paratransit services, and that it is also a strong indicator of transit dependency, this procedure yields an estimate of 10,534 ADA-eligible individuals for the study area. Exhibits III-14 and III-15 show estimates of disabled persons of 11,731 in 2015 and 13,218 in 2020.

Exhibit III-13

Estimated Transportation Disabled Population in Kent County - 2010

Disability Status	Ages 15-24 Years		Ages 25-64 Years		Ages 65 Years +		Total Ages > 15 Years
	Percent	Kent County	13713	Kent County	Percent	Kent County	
Total Population by Age Group		91,172		324,617		59,838	475,627
Disability Status							
With a Disability	20.8%	18,964	16.3%	52913	52.3%	31,295	103,172
Severe	13.7%	12,491	10.8%	35059	36.9%	22,080	69,629
Not Severe	7.0%	6,382	5.5%	17854	15.4%	9,215	33,451
Seeing/Hearing Disability							
With a Disability	6.7%	6,109	4.8%	15582	20.5%	12,267	33,957
Severe	1.4%	1,276	0.9%	2922	4.4%	2,633	6,831
Not Severe	5.3%	4,832	3.9%	12660	16.1%	9,634	27,126
Walking/Using Stairs							
With a Disability	11.4%	10,394	8.0%	25969	38.2%	22,858	59,221
Severe	5.9%	5,379	3.6%	11686	22.1%	13,224	30,290
Not Severe	5.5%	5,014	4.4%	14283	16.1%	9,634	28,932
Had Difficulty Walking	9.4%	8,570	6.5%	21100	31.8%	19,028	48,699
Severe	5.1%	4,650	3.1%	10063	19.5%	11,668	26,381
Not Severe	4.3%	3,920	3.4%	11037	12.3%	7,360	22,317
Had Difficulty Using Stairs	9.2%	8,388	6.5%	21100	31.2%	18,669	48,157
Severe	3.1%	2,826	1.8%	5843	11.9%	7,121	15,790
Not Severe	6.1%	5,561	4.6%	14932	19.3%	11,549	32,043
Used a Wheelchair	1.2%	1,094	0.7%	2272	4.5%	2,693	6,059
Used a Cane/Crutches/Walker	4.1%	3,738	2.2%	7142	16.9%	10,113	20,992
With an Activities of Daily Life Limitation	3.6%	3,282	2.5%	8115	12.3%	7,360	18,758
Needed Personal Assistance	2.0%	1,823	1.3%	4220	7.1%	4,248	10,292
Did not Need Personal Assistance	1.6%	1,459	1.2%	3895	5.2%	3,112	8,466
Number of ADLs or IADLs for which assistance was needed							
One or more	4.8%	4,376	3.1%	10063	16.3%	9,754	24,193

Source: Michigan Department of Information Technology

Exhibit III-14

Estimated Transportation Disabled Population in Kent County - 2015

Disability Status	Ages 15-24 Years		Ages 25-64 Years		Ages 65 Years +		Total Ages > 15 Years
	Percent	Kent County	13713	Kent County	Percent	Kent County	
Total Population by Age Group		91,383		339,333		69,564	500,280
Disability Status							
With a Disability	20.8%	19,008	16.3%	55,311	52.3%	36,382	110,701
Severe	13.7%	12,519	10.8%	36,648	36.9%	25,669	74,837
Not Severe	7.0%	6,397	5.5%	18,663	15.4%	10,713	35,773
Seeing/Hearing Disability							
With a Disability	6.7%	6,123	4.8%	16,288	20.5%	14,261	36,671
Severe	1.4%	1,279	0.9%	3,054	4.4%	3,061	7,394
Not Severe	5.3%	4,843	3.9%	13,234	16.1%	11,200	29,277
Walking/Using Stairs							
With a Disability	11.4%	10,418	8.0%	27,147	38.2%	26,573	64,138
Severe	5.9%	5,392	3.6%	12,216	22.1%	15,374	32,981
Not Severe	5.5%	5,026	4.4%	14,931	16.1%	11,200	31,157
Had Difficulty Walking	9.4%	8,590	6.5%	22,057	31.8%	22,121	52,768
Severe	5.1%	4,661	3.1%	10,519	19.5%	13,565	28,745
Not Severe	4.3%	3,929	3.4%	11,537	12.3%	8,556	24,023
Had Difficulty Using Stairs	9.2%	8,407	6.5%	22,057	31.2%	21,704	52,168
Severe	3.1%	2,833	1.8%	6,108	11.9%	8,278	17,219
Not Severe	6.1%	5,574	4.6%	15,609	19.3%	13,426	34,610
Used a Wheelchair	1.2%	1,097	0.7%	2,375	4.5%	3,130	6,602
Used a Cane/Crutches/Walker	4.1%	3,747	2.2%	7,465	16.9%	11,756	22,968
With an Activities of Daily Life Limitation	3.6%	3,290	2.5%	8,483	12.3%	8,556	20,329
Needed Personal Assistance	2.0%	1,828	1.3%	4,411	7.1%	4,939	11,178
Did not Need Personal Assistance	1.6%	1,462	1.2%	4,072	5.2%	3,617	9,151
Number of ADLs or IADLs for which assistance was needed							
One or more	4.8%	4,386	3.1%	10,519	16.3%	11,339	26,245

Source: Michigan Department of Information Technology

Exhibit III-15

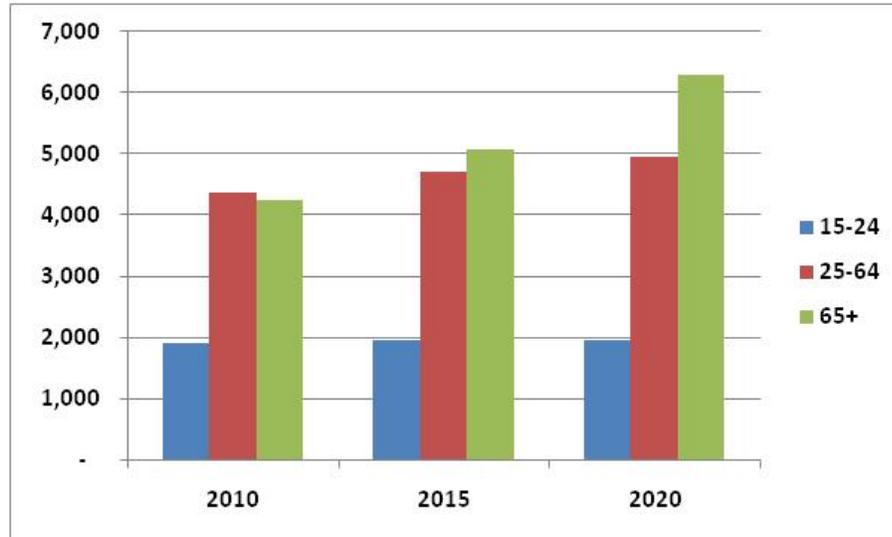
Estimated Transportation Disabled Population in Kent County - 2020

Disability Status	Ages 15-24 Years		Ages 25-64 Years		Ages 65 Years +		Total Ages > 15 Years
	Percent	Kent County	13713	Kent County	Percent	Kent County	
Total Population by Age Group		89,112		348,640		84,127	521,879
Disability Status							
With a Disability	20.8%	18,535	16.3%	56,828	52.3%	43,998	119,362
Severe	13.7%	12,208	10.8%	37,653	36.9%	31,043	80,904
Not Severe	7.0%	6,238	5.5%	19,175	15.4%	12,956	38,369
Seeing/Hearing Disability							
With a Disability	6.7%	5,971	4.8%	16,735	20.5%	17,246	39,951
Severe	1.4%	1,248	0.9%	3,138	4.4%	3,702	8,087
Not Severe	5.3%	4,723	3.9%	13,597	16.1%	13,544	31,864
Walking/Using Stairs							
With a Disability	11.4%	10,159	8.0%	27,891	38.2%	32,137	70,186
Severe	5.9%	5,258	3.6%	12,551	22.1%	18,592	36,401
Not Severe	5.5%	4,901	4.4%	15,340	16.1%	13,544	33,786
Had Difficulty Walking	9.4%	8,377	6.5%	22,662	31.8%	26,752	57,791
Severe	5.1%	4,545	3.1%	10,808	19.5%	16,405	31,757
Not Severe	4.3%	3,832	3.4%	11,854	12.3%	10,348	26,033
Had Difficulty Using Stairs	9.2%	8,198	6.5%	22,662	31.2%	26,248	57,108
Severe	3.1%	2,762	1.8%	6,276	11.9%	10,011	19,049
Not Severe	6.1%	5,436	4.6%	16,037	19.3%	16,237	37,710
Used a Wheelchair	1.2%	1,069	0.7%	2,440	4.5%	3,786	7,296
Used a Cane/Crutches/Walker	4.1%	3,654	2.2%	7,670	16.9%	14,217	25,541
With an Activities of Daily Life Limitation							
Needed Personal Assistance	3.6%	3,208	2.5%	8,716	12.3%	10,348	22,272
Did not Need Personal Assistance	2.0%	1,782	1.3%	4,532	7.1%	5,973	12,288
Did not Need Personal Assistance	1.6%	1,426	1.2%	4,184	5.2%	4,375	9,984
Number of ADLs or IADLs for which assistance was needed							
One or more	4.8%	4,277	3.1%	10,808	16.3%	13,713	28,798

Source: Michigan Department of Information Technology

The SIPP-derived estimates are shown graphically by age group in Exhibit III-16. This shows the significant increase among the 65 and older population. It is estimated that by 2020 there will be 6,294 disabled persons who are 65 years and older. This is an increase of nearly 50 percent from 2010. While the total population of the 25 to 64 year age group is much greater, there are more persons with disabilities in the 65 and over group than in the 25 to 64 year age group.

Exhibit III-16
SIPP Study Area Projections 2010-2020



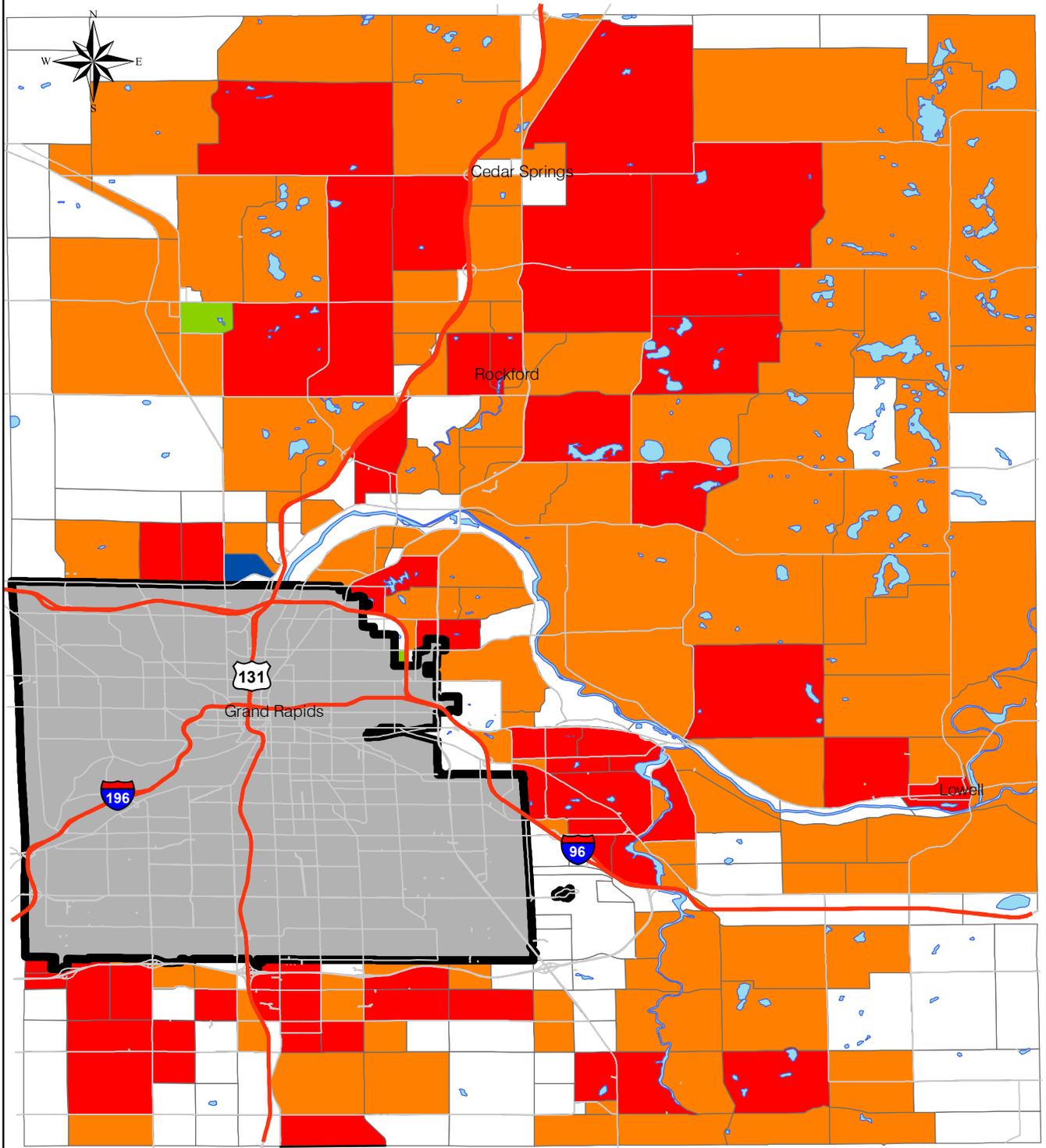
Source: Michigan Department of Information Technology

PROJECTIONS OF POPULATION AND EMPLOYMENT

GVMC Traffic Analysis Zone (TAZ) data for 2009 and 2018 were used to estimate growth and loss of population and employment in the study area. As shown in Exhibit III-17, the majority of TAZs within the study area are projected to increase in population over the next eight years. Those that are expected to increase the greatest in population density are shown in Exhibit III-18. These areas are located in Byron and Gaines Townships in southern Kent County; Cascade and Ada Township east of Grand Rapids; and in the U.S. 131 corridor in northern Kent County.

Exhibit III-19 shows the change in total employment by TAZ. This shows the greatest amount of employment growth occurring along the U.S. 131 corridor and along I-196 in Byron, Gaines, Cascade, and Caledonia Townships. The greatest increases in employment density, as depicted in Exhibit III-20, are in these areas plus parts of Sparta, Plainfield, and Grand Rapids Townships.

Exhibit III-17 Population Change 2009 to 2018

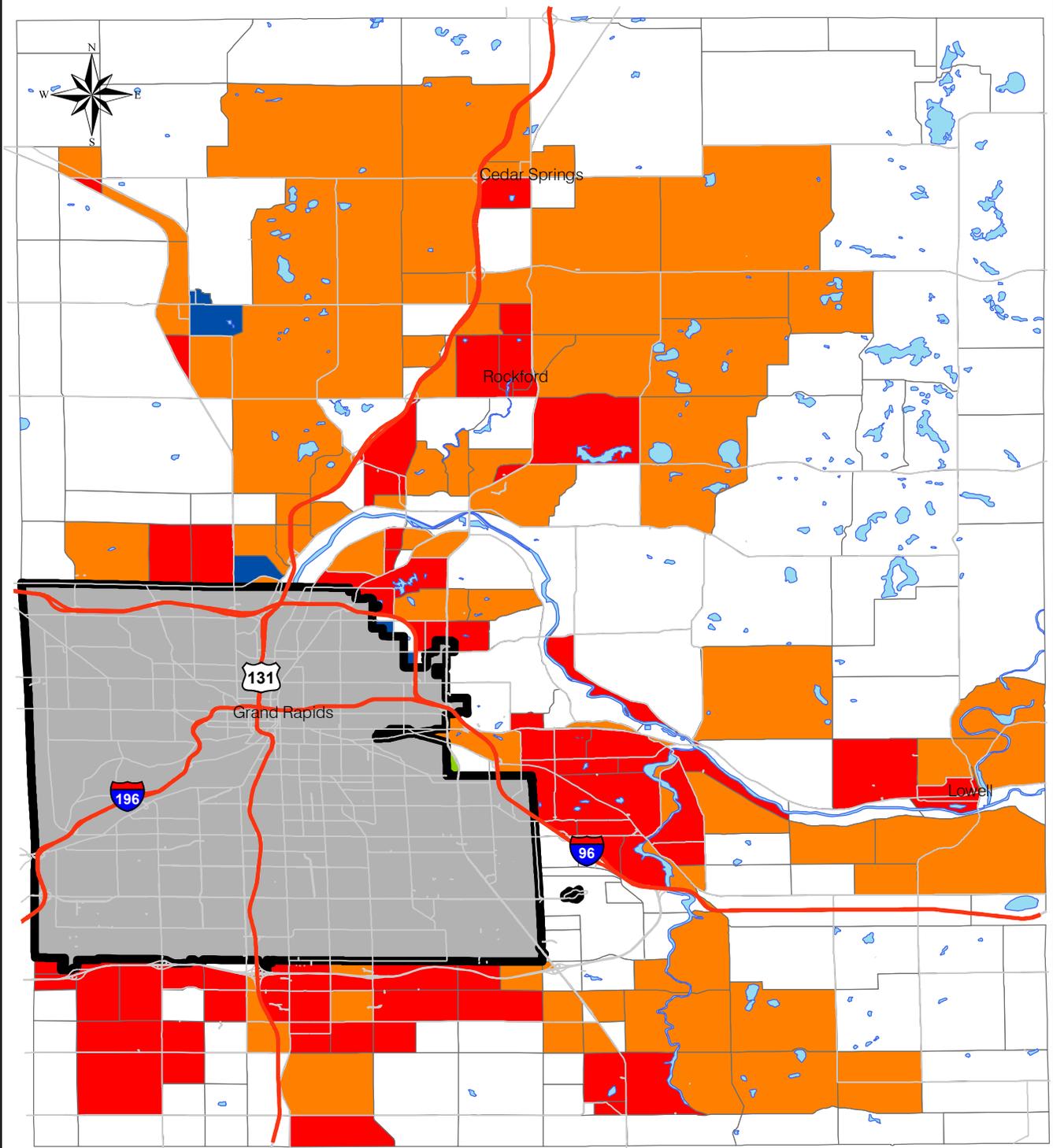


Change in Population

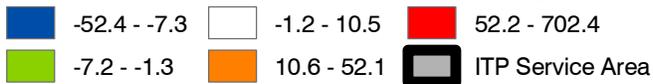


Kent County Transit Needs Assessment

Exhibit III-18 Population Density Change 2009-2018



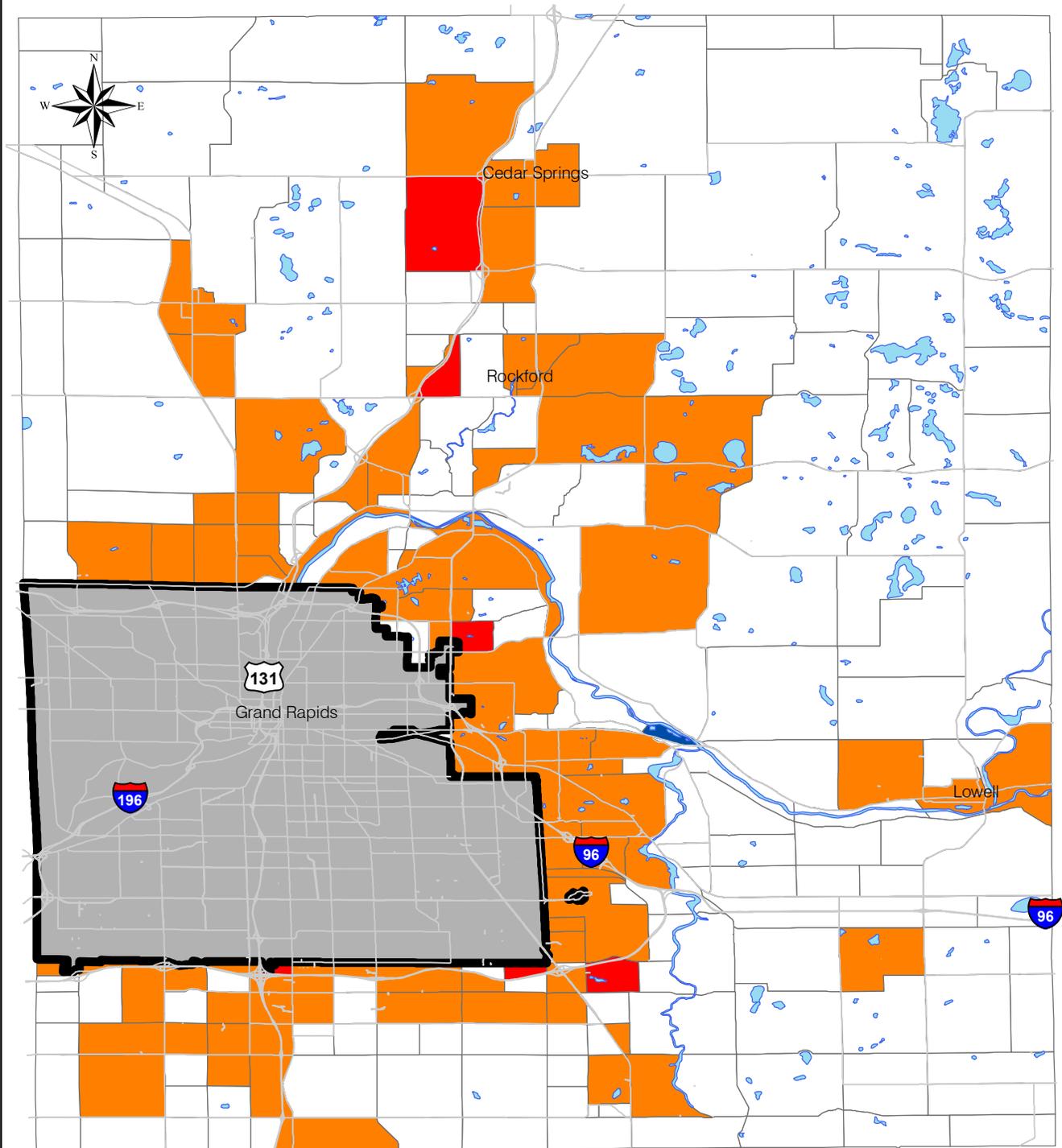
Change in Population Density



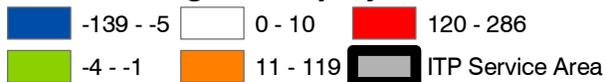
Kent County Transit Needs Assessment

Exhibit III-19

Employment Change 2009-2018

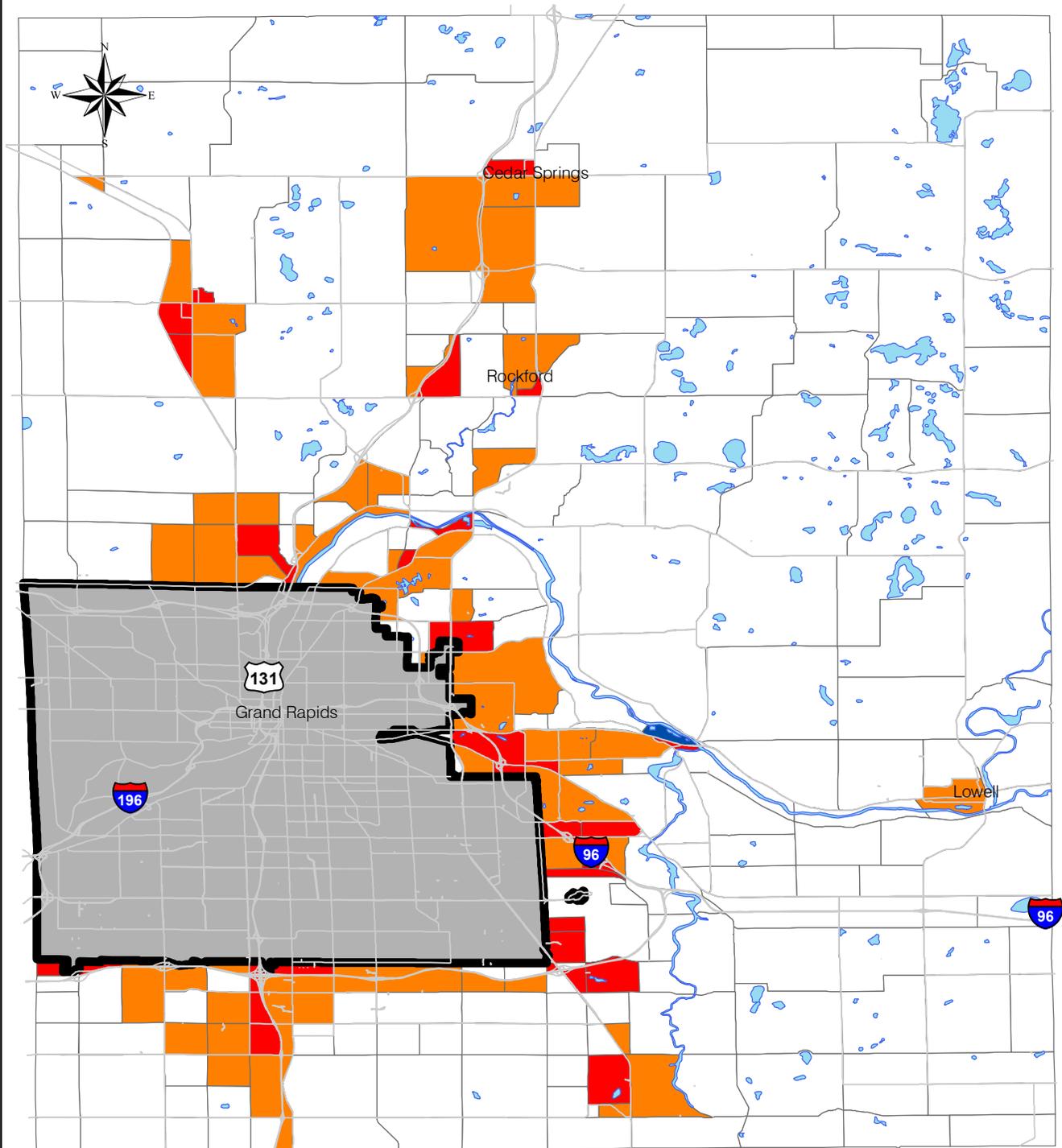


Change in Employment



Kent County Transit Needs Assessment

Exhibit III-20 Employment Density Change 2009-2018



Change in Employment Density



Kent County Transit Needs Assessment

IV. PREVIOUS STUDIES

Previous Studies

HUDSONVILLE/EASTERN OTTAWA IMPACT STUDY

Currently, Hudsonville and Eastern Ottawa is the only urban core in Michigan that does not have access to a public transportation system. This study surveyed individuals to evaluate the potential impact of creating public transportation in Hudsonville and Eastern Ottawa. The study found that 75 percent of the respondents were in favor of implementing public transportation in the area. The creation of public transportation would increase the freedom and independence of individuals who are transit dependent.

The study evaluated the demand for public transit and areas of interest, the willingness to pay fares, and the estimated peak operating times. The report noted that:

- 51.1 percent of respondents were traveling because of medical needs;
- 14.3 percent were traveling to or from school; and
- 12.2 percent expressed the purpose of their trip was employment.

Other reasons given for the purpose of trips included social/recreation (5.9 percent), court (4.3 percent), shopping (3.8 percent), church (1.4 percent), and other (0.7 percent).

The study also asked individuals how much they would be willing to spend for public transportation. A total of 21.2 percent said they would pay between \$4 and \$5. The second highest percentage was 20.5 percent, who said they would pay \$2. A total of 17.4 percent said they would pay \$3, and 12.9 percent said they had no ability to pay for transportation. Peak hours of need were also assessed in the report, and it was found that the highest demand for transit occurs between the hours of 6:00 a.m. and 6:00 p.m. This can be attributed to employment and commuter schedules.

Individuals acknowledge the importance of public transportation and the positive potential it can bring to the area. The majority of individuals were familiar with The Rapid and believed it provided a needed service and performed fairly. Of the individuals interviewed, 87.0 percent said they believe implementing public transportation is important to the area; 49.0 percent of those interviewed added their name to a list of public transportation supporters.

WEST MICHIGAN TRANSIT LINKAGES STUDY

This study evaluated the potential benefits and demand of a regional bus service in Western Michigan. A regional bus service would encourage economic development, provide better mobility, and provide a solution to existing intercity travel needs. However, to achieve a successful regional transportation network some constraints must be considered. These included existing commuters, demand, regional growth, and coordination.

Existing commuter data shows limited opportunities for regional transportation in Western Michigan. With approximately 9,000 work trips made between Georgetown and Hudsonville, it is estimated that there is a potential for up to 90 transit riders. This is based on the U.S. Census mode-split data. Analysis of the Grand Haven and Muskegon areas shows the potential for reasonable ridership. Of the individuals surveyed, 12 percent of Muskegon residents work in Grand Haven, and 6 percent of Grand Haven residents work in Muskegon. Additionally, 17 percent of Ferrysburg and Spring Lake residents work in Muskegon. The Holland and Zeeland Route shows only around 3,000 commuters travel to Grand Rapids and fewer than 1,000 to Grand Haven. However, there are more than 3,000 commuters who travel between the Holland area and Grand Haven giving this area more transportation potential. Stakeholders have suggested that large numbers of Holland and Muskegon residents would utilize regional bus services if they are available to Grand Rapids. Additionally, over one-half of all survey respondents indicated they would be interested in a regional route that provides service to Grand Rapids. Many of these respondents indicated that a regional transit system would open up Muskegon or other lakeshore city residents to more educational and job opportunities located in Grand Rapids.

Current demand trends indicated that 13 percent of Ottawa County residents would consider using public transit two or more times a week. Of these individuals, younger adults 18-24 were more likely to indicate an interest in public transit. Additional transit demands exist among low income residents in Muskegon, Grand Haven, and Holland. The current lack of services in those areas created a greater potential interest in a regional transit system. Over 3,000 regional residents indicated a strong interest in regional transit. Fifty-four percent of respondents and 77 percent of transit users indicated they would welcome a new regional public bus service. Regional growth has also created an increased demand for public transportation in Western Michigan. This growth includes new condominium and apartment development in downtown Muskegon, new student housing in Allendale, mixed use developments in Coopersville, Holland Township's Pfizer/MSU BioEnterprise Center, and new housing in Hudsonville. The growth of the downtown has led to new transit prospects, like the Silver Line BRT proposed in Grand Rapids. Additional growth has occurred in the townships located outside of the urban centers. This growth is mainly residential housing with some business. These areas currently have no transportation services and have begun to put pressure on Harbor Transit and MAX to expand their service areas.

The study also evaluated the current transportation service outside of jurisdictional boundaries and the coordination between the services. It was found that Muskegon Area Transit System MATS provided service to the surrounding area through the Go!Bus service to riders in Muskegon County. Harbor Transit provided coordination beyond Grand Haven to and from Ferrysburg and Spring Lake. Macatawa Area Express MAX provided an intercity coordination between Zeeland and Holland and The Rapid. The report noted that past attempts have been made to expand coordination. However, concerns by some elected officials were expressed because of a fear that regional transit might negatively impact their own community's commerce.

GRAND VALLEY METROPOLITAN COUNCIL LONG RANGE TRANSPORTATION PLAN

The long range transportation plan created by Grand Valley Metropolitan Council (GVMC) outlines the goals for transportation in the region to 2035. The plan outlines five goals related to public transportation. These goals are safety, security, and efficiency; accessibility and

mobility; environmental impacts; economic and financial considerations; and community impact planning.

Transit systems should maximize the safety and security of all riders and should be utilized in the most efficient manner possible. To achieve this, systems should make efforts to minimize traffic accidents, and expand security and control devices. The system should be safe for multiple modes of traffic including pedestrian and bicycle traffic.

Accessibility and mobility should be provided throughout the Grand Rapids Metropolitan Study Area. The system should encourage multiple-occupant vehicle use and spreading travel demand to non-critical times of day. It should also mitigate congestion by managing future traffic growth, and expanding the current transportation capacity, and provide continuous service across the region. The system should minimize transportation barriers to disadvantaged, mobility-limited persons, seniors, and other public transportation users.

The transportation system should be used to help reduce environment impacts and improve the quality of the environmental. This includes the reduction of noise, air, and water pollution by emissions. It also includes smart use of energy resources and fuel consumption. Finally, the system should encourage the use of park and ride transportation and ridesharing to further reduce environmental impacts.

Economic and financial considerations should be considered when developing any transportation plan and remain within feasible realms. Improvements to existing systems should be cost-effective, while minimizing capital and operating costs. Investments should be generated from all available sources, including the private sector. Existing infrastructure should be preserved and protected whenever possible.

In an effort to maximize positive community impacts, good planning efforts should be made regarding transportation systems. A focus on social justice shall be fostered to ensure the inclusions of the entire community. Planning efforts should minimize the disruption of existing neighborhoods. Plans should also reduce negative impacts on commercial and industrial facilities. Transportation should be used as an aesthetic enhancement tool to improve the design and function of transportation corridors. Transportation planning should make every effort to be consistent with land use plans and existing master plans.

GRAND VALLEY METRO COUNCIL METROPOLITAN FRAMEWORK

The Grand Valley Metro Council Metropolitan Framework is a land use and strategic plan developed to provide an understanding of what kind of growth citizens in the region would like to see, and where they would like to see it occur. The plan was developed through a series of group meetings, in which participants identified types of development they would like to see on a large map. The findings suggested citizens were interested in smart growth, regional cooperation, planned development, and land preservation.

Participants identified an interest in neighborhood and town growth, where neighborhood growth defined as 70 percent residential with little commercial, and town growth was defined as 50 percent residential with a large core commercial center. In both types of development, more dense compact development was preferred to larger sprawling development. Respondents indicated they wished to see the majority of growth in the Urban Metro region and the South Belt region.

The importance of land preservation was universally agreed upon. Farmland and natural areas were identified as areas that should remain undeveloped. Areas of clustered development, including areas with two acre parcels were viewed as areas that should be conserved and limited in expansion. The growth of towns and cities should be encouraged and focused around a central business district. These developments should be developed as walkable communities. Development should continue to be focused on existing corridors as long as resources exist within the corridor to sustain new development. This focused development will lead to better planning and reduced sprawl in the region.

Focused growth makes planning for new development a proactive process. Utilities, such as sewer and water, can precede new development and anticipate the growing population in areas targeted for expansion. Additional pre-existing infrastructure can direct development and encourage smart growth.

Transportation was also identified as a way to ensure good development and plan for growth. The Interurban Transit Partnership has begun studying corridors for potential bus rapid transit or light rail corridors to connect villages, towns, and cities in the region. This type of transportation was suggested because of its ability to connect areas of growth throughout the county. The study concluded that transportation is vital to land use planning in the region. Simply designing transportation around land use models is not enough, and more information is needed.

GRAND RAPIDS MASTER PLAN

The Grand Rapids Master Plan is a blue print designed to guide and shape development within Grand Rapids. The plan provides details regarding all aspects of Grand Rapids including business, the economy, recreation, transportation, and land use. For the purpose of the Kent County Needs Assessment Study, this review will focus on the land use and transportation plans outlined in the Grand Rapids Master Plan. The Master Plan outlines the need to utilize land use and transportation to encourage good development, reduce automobile dependence, and encourage walkable communities.

Land use goals outlined in the Master Plan include: the desire to direct higher housing densities within walking distance of major transit routes; the encouragement of mixed-use centers located on existing high ridership bus routes; and the encouragement of developing job centers on transit routes. These goals will reduce urban sprawl and encourage smart development in Grand Rapids.

In conjunction with these land use goals, the master plan outlines transportation goals to improve the existing system and to help meet the outlined land use goals. The plan suggests transit should be supported in land use plans and street designs. This allows for easier mobility and planned coordination between routes. Streets should be designed in a manner that accommodates pedestrian and bicycle traffic. They should be safe and scenic to encourage pedestrian travel. This is an important aspect of creating a walkable community, and encouraging alternate forms of transportation. The plan also calls for reduced highway creation and better parking lot location. Modern cities have a heavy focus on the automobile and use highways to route traffic around the city. This results in manmade land divisions, and the loss of travel through the urban area. The development of boulevards and parkways is considered a better choice. The development of large parking lots is another trait of modern cities. These parking lots limit bus service and increase walking distances for pedestrians. To correct this,

the plan suggests the relocation of parking lots to the rear of buildings. This opens up the sidewalk to pedestrians and allows for easier access.

By focusing on transportation and land use, the Master Plan suggests ways in which Grand Rapids can limit sprawl and encourage smart growth. The suggested changes are seen as long term projects that will make dramatic improvements to the city over time. The blue print developed in the Master Plan will guide these changes, and encourage desired development.