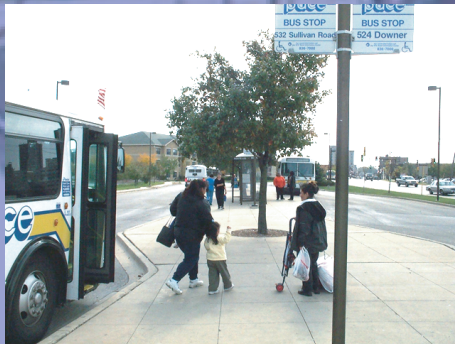
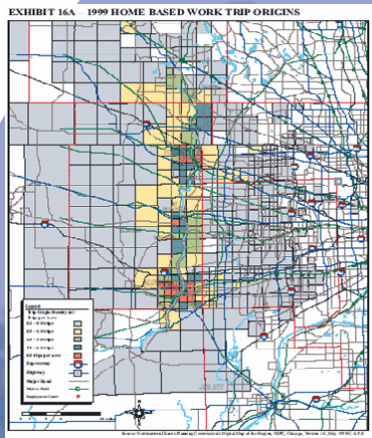


KANE COUNTY TRANSIT OPPORTUNITY ASSESSMENT STUDY



- Commuter Rail
- Paratransit Services
- Transit-Oriented Development
- Rideshare Incentive Program
- Corridor Planning
- Park-n-Ride
- Employer Programs
- HOV Traffic Lanes
- Express Bus Service
- Car Pool

Prepared By:

Land Strategies Inc.
Okrent Associates
Schlickman & Associates
UIC-Urban Transportation Center

October 2002

Disclaimer

Preparation of this document was financed through a grant from the U.S. Department of Transportation, the Federal Transit Administration under the Federal Transit Act, and the Illinois Department of Transportation, Division of Public Transportation. The contents do not necessarily reflect the official views of the U.S. Department of Transportation, Federal Transit Administration, the Illinois Department of Transportation or the Regional Transportation Authority.

TABLE OF CONTENTS

I. Executive Summary	Page i
II. Introduction	Page 3
III. Areas of Study	Page 4
IV. Transit Market Characteristics	Page 7
V. Transportation Characteristics	Page 17
VI. Traveler Characteristics	Page 39
VII. Transit Supportive Programs	Page 43
VIII. Transit Supportive Land Planning	Page 49
IX. Transit Recommendations	Page 55
X. Funding	Page 67
Appendix A	Page 74
Appendix B	Page 78

I. EXECUTIVE SUMMARY

The Kane County Transit Opportunity Assessment Study defines niche markets for transit use in this urban, suburban and rural environment, typically dominated by the automobile.

I. Areas of Study

In this study, Kane County has been divided into what are called *transit areas* and *transit corridors*. The transit areas have been established in order to formulate transit ideas for municipalities contiguous with each other. They provide an opportunity to pool ideas and resources to lessen their reliance on the automobile. The transit areas are the Upper Fox Transit Area, Greater Elgin Transit Area, Tri Cities Transit Area, Greater Aurora Transit Area, and the Rural Villages Transit Communities. The transit corridors are the Randall/Orchard Road corridor and the Kirk Road corridor.

II. Transit Market Characteristics

A potential transit market in Kane County is defined by the characteristics of the people that live or work there. These characteristics include demographic information such as income, employment, population and household data. Yet they are also characterized by land use characteristics and density. These characteristics all have an effect on how, why and where people travel.

III. Transportation Characteristics

Transit in Kane County is primarily served by: **Metra**, the commuter rail division of the RTA, providing daily passenger rail service for the Chicago Region; **Pace**, the suburban bus division of the Regional Transportation Authority (RTA), providing fixed route bus service, express bus service, dial-a-ride paratransit opportunities and vanpool/subscription bus service; and **The Chicago Area Transportation Study (CATS)**, the Metropolitan Planning Organization (MPO) for the Chicago region, (CATS created a carpool program called *Share the Drive*). The existing road system in Kane County contains toll highways I-90 and I-88, and eight Strategic Regional Arterials (SRAs). These 10 corridors are planned to carry the majority of regional traffic and are projected to be moderately to severely congested by 2020.

IV. Traveler Characteristics

This study details the traveler and trip characteristics in Kane County and found that Kane County is experiencing higher than the average trip lengths in the region for the home to work and the home to other trip.

V. Transit Supportive Programs

Transit supportive programs focus on capitalizing on already existing transit services. The following programs are detailed in the report:

- Employee Sponsored Programs
- Transportation Management Associations (TMAs)

VI. Transit Supportive Land Planning

Land use development patterns in Kane County have a distinct separation of land uses. This separation of residential, industrial and commercial uses, coinciding with development design that does not connect these land uses, prohibits an environment of walking, bicycling and transit use and forces a reliance solely on the automobile. The following are land use planning and policy recommendations to support transit in Kane County:

- *Apply Transit Oriented Development (TOD) and Transit Corridor Planning (TCP) methods to new developments by incorporation in local comprehensive plans, subdivision ordinances, and zoning ordinances, including incentives such density bonuses*
- *Share local tax revenue for new (commercial) developments through intergovernmental agreements.*
- *Enact parking limitations by implementing parking fees or by providing a minimum parking space allotment, not maximum.*

VII. Transit Recommendations

Kane County requires a comprehensive system of transit opportunities in order to provide transportation options for its citizens. These options can be realized by: encouraging and requiring government agencies and employers to cooperate with CATS and Pace in their carpool and vanpool efforts; encouraging and supporting communities to adopt land use planning policies to support walking, biking and transit; and establishing a comprehensive, county-wide system of transit opportunities. This would include establishing Transportation Hubs, Transit Centers and park-n-ride lots strategically placed throughout the county to support a multi-modal transit system that includes walkers, bicyclists, taxi service, carpool, vanpool, a variety of bus service, light rail and commuter rail. The following recommendations are detailed in the full report.

Recommendations that can be applied to all of the Transit Areas:

- *Plan and develop a system of park-n-ride lots throughout Kane County.*
- *Implement Bus Rapid Transit (BRT) in Kane County.*
- *Establish Transportation Management Associations (TMAs) for both Kirk and Randall/Orchard corridors. Consider TMAs for each transit area.*
- *Encourage Pace and CATS to coordinate carpooling and ridesharing programs. Enact employer-based trip reduction strategies.*
- *Share employee address information with Pace and CATS to create a viable countywide database of potential system users.*
- *Employ professional marketing firms to promote carpooling, vanpooling and transit use in Kane County.*
- *Support Pace's Vision 2020 planning concepts to improve mobility in the region.*
- *Work with CATS and Pace on potential park-n-ride lot locations and operations.*
- *Provide shuttle service from remote park-n-ride lots to Metra stations.*

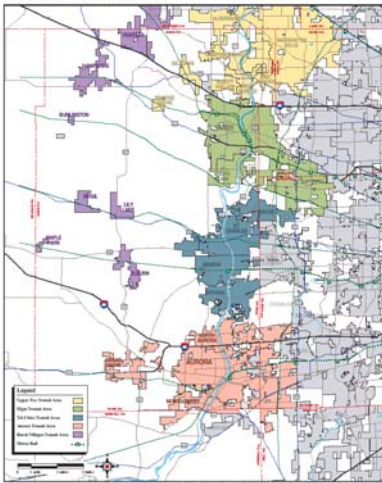
Kane County Transit Opportunity Assessment Study

- *Petition the Illinois Department of Transportation and the Illinois State Toll Highway Authority to investigate the feasibility of HOV lanes or HOV by-pass lanes.*
- *Establish an express bus service from the transit area to O'Hare Airport, Schaumburg, and other high demand travel destinations in the Chicago region.*
- *Promote transit system expansion to include Metra commuter rail service at new stations.*
- *Design new Fox River Bridge crossings to accommodate walking, biking and using transit.*
- *Establish transit connections to the proposed EJ&E passenger line.*

Recommendations for the retail, recreational and institutional centers throughout Kane County in traditional downtowns such as Geneva and Elgin, and the high suburban growth areas on Randall Road include:

- *Provide on-demand paratransit to and from major shopping centers. Direct paths to and from these centers for walking and biking.*
- *Provide shuttle service between these centers and residential markets. Incorporate incentives to utilize the service such as discount vouchers.*
- *Provide a local shuttle service to the activity centers that would also connect other activity points in the transit areas.*
- *Use excess parking capacity as park-n-ride lots.*

EXHIBIT 1 – TRANSIT AREAS



Recommendations for individual Transit Areas (Exhibit 1) are found on the following pages in the full report:

The Kirk Road Corridor	Page 60
The Randall/Orchard Corridor	Pages 59-60
The Greater Elgin Area	Page 63
The Greater Aurora Area	Pages 63-64
The Tri Cities Area	Pages 64-65
The Upper Fox Area	Page 65
The Rural Villages Area	Pages 65-66

Funding

The report includes a table that represents funding opportunities for Kane County on a Federal, State and Local level. This study recommends that Kane County should coordinate with the Transit Area TMAs and local communities to secure appropriate funding mechanisms for transit projects.

II. INTRODUCTION

The Kane County Transit Opportunity Assessment Study defines niche markets for transit use in this urban, suburban and rural environment, typically dominated by the automobile. Kane County has a unique existing structure that lends and forces itself to offer many different transit options due to different development densities, urban design characteristics, geography and socioeconomic strata. The urban areas along the Fox River, which began development in the last half of the 19th century, lend themselves to more traditional forms of transit service due to their higher density development and connectivity of the street system. However, the westward expanding suburban growth areas nearing Randall Road require more flexible systems due to lower development densities, separation of land uses, and a hierarchy of street systems that promote automobile use at the expense of bicycles, pedestrians and transit. The rural villages further west have different transit needs than the other areas due to their separation from the urban areas of the county and the region. This report attempts to establish what these differences are, what these differences mean with respect to travel needs and demands, and then establish different transit options to meet the needs of these areas. This report also deals with current land use policy issues that face the county and makes recommendations to improve land use and development in order to promote transit use.

III. AREAS OF STUDY

Transit Areas

Kane County has been divided into what are called “**Transit Areas.**” They are very similar to what were defined as Planning Partnership Areas in the *Kane County Transportation Planning Area Study*, by CH2MHill, May 2001. These areas have been established in order to formulate transit ideas for municipalities contiguous with each other. Although these transit areas overlap different municipalities, they provide an opportunity for these communities to pool ideas and resources to lessen their reliance on the automobile. There is no single solution that will solve the suburban congestion problem we currently experience. It is the sum of many small solutions that will make a notable difference in our daily lives. **Exhibit 1** illustrates the Transit Areas.

They are:

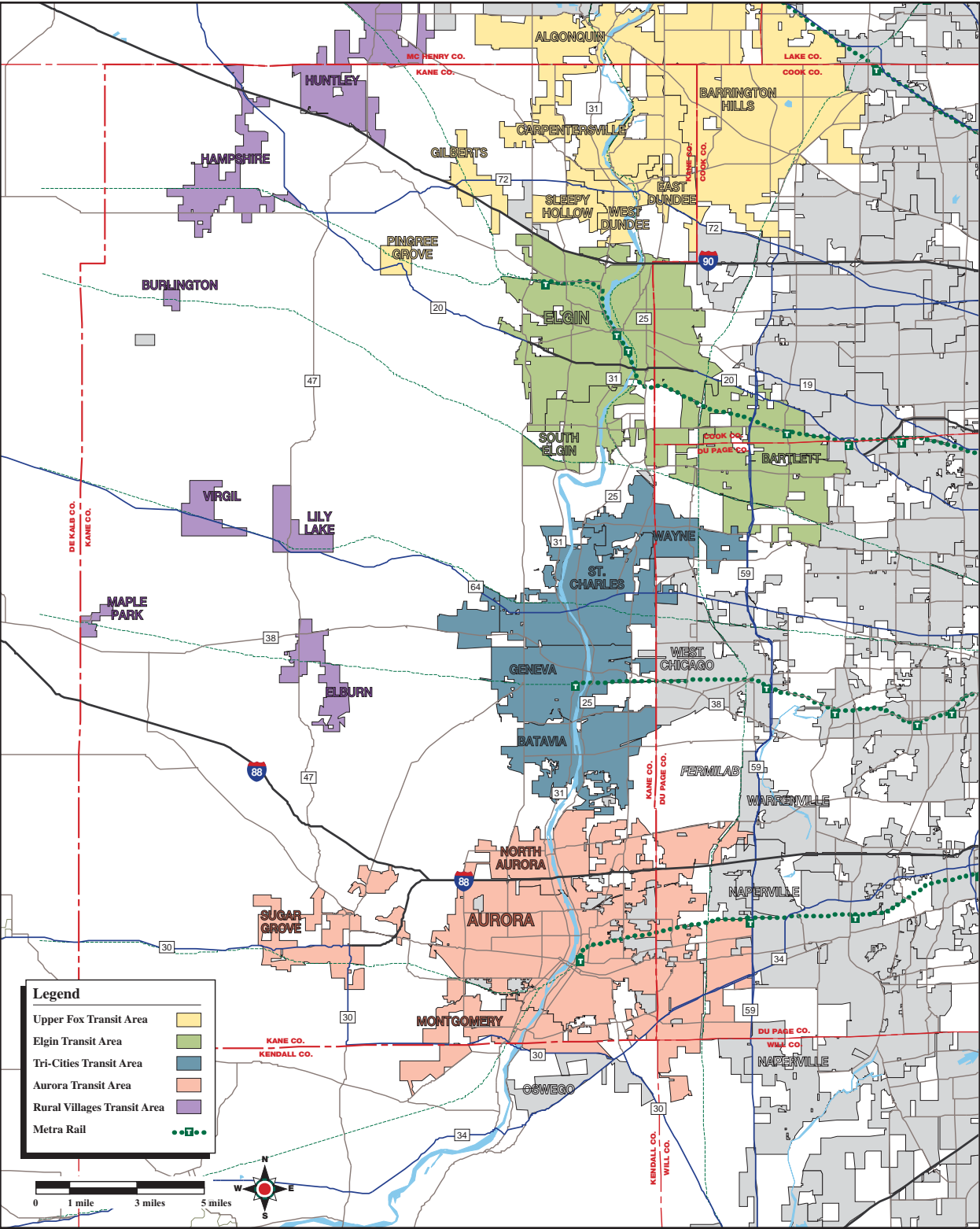
- The **Upper Fox Transit Area** consisting of the Villages of Algonquin, Barrington Hills, Carpentersville, East Dundee, Gilberts, Pingree Grove, Sleepy Hollow, West Dundee and unincorporated areas of Kane County.
- The **Greater Elgin Transit Area** consisting of the Village of Bartlett, the City of Elgin, the Village of South Elgin and unincorporated areas of Kane County.
- The **Tri Cities Transit Area** consisting of the Cities of Batavia, Geneva, and St. Charles, the Village of Wayne, and unincorporated areas of Kane County.
- The **Greater Aurora Transit Area** consisting of the City of Aurora, the Village of Montgomery, the Village of North Aurora, the Village of Sugar Grove and unincorporated areas of Kane County.
- The **Rural Villages Transit Communities** that include the Villages of Burlington, Elburn, Hampshire, Huntley, Lily Lake, Maple Park, Virgil and the unincorporated areas of Kane County.

Transit Corridors

Two corridors have been chosen for study given their potential for transit opportunities. Both corridors are projected to have congested roadway operations given their current reliance on the automobile and land use development patterns that detract from pedestrian, biking and transit options.

The Randall/Orchard Road Corridor, between the Kendall County Line to the McHenry County Line has current traffic volumes between 20,000 and 40,000 vehicles per day. This corridor is developing rapidly, yet most development has isolated and separated land uses, as opposed to have mixed and connected them. This has resulted in traffic congestion and future traffic projections have estimated severe traffic conditions, with traffic volumes reaching over 60,000 vehicles per day. Additionally, “this roadway is currently experiencing traffic accidents that greatly exceed expected traffic accidents on roads with similar traffic volumes” (*Kane County Transportation Planning Area Study*, CH2MHill, May 2001).

EXHIBIT 1 – TRANSIT AREAS



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999

**Kane County
Transit Opportunity Assessment Study**

The Kirk Road Corridor, between IL 64 in St. Charles and I-88, is heavily congested. Future traffic projections have estimated severe traffic conditions, with traffic volumes reaching over 60,000 vehicles per day. High truck volumes add to this severe condition due to its location in a high employment area.

IV. TRANSIT MARKET CHARACTERISTICS

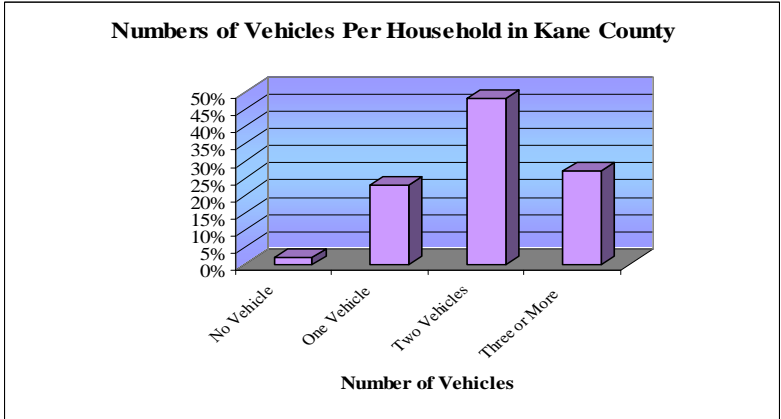
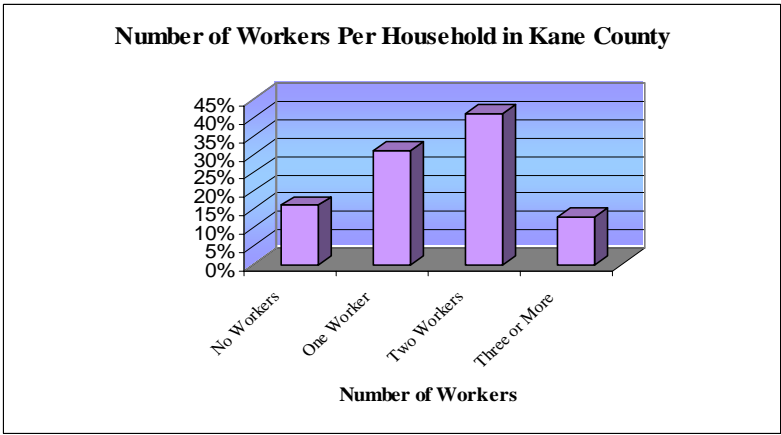
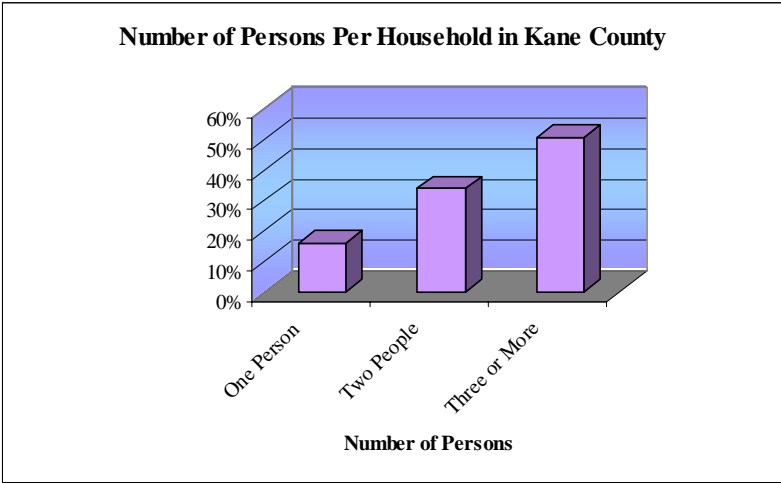
A potential transit market in Kane County is defined by the characteristics of the people that live or work there. These characteristics include demographic information such as income, employment, population and household data. Yet they are also characterized by land use characteristics and density. These characteristics all have an effect on how, why and where people travel.

Demographics

- **Income Level** - Higher income persons in Kane County typically live in lower density areas. Lower income persons typically have fewer cars and may be required to travel longer distances to find work.
- **Type of Employment** - Service employees are typically on a fixed work schedule. Professionals are typically allowed more flexibility in their work schedules, resulting in the potential to travel during off-peak times.
- **Number of People Per Household** - More people per household equates to more trips generated per day.
- **Development Density** - A higher density of development allows the opportunity for more transit service, since more persons in a smaller geographic area are available to use it. A lower density of development typically cannot support regular transit service since not enough people reside in the areas to support it.
- **Number of Vehicles Per Household** - The more vehicles per household typically results in more auto trips. It also gives people the opportunity to use an automobile for discretionary trips such as recreational trips or shorter trips that could be made by walking or biking.

Exhibit 2 indicates that Kane County averages 2.84 persons per household, and over 50 percent of all households have three or more people. The number of workers per household averages 1.54, with 54 percent of the households having two workers or more. The average number of vehicles per household is 2.12, with 75 percent having two vehicles or more. Therefore, households with three or more people, with at least two that are working that have the availability to use two cars to travel to work contribute to high levels of automobile use in Kane County.

EXHIBIT 2 – HOUSEHOLD DEMOGRAPHIC FACTORS



Population and Employment

Potential transit markets are also defined by areas of higher employment and retail concentrations. These areas attract large numbers of people per day, providing an opportunity for people to use transit.

In the year 2000, Kane County population was 404,119 according to the United States Census. This is a substantial growth rate of 27.3 percent from the 1990 population of 317,471. **Table 1** contains data from the U.S. Census and year 2020 projections established by the Northeastern Illinois Planning Commission (NIPC).

Table 1 Kane County Population Information

Location	Year 1990	Year 2000	Growth	Year 2020 (1)	Year 2020 (2)
Population	317,471	404,119	27.3%	552,034	548,965
Households	107,176	133,901	24.9%	198,874	197,751
Employment	145,205	NA	NA	231,620	223,550

- (1) Projections by the Northeastern Illinois Planning Commission with the O'Hare expansion.
- (2) Projections by the Northeastern Illinois Planning Commission with the South Suburban Airport expansion.

Table 2 shows the Kane County population disaggregated by age. The 20 to 64 age group represents the highest population base and represents many workers in Kane County, a major potential transit market. Also, 8.5 percent of the population, or 33,981 persons, are over the age 65, while 24.2 percent of the population, or 98,085 persons are between the age of 5 and 19. Both of these age groups provide non-traditional transit opportunities in Kane County. The 5 to 19 age group, especially persons below the age of 16 and without a driver's license, could be a primary market for shuttles service to schools, public facilities, services and organized events.

Table 2 Kane County Population by Age Group

Total Population	Under 5 Years	5 to 19 Years	20 to 64 Years	65 Years & Over
404,119	35,249 (8.7%)	98,085 (24.2%)	236,804 (58.6%)	33,981 (8.5%)

Exhibit 3 illustrates the municipal populations within Kane County. As shown, the areas along the Fox River are most heavily populated forming a strong north/south axis, with the Cities of Elgin and Aurora establishing the potential for major transportation nodes along this axis. Aurora and Elgin areas and are respectively the second and fifth largest municipalities in northeastern Illinois. Aurora has a population 142,990 persons, while Elgin has 94,487 persons.

Exhibit 4 illustrates projected growth rates to the year 2020. The heaviest concentrations of growth are also expected to occur along the Fox River Valley. Other high growth communities in Kane County include the Villages of Algonquin, Bartlett, Elburn, Huntley and Sugar Grove.

EXHIBIT 3 – MUNICIPAL POPULATIONS: 2000 CENSUS

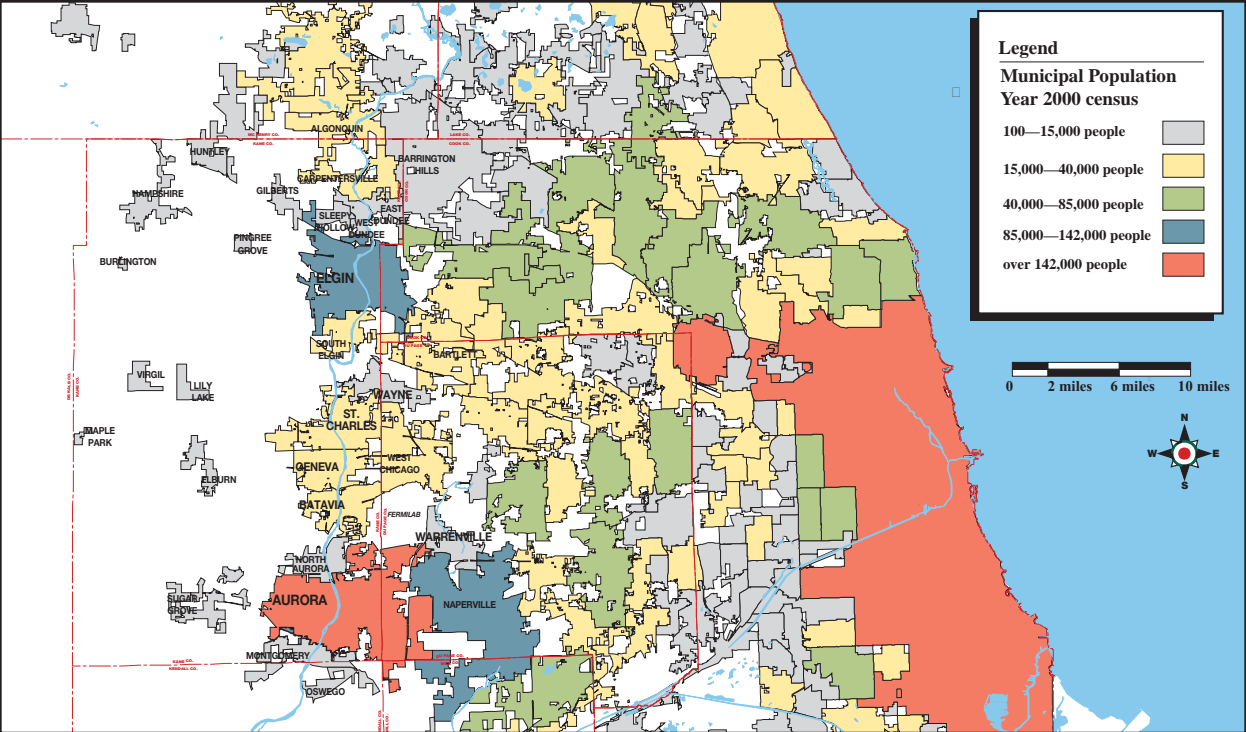


EXHIBIT 4 – PROJECTED GROWTH RATES: 2020 PROJECTIONS

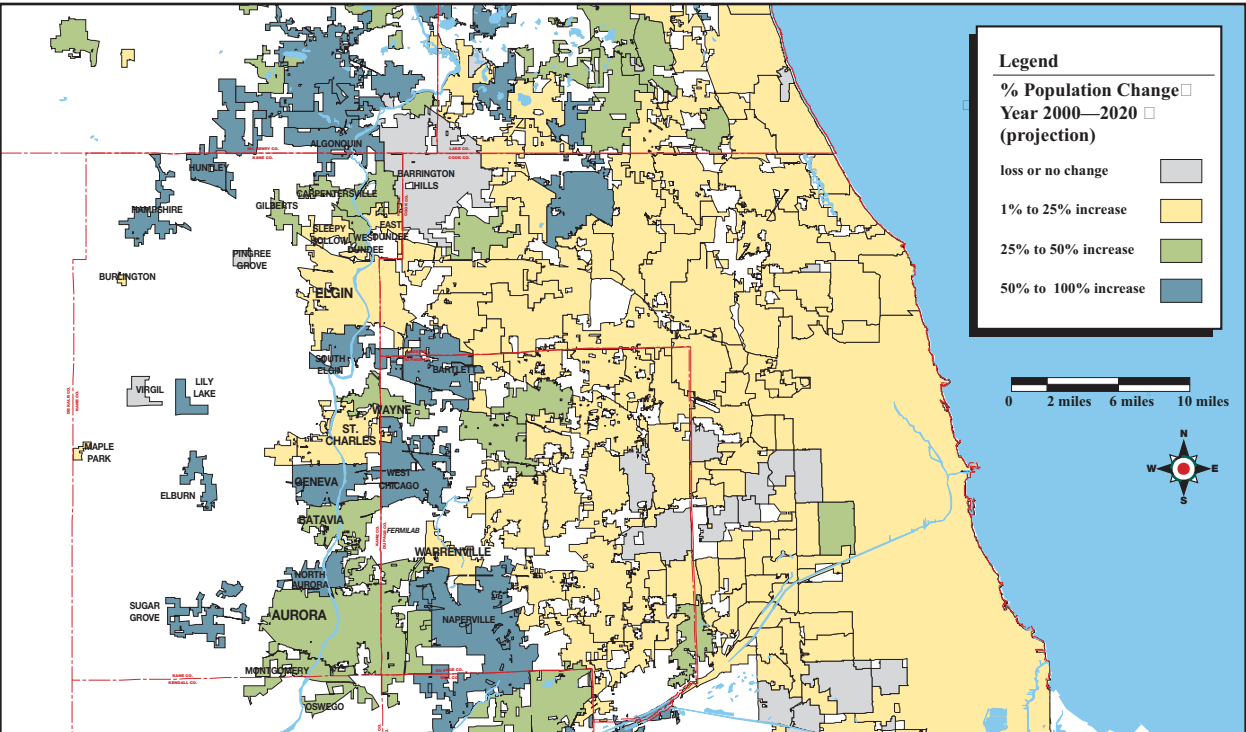


Exhibit 5 contains the population density within Kane County by census tract. As illustrated, the highest density areas are located in the Greater Aurora Transit Area, the Greater Elgin Transit Area, and the Upper Fox Transit Area.

EXHIBIT 5 – POPULATION DENSITY BY CENSUS TRACT: 2000 CENSUS

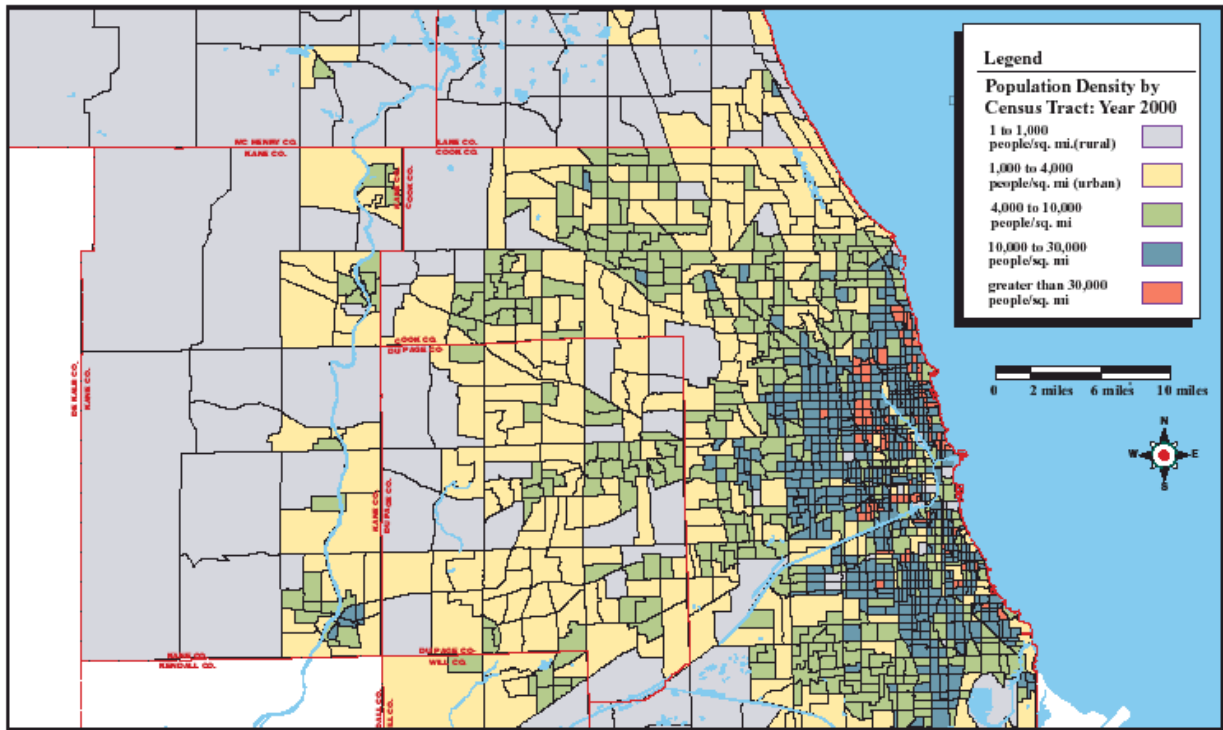
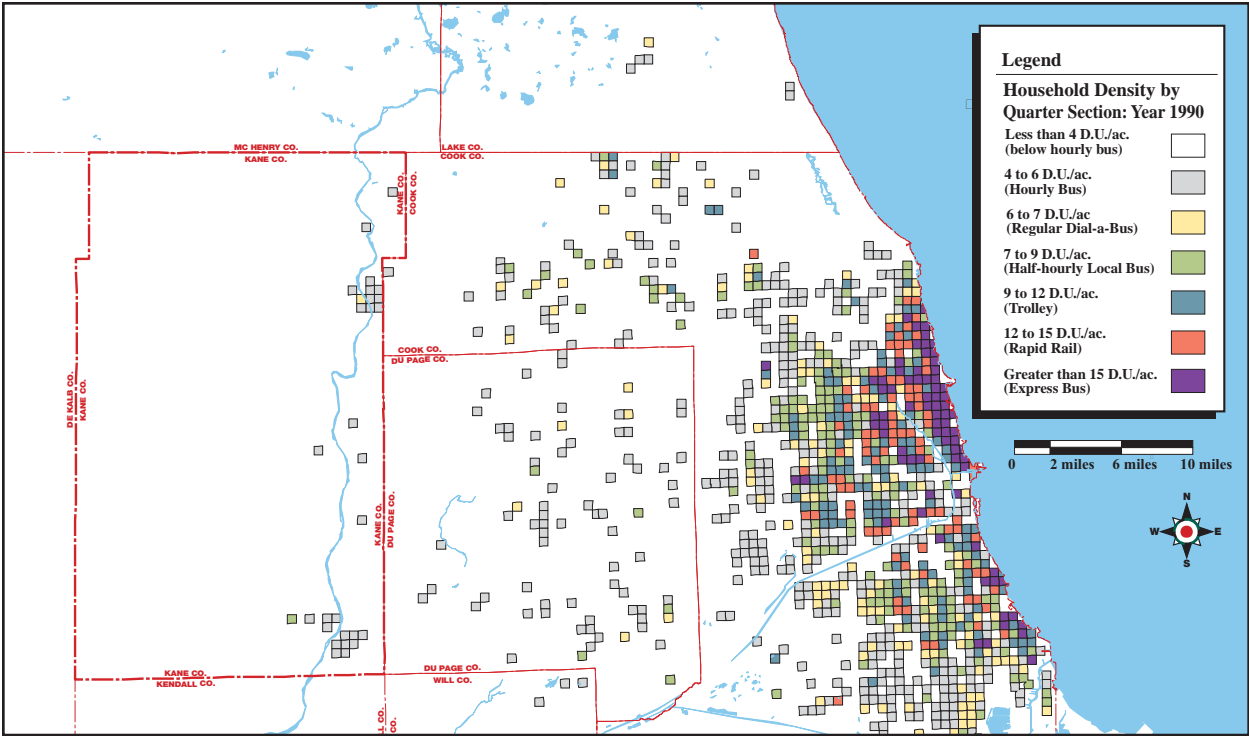


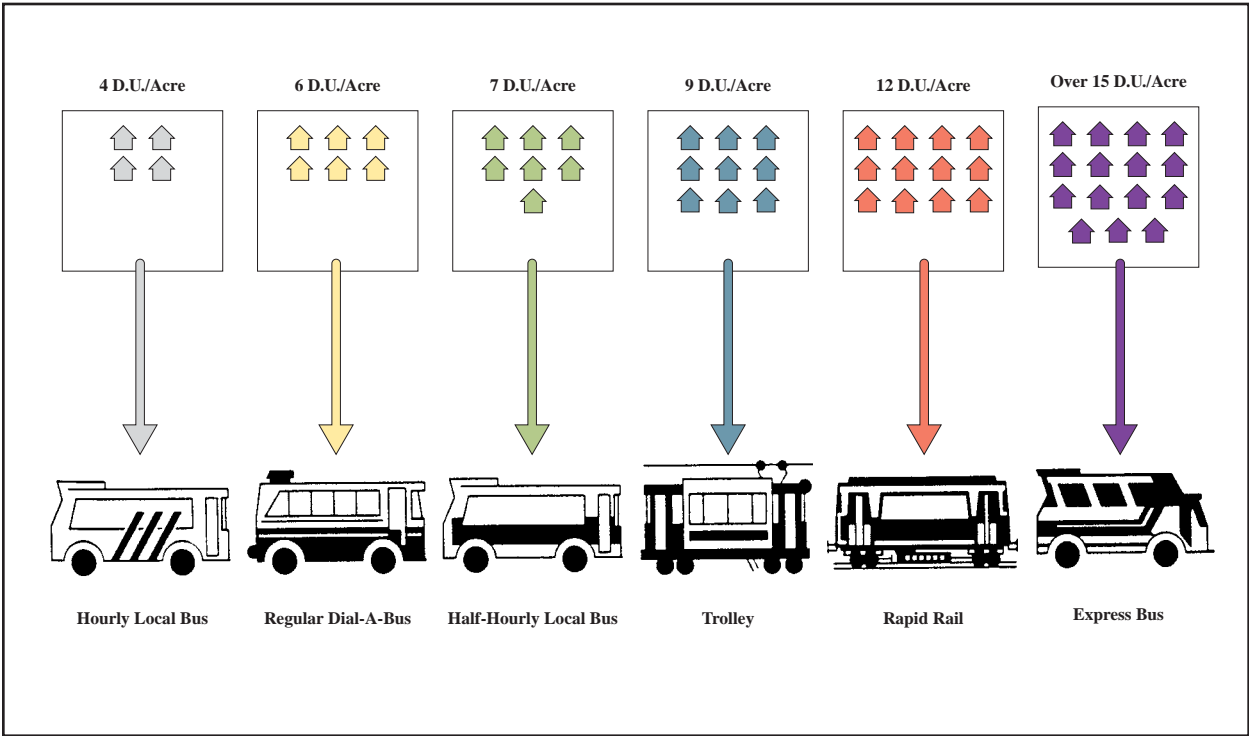
Exhibit 6a contains year 1990 household density by quarter-section and estimated dwelling units per acre. A quarter-section is defined as an area ½ mile by ½ mile in size. As shown, two quarter sections have a density range of between six and seven dwelling units per acre, a density level typically required to provide fixed route transit service with a half-hour local bus. These quarter-sections are in Aurora and in Elgin. **Exhibit 6b** contains research indicating the types of transit service supportable by different densities of development, indicating that most areas of Kane County currently do not qualify for half-hour local bus or even regular dial-a-ride service.

EXHIBIT 6A – HOUSEHOLD DENSITY BY QUARTER SECTION: 1990 CENSUS



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999

EXHIBIT 6B – TRANSIT SERVICE GUIDELINES BY DENSITY



Source: Boris S. Pushkarev and Jeffrey M. Zupan, *Public Transportation and Land Use Policy* (Ontario Coanda: Indiana University Press/Bloomington and London, 1977)

Land Use

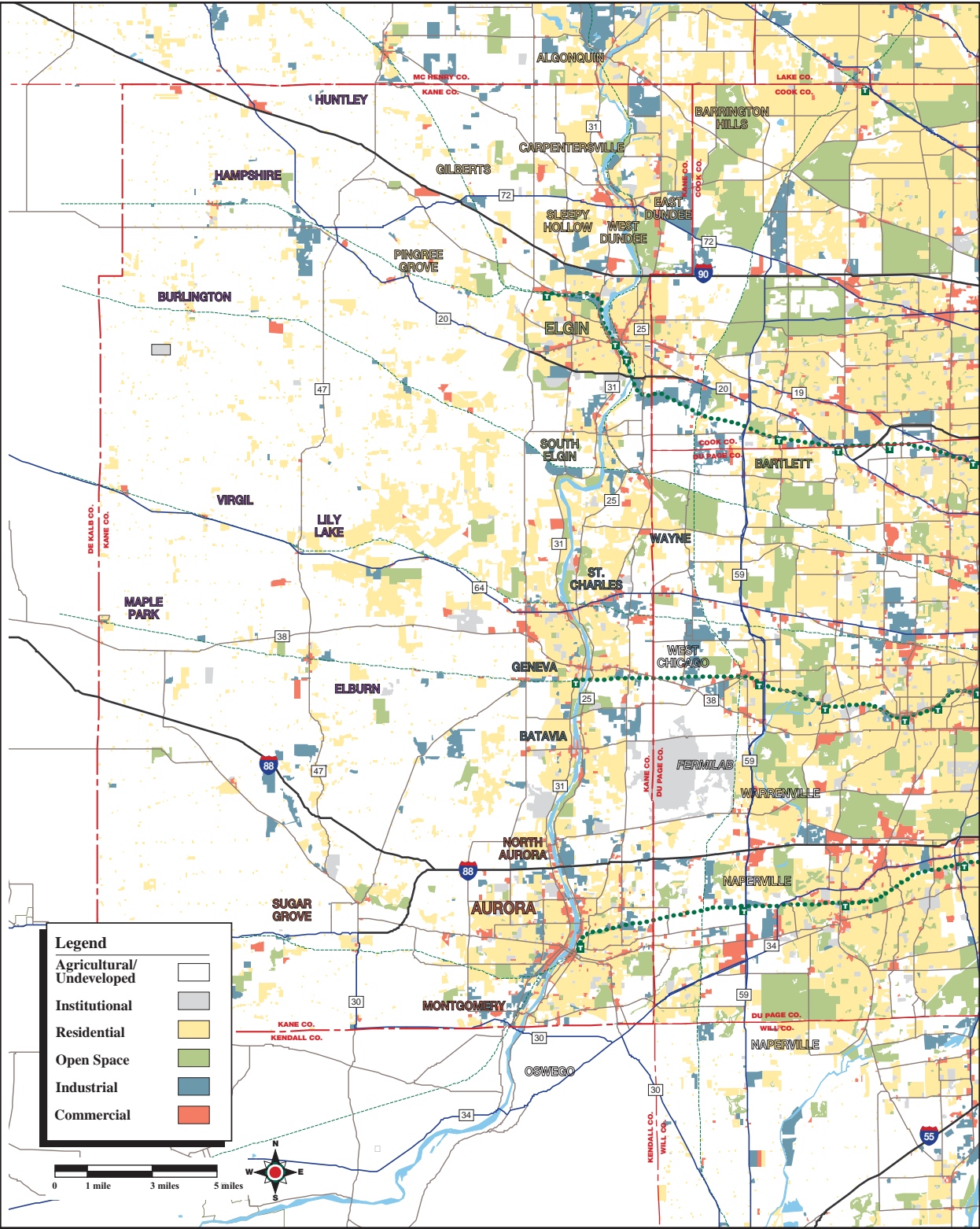
The type of land use development also has an affect on transit use. Areas that have separated land uses, are spread geographically apart, are divided by major arterials, and are designed to provide little opportunities for people to bicycle or walk, resulting in a lower possibility for transit use. An area that provides a mix of land uses such as office, retail, and residential in closer proximity to one another, with safe and walk able pedestrian connections at intersections and direct pedestrian connections between and within developments, provides an environment where people have an opportunity to walk, bicycle, and use transit, supplementing the automobile.

Exhibit 7 contains the year 1990 land use characteristics in Kane County. This illustration indicates that land use development patterns in Kane County have a distinct separation of land uses. This separation of residential, industrial and commercial uses, coinciding with development design that does not connect these land uses, prohibits an environment of walking, bicycling and transit use and forces a reliance solely on the automobile.

Exhibits 8a and 8b contain employment information for Kane County. There are many employment concentrations in Kane County, providing a potential opportunity for transit use.

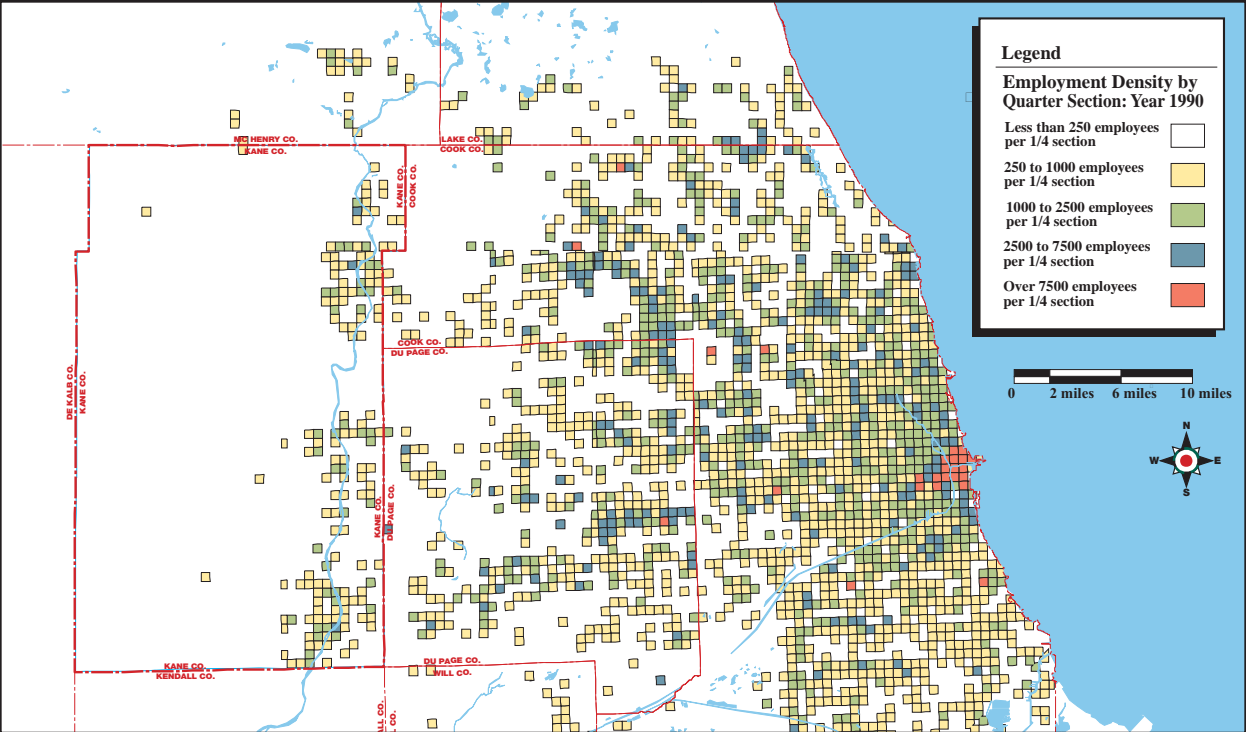
Exhibit 9 contains retail square footage information for Kane County. These areas not only attract many travelers per day, they also provide large parking areas that sit vacant for many hours of the day. These parking lots provide an opportunity for long distance travelers, typically persons on their way to work, to use this area for carpool, vanpool, express bus parking lots and remote park-n-ride lots for Metra Stations. These areas could now efficiently utilize excess parking spaces and also increase business at these retail centers as persons perform their daily errands either before or after work. This includes grocery shopping, day care, banking, dry cleaning, restaurants, and other services people use daily.

EXHIBIT 7 – 1990 LAND USE



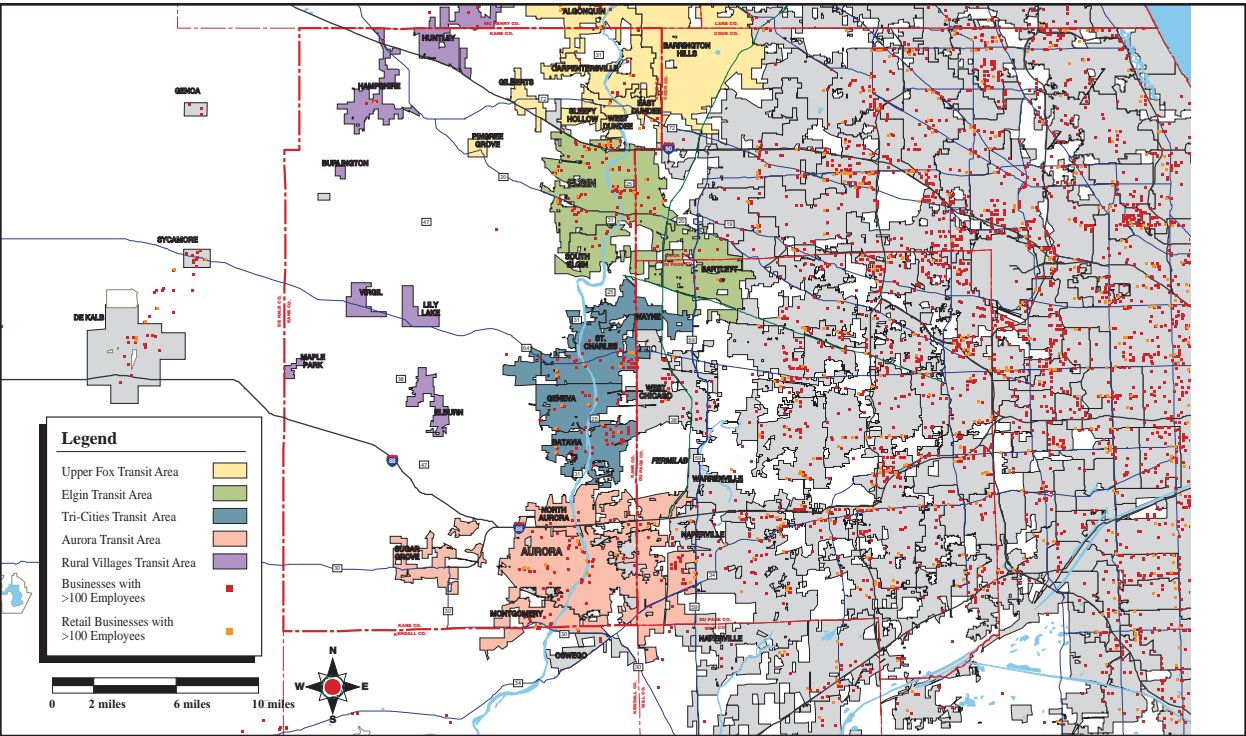
Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999

EXHIBIT 8A – EMPLOYMENT DENSITY BY QUARTER SECTION: 1990 CENSUS



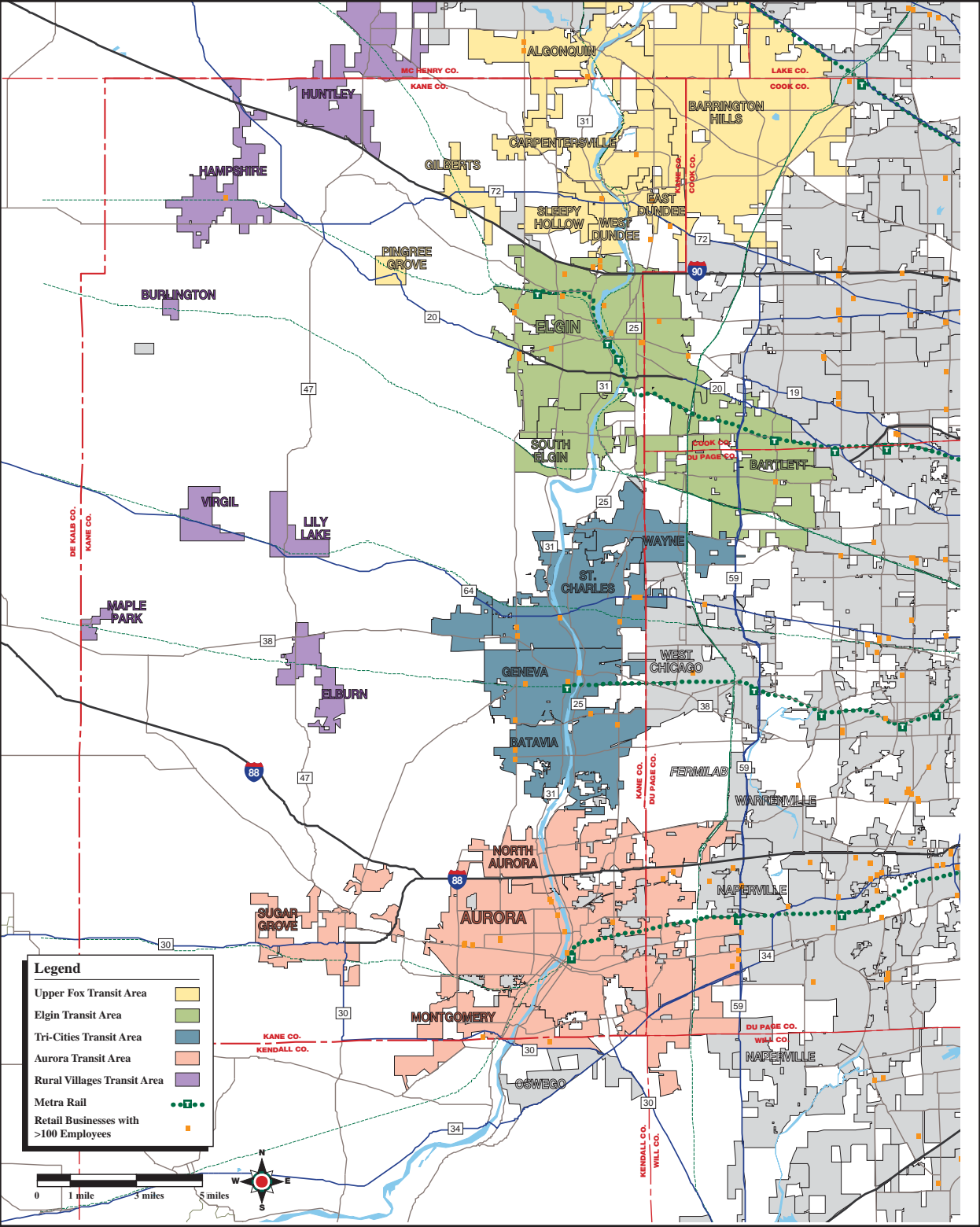
Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999

EXHIBIT 8B – BUSINESSES WITH MORE THAN 100 EMPLOYEES



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/Info USA

EXHIBIT 9 – CONCENTRATIONS OF RETAIL DEVELOPMENT



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/Info USA

V. TRANSPORTATION CHARACTERISTICS

Transit in Kane County is primarily served by the following agencies:

- Pace is the suburban bus division of the Regional Transportation Authority (RTA), providing fixed route bus service, express bus service, dial-a-ride paratransit opportunities and vanpool/subscription bus service for the residents of Kane County.
- The Chicago Area Transportation Study (CATS), the Metropolitan Planning Organization (MPO) for the Chicago region, has created a carpool program called *Share the Drive*.
- Metra, the commuter rail division of the RTA, provides daily passenger rail service for the Chicago Region. The five Metra stations in Kane County board and alight approximately 9,100 riders per day (inbound and outbound). Most of these riders are traveling to and from downtown Chicago for employment

Existing Pace Transit Service

Pace provides public transportation services within Kane County, between Kane County and the other collar counties of northeastern Illinois, and provides connections to the Metra and Chicago Transportation Authority (CTA) systems. These services include:

Fixed Route System

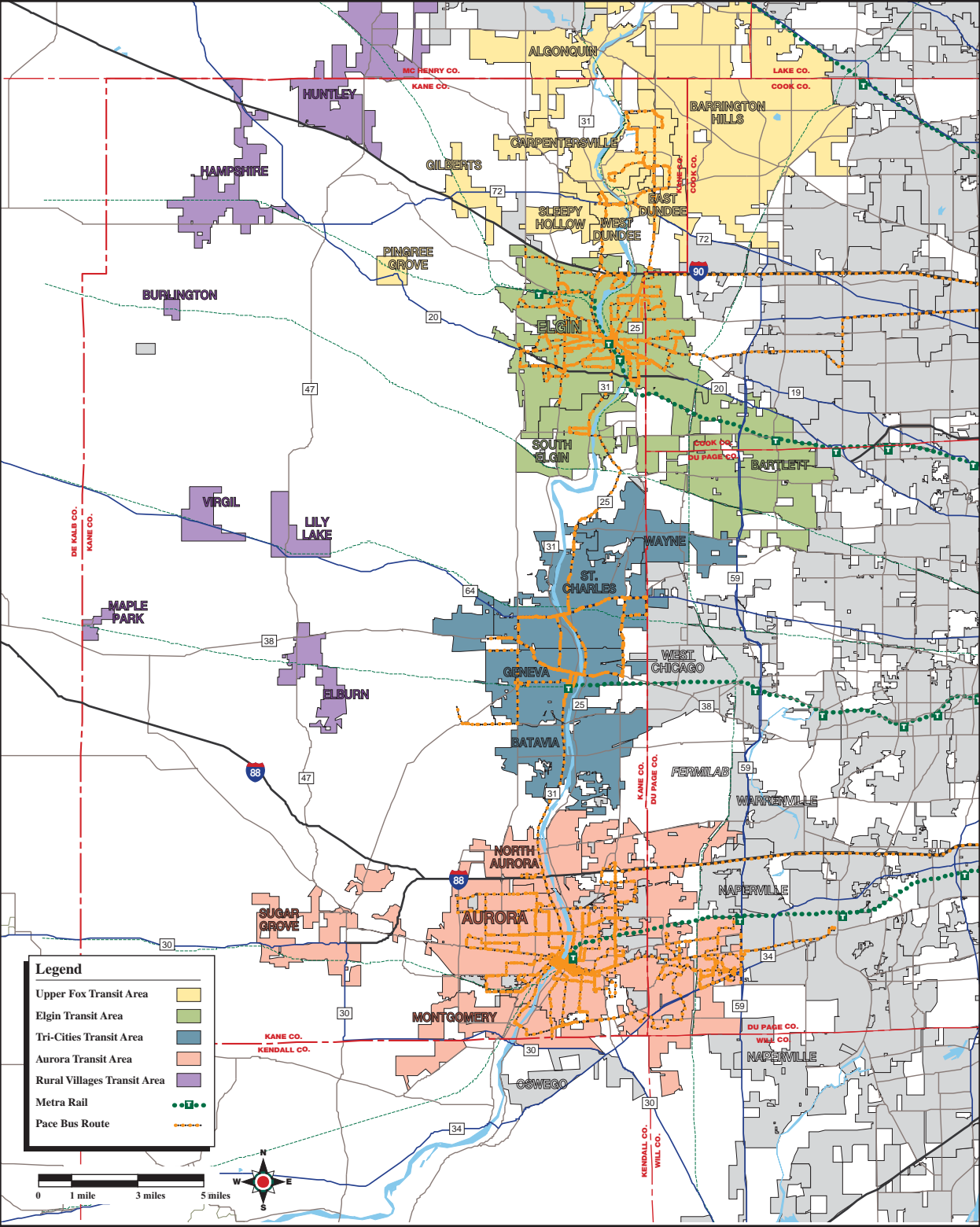
Exhibit 10 illustrates the existing Pace fixed route system. As shown, these routes are predominant in the Upper Fox, Greater Elgin and Greater Aurora Transit Areas. The Greater Elgin Transit Area has 16 routes, including three lines serving the Upper Fox Transit Area. The Greater Aurora Transit Area has 15 routes. And the Tri Cities Transit Area is connected to Aurora and Elgin by routes 801 and 802 and this area is also served by Pace shuttle route 921 operating from a remote park-n-ride location to Metra's Geneva train station.

Pace operated fixed route bus service in Kane County averaged approximately 4,220 monthly riders in 2001 on weekdays. This is an 11 percent decrease since 1998, when ridership was 4,670 per month. Saturday ridership also decreased over the last four years. There were 2,060 riders per month in 2001, compared to 2,480 riders in 1998, a decrease of approximately 21 percent.

The Pace feeder route 921, which provides service between two remote park-n-ride lots and the Geneva Metra Station, provides morning and evening peak hour service to about 120 riders per day. This number of riders has remained stable over the last three years.

The Pace fixed route system provides bus routes that typically travel along major streets on a schedule, usually operating between areas of relatively dense housing and major employment areas or activity centers. This fixed route system operates within the Greater Elgin Transit Area, the Upper Fox Transit Area, and the Greater Aurora Transit Area on what is called a "pulse system". For example, a bus *pulses in* to downtown Elgin, letting people off at the transportation

EXHIBIT 10 – PACE FIXED ROUTE SYSTEM



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/PACE

center. This bus then collects people at the transportation center, and then *pulses out* to the outlying areas dropping people off at their destinations. This system is set up similar to an airport hub such as at O'Hare Airport, where people travel to the hub, make a connection (i.e. bus transfer), and travel to another destination. However, this system lends itself to long travel times. This is due to the many phases of the trip that include: the pulse trip in, the wait time, the connection, and the pulse trip out.

People make travel decisions based on cost, time and the convenience of arriving at specific destinations from their origins. If the time of travel utilizing this fixed route pulse system is too long, they will not use it and opt for the lesser cost of automobile use. Automobile travel has associated and often overlooked costs of gasoline, insurance, maintenance, depreciation, congestion, stress, lower worker productivity, time away from family, roadway infrastructure, and pollution. Although these costs are high, by some estimates as much as \$0.80 per mile, most people choose this over the slower existing suburban bus system due to its convenience of arriving at their chosen destination. And unless a person cannot purchase an automobile, which is unlikely in Kane County since less than 5 percent of all households do not own an automobile as shown on Exhibit 2, or a person's home and destination are located directly along the bus route corridor, people will choose to drive. And, since there are few areas in Kane County serviced by bus, people must choose the automobile in order to travel to many popular destinations.

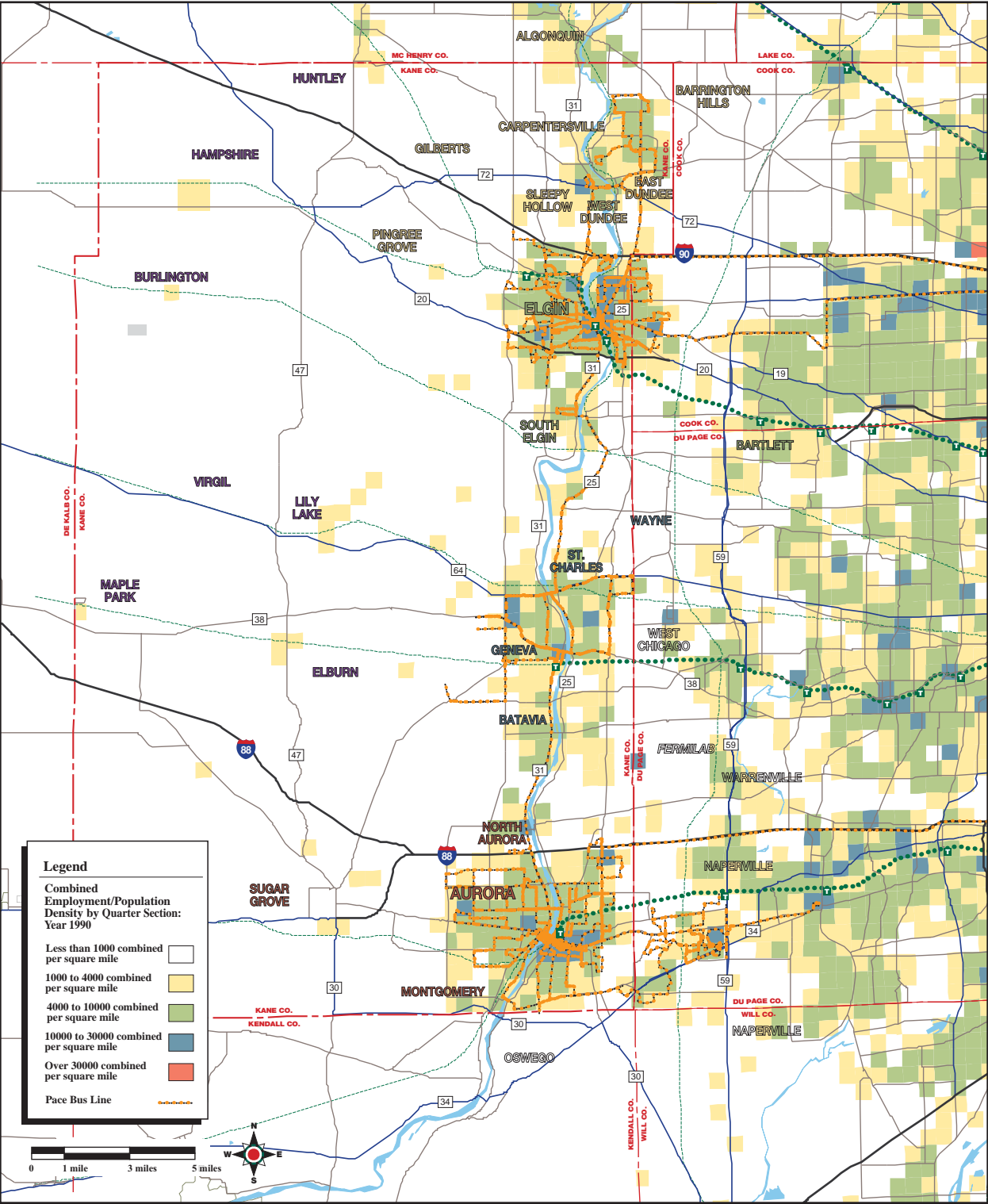
In other areas of the Chicago region, Pace provides a shuttle bus service between Metra Stations and employers. The Lake Cook shuttle bus service is an example of a successfully operating service averaging 700 riders per month.

Exhibit 11 is an overlay of the Pace route system and existing population density. This graphic indicates that the Pace fixed route system appears to adequately cover these areas of higher density and they do meet the Pace criteria established to provide fixed route service. The criteria establish a combined residential and employment population of 4,000 persons per square mile, with an additional requirement of:

- Eight contiguous quarter-sections (2 square miles) having population and employment of 4,000 persons per square mile; or
- A six square mile area with 75 percent of the quarter sections having a population and employment density of 4,000 persons per square mile.

It is apparent that even though these areas meet fixed route service criteria, the cost of travel on this pulse system is too high in comparison to automobile use. As a component of the agency's Vision 2020 plan, Pace is currently reanalyzing the Greater Elgin Transit Area to make the bus transit system more efficient and attractive to new riders.

**EXHIBIT 11 – PACE SYSTEM CRITERIA OVERLAY:
 COMBINED EMPLOYMENT AND POPULATION–1990 CENSUS**



Pace Dial-a-Ride Paratransit System

Pace presently operates two types of paratransit or demand responsive curb-to-curb service. Typically, a customer will call Pace (or a private provider contracting the service) one day in advance and schedule a pick-up time at their home. **Pace Dial-a-Ride** is usually a joint partnership between Pace and a township or municipality. Pace Dial-A-Ride is available in the Aurora Township, the City of Batavia, Batavia Township, Dundee Township, the City of Elgin, St. Charles Township, Geneva Township, Burlington Township, Hampshire Township, Plato Township, Rutland Township and the Village of Algonquin. Pace provides Americans with Disabilities Act (ADA) Paratransit Service in portions of Aurora, Batavia, Dundee, Elgin, Geneva, St. Charles, and Sugar Grove Townships.

Examples of service are the *Hampshire Township Senior Citizens Service Dial-a-Van* for persons 60 years old and over, or persons with disabilities. This service provides: medical and/or dental trips, trips to nutrition sites, and non-medical trips. Another service is the *City of St. Charles ParaTransit Program*, providing rides for persons in St. Charles and the Geneva Townships, the City of St. Charles and Geneva. There were 10,368 riders in 1999, growing to 11,273 riders in the year 2000 (an average of 43 riders per day), a nine percent growth rate over two years. About 90 percent of the riders are elderly, while the other 10 percent are persons with disabilities or who need special assistance. The City and Township of St. Charles' residents account for about 85 percent of all riders, while the City and township of Geneva account for 15 percent. Typical hours of operation for these services are Monday through Friday from 8:00 am to 4:30 pm. Limited weekend, early morning and early evening service are provided in some areas.

The elderly population in Kane County and throughout the U.S. is growing rapidly and will continue as the baby boom generation retires and lives longer than any generation before it. This represents a significant transit market in Kane County. Transit service should become more flexible for this market as it becomes larger, potentially providing service for recreation, shopping, and leisure activities. Assisted living developments should be developed in conjunction with mixed land uses on or near the site, with direct pathways and with transit opportunities to make it convenient for this group to satisfy their travel needs.

Kane County ParaTransit

Kane County is in the process of analyzing the paratransit market in further detail. The main elements of the project scope include the following:

- An examination of current and future demographic characteristics of the County, the analysis of data to document existing services and identify opportunities for coordination, and meetings with key stakeholders and focus groups.
- Information collected about existing services, target markets, and travel patterns will be analyzed to identify service gaps and unmet needs. Solutions to address those needs will then be developed.

- Development of an approach to presenting the results of the paratransit planning study to stakeholders and the general public.

The project will analyze paratransit in Kane County and will be guided by a Project Steering Committee consisting of County staff and a representative range of people that are involved in various aspects of paratransit including social service agencies/service providers, transportation providers, and government (municipalities and townships). This group will help guide and direct the project.

Vanpool

Pace has an extensive vanpool program to eliminate the single occupant automobile. These programs include:

- **Traditional Vanpool** – People that live and work near one another or can meet at a specified location such as a park-n-ride lot, can share a ride in a Pace provided van. Each rider pays a low monthly fare base on the distance traveled and the number of participants. This program also includes a reimbursement to persons that may be required to pay for alternative transportation home for unexpected events that may occur during the day. This is referred to a guaranteed ride home.
- **Metra Feeder** – This program allows a Pace van to remain parked overnight at Metra Stations. A person who, for example, reverse commutes to the Big Timber Road station, may then use the van to drive to their place of employment in the Greater Elgin Transit Area.
- **ADvAntage** – This program is available to human service organizations/workshops/agencies that provide work-related transportation service to persons with disabilities.
- **Non-Emergency Medical Shuttle** – Any medical facility in Kane County and the Chicago region can pick-up and drop-off persons at home for non-emergency reasons.
- **Employer Shuttle** – This shuttle is available for companies to provide vanpool service for its employees. The service can be either employer-operated and driven by an employee or third party-operated with the driver subcontracted out.

Employer Vanpools

There are a number of company sponsored vanpools originating and terminating in Kane County as shown in Tables 3 and 4.

Table 3 - Vanpools Terminating in Kane County

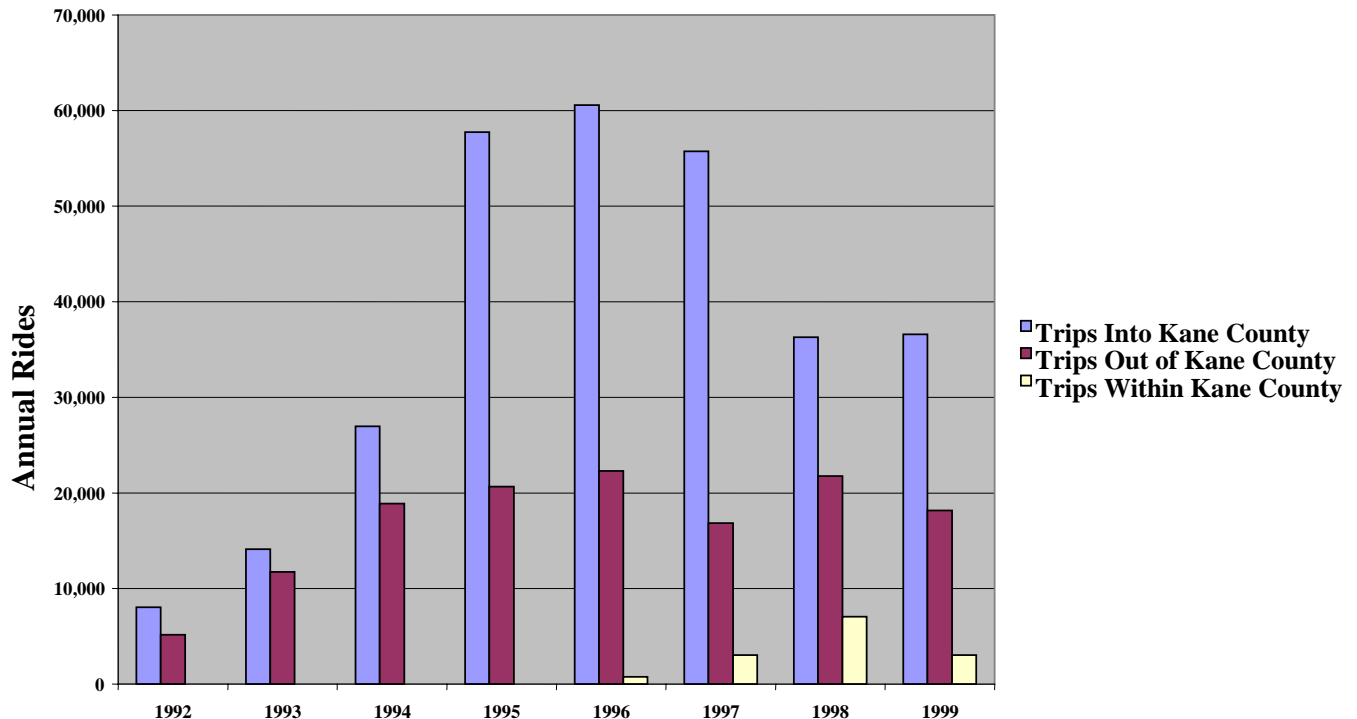
Destination	Company	Origin
Aurora	Caterpillar	LaSalle
Aurora	Caterpillar	Ottawa
Aurora	Kalmus & Kalmus	Bellwood
Aurora	Kalmus & Kalmus	Chicago
Aurora	Kalmus & Kalmus	Westchester
Aurora	Service Manufacturing	Cicero
Aurora	Service Manufacturing	Cicero
Aurora	Service Manufacturing	Chicago
Aurora	USPS	Flossmoor
Aurora	USPS	Richton Park
Aurora	USPS	Calumet City
Aurora	USPS	Chicago
Aurora	USPS	Chicago
Aurora	USPS	Blue Island
Elgin	Sherman Health System	Elgin
Sugar Grove	HRF Precision Machinery	Cicero

Table 4 - Vanpools Originating in Kane County

Origins	Company	Destination
Batavia	Allstate	Northbrook
Sleepy Hollow	FAA	Des Plaines
Aurora	FAA	Des Plaines
Carpentersville	FAA	Des Plaines
Aurora	Sears	Hoffman Estates
Aurora	Sears	Hoffman Estates

Exhibit 12 indicates the ridership numbers of these vanpools. The significant reduction of vanpool ridership after 1997 was due to employee layoffs, early retirement incentives and contraction of the economy.

Exhibit 12 - Vanpool Ridership in Kane County



CATS Programs

The Chicago Area Transportation Study is focusing on carpool opportunities in the Chicago Region. CATS has:

- Created a *Share the Drive* carpool matching program. This voluntary program uses home and work addresses of people to match them with other potential rideshare candidates. Current marketing efforts of *Share the Drive* include roadway signage advertising this program.
- Attempted to contact major employers in the Chicago region in order to obtain home addresses of employees to include in the *Share the Drive* program. CATS is understaffed in this regard and cannot possibly contact all the major employers in Kane County, much less the Chicago region. There have also been reports of employer resistance to giving this information to CATS.

- Established criteria for the placement of park-n-ride lots near arterial interchanges and have established a list of possible park-n-ride locations in Kane County.

Metra Commuter Rail Service

Kane County is served by five Metra stations:

- The Greater Elgin Transit Area is served by three stations on the Milwaukee District/West Line: National Street, Downtown Elgin, and Big Timber Road. Downtown Elgin is served by Pace, Greyhound bus service and taxi. National street is also served by Pace.
- The Tri Cities Transit Area is served by a Metra station in Geneva on the UP West Line. This station is also served by Pace and taxi service.
- The Greater Aurora Transit Area is served by a station in Aurora on the Burlington Northern Santa Fe Line. This station is also served by Pace, Greyhound Bus Service, and taxi.

Table’s 5 and 6 show Metra train ridership information by train station. While there are only five stations that are located within the Kane County itself, given proximity and travel patterns, Metra riders who reside in Kane County also use the Metra stations in Bartlett, Hanover Park, West Chicago, and Route 59 in Aurora/Naperville.

Table 5 – 1999 Metra Ridership in Kane County

Station/Line	Weekday		Saturday		Sunday	
	Boarding	Alighting	Boarding	Alighting	Boarding	Alighting
National Street/ Milw-W	618	588	190	204	184	179
Downtown Elgin/ Milw-W	419	404	270	261	230	225
Big Timber/ Milw-W	482	473	No Service	No Service	No Service	No Service
Bartlett/Milw-W	1,173	1,136	133	149	105	98
Hanover Park/Milw-W	1,506	1,473	204	199	164	149
Geneva/UP-W	1,642	1,657	486	511	205	280
West Chicago/UP-W	499	505	130	131	123	96
Aurora/BNSF	1,467	1,387	607	566	463	496
Route 59/BNSF	4,178	4,071	363	368	218	210
Total	11,984	11,694	2,383	2,289	1,692	1,733

Table 6- Weekday Station Passenger Boarding Over Time

Station/Line	1983	1985	1987	1989	1991	1993	1995	1997	1999
National Street/ Milw-W	834	905	985	1,056	1,014	1,033	1,184	1,387	1,467
Downtown Elgin/ Milw-W	390	495	463	465	358	421	373	361	419
Big Timber/ Milw-W	-	-	41	33	124	128	347	385	482
Bartlett/Milw-W	669	712	805	915	1,075	1,109	1,213	1,184	1,173
Hanover Park/Milw-W	738	765	855	1,150	1,171	1,455	1,356	1,460	1,506
Geneva/UP-W	872	955	1,124	1,290	1,366	1,370	1,623	1,607	1,642
West Chicago/UP-W	371	386	474	464	485	495	520	518	499
Aurora/BNSF	834	905	985	1,056	1,014	1,033	1,184	1,387	1,467
Route 59/BNSF	-	-	-	1,112	1,740	2,011	2,556	3,322	4,178
Total	4,006	4,440	4,930	6,740	7,754	8,461	9,734	10,783	11,984

Table 7 shows the number of vehicles at the parking facilities within Kane County and those that serve Kane County residents. As indicated, the parking lots in downtown Elgin, Geneva, Aurora and Route 59 are at full use, and the stations at National Street and Big Timber are over 70 percent utilized.

Table 7 – 1999 Metra Parking Space Utilization in Kane County

Station/Line	Parking Spaces Provided	Parking Space Effectively Used	Percentage of Use
National Street/Milw-W	410	309	75.4 %
Downtown Elgin/Milw-W	142	141	99.3 %
Big Timber/Milw-W	473	342	72.3 %
Bartlett/Milw/W	574	572	99.7%
Hanover Park/Milw-W	1,181	1,170	99.1%
Geneva/UP-W	813	813	100 %
West Chicago/UP-W	176	174	98.9%
Aurora/BNSF	828	827	99.9 %
Route 59/BNSF	3,458	3,441	99.5%
Total	8,055	7,789	96.7%

Park-n-Ride

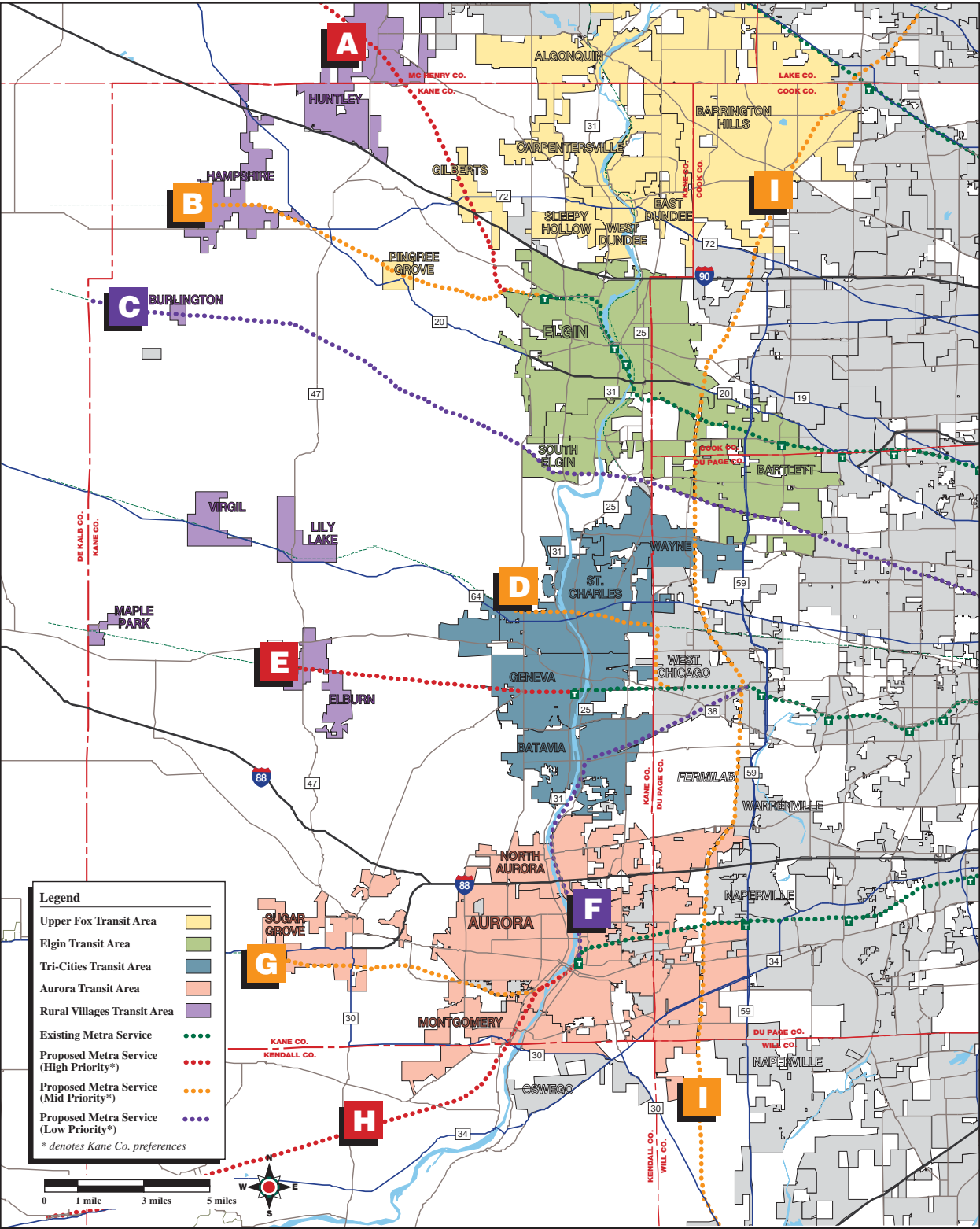
The Geneva Metra station is served by Pace Remote Shuttle Route 921. In addition to providing service to the Illinois Youth Center and the Kane County Judicial Center, this line picks up park-n-ride patrons at a Baptist church in Geneva located about five minutes from the station and at the Mill Creek development. These persons drive to the Baptist church, park their cars in the parking lot, and ride the Pace bus to the station. This service is provided on weekdays during the am and pm peak periods only.

An example of service that could be provided in Kane County is a Metra and Pace arrangement in Will County, located at a Jewel Shopping Center at the intersection of IL 53 and Boughton Road. Persons drive to the Jewel Shopping Center parking lot, park their vehicles, and board a Pace express bus to the Metra station in Lisle. This not only provides convenient parking and shuttle service to the train station. It also increases potential business for the Jewel shopping center. This type of arrangement may be applicable in Kane County locations.

Proposed and Potential Metra Commuter Rail Service Extensions

Exhibit 13 illustrates both existing Metra lines and a number of freight rail lines that potentially could be used for service expansion. Keep in mind that any and all of these proposed routes would operate over tracks owned by a railroad other than Metra, which would require negotiated fees for trackage rights or some other financial arrangement with the respective freight railroads. The priority rankings on Exhibit 13 are based on Kane County preferences. They are not Metra’s priority ranking.

EXHIBIT 13 – EXISTING AND PROPOSED METRA SERVICE



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/METRA

- **Extension (A) MD-W Extension to Huntley or Marengo [Union Pacific (UP) Belvidere Subdivision]** – This potential route would extend northwest from the current terminal point at Big Timber Road in Elgin. Besides the two alternative terminal communities, stations would be anticipated in Gilberts (if Huntley is the terminal point) and Union (if Marengo is the terminal point). Metra will begin a Phase I Feasibility study on this potential service in late 2002, with an expected completion date at the end of 2003. Service on this line would require building a track connection between the parallel UP-Belvidere Subdivision and the MD-W Line at the Big Timber Road Station near Randall Road in Elgin.

- **Extension (B) MD-W Extension to Hampshire [Iowa, Chicago and Eastern (IC&E), formerly I&M Rail Link (IMRL)]** – This potential route would extend west from the current terminal point at Big Timber Road in Elgin (same location as above). This alignment should probably be considered as an alternative to Extension (A) that would terminate in Hampshire, with a potential intermediate station anticipated in Pingree Grove. No formal studies have taken place to date.

- **New Route (C) West Suburban Commuter Rail Service [Canadian National-Illinois Central (CN-IC), formerly Chicago Central and Pacific (CC&P)]** – A Phase I Feasibility Study was completed in June of 2000; it evaluated a potential new commuter rail line running from Burlington to Chicago Union Station. Options to connect the route with the Union Pacific-West Line in Villa Park or the Burlington Northern Santa Fe in Berwyn were examined but ruled infeasible, due to the difficulty of engineering connections at the grade-separated intersections of the railroads and the fact that the two lines already are congested with existing Metra commuter trains and freight trains. Finally, the Final Report determined that the potential capital investment would be too costly for a roundabout routing that would come into the southern end of Union Station. In addition, there was a noticeable lack of support and some outright opposition from officials in several villages along the route, particularly in DuPage County.

- **Extension (D) Union Pacific-St. Charles Branch** – This route was studied as an alternative to the extension of the UP-West Line to Elburn (Extension E) and is outlined in the Central Kane Corridor Major Investment Study (MIS). This routing would utilize an existing UP rail spur that diverges from the main line near Kress Road in West Chicago, travels around the western edge of the DuPage Airport along Kautz Road, and terminates just west of Randall Road. [This spur is the last remnant of the Chicago Great Western Railroad in Illinois, purchased by the Chicago and NorthWestern [(C&NW), a UP predecessor] in 1968.] Two stations would be anticipated, one on either side of the Fox River within existing industrial parks. As noted in the MIS Report, each alignment was rated in nine different categories to determine a preferred alignment. While this alignment modeled well in the category of maximizing cost-effectiveness, and received a neutral score in five of the nine categories, it also received the lowest score possible in the areas of correcting operational problems, minimizing residential impacts, and

community support. As a result of its poor modeling, this route was not deemed to be a preferred alternative by Metra.

- **Extension (E) Union Pacific-West Line Extension to Elburn** – Metra has received Federal New Start funding to extend the UP-W line eight miles beyond its current terminal in Geneva. An intermediate station will be provided in unincorporated La Fox. Significantly, by locating a new coach storage yard in Elburn, this extension also will resolve an operational bottleneck created by the existing coach yard being located in West Chicago, east of Geneva. The project includes the installation of a third main track between Peck Road and Elburn, new signals, construction of a new coach yard on the east side of Elburn, new stations and parking in Elburn and LaFox, lengthening of boarding platforms in Geneva, and the purchase of a new train set. The extended service is anticipated to begin in 2005 or 2006.
- **Extension (F) Burlington Northern Santa Fe (BNSF) between Aurora and West Chicago** – This route along the east side of the Fox River was part of the original Burlington Route through Batavia, connecting with the Galena and Chicago Union Railroad (C&NW and UP predecessor) in West Chicago. Before too long, the Chicago, Burlington and Quincy [(CB&Q), BNSF predecessor] built a new route through Naperville and points east where commuter service is provided today. This short link is now disconnected from the UP, but BNSF still provides local freight service to Batavia and West Chicago from Aurora. No formal studies have taken place to date, since this route is deemed to have no real utility for the Metra commuter rail network.
- **Extension (G) BNSF Extension to Sugar Grove** – This potential route would extend south and west from the current terminal in Aurora to Sugar Grove on the BNSF tracks destined for Savanna IL. This line is only single track, with a passing siding west of Sugar Grove, and would require a minimum of two main tracks since it already has a high level of freight service. In fact, between Aurora Junction and Sugar Grove it is quite probable that even three main tracks could be required to accommodate commuter trains and freight trains. In fact, several freight trains are often lined up along this route waiting for access to Eola Yard or points east. Obviously, this situation would mandate a significant capital investment in the physical plant of the railroad for this extension to be operationally feasible. An intermediate station would be anticipated near Orchard Road in Aurora. No formal studies have taken place to date.
- **Extension (H) BSNF Extension to Kendall County** – This potential route would extend southwest from the current terminal in Aurora to provide service to the community of Montgomery, on the BNSF tracks destined for Galesburg IL. This line is double track, but a third main track could be required. BNSF has previously indicated a need to reinstall the third main track between Aurora Junction and Eola Yard. Montgomery lies in both Kane and Kendall Counties. The two counties received grant funds to conduct feasibility studies on this proposed commuter rail extension, which could extend beyond Montgomery to Oswego, Yorkville, and Plano. The Phase I Study

has been completed and indicated that there are no fatal flaws that would preclude commuter rail service on the line. A Phase II Study is currently underway. Metra did not participate in these feasibility studies since Kendall County is not within its six-county service area. The Regional Transportation Authority (RTA) receives a percentage of local sales taxes, which is used in part to subsidize Metra service. (Metra has a 55% fare-box recovery ratio, i.e., only 55% of their revenues come from ticket sales, with the other 45% coming from the sales-tax receipts.) Either Kendall County would join the RTA or some kind of contractual agreement regarding a subsidy must be completed among Kendall, BNSF, and Metra.

- **New Route (I) Outer Circumferential Service [(Elgin, Joliet and Eastern (EJ&E)]** – The EJ&E is a 105-mile corridor that runs in an arc from Waukegan on the north to Lynwood on the south, about 35 miles from downtown Chicago. It crosses all eleven existing radial lines in the Metra system. Metra conducted a Phase I Feasibility Study, which was completed in April of 1999, which indicated that commuter rail service in the EJ&E corridor would be both physically and operationally feasible. Major capital investments in the physical plant would be required, with at least one new main track and in places likely two tracks being added to the existing single EJ&E track existing in most locations. A Phase II Study is currently underway to design a set of alternative operational segments, identified by assessing market demand, which can be evaluated further in other elements of Phase II work. Another element of Phase II is just beginning; it will review the existing and potential land uses within the corridor, particularly at each prospective station area, to help communities devise transit-oriented development scenarios that would be supportive of commuter rail service. There is substantial, although not unanimous, community support for this suburb-to-suburb circumferential (i.e., not oriented to Downtown Chicago) service.

Roadway System

As reported in the *Kane County Transportation Planning Area Study* by CH2MHill only 2.8 percent of the total work trips made by Kane County residents were made using rail or bus. Other means such as taxi and bicycle add only 0.8 percent and the other 96.4 percent travel to and from work in the automobile, either traveling alone or by carpool.

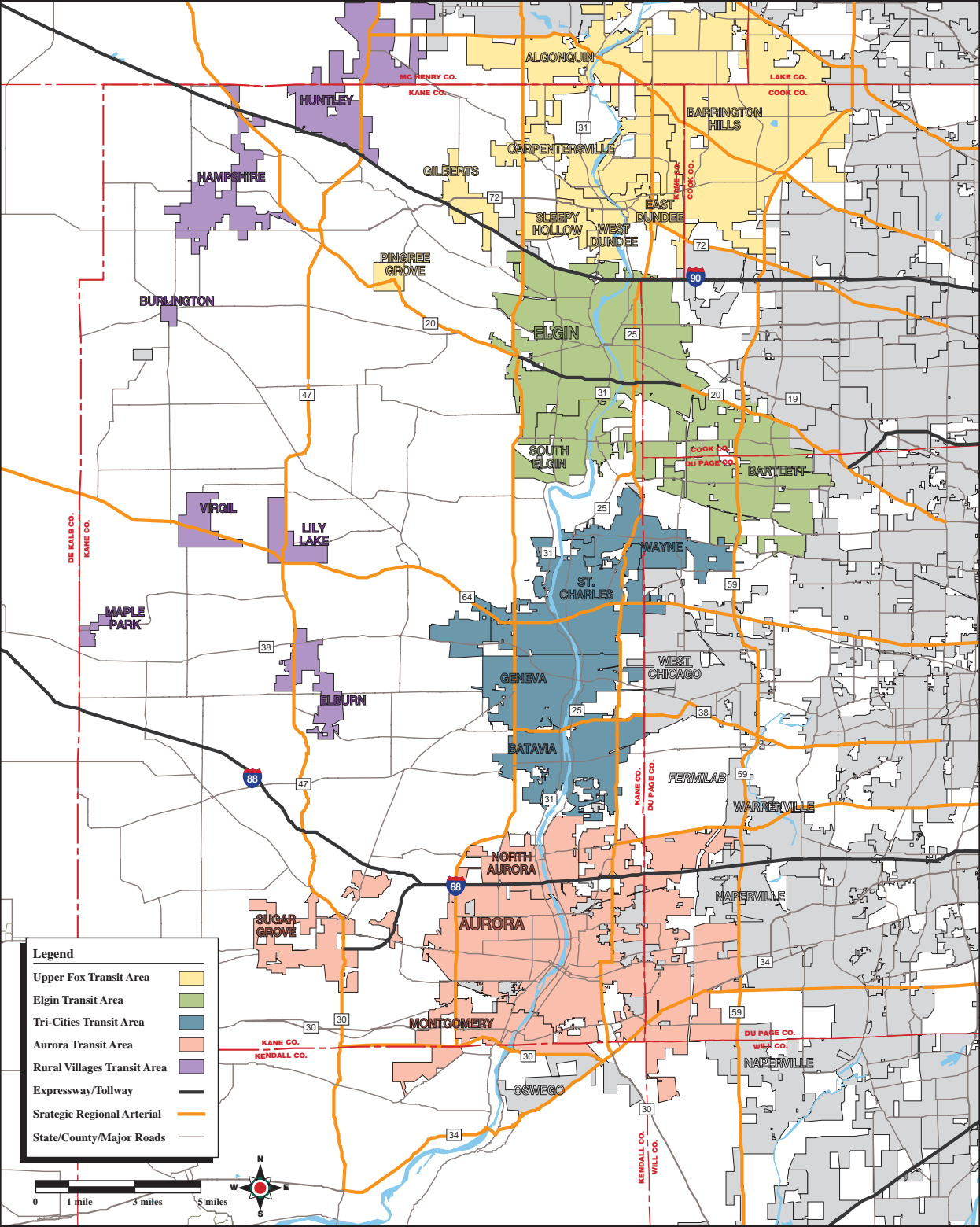
Exhibit 14 contains the existing road system in Kane County. This system contains toll highways 90 and 88, and eight Strategic Regional Arterials (SRAs). These 10 corridors are planned to carry the majority of regional traffic. Yet, the SRA routes must also provide local access as well.

Exhibit 15 contains the projected congested roadway segments at the year 2020. As shown, most of these roadways will be experiencing moderate to severe congestion at this time. “While only about one-quarter of Kane County experienced congestion in 1996, the areas would expand to cover three-quarters of the county by 2020” (*Kane County Transportation Planning Area Study*, CH2MHill, May 2001). These projections are the direct result of the origin and destination locations illustrated on **Exhibit 16a, 16b, 16c and 16d**. As shown, there are some

**Kane County
Transit Opportunity Assessment Study**

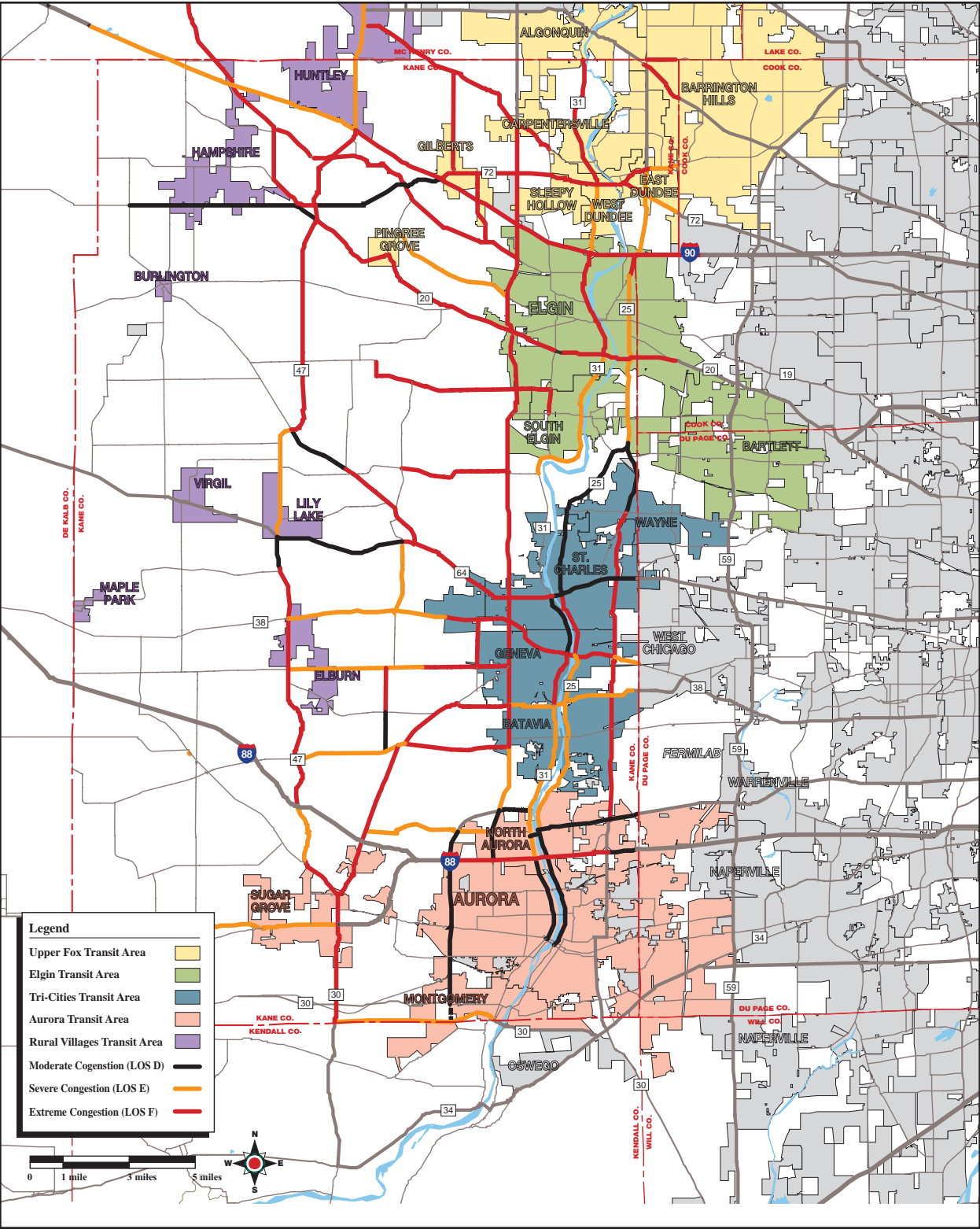
specific origin and destination aggregations. However, these illustrations also indicate the dispersing of suburban travel from the Transit Areas.

EXHIBIT 14 – EXISTING ROAD SYSTEM



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/I.D.O.T.

EXHIBIT 15 – PROJECTED CONGESTED ROADWAY SEGMENTS: YEAR 2020



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

EXHIBIT 16A – 1999 HOME BASED WORK TRIP ORIGINS

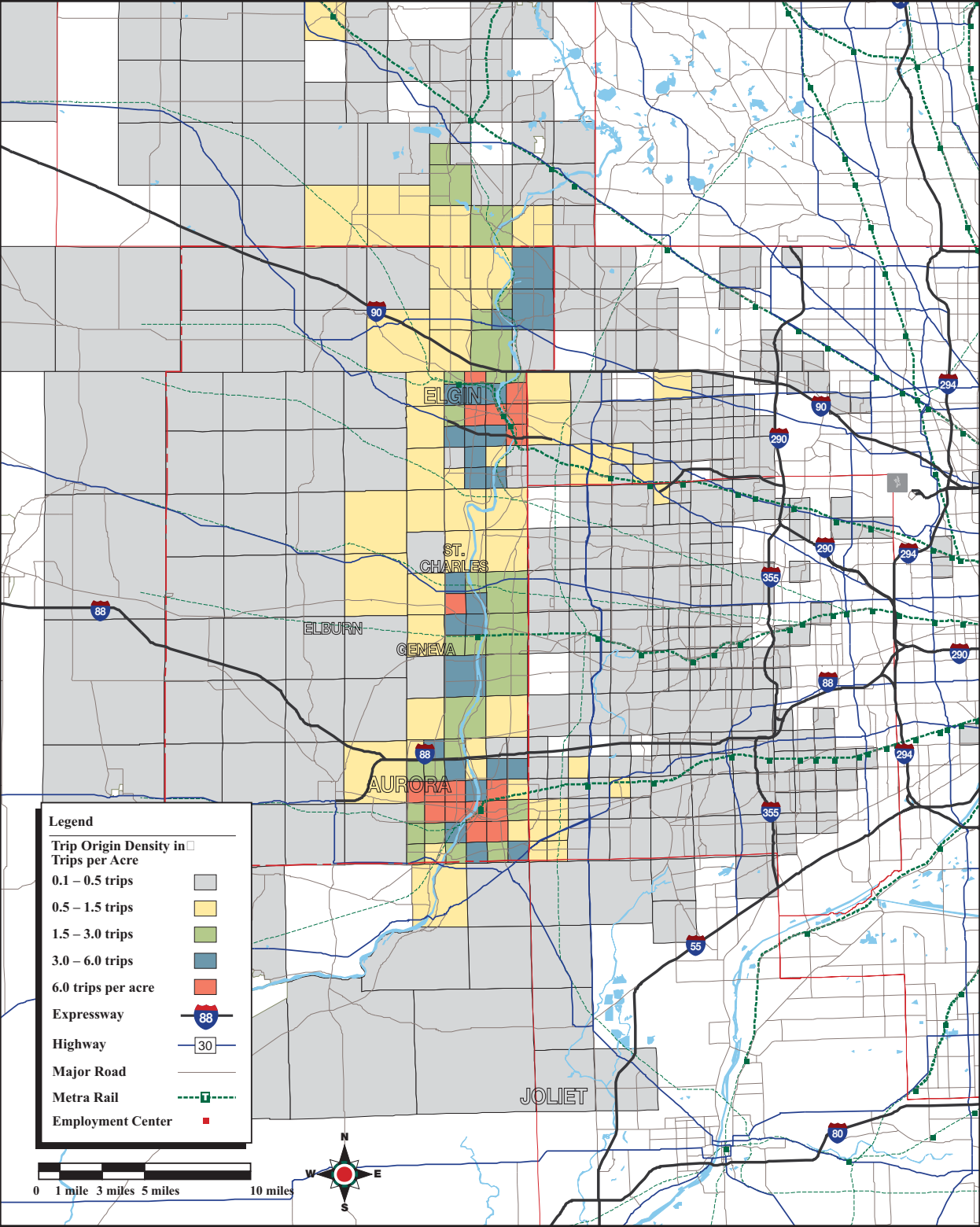
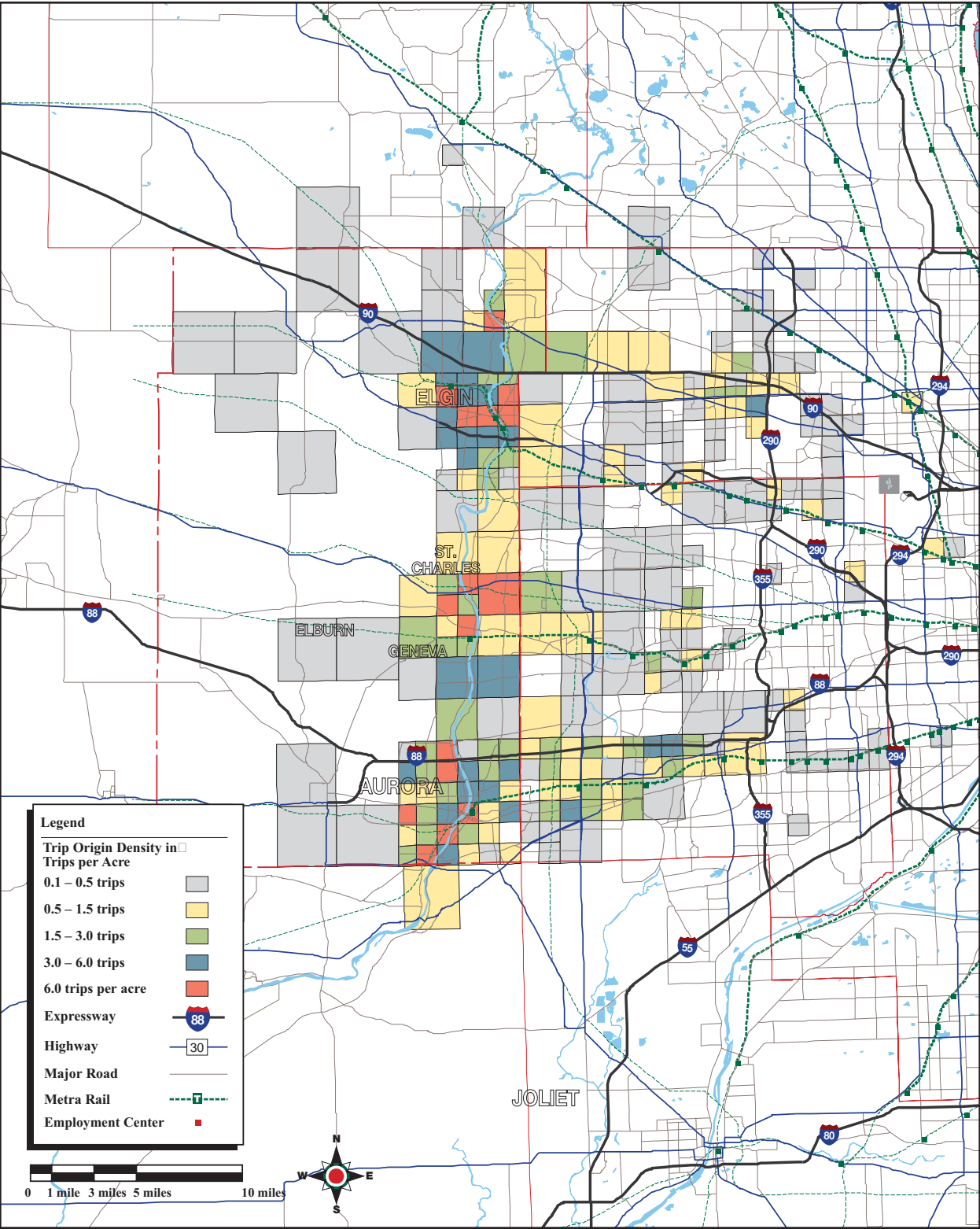
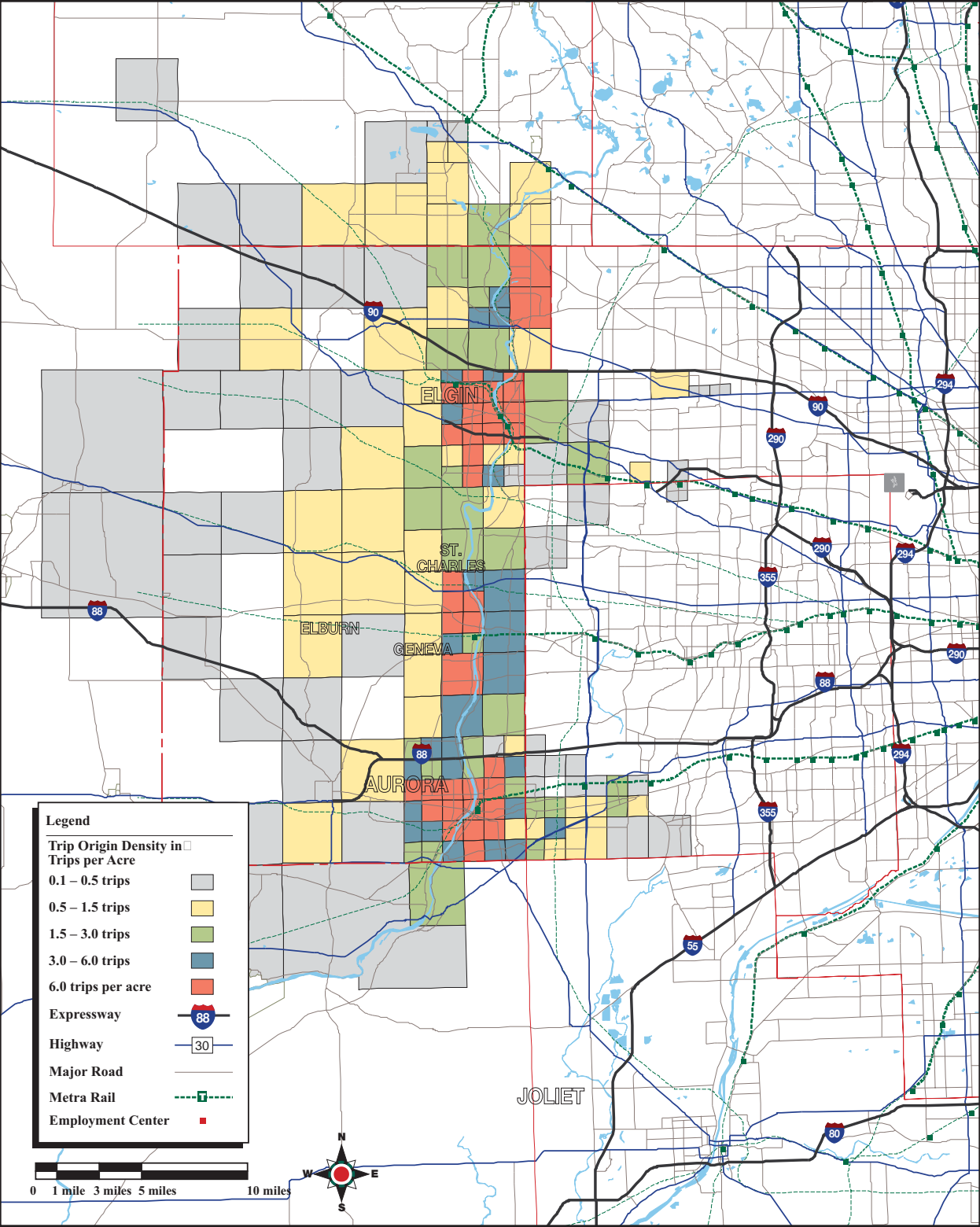


EXHIBIT 16B – 1999 HOME BASED WORK TRIP DESTINATIONS



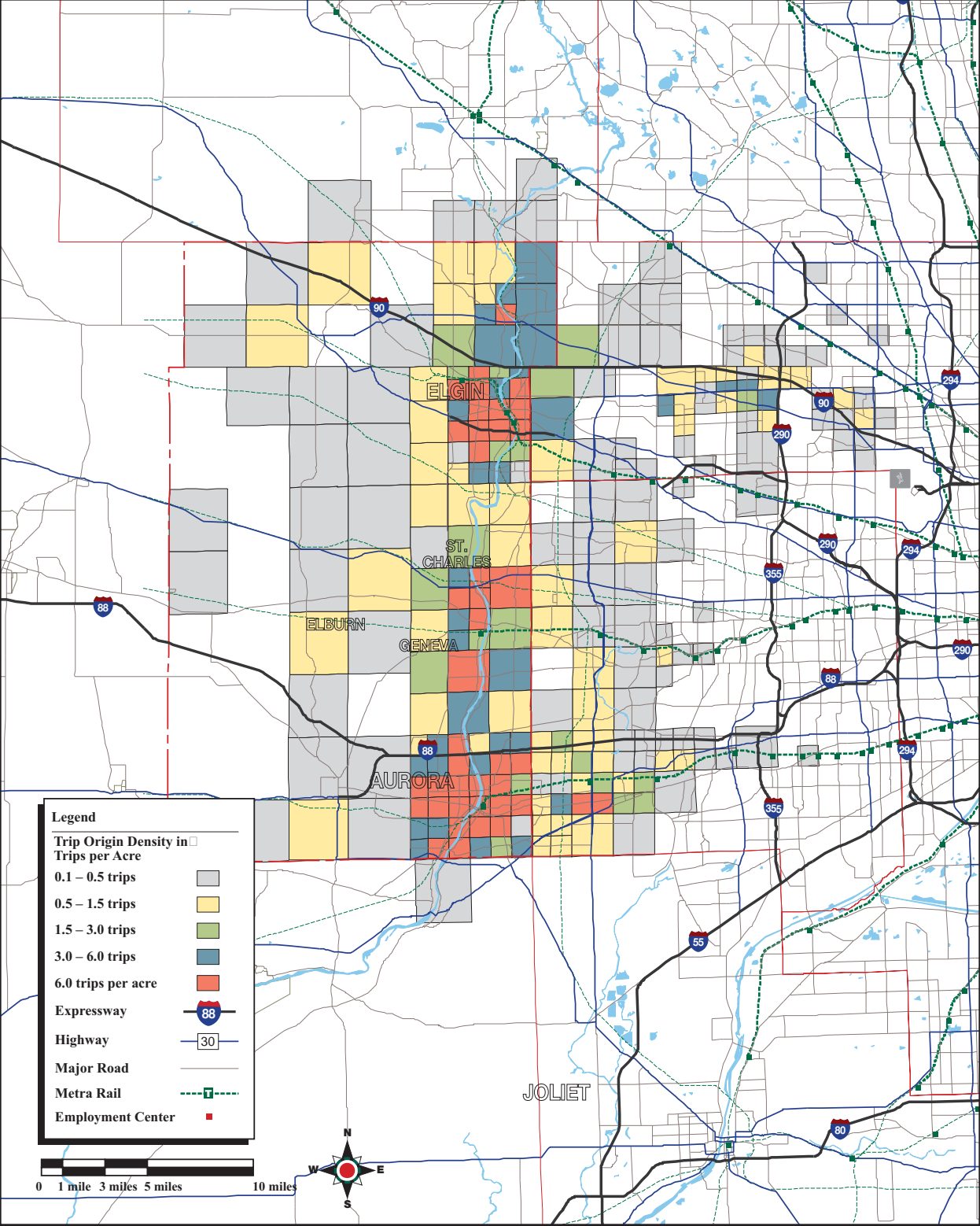
Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

EXHIBIT 16C – 1999 HOME BASED NON-WORK TRIP ORIGINS



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

EXHIBIT 16D – 1999 HOME BASED NON-WORK TRIP DESTINATIONS



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

VI. TRAVELER CHARACTERISTICS

In Kane County, the average trip from home to work (one way) is 12.3 miles. The average home to other trip (shopping, school, recreation, etc.) is 6.0 miles, and the average non-home to non-home trip is 4.9 miles (*2020 Conformity Analysis Documentation, CATS, October 2000*). **Table 7** shows a comparison of trip lengths in the Chicago metropolitan area. As shown, Kane County is experiencing higher than the average trip lengths in the region for the home to work and the home to other trip. It is lower for the non-home to non-home trip average for the region. What makes these numbers significant are the resulting cost of these longer travel lengths with respect to total vehicles miles of travel and total vehicle hours of travel for Kane County residents each day.

Table 7 – 1990 Person Trip Lengths

Area	Home to Work (miles)	Home to Other (miles)	Non-Home to Non-Home (miles)
Chicago	8.6	4.8	5.8
Cook County			
North Shore	10.3	4.7	5.6
Northwest	10.7	5.2	5.8
North Central	8.5	4.7	5.8
Central	9.2	4.3	4.7
Southwest	11.8	4.5	4.8
South	13.5	5.3	5.5
DuPage County	12.0	4.6	5.9
Kane County	12.3	6.0	4.9
Kendall County	11.7	5.2	5.5
Lake County	13.2	5.7	6.5
McHenry County	15.2	5.8	5.2
Will County	14.7	6.2	6.1
Regional Average	10.7	5.0	5.7

Source: CATS 2020 Regional Transportation Plan, October 2000.

Exhibit 17 contains a breakdown of the percentage of trips taken in Kane County by the mode of travel. The automobile, both as a driver and passenger, dominates as a travel method in Kane County representing 93.4 percent. Walking has a share of 3.3 percent. This is higher than public transit, which accounts for 1.1 percent.

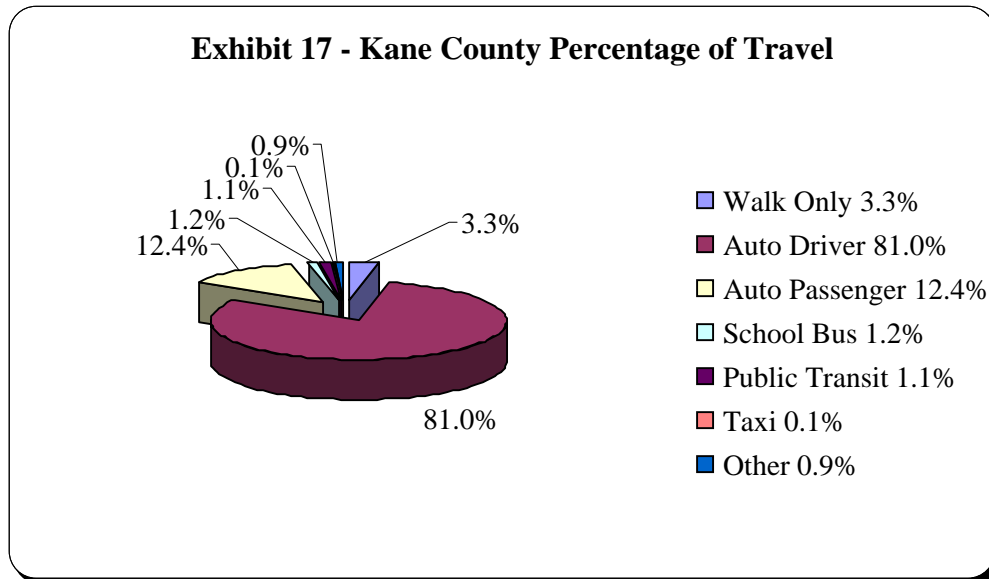
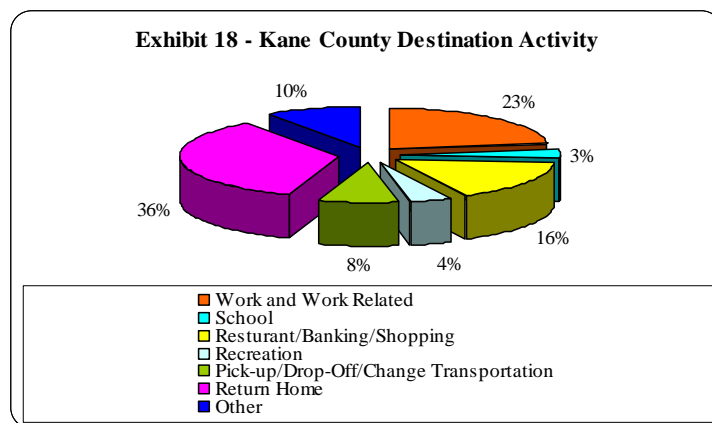


Exhibit 18 contains the percentage trips by trip purpose in Kane County. Work and work related trips account for about ¼ of all trips (23 percent), while non-work related trips (i.e. school, shopping, recreation, etc.) account for approximately 23 percent. This indicates that there is a significant market for transit use for the home to work/school trip. However, many of these trips are also linked. For example, people may also go to the grocery store, stop at a restaurant or pick-up their children on their way to and from work. This trip chaining phenomena must be accounted for when trying to convert the work trip from auto to transit.



Solutions range from a guaranteed ride home from work for special circumstances, locating complementary land uses such as retail, day care and restaurants within a single development located near an employer or home, or locating carpool/vanpool parking lots within existing

shopping centers or other similar uses in order to capture some of these linked trips. Vanpools and carpools could also be provided for school children for their trip to and from home and also for recreation/educational trips after school.

Youth

As two worker households and single parent households continue to grow, a potential transportation demand for youth between the ages of 5 and 19 is created. The current population of this age group is 98,085, comprising 24.2 percent of the entire county. This represents a significant potential transit market. Additionally, starting these children early in life using transit will make them more acceptable to this form of transportation in their adult years.

Commuters

As shown in **Table 9**, there are a significant number of work trips to and from Kane County each day based on a study performed by CATS using 1990 U.S. Census Data (E.J. Christopher and M.J. Rogus of CATS, *1990 Work Trip Flows Between Illinois Counties*, September 1993). As discussed, work related trips account for about 23 percent of all trips taken in Kane County.

Table 9 – Daily Work Flow Trips To and From Kane County

<i>Work Trips to</i>							
	Cook County	DuPage County	Kane County	Kendall County	Lake County	McHenry County	Will County
<i>From Kane County</i>	28,017	24,325	94,614	2,204	1,548	3,193	Not Available
<i>Work Trips From</i>							
	Cook County	DuPage County	Kane County	Kendall County	Lake County	McHenry County	Will County
<i>To Kane County</i>	16,107	10,805	94,614	6,189	1,423	5,196	2,316

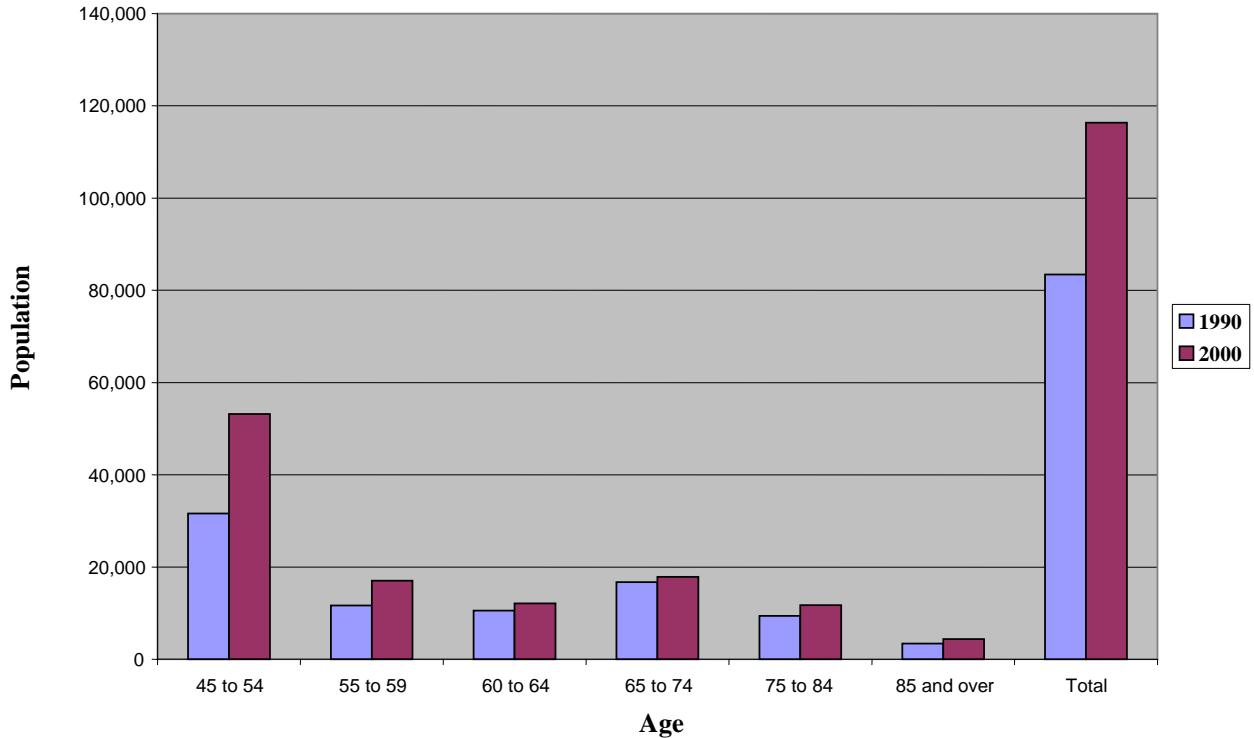
Low Income

Based on a report by the U.S. Bureau of Transportation Statistics, approximately 10 percent of persons within the Temporary Assistance for Needy Families (TANF) program report that “having no car and the jobs located outside the metro area” are obstacles to work. These are persons who are required to obtain employment as part of their welfare benefits and their future requirement of leaving the welfare system. Adults participating in this program are significantly located in the Chicago, Aurora, and Elgin areas. With 230,000 jobs located in Kane County projected for the year 2020, this provides a good transit market opportunity.

Elderly

As shown on **Exhibit 19**, the elderly population is growing in Kane County, with each age group over the age 45 experiencing growth over the last 10 years. This represents a significant growth in the over age 64 population in the future. Many of these persons will continue to drive, however, due to health and other issues many will not.

Exhibit 19 - Kane County Population Over 45



VII. TRANSIT SUPPORTIVE PROGRAMS

For Kane County to support and create transit opportunities, they must first focus on the potential markets. The primary ones are the elderly, children and commuters. These markets can be capitalized on by:

Employer Sponsored Programs

As shown on **Exhibit 20**, there are many groupings of employers in Kane County. This is a large market and a good opportunity to reduce congestion in Kane County. Employer sponsored programs allow a company to attract from a larger market, reduce worker stress and decrease tardiness and absenteeism. Employers can now provide financial incentives, through pre-tax benefits to employees to promote carpool and vanpool efforts.

Pre-Tax Benefits of Transit

Effective January 1, 1999 the Transportation Equity Act of the 21st Century revised the Internal Revenue Service Code Section 132 to allow employers to offer employees the opportunity to set aside a portion of their salary to pay for certain transportation expenses.

The employee will not be taxed on amounts set aside and used for qualified expenses (that is, pre-tax dollars are used to pay the commuting expenses).

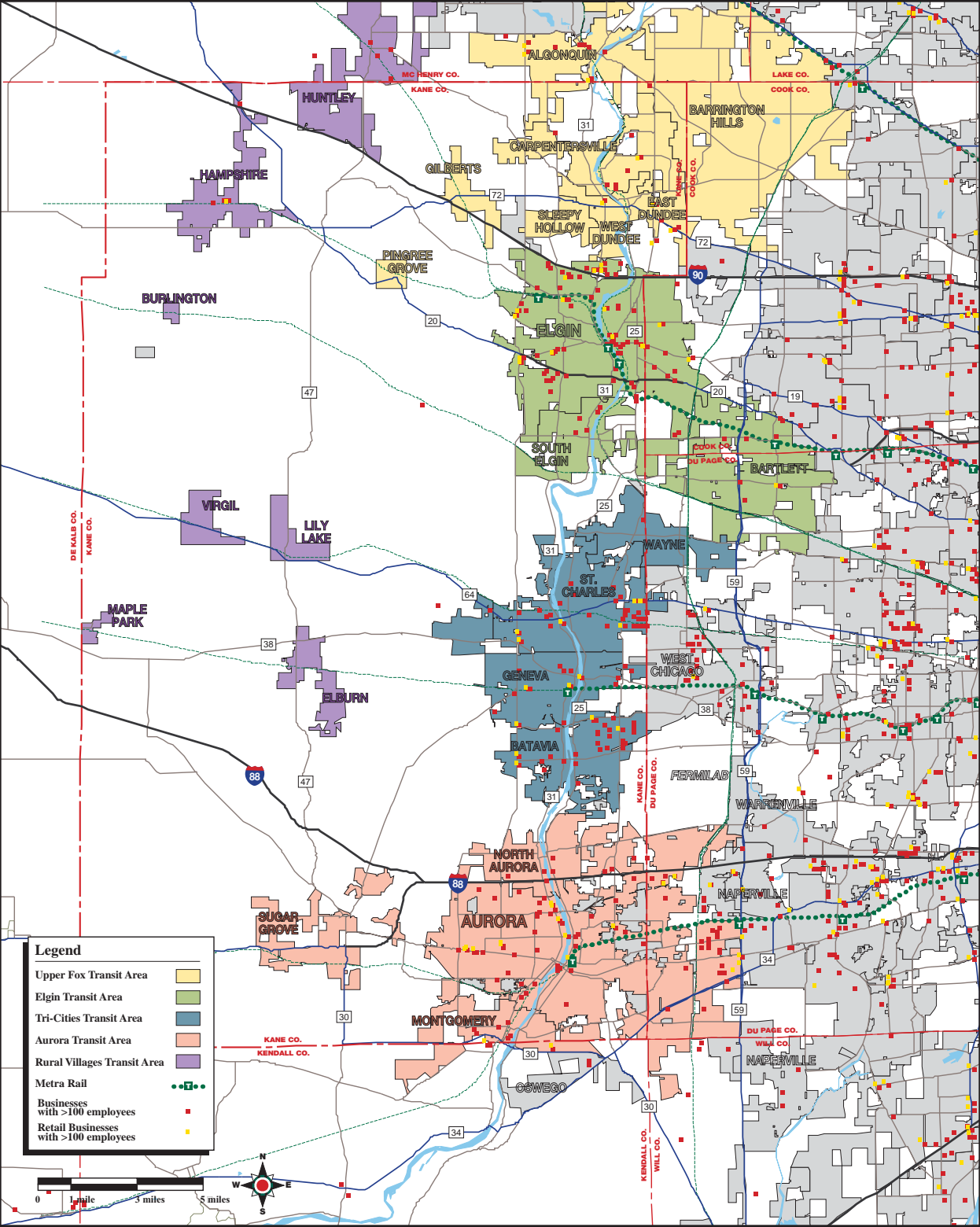
Under Section 132 and TEA-21, qualified transportation expenses generally include payments for the use of mass transportation (for example, train, subway, bus fares), and for parking (see further details below). The maximum monthly pre-tax contribution for mass transit is \$100, and \$175 for parking. These limits will be indexed for inflation.

How it works

Before the start of the plan year, employees must apply for the program thru their employer and/or benefits administrator. By applying and participating, employees are asking their employer to set aside a certain amount of pre-tax salary to cover qualified costs incurred in commuting to work. The employee will designate an amount (up to \$100 per month) for mass transit expenses and a separate amount (up to \$175 per month) for parking expenses - separate reimbursement accounts are maintained for each category, and funds cannot be commingled or transferred between accounts (for example, amounts cannot be transferred from the mass transit to the parking account).

As the employee incurs the expenses during the year, a request (usually a form) may be submitted to the employer for reimbursement. Any amounts remaining in the employee's reimbursement account at the end of the year are refunded to the employee in the following year (that is, the year after the employee's contributions were withheld from his/her paycheck).

EXHIBIT 20: BUSINESSES WITH MORE THAN 100 EMPLOYEES



Who is eligible?

As a general rule, this transportation fringe benefit can only be provided by employers to employees. Common law employees and officers of corporations are eligible (the law does not include non-discrimination requirements for the benefit). Sole proprietors, partners, independent contractors, and two-percent shareholders of "S" corporations are not eligible for this transportation fringe benefit.

Qualified Section 132 Expenses

Parking expenses that can be paid with pre-tax dollars include the costs of (1) parking a vehicle in a facility that is near the employee's place of work, or (2) parking at a location from where the employee commutes to work (for example, the cost of parking in a lot at the train station so that the employee can continue his/her commute on the train).

Transit passes for mass transportation to and from work

Qualified amounts include costs of any pass, token, fare card, voucher, or other item that entitles the employee to use mass transit for the purpose of traveling to or from his/her place of work. However, when a transit voucher program is readily available, Federal regulations prohibit the use of cash reimbursement as a way to provide transit benefits. Section 132(f) (3) states: Transit benefits can include cash reimbursement to an employee as long as the reimbursement is for any transit pass, **and** a voucher or similar instrument which can be used to purchase the transit pass is **not** readily available for direct distribution to the employee.

The RTA also has a *Transit Check Program* where employers can purchase transit passes from the RTA and offer them to employees as a tax free benefit. These vouchers are valid for use on Pace, Metra, the CTA and the South Shore Electric system and on vanpools. These purchases are tax deductible by employers.

Mass transit can be a public system, or a private enterprise

Transit must be provided by a company/individual who is in the business of transporting people in a "commuter highway vehicle." Such a vehicle must have a seating capacity for six or more adults (not including the driver), and at least 80% of the of the vehicle's mileage must be from transporting employees to and from their place of work. Additionally, the vehicle must be carrying at least three passengers (not including the driver). Commuter highway vehicles may be owned or leased by an employer to be used by employees or a third-party provider for transportation purposes. Employees can also own and operate commuter highway vehicles.

Tax Savings

Federal income tax and social security (FICA) tax are not imposed on amounts set aside for qualified transportation expenses. Depending on state law, individuals may also avoid state and local income taxes on earnings set aside. The federal tax savings can be as much as 35.65% (28% federal tax plus 7.65% FICA). The following table summarizes the amount of savings available at different income levels, assuming maximum employee contributions are made to each reimbursement account (\$100 monthly contribution for mass transit).

Table 8 – Qualified Tax Rates for Transit Use

2001 Marginal Federal Income Tax Rate Plus FICA, Medicare	Annual Salary Deduction (\$100 per month for one year)	Tax Savings
22.65% (1)	\$1,200	\$272
35.65% (1)	\$1,200	\$428
37.45% (2)	\$1,200	\$450
41.05% (2)	\$1,200	\$493
1. 15 and 28% marginal rates plus 7.65% FICA (assuming salaries less than \$68,400). 2. 36 and 39.6% marginal rates plus 1.45% FICA HI (Medicare) tax for salaries over \$68,400.		

The employee's future social security benefits may be slightly lower because the amounts set aside for the transportation costs are not subject to FICA tax. In most cases, this reduction in the social security wage base will have a nominal effect on future social security benefits.

Transportation Demand Management (TDM)

Employers can offer many other incentives to promote transit and reduce congestion. They include:

- Staggering work hours and schedules.
- Providing preferential parking for carpools and vanpools.
- Offering flextime or compressing the work week (i.e. 40 hrs. /4 days).
- Lowering or eliminating parking rates for carpools and vanpools.
- Provide bicycle racks, lockers and shower facilities for persons who cycle.
- Allowing telecommuting and hoteling (a method where employees reserve and share desk space in the office, while primarily working from home).
- Establishing trip reduction goals and an annual report on its performance.
- Providing annual reports to the community, transit area or TMA.

TRANSPORTATION MANAGEMENT ASSOCIATIONS (TMAs)

A Transportation Management Association is an organized group applying carefully selected approaches to facilitate the movement of people and goods within an area. TMAs are often legally constituted and frequently led by the private sector in partnership with the public sector to solve transportation problems. The following contains more specific information regarding Transportation Management Associations.

History of TMAs

Transportation Management Associations were first created in the early 1980s, typically by groups of employers that banded together to advocate local transportation issues. Others formed to save money to combine services or were started by developers who were required to mitigate trips as a condition of a development agreement. Today TMAs take on a variety of forms and sizes depending upon geography, goals, management practices, products, services and specific markets.

TMA Goals

Most TMA goals include reducing traffic congestion and increasing mobility, while others include enhancement of facilities or land use planning and economic development. However, there are no right or wrong goals. Each TMA should adopt goals that its respective members can embrace and are worthy of its time and effort.

Track Record

Most of the earliest TMAs, those initiated by private businesses, have remained active and productive. Other, generally those that resulted from the push of a public agency, have struggled or ceased to exist.

Transportation Management Association Activities

Consultant - Act as a consultant to provide transportation advice and technical support for programs that can be implemented collectively or by individuals.

Watchdog – Observe and monitor conditions relating to transportation, access, business climate and other topics of interest.

Information Clearing House – Serve as providers of information to businesses on important issues and opt to engage in the dialogue.

Consensus Building – Serve as a forum for consensus building regarding the nature of a problem and take steps to address it. This empowers the membership to act effectively and as one voice.

Advocate – Many TMAs have developed credibility with local planning agencies, enabling TMAs to promote better long-term transportation and land use planning. These TMAs are often a persuasive voice in local planning, resulting in improvement in local transportation services and facilities.

Education – TMAs can serve as an educator to benefit a broad audience of employers, developers, public agencies and customers about the nature of transportation problems that exist in the service area and the range of solutions and strategies that can be implemented to address them.

TMA Funding Sources

Funding sources and amounts vary substantially and can include:

- Membership dues/assessments
- Fees for services/user fees
- Seed funding and Start-up grants
- Ongoing service operation and study grants
- Private contributions
- In-kind contribution (non-cash)
- Other revenue sources

What Warrants a TMA?

The experiences of many groups in establishing TMAs suggest that the following elements are characteristic of success in TMA Development:

- A well-defined problem
- Solutions and sufficient resources to carry them out
- Private and public sector support
- Sufficient target market(s)

VIII. TRANSIT SUPPORTIVE LAND PLANNING

Travel is a derived demand based on the desire to travel from one place, or land use, to another. For example, if people are provided employment options within walking distance to their homes, they will most likely choose to walk. If a school is centrally located within a community neighborhood and within biking distance from a home, children have the opportunity to bicycle to school. Opportunities like this can free children from the automobile, teach them independence and safety, and promote their physical fitness. It can also allow parents additional time, aside from transporting children in the car, and gives them the option to walk their children to school.

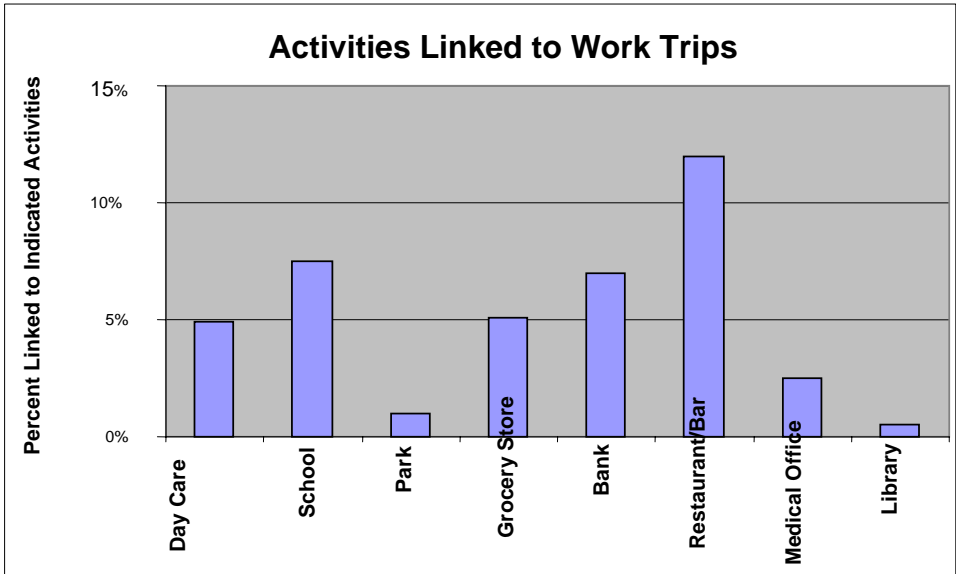
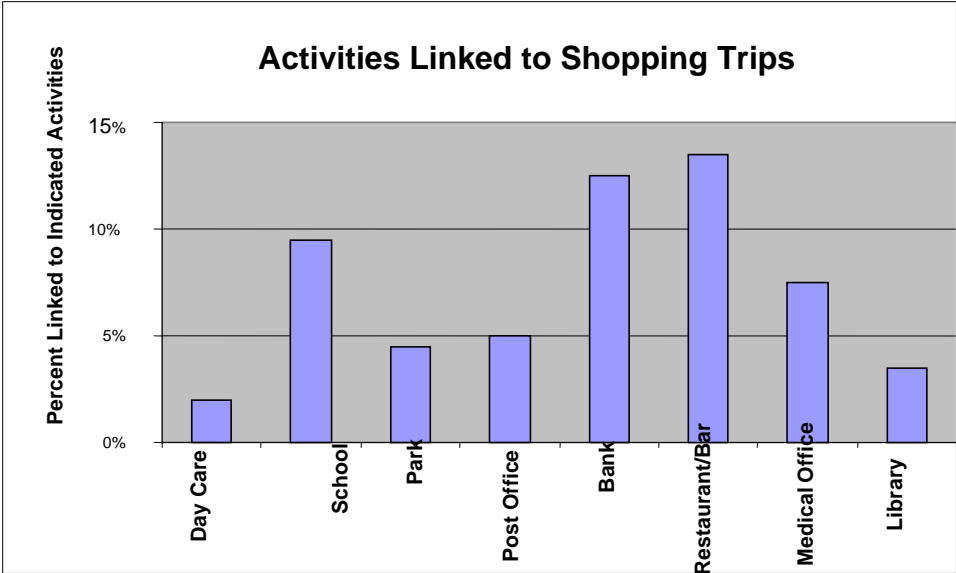
Since the current road system in Kane County is becoming severely congested, Kane County, with cooperation of local agencies, should adjust their local land use policies to promote accessibility by pedestrians, bicycles and transit. This is a unique approach since most land planning practiced in Illinois today is simply a reaction to developers' proposals. But proactive land planning, where the local communities in Kane County seek to moderate the need for automobile travel, will be a necessity in the 21st century due to higher infrastructure and natural resource costs.

Instead of solely trying to improve a roadway level of service to accommodate a new development, land planning should also reduce dependence on the automobile. This is accomplished by mixing land uses and providing direct and convenient paths for people to walk, bicycle and use transit between land uses.

Mixed Land Use

Exhibit 21 indicates that many trips are interconnected. For example, a person who is going to the shopping center for shoes, may also stop at the bank beforehand, and the restaurant afterwards. This trip chaining phenomena has grown substantially over the last 20 years as traffic congestion has become worse and time more valuable. In a mixed land use development, office, shopping space and service opportunities such as day care, banking, dry cleaning and restaurants are all provided within one area that is designed to promote walking from one use to another.

Exhibit 21 – Linked Trips



(Source: Household Travel Survey, Palm Beach County FL, 5/91 – 7/91)

Commercial Design

Exhibits 22 and 23 show two very different commercial developments. One is a typical suburban shopping center, completely dependent on automobile access. The other contains an example that promotes transit accessibility and walking. This commercial development would contain banks, restaurants, shops, and possibly public uses such as libraries or government offices. In addition, there could be office use and residential opportunities on upper floors. This type of development should be promoted in Kane County by providing density bonuses, impact fee discounts and expedited approval to developers who commit to these transit oriented developments.

EXHIBIT 22 – CONVENTIONAL SHOPPING CENTER



(Courtesy of Conservation Design Forum, Elmhurst, IL.)

EXHIBIT 23 – TRANSIT ORIENTED SHOPPING CENTER



(Courtesy of Conservation Design Forum, Elmhurst, IL.)

Residential Design

Exhibits 24 and 25 contain two different development configurations for the same 40 acre suburban development site. Both development proposals result in the same number of single family dwelling units. However, the development in Exhibit 25 provides opportunities for persons to walk, bicycle and access a transit system on the adjacent arterials. Therefore, by only revising the land development design, transit use can be promoted.

EXHIBIT 24 – CONVENTIONAL RESIDENTIAL SUBDIVISION



(Courtesy of Conservation Design Forum, Elmhurst IL)

EXHIBIT 25 – TRANSIT ORIENTED RESIDENTIAL DESIGN



(Courtesy of Conservation Design Forum, Elmhurst IL)

As shown, the street layout is important for transit accessibility and walking. “Curvy, discontinuous streets are no problem for automobiles at 35 miles an hour, but make trips too long for pedestrians at 3 miles an hour. Such streets force buses to backtrack and take indirect routes, and make it harder to provide service within easy walking distance of residents” (R. Ewing, *Transportation and Land Use Innovations*, 1997). It does not take a ubiquitous system of grid streets to establish interconnected streets. Street systems can include curves and land form characteristics. Yet, they should maintain connections within the neighborhood and directly connect to the adjacent arterials, neighborhoods and other land uses.

Density of Development

Exhibit 26 contains a comparison of the urbanized or developed land in 1970, 1980 and 1990. As illustrated, Kane County has experienced significant urbanization in the Fox Valley Region and to the west of the Fox River. Most of this growth has been suburban, typified by cul-de-sac residential development, with indirect roadways, creating an environment that is not conducive to walking and transit. **Exhibit 27** shows that the average persons per acre of developed land in Kane County has reduced from 4.0 persons per acre in 1972 to 2.7 in 1997.

As shown previously, **Exhibit 6b** contains research indicating the types of transit service supportable by different densities of development. If residential land uses are provided at densities over seven dwelling units per acre, various transit services have been shown to work. If land uses are mixed and located along corridors, fixed route transit service can be cost effective.

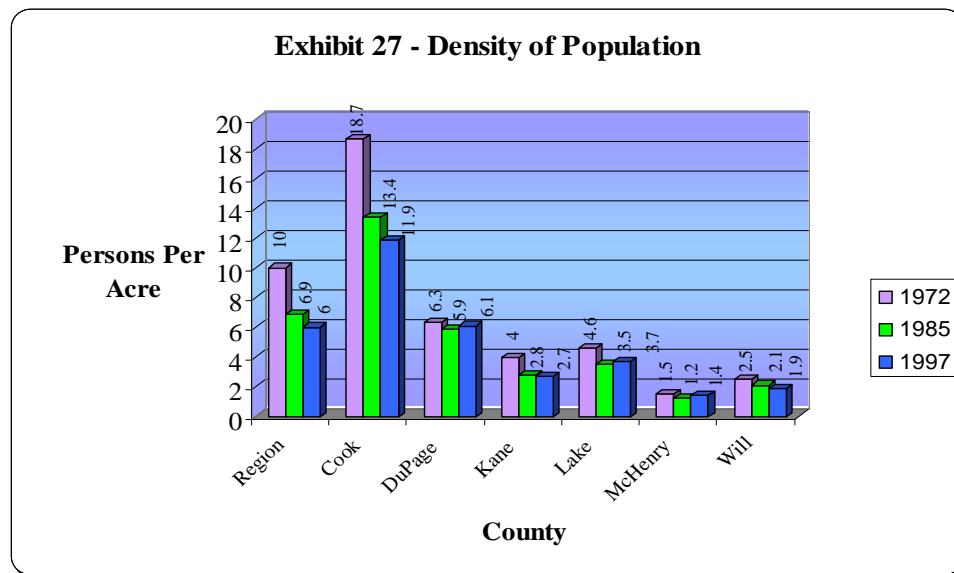
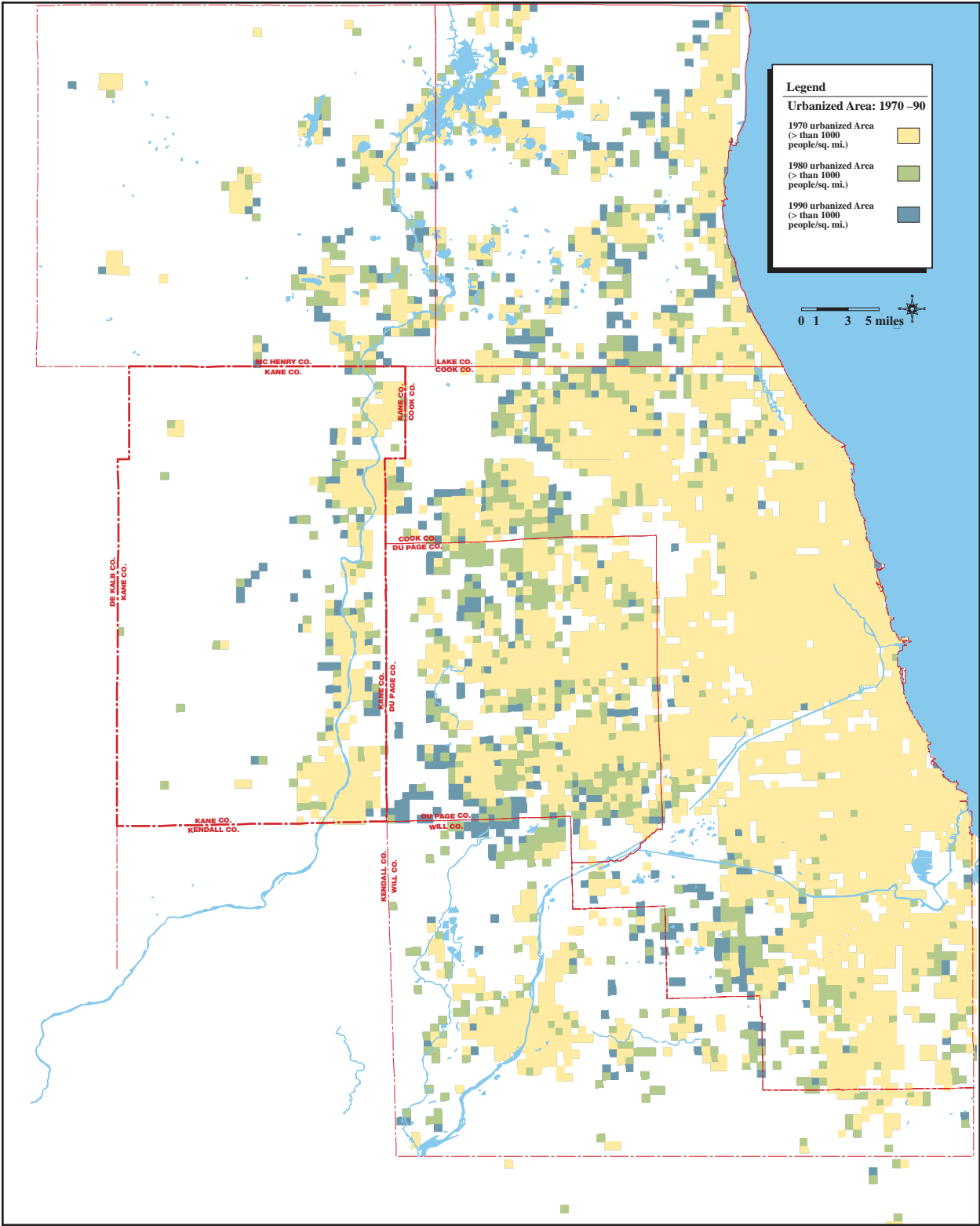


EXHIBIT 26 – GROWTH IN URBANIZED AREA: 1970 – 1980 – 1990



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999

IX. TRANSIT RECOMMENDATIONS

Kane County requires a comprehensive system of transit opportunities in order to provide transportation options for its citizens. These options can be realized by: encouraging and requiring government agencies and employers to cooperate with CATS and Pace in their carpool and vanpool efforts; encouraging and supporting communities to adopt land use planning policies to support walking, biking and transit; and establishing a comprehensive, county-wide system of transit opportunities. This would include establishing Transportation Hubs, Transit Centers and park-n-ride lots strategically placed throughout the county to support a multi-modal transit system that includes walkers, bicyclists, taxi service, carpool, vanpool, a variety of bus service, light rail and commuter rail.

TRANSPORTATION HUBS

Transportation Hubs are an extension of the existing transportation facilities in downtown Elgin and Aurora. They are comprehensive and full service centers that provide a full range of transportation opportunities. They are a convergence point for the entire transportation system in Kane County and provide direct transit links to the larger transportation system in the Chicago Region. This larger system includes the proposed EJ&E passenger service, the Northwest Corridor transit plan near I-90, a potential passenger service rail line to Belvidere and Rockford, and potential HOV lanes on I-90 and I-88. Transportation Hubs are accessible by pedestrians, bicyclists, and driving and would utilize a transit system of carpools, taxis, paratransit (vanpools, shuttles, and express buses), fixed route buses, bus rapid transit, light rail and rail.

- The Greater Aurora Transit Area and the Greater Elgin Transit Area contain existing transportation centers that could require enhancement to fulfill their definition as a Transportation Hub. *New plans for these two facilities would include a system to support all forms of transit.*
- The Geneva Metra station is located in a prime location near downtown Geneva. *A comprehensive transit plan should be created for the Geneva station for its use as a Transportation Hub.*
- *There is potential for a Transportation Hub in Huntley given its location on the Milwaukee West Line, its proximity to I-90, and the fact that it is experiencing high population and employment growth.*

TRANSPORTATION CENTERS

Transportation Centers are smaller facilities with more limited transportation service. They are viewed as connections between park-n-ride lots in smaller outlying local communities and Transportation Hubs. *These types of facilities would be located at the existing Metra rail stations at Big Timber and National Street and the proposed Metra rail stations in Elburn,*

LaFox, Sugar Grove, Montgomery, Hampshire, South Elgin, St. Charles and one or two strategic locations in the Upper Fox Transit Area.

It is important to remember that people avoid riding transit due to high wait times. Therefore, when transfers are unavoidable, they should be timed transfers to avoid waiting time. Additionally, full selection of retail and other services should be provided at transfer points such as day care, banking and dry cleaning. Transportation Centers should incorporate transit oriented development practices.

PARK-N-RIDE LOTS

A ubiquitous system of park-n-ride lots should be planned and developed throughout Kane County. These lots require a medium density area of residential development located next to one or two more heavily traveled corridors with a longer commute to an employment area. According to a study titled *The Location and Design of Safe and Convenient Park-And-Ride Lots*, by Aronson and Homburger in 1983, the typical distance from a person's home to a park-n-ride lot is about three miles. The commute from the park-n-ride lot to an employment area is typically 15 to 50 miles. This distance appears very conducive to the success of potential park-n-ride lots in Kane County since the average home to work trip in Kane County is 12.3 miles. The park-n-ride lots should be accessible by pedestrians, bicyclists, and drivers. They would provide automobile ridesharing opportunities and as demand for this location becomes greater, an opportunity for persons to utilize the larger transit system of paratransit (vanpools, shuttles, and express bus), fixed route bus, and bus rapid transit.

Park-n-Ride lots can be located at existing shopping centers, churches and other locations where parking is available throughout the day. They offer additional opportunities for accessing the Metra system. When land within a station area is land-locked and new parking is not feasible, park-n-ride lots with properly planned bus service can increase the use of Metra service by offering another means of station access. An arrangement such as this not only reduces the number of cars on the road system, it utilizes parking lots that remain empty throughout the day.

Studies of park-n-ride lots have shown the following features that are most important to people:

- Priority or quick access to and from the park-n-ride lot by automobile
- Security
- Lighting
- Bus Service
- Vans
- Pay Telephones
- Sheltered Waiting Areas
- Trash Cans
- Bus/Carpool Information
- Landscaping

- Vending Machines
- Bike Racks
- Day Care Facilities
- Other Retail Facilities (coffee, banking (ATM), dry cleaners, etc.)

STEPS TO ESTABLISH PARK-N-RIDE LOTS

The following steps are necessary in an effort to provide park-n-ride facilities in Kane County:

- *Work directly with CATS and Pace to establish a system of potential park-n-ride users and locations.*
- *Discuss the park-n-ride concept with each local community in order to discuss and establish the potential benefits and to obtain their support.*
- *Identify potential funding sources for park-n-ride bus service.*
- *Obtain from the local communities ideas regarding their special travel needs and potential park-n-ride lot locations. Community input and support is imperative since their first hand knowledge will direct efforts in determining optimum park-n-ride locations. Location options include existing parking lots that have available spaces during the day (i.e. churches, shopping centers), community owned property or property that can be conveniently obtained, leased or used.*
- *Petition the local communities to change their zoning ordinances to allow shared parking for park-n-ride facilities and the current or future land us.*
- *Identify potential areas that appear to make the most sense. Criteria for this include informal park-n-ride activity, residential density surrounding potential park-n-ride locations, proximity of park-n-ride locations to major arterials, daily traffic volumes on the arterials, level of service on the arterials, distance from and employment population at potential destinations.*
- *Analyze potential sites to determine the best location. This will include criteria such as site availability (i.e. purchase, lease, or use), lot size, ease of access into and out of park-n-ride facilities for automobiles and transit vehicles, existing transit service, road congestion that may discourage use, bike and pedestrian access, expansion opportunities, visibility, and safety.*
- *Secure locations for park-n-ride lots. This could include negotiations with respect to property purchase, lease agreements, easements, driveway access issues, incentives, insurance and liability issues.*
- *Promote and market the park-n-ride locations.*
- *Operate and maintain the park-n-ride locations.*

HIGH OCCUPANCY VEHICLE LANES

The right-of-way widths on the newer major arterials such as Randall Road and Kirk Road exceed 120 feet, and often are planned to reach 160 to 200 feet. These large widths allow the potential to establish designated lanes, or even separate facilities for HOV lanes used for carpooling, vanpooling, express bus, bus rapid transit, and even light rail systems. Many areas of the U.S. have successfully implemented arterial HOV lanes that have proven to encourage carpooling and reduce congestion.

This system could be staged in the following sequence:

- *Identify arterials that may qualify for HOV use given their width, projected future congestion levels and potential connectivity to a larger transit or HOV system.*
- *Designate these arterials as future HOV facilities.*
- *Identify congestion points or intersections within these corridors.*
- *Analyze and implement HOV by-pass lanes around these congestion points.*
- *Locate park-n-ride facilities at major arterials and expressways and connect HOV lanes to park-n-ride facilities.*
- *Promote their use throughout the Chicago region for a system of interconnected HOV facilities.*

BUS RAPID TRANSIT

Bus Rapid Transit (BRT) should be implemented within Kane County. BRT are buses that travel both on an exclusive guideway and also can travel on roadways, similar to a typical bus. These buses are much less expensive and more flexible than light rail systems. This type of system could travel on designated HOV lanes on the Randall Road and Kirk Road corridors, or even along the right-of-way of existing or abandoned rail lines for faster line haul service within the Fox River Valley.

In Pittsburgh, Pa, BRT has been operating for about 24 years. One line, the East Busway, was built along an active railroad right-of-way. Pittsburgh has established a system of BRT with support by automobile use. “As Port Authority and others have learned, a well designed busway can serve a variety of functions that include use as a collector of suburban routes, as shuttle along a guideway, as a downtown circulator and as a convenience for riders who live near busways.” The Pittsburgh BRT system is soon to have over 2,500 parking spaces associated with the system, recognizing that many people do not live along the corridor and have access to automobiles. “We don’t have the kind of resources in public transit today that we can simply keep building new routes into all parts of the service areas. However, if we are astute, we can identify major travel corridors, establish park-n-ride facilities where we can concentrate our service, and make that service frequent and attractive” (quote from Paul Skoutelas of the Port Authority of Allegheny County within an article by Peter Longini of Mass Transit Magazine, March 2001).

EXHIBIT 28– BUS RAPID TRANSIT



(Source: Mass Transit Magazine)

TRANSPORTATION MANAGEMENT ASSOCIATIONS

Transportation Management Associations should be created within Kane County to support specific transit initiatives, specifically the Randall/Orchard Road and Kirk Road corridors. TMAs could be created for each transit area.

RANDALL/ORCHARD ROAD CORRIDOR

To create solutions for decreasing traffic impacts, transit solutions for Randall Road should include:

- *The creation of a **Randall Road Transportation Management Agency**. This would be a public/private partnership to include employers, developers, Kane County, local agencies, Pace, CATS, possibly Metra and other appropriate stakeholders. The TMA should work directly with Metra, Pace and CATS to fully analyze the transit market within the Randall Road corridor*
- *Creation of a **Randall Road Corridor Plan** that will coordinate land use development and transportation in order to reduce dependence on automobile use and increase the potential for walking, biking and transit use.*
- *The designation of Randall Road, with its wide right-of-way to include separate HOV, Bus Rapid Transit and/or Light Rail lanes. This facility should be phased and may initially include HOV by-pass lanes at congested intersections.*
- *Provision of an on demand east/west shuttle service between the older downtown areas of Elgin, South Elgin, St. Charles, Geneva and Batavia and the developed and developing areas of Randall Road.*
- *Provision of a peak hour shuttle service between the Metra stations at Big Timber Road, downtown Elgin, and Geneva and the retail/employment areas on Randall Road.*
- *Establishment of transit service from strategic locations on Randall Road to O’Hare Airport, the Schaumburg employment/retail areas and the I-355 & I-88 interchange area.*

- *The connection of the Randall Road transit system to the Northwest I-90 Corridor and the I-88 Corridor.*
- *Establishment of a fixed route service along the Randall Road corridor, providing door to door service to the shopping centers due to their current lack of walkability.*
- *Establish park-n-ride lots at strategic locations on Randall Road. These lots would preferably be located at the intersection of two high volume arterials. Priority or separate access facilities should be provided for park-n-ride ingress and egress and should be tied directly to HOV lanes to avoid traffic congestion.*

KIRK ROAD CORRIDOR

A Kirk Road Land Use and Transportation Corridor Plan should be created to establish plans for potential transit systems along the corridor. Some transit solutions could include:

- *The creation of a **Kirk Road Transportation Management Agency**. This would be a public/private partnership to include employers, developers, Kane County, local agencies, Pace, CATS, possibly Metra and other appropriate stakeholders. The TMA should work directly with Metra, Pace and CATS to fully analyze the transit market within the Kirk Road corridor.*
- *Revision of land use and zoning designations in order to promote the development or redevelopment of property within walking distance of the major employers. These land uses should include restaurants, banks, retail, day care and other services that employees can walk to and from in the morning, lunch, and in the evening. Residential land uses would also be appropriate.*
- *Creating a shuttle or express bus service between the following locations: West Chicago Metra Station, Geneva Metra Station, St. Charles employment area at IL 64 & Kirk Road, and the Batavia employment area on Kirk Road between Wilson Street and Fabyan Parkway.*
- *Promotion of the potential passenger rail service between West Chicago, the St. Charles employment area at IL 64 & Kirk Road, and the high employment/retail area at IL 64 and Randall Road. This was defined as Extension I in this reports Metra section. The shuttle service between the West Chicago Metra station and the St. Charles employment area could be an initial step for the establishment of passenger rail service between these two locations.*
- *Designating Kirk Road to contain HOV, Bus Rapid Transit or Light Rail lanes. This facility should be phased and may initially include HOV by-pass lanes at congested intersections.*
- *Creation of traffic signal preemption for shuttle, express or fixed route bus service on Kirk Road.*

LAND USE PLANNING

The following are recommendations with respect to land use planning efforts in Kane County:

- *Local communities should incorporate proven Transit Oriented Development (TOD) and Transit Corridor Planning (TCP) methods that could be applied to new developments. These methods would promote land use development techniques that encourage walking, biking, and transit use.*
- *Local communities should incorporate the TOD and TCP methods into their comprehensive plans, zoning and subdivision ordinances.*
- *Local communities should encourage TOD and TCP methods with density bonuses, transfer of development rights, fast track development review and other proven methods.*
- *Local communities could create intergovernmental agreements for the sharing of tax revenue for new projects. This will reduce the potential for poor planning caused by competition between jurisdictions.*
- *Enacting parking charges and/or parking limitations. These methods have been proven to be the most effective ridesharing incentive. “Solo commuting can be reduced by 20 percent or more by instituting market-rate parking charges,” (D.C. Shoup and R.W. Willson, “Employer-Paid Parking: The Problem and Proposed Solutions, Transportation Quarterly, Vol. 46, 1992, pp. 169-192).*
- *New development should provide a minimum parking space allotment, not maximum. Other areas on-site could be land banked for the construction of more parking spaces if necessary. “At suburban office sites, parking supply has been found to exceed peak demand by 30 percent or more,” (Gruen Gruen + Associates, Employment and Parking in Suburban Business Parks: A Pilot Study, Urban Land Institute, Washington D.C., 1986, pp. 13-15).*

CARPOOL AND VANPOOL

The following are recommendations with respect to carpooling, vanpooling and other similar transit efforts in Kane County:

- *Appeal for Pace and CATS to coordinate their efforts on carpooling and ridesharing. Their pooling of resources and knowledge will improve results.*
- *Local communities or Transit Areas should enact employer trip reduction strategies.*
- *Employers should freely give employee address information to Pace and CATS in order for them to create a viable countywide data base of potential system users.*
- *Strong marketing efforts created by professional marketing firms are needed to promote carpooling, vanpooling and transit use in Kane County.*

ACTIVITY CENTERS

There are a large number of retail, recreational and institutional centers throughout Kane County. They are located in traditional downtowns such as Geneva and Elgin, and the high suburban growth areas on Randall Road. These areas provide the following transit opportunities:

- *Elderly on-demand paratransit to and from major shopping centers. This service should be provided on weekends and evenings.*
- *Direct paths to and from these centers for walking and biking.*
- *Shuttle service between these centers and residential markets. Incentives to utilize the service such as discount vouchers at stores could be incorporated.*
- *A local shuttle service to the activity centers that would also connect other activity points in the transit areas.*
- *Excess activity center parking lots utilized as park-n-ride lots.*

TRANSIT AREAS

Each of the five transit areas have unique transit requirements specific to their needs. However, there are many similarities, especially the communities along the Fox River. The following are recommendations that can be applied to all of the transit areas:

- *Create a TMA made up of community staff, Kane County, private employers and other appropriate stakeholders. The TMA would be a cooperative group to solve transportation problems in the transit area and to facilitate the use of transit or non-automobile forms of transportation. One focus of the TMA would work on providing carpool, vanpool, and express bus opportunities to major employment areas. Direct contact and participation by major employers will be necessary.*
- *Apply Transit Oriented Development and Transit Corridor Planning methods for the western suburban growth areas.*
- *Support Pace's Vision 2020 planning concepts to improve mobility in the metropolitan region.*
- *Work with CATS and Pace on potential park-n-ride lot locations and operations.*
- *Provide shuttle service from remote park-n-ride lots to Metra stations.*
- *Petition the Illinois Department of Transportation and the Illinois State Toll Highway Authority to investigate the feasibility of HOV lanes or HOV by-pass lanes on their existing and proposed facilities.*
- *Establish an express bus service from the transit area to O'Hare Airport, Schaumburg, and other high demand travel destinations in the Chicago region.*
- *Promote transit system expansion to include Metra commuter rail service at new stations.*
- *All new Fox River Bridge crossings should be accessible to people walking, biking and using transit. Transit connections to the proposed EJ&E passenger line should be established.*

The Greater Elgin Transit Area

The Greater Elgin Transit Area includes the City of Elgin, the Village of South Elgin, a portion of the Village of Bartlett within Kane County, and unincorporated areas of Kane County. Appendix A contains population and employment data for this area. This area has experienced 42 percent population growth over the last 10 years. Employment is expected to increase almost 50 percent between 1990 and 2020, climbing to between 85,000 and 95,000 employees in the area.

The following are transit opportunity recommendations for the Greater Elgin Transit Area:

- *Work with the Human Service Departments and the Grand Victoria Foundation to connect low income residents of Elgin to employment in the Greater Elgin Transit Area. Also, work on connecting Chicago low income residents to employment in the Greater Elgin Transit Area.*
- *Focus on transit service between the Greater Elgin Transit Area and Schaumburg, St. Charles, O'Hare Airport, Hoffman Estates, and Bartlett.*
- *Study the establishment of a local area shuttle transit service to serve the employment and retail areas of the Greater Elgin Transit Area. This service should have connections to local community services in the Upper Fox Transit Area and the Tri Cities Transit Area, downtown casinos, and Randall Road. It should also provide flexible paratransit service for the elderly.*
- *Promote Metra passenger service to the Village of Huntley, Marengo, Belvidere and Rockford. Promote Transit Oriented Development Guidelines for the potential stations.*
- *Promote and cooperate with Pace's Vision 2020 restructuring of the Elgin transit system.*
- *Participate in the Randall Road and Kirk Road TMAs.*

The Greater Aurora Transit Area

The Greater Aurora Transit Area includes the City of Aurora, the Village of North Aurora, the Village of Montgomery, the Village of Sugar Grove, and unincorporated areas of Kane County. This area has experienced 31 percent population growth from 1990 to 2000 and employment is expected to increase in this area by approximately 80 percent between 1990 and 2020 according to projections by the Northeastern Illinois Planning Commission (NIPC). The Greater Aurora Transit Area is expected to have over 100,000 jobs by the year 2020.

The following are transit options for the Greater Aurora Transit Area:

- *Focus on transit service between the Greater Aurora Transit Area and the I-355/I-88 Interchange area, St. Charles, Batavia, Naperville, the I-88 Corridor, Joliet, and O'Hare Airport. Work directly with the East-West Corporate Corridor Association (EWCCA) on employer transportation incentives.*

- *Promote and work with Pace to provide park-n-ride facilities in both Sugar Grove and Montgomery with connecting shuttle service to existing Metra stations. Promote transit-oriented development guidelines for these park-n-ride facilities and future station locations should Metra commuter rail service be established.*
- *Establish a local community shuttle to serve the employment and retail areas of the Greater Aurora Transit Area. This service should have connections to local community shuttles in the Tri Cities Transit Area, Sugar Grove, the Aurora Transportation Hub, and the downtown casinos. It should also provide flexible paratransit service for the elderly.*
- *Participate in the Randall Road and Kirk Road TMAs.*
- *Promote Orchard Road and Randall Road as a transit corridor with appropriate land use and development patterns. Create a transit connection between Orchard Road and the Aurora Transportation Hub, possibly via New York Street.*
- *Based on Pace Vision 2020, a restructuring of transit service in the Greater Aurora Transit Area should be considered.*

The Tri Cities Transit Area

This area includes the Cities of Batavia, Geneva and St. Charles, the Village of Wayne and unincorporated areas of Kane County. This area has experienced 37 percent population growth from 1990 to 2000 and employment is expected to increase in this area by approximately 65 percent between 1990 and 2020 according to projections by the Northeastern Illinois Planning Commission (NIPC). The Tri Cities Transit Area is expected to have over 60,000 jobs by the year 2020.

The following are transit options for the Tri Cities Transit Area:

- *Establish the Geneva Metra Station as a Transportation Hub.*
- *Promote the extension of the Union Pacific Rail Line/St. Charles from West Chicago, through the St. Charles employment area, ending at Randall Road. Create Transit Oriented Design Guidelines for these potential Metra stations in St Charles.*
- *Focus on transit service between the Tri Cities Transit Area and the St. Charles employment area, West Chicago, North Aurora, and O'Hare Airport.*
- *Establish an express bus service from the Tri Cities Transit Area to O'Hare Airport.*
- *Establish a local community shuttle to serve the employment and retail areas of the Tri Cities Transit Area. Connections between Randall Road, the downtown areas of the local communities and other major origins and destinations in the Tri Cities Transit Area are important. This service should have connections to local community shuttles in the Greater Aurora Transit Area and the Greater Elgin Transit Area, and would provide flexible paratransit service for the elderly.*
- *Promote more retail and residential opportunities near the Kirk Road employment area.*

- *Promote more employment opportunities near the Geneva Metra Station.*
- *Participate in the Kirk Road and Randall Road TMAs.*

The Upper Fox Transit Area

The Upper Fox Transit Area includes the Villages of Carpentersville, East Dundee, West Dundee, Sleepy Hollow, Gilberts, Pingree Grove, portions of Algonquin and Barrington Hills within Kane County, and unincorporated areas of Kane County. This area has experienced 43 percent population growth from 1990 to 2000 and employment is expected to increase in this area by approximately 110 percent between 1990 and 2020 according to projections by the Northeastern Illinois Planning Commission (NIPC). Algonquin has doubled its population over the last 10 years from 11,663 to 23,276.

The following are transit options for the Upper Fox Transit Area:

- *Work with local agencies, human services and area employers to provide transit opportunities for lower income persons in the Upper Fox Transit Area to employment locations in the Elgin Transit Area.*
- *Focus on transit service between the Upper Fox Transit Area and Elgin, the I-90 Corridor, Hoffman Estates, Barrington, the IL 72 Corridor, and O'Hare Airport.*
- *Establish a local community shuttle to serve the retail areas of the Upper Fox Transit Area. Connections between Randall Road, the downtown areas of the local communities, and other major origins and destinations in the Upper Fox Transit Area are important. This service should have connections to local community shuttles in the Greater Elgin Transit Area, and should provide flexible paratransit service for the elderly.*

The Rural Villages Transit Communities

The Rural Villages include the Villages of Elburn, Hampshire, Huntley, Lily Lake, Virgil, Burlington and Maple Park, Pingree Grove, Plato Center, Virgil, and the unincorporated areas of Kane County. The combined villages have experienced 12 percent population growth from 1990 to 2000. However population and employment are expected to increase in the villages by approximately 610 percent (from 7,607 people to 54,154) and 390 percent (from 4,978 to 24,479 employees) between 1990 and 2020 according to projections by the Northeastern Illinois Planning Commission (NIPC). Elburn and Huntley have grown 116 and 134 percent respectively between 1990 and 2000. Huntley employment is expected to grow from 2,967 in 1990 to 18,854 jobs in 2020.

The following are transit options for the Rural Village Transit Communities:

- *Promote Metra passenger service to the Village of Huntley, Marengo, Belvidere and Rockford. Promote Transit Oriented Development Guidelines for the potential stations.*
- *Promote Transit Oriented Design Guidelines for the all of the Village communities.*

**Kane County
Transit Opportunity Assessment Study**

- *Maintain Route 47 as a Rural Highway. Perform a corridor plan for this roadway, maintaining land use development in a rural village character and the provision of transit options. Work with McHenry County on their future plans for Route 47 and expand on any connectivity potential for land use and transportation.*
- *Establish park-n-ride lots within the local communities for long range vehicular trips. Allow for expansion of transit services for potential future growth.*
- *Provide flexible paratransit opportunities for the elderly to and from the larger communities to the east.*

X. FUNDING

The following table represents funding opportunities for Kane County on a Federal, State and Local level. Kane County should coordinate with the Transit Area TMAs and local communities to secure appropriate funding mechanisms for transit projects.

Table 20 – Transit Funding for Northeastern Illinois

#	Program Name	Source of Funding	Eligibility	FY 2002 Funding (\$ in millions)	Comment on Kane County Eligibility
	County/Municipality				
1	Local Funding Resources	All county, township and municipal taxing authority that can be dedicated to transportation including sales and gas tax revenue, property tax revenue (including special assessments and tax increment financing), impact fee revenues, gambling boat revenues and special service areas	General	N/A	
	RTA/Service Boards				
2	RTA Operations Funding	RTA sales tax/State Public Transportation Fund (PTF; see IDOT # 23 below)/ other miscellaneous	Must be one of the three service boards (CTA, Metra, & Pace) for expenditure on operating expenses	\$724.6	Kane County expenditure must be part of a service board operating activity
3	State Reduced Fare Reimbursement (See also IDOT #25 below.)	State general revenues	Must be one of the three service boards (CTA, Metra, & Pace) to cover lost revenues from reduced fares for elderly, disabled, and student riders	\$40.0	Kane County expenditure must be part of a service board operating activity
4	RTA Transfer Capital	Excess RTA sales tax revenue not needed to fund service board operating deficits and other discretionary funds.	Must be one of the three service boards (CTA, Metra, & Pace) for expenditure on capital projects	\$58.6	Kane County expenditure must be part of a service board capital activity
5	RTA Discretionary Capital	RTA (principally RTA sales tax) and State funds (principally PTF, see IDOT #23 below)	Must be one of the three service boards (CTA, Metra, & Pace) for expenditure on capital projects	0.0	Kane County expenditure must be part of a service board capital activity
6	IDOT Capital Grants (See also IDOT #23 below.)	State bonds and state general revenue	Must be one of the three service boards (CTA, Metra, & Pace) for expenditure on capital projects	\$65.3	Kane County expenditure must be part of a service board capital activity
7	FTA Capital Grants (See also FTA ## 29-32 below)	Federal general and motor fuel tax revenue	Must be one of the three service boards (CTA, Metra, & Pace) for expenditure on capital projects	\$443.5	Kane County expenditure must be part of a service board capital activity

**Kane County
Transit Opportunity Assessment Study**

#	Program Name	Source of Funding	Eligibility	FY 2002 Funding (\$ in millions)	Comment on Kane County Eligibility
8	Service Board and Local Community Capital Funding	Service Board funds, primarily fare revenue, and contributions to service boards from local communities	Project needs to be in the service board and RTA capital budgets	\$17.7	The service boards could allocate funding that they have sole authority over to Kane County for transit improvements related to the service boards' operation as long as the project is in RTA & service board capital budgets.
9	RTA Bonds	RTA sales tax revenue/State general revenues/miscellaneous revenues	Must be one of the three service boards (CTA, Metra, & Pace) for expenditure on capital projects	\$344.5	Kane County expenditure must be part of a service board capital activity
10	Regional Technical Assistance Program (RTAP)	RTA's Capital & Technology Program which includes various RTA, state, and federal sources of funds	Provides funding for consultation services, technical support, planning assistance, information services, as well as presentations, training and workshops on transit planning issues. Local public agencies including counties are eligible to be direct grant recipients.	\$2.3	Kane County is an eligible direct grant recipient
11	Transit Coordination	RTA's Capital & Technology Program which includes various RTA, state, and federal sources of funds	RTA sponsored project involving a series of studies aimed at enhancing mobility by improving passengers transfer opportunities between CTA, Metra, and Pace.	\$.8	The project may result in projects recommendations that could benefit Kane County.
12	RTA Transit Technology	RTA's Capital & Technology Program which includes various RTA, state, and federal sources of funds	RTA sponsored projects to improve transit service through the use of intelligent transportation systems such as signal priority, real time schedule information, and various internet based transit information systems.	\$3.3	Kane could seek funding from RTA for eligible projects
13	FTA Job Access & Reverse Commute (JARC) (See also CATS # 15 FTA # 33 below)	Federal motor fuel tax and general revenue	These funds are primarily earmarked by Congress. In FY 2002, DuPage County received an earmark of \$500,000 and Pace received an earmark of \$561,000. Funding is for developing transportation services to connect welfare recipients and low-income persons to employment and support services.	\$1.6 million	See FTA # 33 below.

**Kane County
Transit Opportunity Assessment Study**

#	Program Name	Source of Funding	Eligibility	FY 2002 Funding (\$ in millions)	Comment on Kane County Eligibility
	CATS				
14	Congestion Mitigation and Air Quality (CMAQ)	Federal motor fuel tax revenue	Finances projects that will contribute to the attainment of national ambient air quality standards in designated non-attainment areas. The CMAQ Project Selection Committee selects projects to be implemented from among the submitted projects. Generally you must be a public agency, including counties, to receive funds.	\$78.2	Kane County is an eligible direct grant recipient
15	Job Access and Reverse Commute (JARC) (See also RTA # 13 above & FTA # 33 below)	Federal motor fuel tax and general revenue	Projects funded with federal JARC grants must be in the CATS JARC program. These funds are primarily earmarked by Congress. In FY 2002, DuPage County received an earmark of \$500,000 and Pace received an earmark of \$561,000. Funding is for developing transportation services to connect welfare recipients and low-income persons to employment and support services.	\$1.6 million	See FTA # 33 below.
16	Surface Transportation Program (STP)	Federal motor fuel tax revenue	The STP provides flexible funding that may be used by States and localities for projects on any Federal-aid highway, including the NHS, bridge projects, on any public road, transit capital projects, and intracity and intercity bus terminals and facilities.	(See next line)	(See next line)
17	STP Local	(See above)	For local municipalities (see above)	\$84.7	Municipalities within Kane County are eligible for these funds.
18	STP Counties	(See above)	For counties (see above)	\$3.2	Kane County is eligible for these funds

**Kane County
Transit Opportunity Assessment Study**

#	Program Name	Source of Funding	Eligibility	FY 2002 Funding (\$ in millions)	Comment on Kane County Eligibility
19	Unified Work Program	Various federal and state planning funds	The <i>UWP</i> identifies and coordinates a program of needed planning tasks limited by identified fiscal constraints. Tasks included in the <i>UWP</i> range from long-range plan development to project-specific planning to project programming.	\$25.2	Kane County is eligible to receive UWP funds for transit planning activities.
	IDOT¹				
20	State Technical Studies	State general revenues	For miscellaneous transit technical studies	\$.1	Kane County is eligible to receive these funds
21	Federal State Planning & Research Funds	Federal general revenues	These funds may be used for a variety of purposes such as planning, technical studies and assistance, demonstrations, management training, and cooperative research. In addition, a state may authorize a portion of these funds to be used to supplement metropolitan planning funds allocated by the state to its urbanized areas, as the State deems appropriate.	\$.5	Kane County is eligible to receive these funds
22	Operation Green Light	IDOT Series B Bond Fund	This program finances comprehensive, innovative efforts to control and reduce urban congestion. Examples of programmed projects include: traffic signal preemption for transit vehicles; improved vehicular and bicycle access to rail stations; expanded parking at commuter rail stations; pedestrian access enhancements; and commuter rail grade crossing improvements.	\$15.0	Kane County is eligible to receive these funds
23	Northeastern Illinois Capital Grants (See RTA #6 above)	IDOT Series B Bond funds and State general revenue	Funds are available to the RTA and service boards, primarily to match federal grants	\$80.0	See RTA # 6 above
24	Public Transportation Fund – RTA (See RTA #2 above)	State general revenues	State assistance to the RTA for discretionary funding, primarily used for service board operations	\$173.0	See RTA # 2 above

¹ The funding amounts may be duplicative or, due IDOT's fiscal year of July 1 to June 30, inconsistent with related line items

**Kane County
Transit Opportunity Assessment Study**

#	Program Name	Source of Funding	Eligibility	FY 2002 Funding (\$ in millions)	Comment on Kane County Eligibility
25	Fare Reimbursement – RTA (See RTA #3 above)	State general revenues	State assistance to the RTA for distribution to the service boards to cover lost revenues from reduced fares for elderly, disabled, and student riders	\$40.0	See RTA # 3 above
26	FTA Formula Grants for the Elderly and Persons with Disabilities	Federal general and motor fuel tax revenue	These funds provide capital assistance for transportation for elderly persons and persons with disabilities. Eligible capital expenses may include, at the option of the recipient, the acquisition of transportation services by a contract, lease, or other arrangement. While the assistance is intended primarily for private non-profit organizations, public bodies that coordinate services for the elderly and persons with disabilities, or any public body that certifies to the State that there are no non-profit organizations in the area that are readily available to carry out the service, may receive these funds.	\$3.5 ²	Kane County can apply directly to IDOT for these funds
27	Corridor Planning Grant Program	State general revenues	Beginning in 2000 this is a five-year, \$15 million initiative provided to local governments to develop plans that promote the efficient use of transportation facilities and an improved quality of life. It will fund planning activities that promote the integration of land use, transportation, and infrastructure improvement in major transportation corridors in Illinois.	\$3.0	Kane County can apply for these funds through CATS.
28	Legislative Initiative	State general revenues	Members of state legislature frequently earmark appropriations to target funding to particular projects. This frequently occurs in the IDOT appropriation bill.	?	Kane County could seek an earmark through the state legislature
	Federal Transit Administration³				

² Represents the statewide federal funding apportionment.

³ The funding amounts may be duplicative or, due the federal fiscal year of October 1 to September 30, inconsistent with related line items

**Kane County
Transit Opportunity Assessment Study**

#	Program Name	Source of Funding	Eligibility	FY 2002 Funding (\$ in millions)	Comment on Kane County Eligibility
29	§ 5307 Urban Formula Grants (See RTA #7 above)	Federal motor fuel tax and general revenues	Provides general formula transit capital assistance to Northeastern Illinois. Must be the RTA or its service boards to receive these funds.	\$200.0	Kane County expenditure must be part of a service board capital activity
30	§ 5309 Capital Investment Fixed Guideway Formula Grants (See RTA #7 above)	Federal motor fuel tax and general revenues	Provides rail or fixed guideway modernization assistance to Northeastern Illinois. Only CTA and Metra rail systems are eligible for these funds.	\$123.7	Kane County expenditure must be part of a Metra's capital activity
31	§ 5309 Capital Investment Bus Grants (See RTA #7 above)	Federal motor fuel tax and general revenues	While FTA has discretionary authority to allocate these funds, they are completely earmarked by Congress. Through the earmarking process CTA and/or Pace can obtain funding.	\$3.5	Kane County expenditure must be part of a Pace's capital activity
32	§ 5309 Capital Investment New Start Grants (See RTA #7 above)	Federal motor fuel tax and general revenues	While FTA has discretionary authority to allocate these funds, they are completely earmarked by Congress. The funds are used to fund new rail/fixed guideway projects or extensions. Funds may go to a public agency that has the technical capability to develop the New Start project. Current New Start project earmarks for Northeastern Illinois go to Metra and CTA.	101.1 ⁴	Kane County could seek an earmark for a qualified New Start project and be the direct recipient of the funds assuming it has the technical capability to develop the project. The project also needs to be in the RTA and CATS capital programs.
33	Job Access & Reverse Commute Program (See RTA #13 and CATS #15 above)	Federal general and motor fuel tax funds	These funds are primarily earmarked by Congress. In FY 2002, DuPage County received an earmark of \$500,000 and Pace received an earmark of \$561,000. Funding is for developing transportation services to connect welfare recipients and low-income persons to employment and support services.	\$1.6 million	Kane County could obtain these funds through the Congressional earmarking process or through FTA's competitive grant process.
	Federal Highway Administration (FHWA)				

⁴ The number will vary greatly from year to year subject to the status of the New Start projects and the availability of funding through the Congressional earmarking process.

**Kane County
Transit Opportunity Assessment Study**

#	Program Name	Source of Funding	Eligibility	FY 2002 Funding (\$ in millions)	Comment on Kane County Eligibility
34	Transportation and Community and System Preservation Program	Federal motor fuel tax revenue	While FHWA has discretionary authority to allocate these funds to projects involving transportation and land use, Congress mostly earmarks the program. For FY 2002 at least one transit related project in Northeastern Illinois obtained an earmark. \$500,000 was earmarked to expand service for the Chicago Museum Campus Trolley.	\$1.25+	Kane County could obtain these funds through the Congressional earmarking process or through FHWA's competitive grant process

Information Sources

RTA FY 2002 Annual Budget and Five Year Program
 CATS FY 2001-2006 Transportation Improvement Program
 IDOT Division of Public Transportation Appropriations Tracking Table
 USDOT TEA 21 Program Descriptions
 USDOT FY 2002 Congressional Appropriations Conference Report
 FTA FY 2002 Funding Apportionment Notice

APPENDIX A – TRANSIT AREA POPULATION AND EMPLOYMENT

Population for the Greater Elgin Transit Area

Community	Year 1990	Year 2000	Growth	Year 2020 (1)	Year 2020 (2)
Bartlett	19,373	36,706	89%	47,500	47,500
Elgin	77,010	94,487	23%	138,743	138,080
South Elgin	7,474	16,100	115%	28,717	27,949
Total	103,857	147,293	42%	214,960	213,529

- (1) Projections by the Northeastern Illinois Planning Commission with the O'Hare expansion.
 (2) Projections by the Northeastern Illinois Planning Commission with the South Suburban Airport expansion.

Employment for the Greater Elgin Transit Area

Community	Year 1990	Year 2020 (1)	Year 2020 (2)
Bartlett	3,465	15,220	12,539
Elgin	41,669	72,957	67,390
South Elgin	3,806	7,175	5,265
Total	48,940	95,352	85,194

- (1) Projections by the Northeastern Illinois Planning Commission with the O'Hare expansion.
 (2) Projections by the Northeastern Illinois Planning Commission with the South Suburban Airport expansion.

Population in the Greater Aurora Transit Area

Community	Year 1990	Year 2000	Growth	Year 2020 (1)	Year 2020 (2)
Aurora (3)	99,581	125,766	26%	178,137	178,137
Montgomery (4)	3,675	5,397	47%	8,842	8,842
North Aurora	5,940	10,585	78%	18,000	18,000
Sugar Grove	2,005	3,909	95%	11,613	11,613
Total	111,201	145,657	31%	216,592	216,592

- (1) Projections by the Northeastern Illinois Planning Commission with the O'Hare expansion.
 (2) Projections by the Northeastern Illinois Planning Commission with the South Suburban Airport expansion.
 (3) Excluding Kendall County.
 (4) Kane County only.

Employment in the Greater Aurora Transit Area

Community	Year 1990	Year 2020 (1)	Year 2020 (2)
Aurora (3)	46,015	87,531	87,472
Montgomery (4)	7,901	8,670	8,670
North Aurora	4,295	6,020	6,020
Sugar Grove	1,160	3,934	3,934
Total	59,371	106,155	106,096

- (1) Projections by the Northeastern Illinois Planning Commission with the O'Hare expansion.
- (2) Projections by the Northeastern Illinois Planning Commission with the South Suburban Airport expansion.
- (3) Excluding Kendall County.
- (4) Kane County only.

Population in the Tri Cities Transit Area

Community	Year 1990	Year 2000	Growth	Year 2020 (1)	Year 2020 (2)
Batavia	17,076	23,866	40%	25,940	25,940
Geneva	12,617	19,515	55%	25,459	25,459
St. Charles	22,501	27,896	24%	40,591	40,591
Wayne	1,541	2,137	39%	5,853	5,853
Total	53,735	73,414	37%	97,843	97,843

- (1) Projections by the Northeastern Illinois Planning Commission with the O'Hare expansion.
- (2) Projections by the Northeastern Illinois Planning Commission with the South Suburban Airport expansion.

Employment in the Tri Cities Transit Area

Community	Year 1990	Year 2020 (1)	Year 2020 (2)
Batavia	9,004	19,940	19,825
Geneva	7,510	12,568	12,568
St. Charles	19,412	26,587	25,829
Wayne	509	1,425	1,425
Total	36,435	60,520	59,647

- (1) Projections by the Northeastern Illinois Planning Commission with the O'Hare expansion.
- (2) Projections by the Northeastern Illinois Planning Commission with the South Suburban Airport expansion.

Population in the Upper Fox Transit Area

Community	Year 1990	Year 2000	Growth	Year 2020 (1)	Year 2020 (2)
Algonquin	11,663	23,276	100%	38,993	38,775
Barrington Hills	4,202	3,915	-7%	5,504	5,504
Carpentersville	23,049	30,586	33%	37,080	35,921
East Dundee	2,721	2,955	9%	4,722	4,722
Gilberts	987	1,279	30%	7,186	7,089
Sleepy Hollow	3,241	3,553	10%	5,384	5,068
West Dundee	3,728	5,428	46%	8,805	8,805
Total	49,729	71,116	43%	107,940	106,150

- (1) Projections by the Northeastern Illinois Planning Commission with the O'Hare expansion.
- (2) Projections by the Northeastern Illinois Planning Commission with the South Suburban Airport expansion.

Employment in the Upper Fox Transit Area

Community	Year 1990	Year 2020 (1)	Year 2020 (2)
Algonquin	2,406	8,853	4,949
Barrington Hills	2,202	2,229	2,202
Carpentersville	5,376	8,770	8,538
East Dundee	3,181	5,490	5,490
Gilberts	342	856	649
Sleepy Hollow	156	1,163	1,163
West Dundee	5,161	8,435	8,435
Total	20,989	44,018	36,134

- (1) Projections by the Northeastern Illinois Planning Commission with the O'Hare expansion.
- (2) Projections by the Northeastern Illinois Planning Commission with the South Suburban Airport expansion.

Population of the Rural Village Transit Communities

Community	Year 1990	Year 2000	Growth	Year 2020 (1)	Year 2020 (2)
Burlington	400	452	13%	652	652
Elburn	1,275	2,756	116%	6,216	6,216
Hampshire	1,843	2,900	57%	5,143	5,143
Huntley	2,453	5,730	134%	38,789	38,789
Lily Lake	542	825	52%	1,818	1,818
Maple Park (3)	637	697	9%	817	817
Pingree Grove	138	124	-11%	266	266
Virgil	319	266	-20%	453	453
Total	7,607	8,550	12%	54,154	54,154

- (1) Projections by the Northeastern Illinois Planning Commission with the O'Hare expansion.
- (2) Projections by the Northeastern Illinois Planning Commission with the South Suburban Airport expansion.
- (3) Kane County only

Employment of the Rural Village Transit Communities

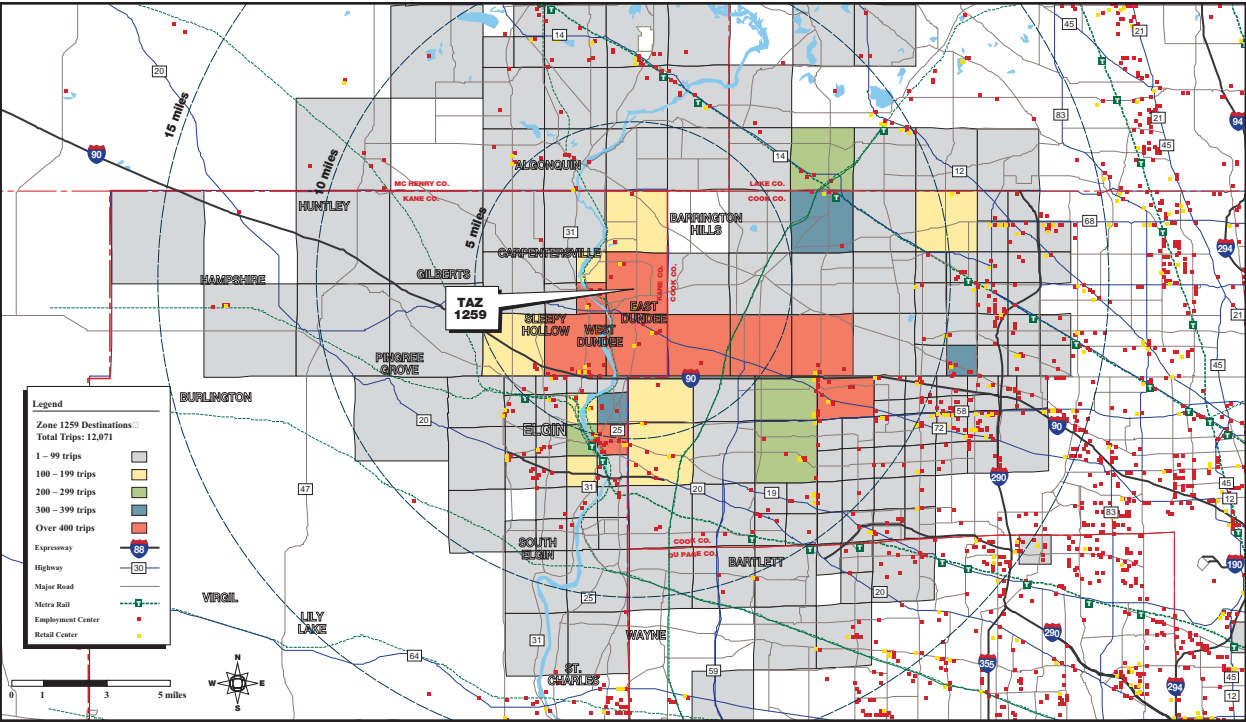
Community	Year 1990	Year 2020 (1)	Year 2020 (2)
Burlington	152	280	253
Elburn	761	1,690	1,647
Hampshire	772	2,447	2,328
Huntley	2,967	18,854	17,265
Lily Lake	188	370	235
Maple Park (1)	53	398	377
Pingree Grove	0	254	254
Virgil	85	186	159
Total	4,978	24,479	22,518

- (1) Projections by the Northeastern Illinois Planning Commission with the O'Hare expansion.
- (2) Projections by the Northeastern Illinois Planning Commission with the South Suburban Airport expansion.
- (3) Kane County only

APPENDIX B – ORIGIN/DESTINATION DATA

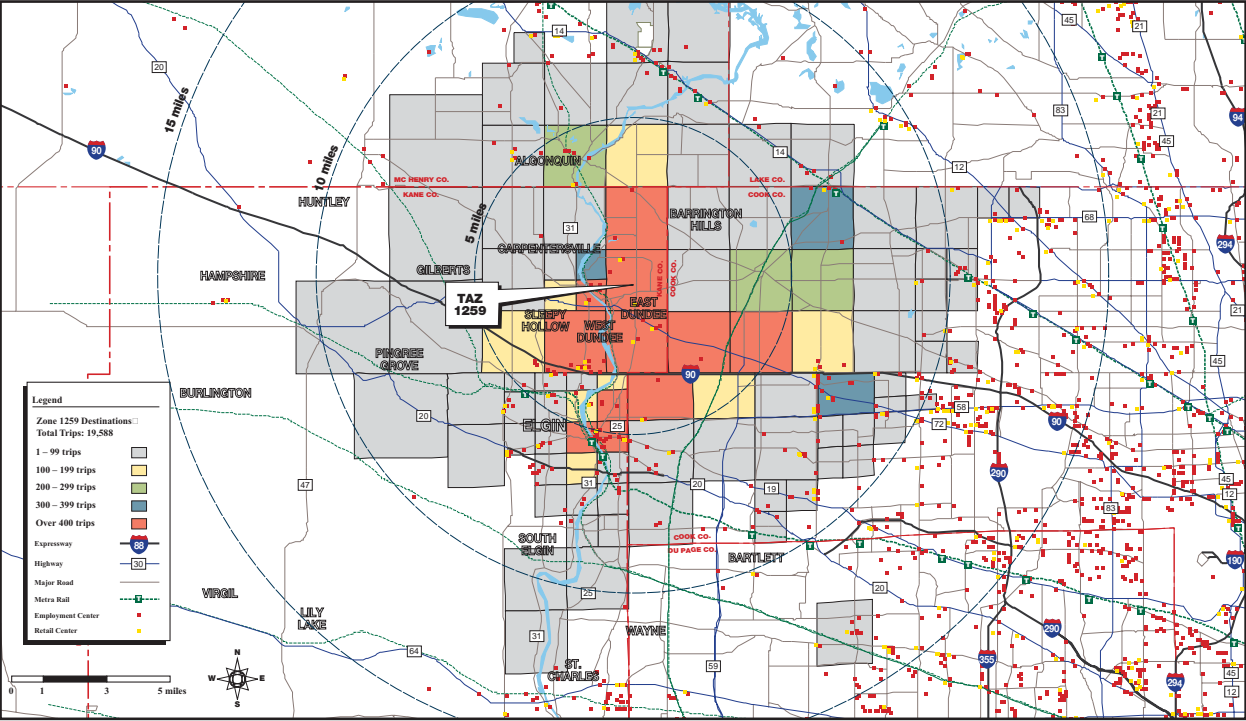
UPPER FOX TRANSIT AREA

HOME BASED WORK DESTINATIONS: TAZ #1259



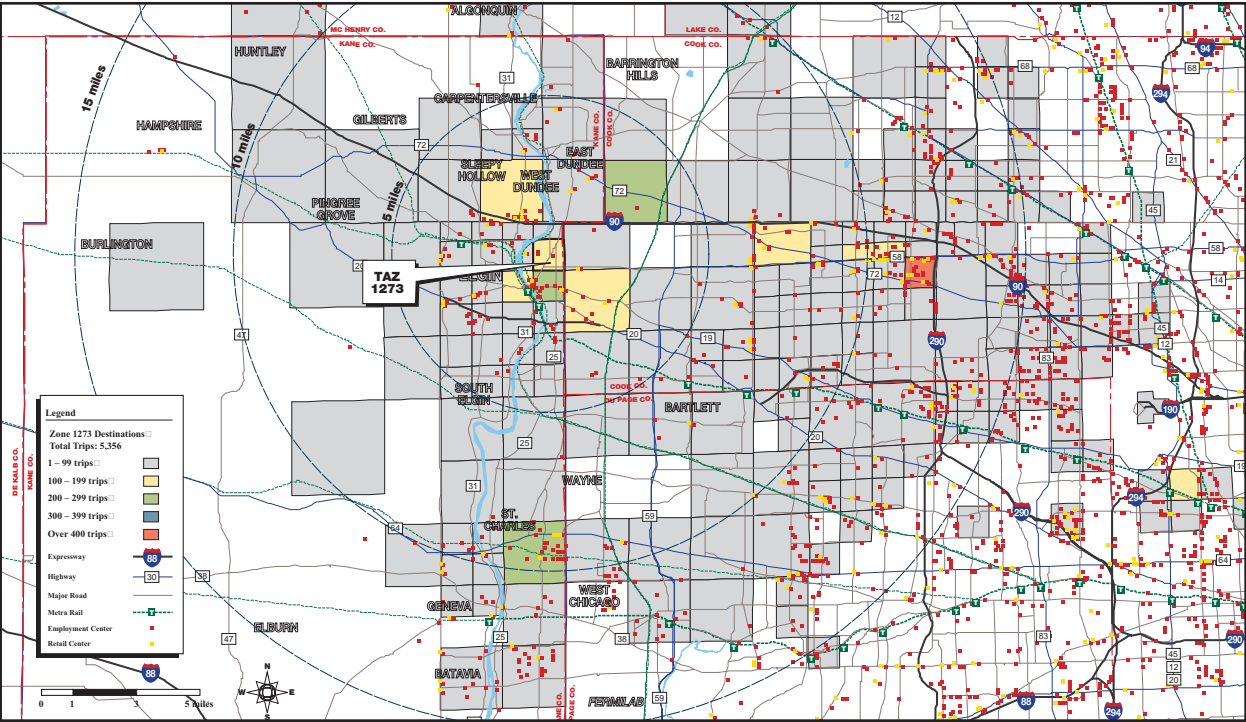
Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

HOME BASED NON-WORK DESTINATIONS: TAZ #1259



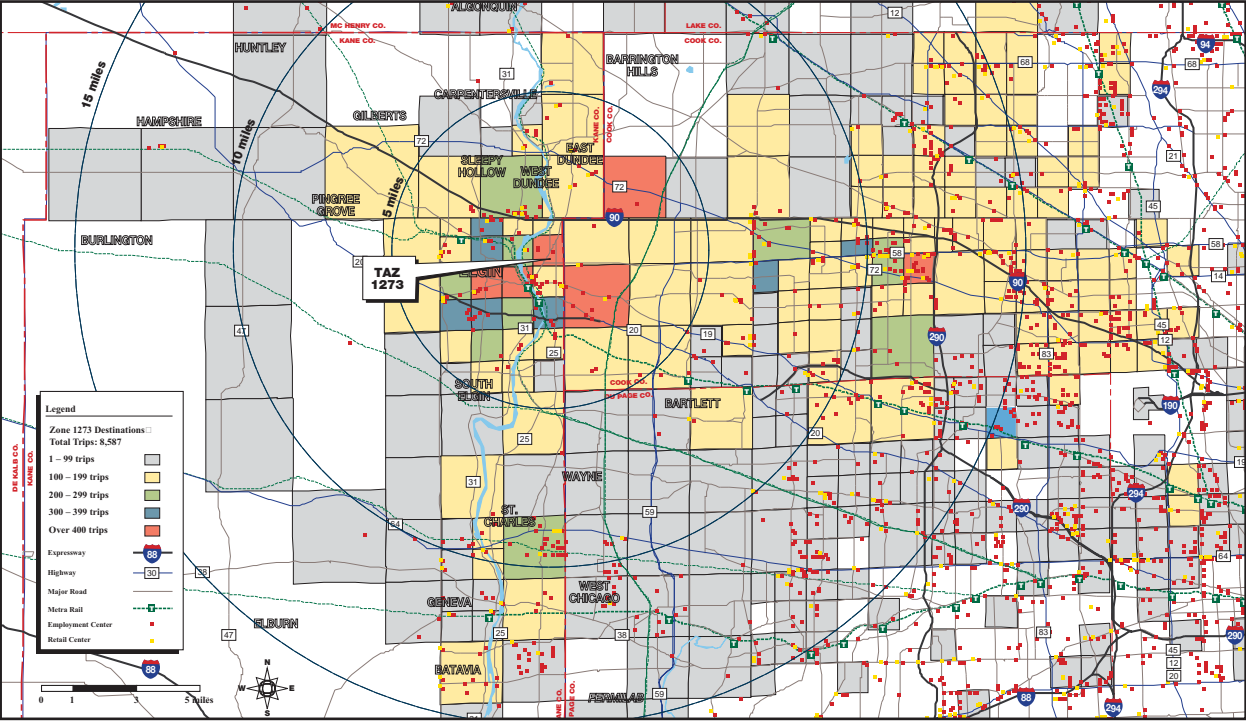
Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

ELGIN TRANSIT AREA
HOME BASED WORK DESTINATIONS: TAZ #1273



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

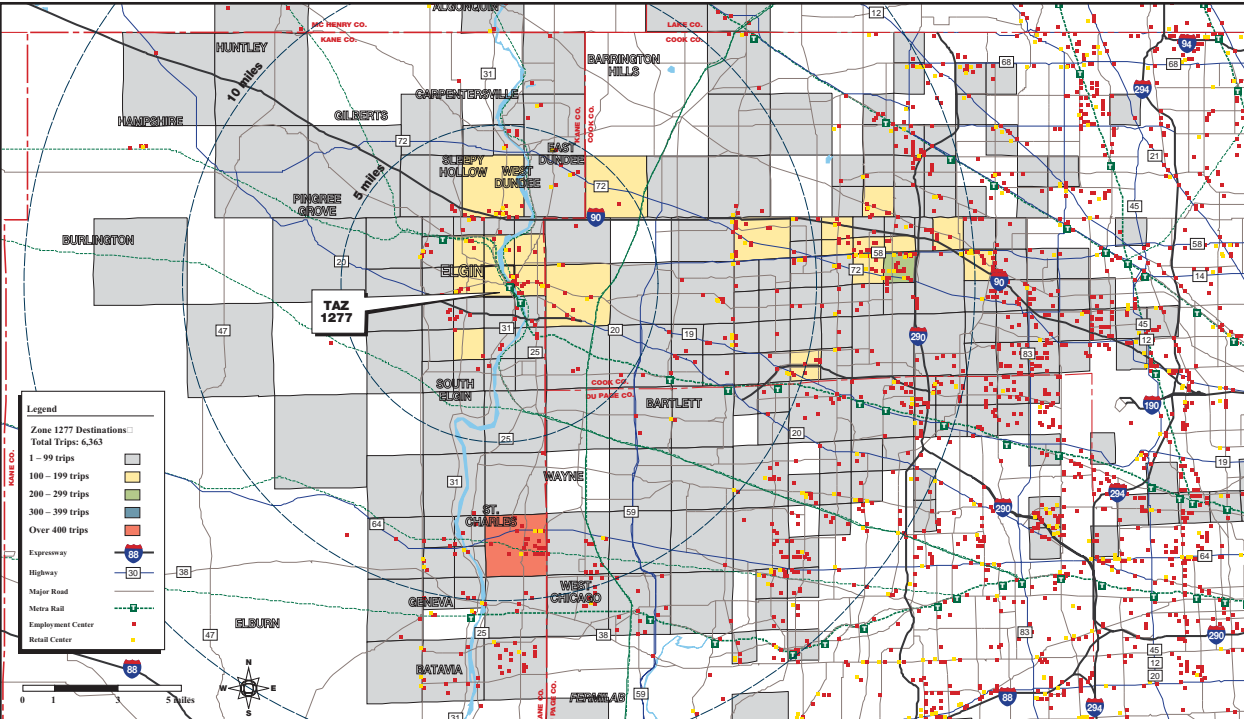
HOME BASED NON-WORK DESTINATIONS: TAZ #1273



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

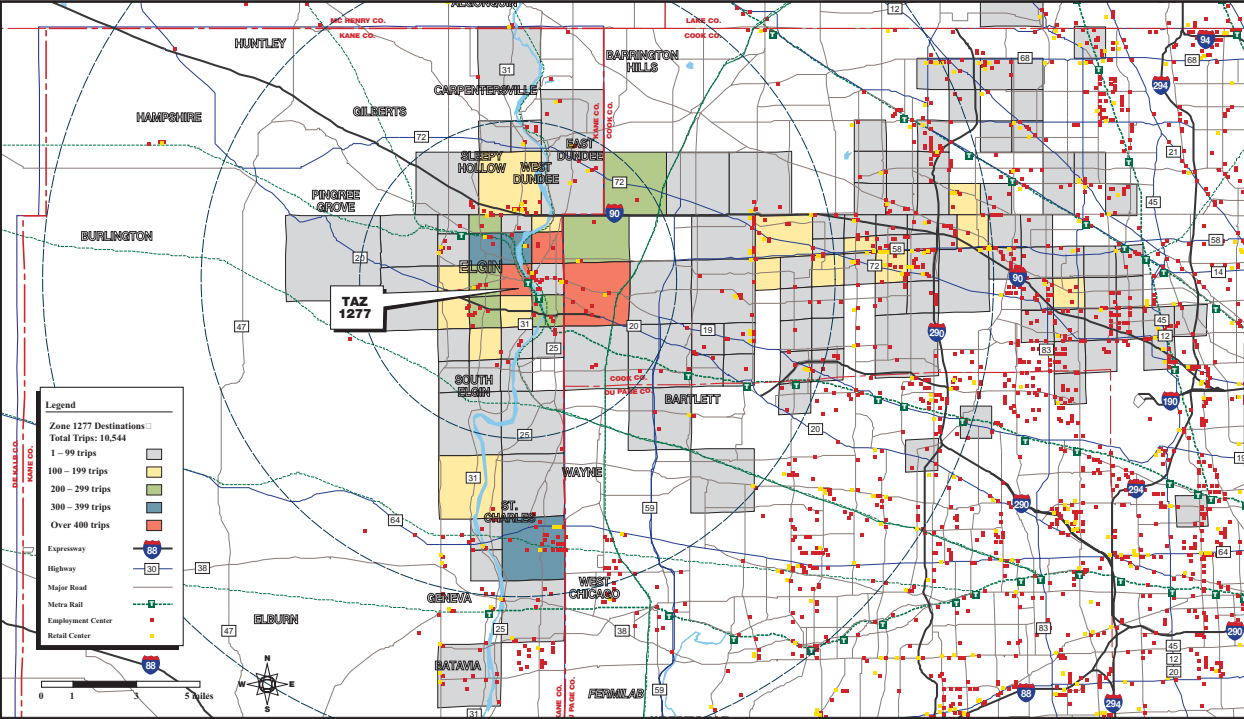
ELGIN TRANSIT AREA

HOME BASED WORK DESTINATIONS: TAZ #1277



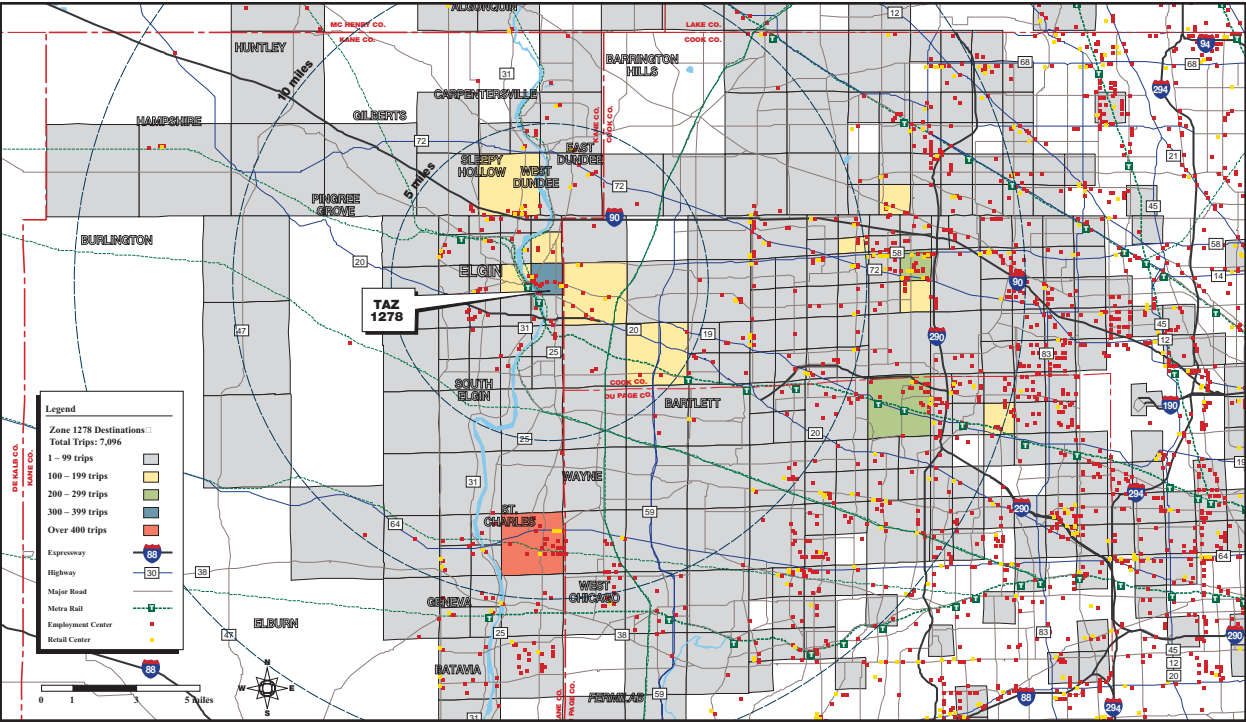
Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

HOME BASED NON-WORK DESTINATIONS: TAZ #1277



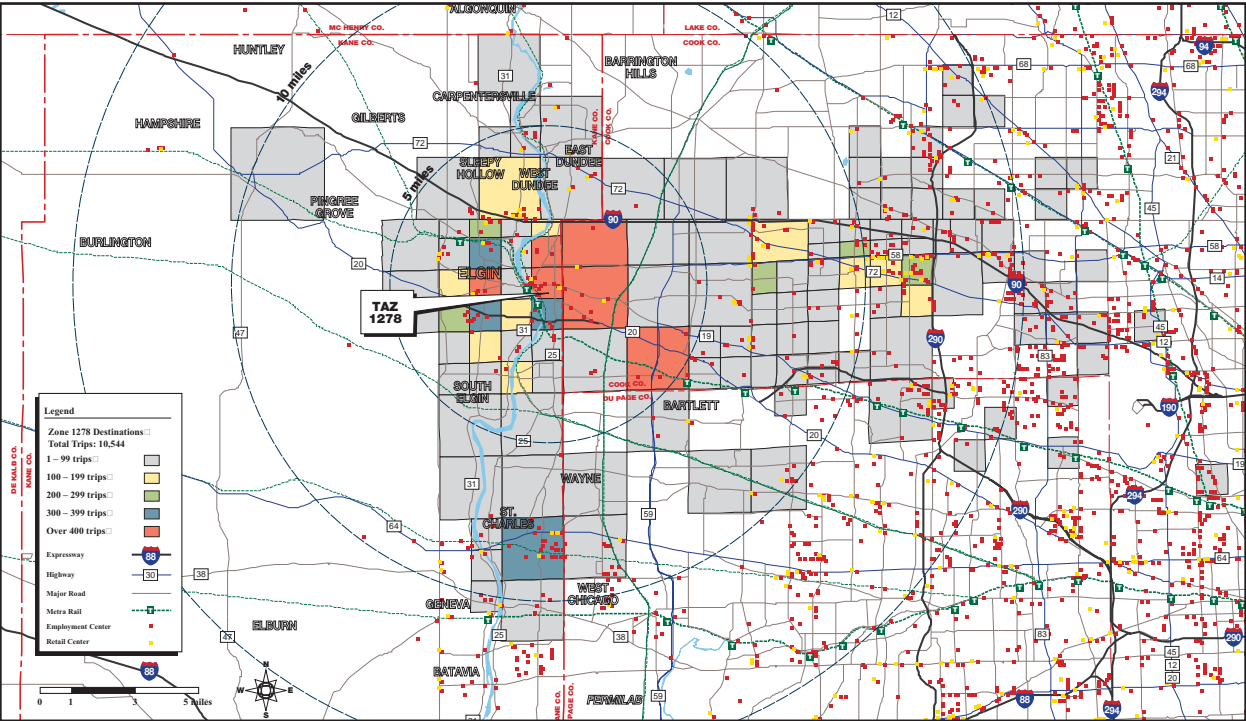
Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

ELGIN TRANSIT AREA
HOME BASED WORK DESTINATIONS: TAZ #1278



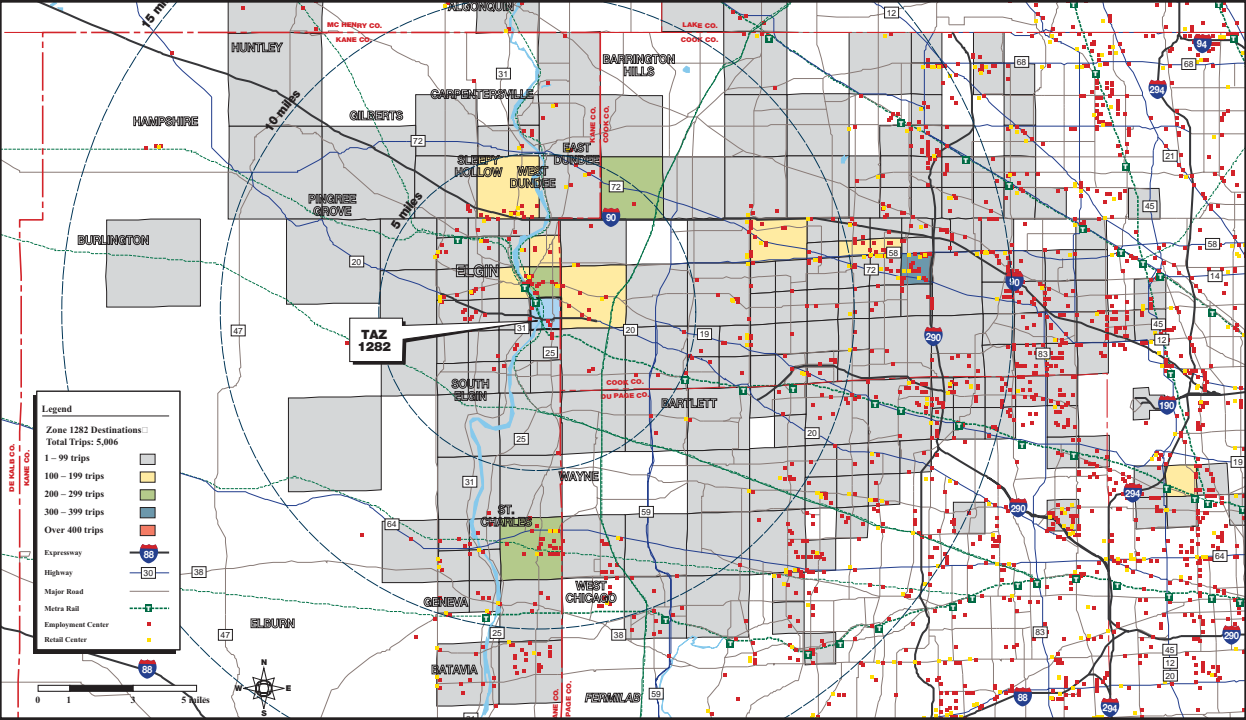
Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

HOME BASED NON-WORK DESTINATIONS: TAZ #1278



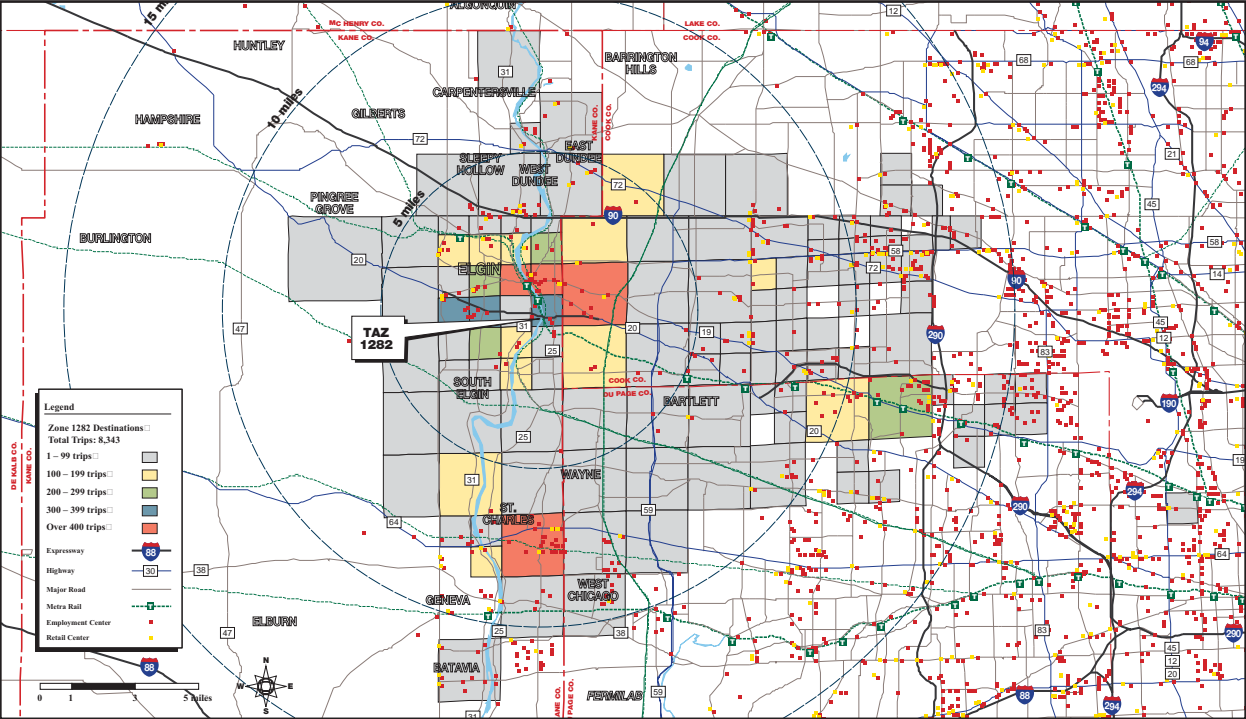
Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

ELGIN TRANSIT AREA
HOME BASED WORK DESTINATIONS: TAZ #1282



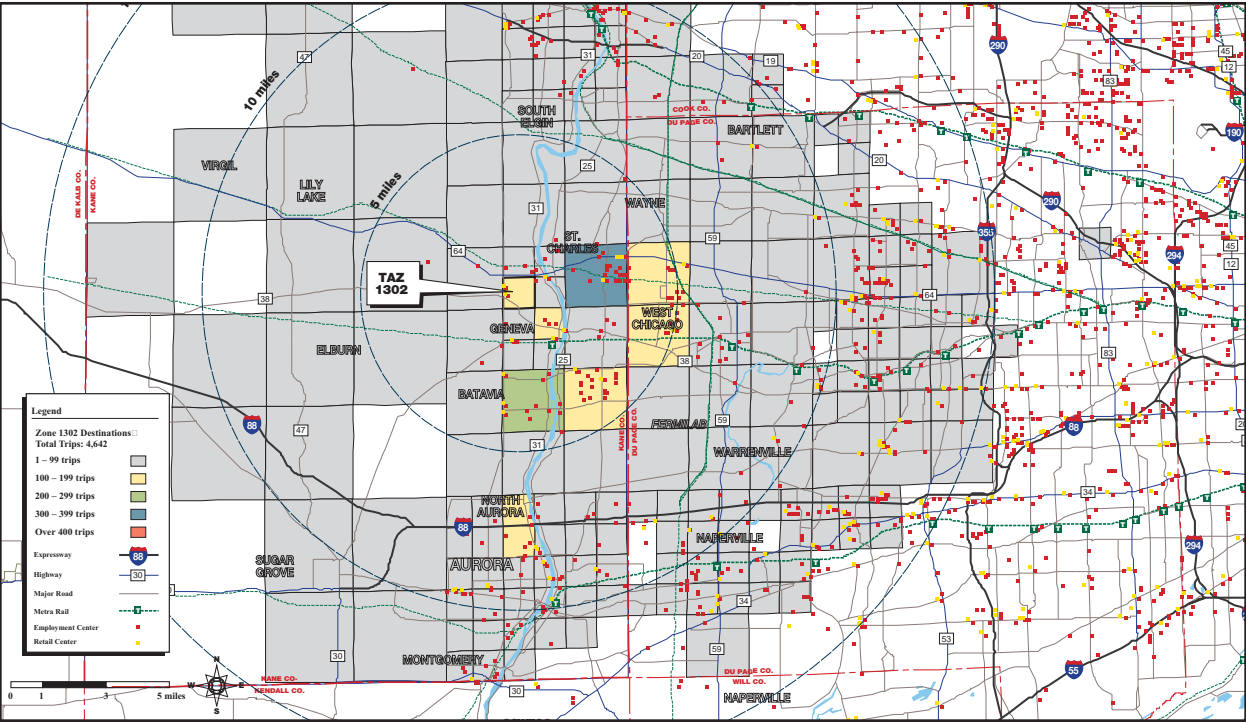
Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

HOME BASED NON-WORK DESTINATIONS: TAZ #1282



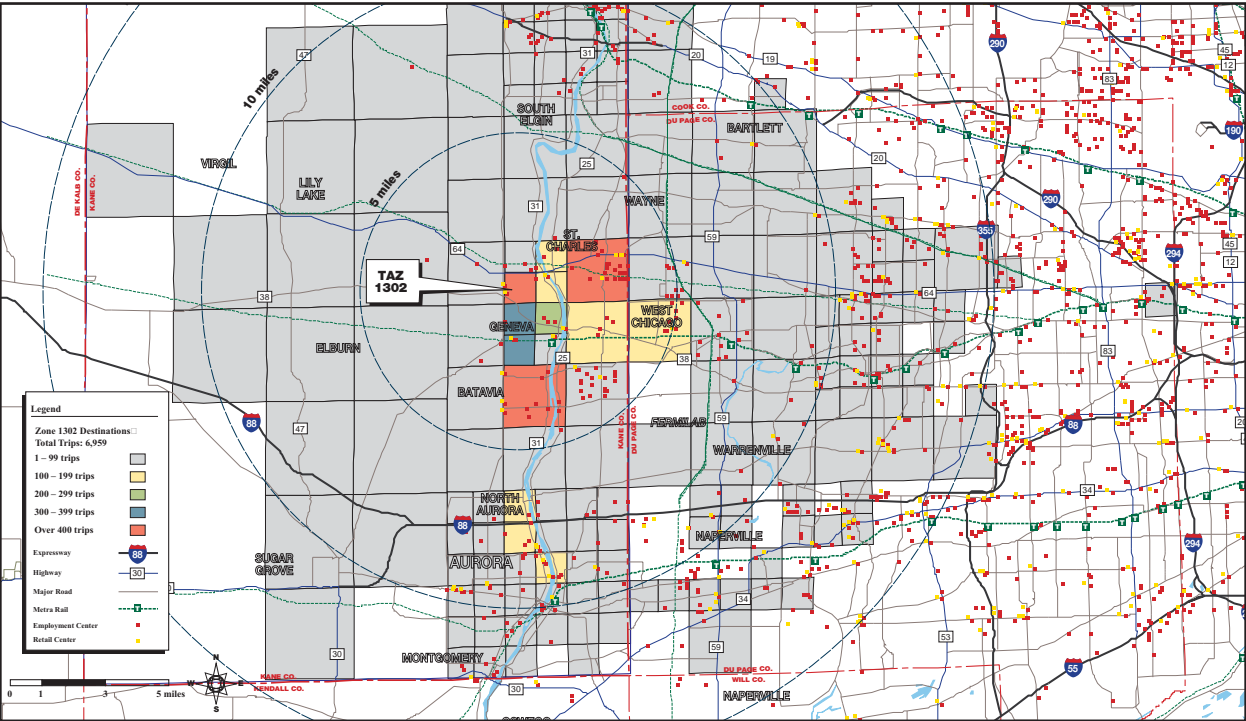
Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

TRI-CITIES TRANSIT AREA
HOME BASED WORK DESTINATIONS: TAZ #1302



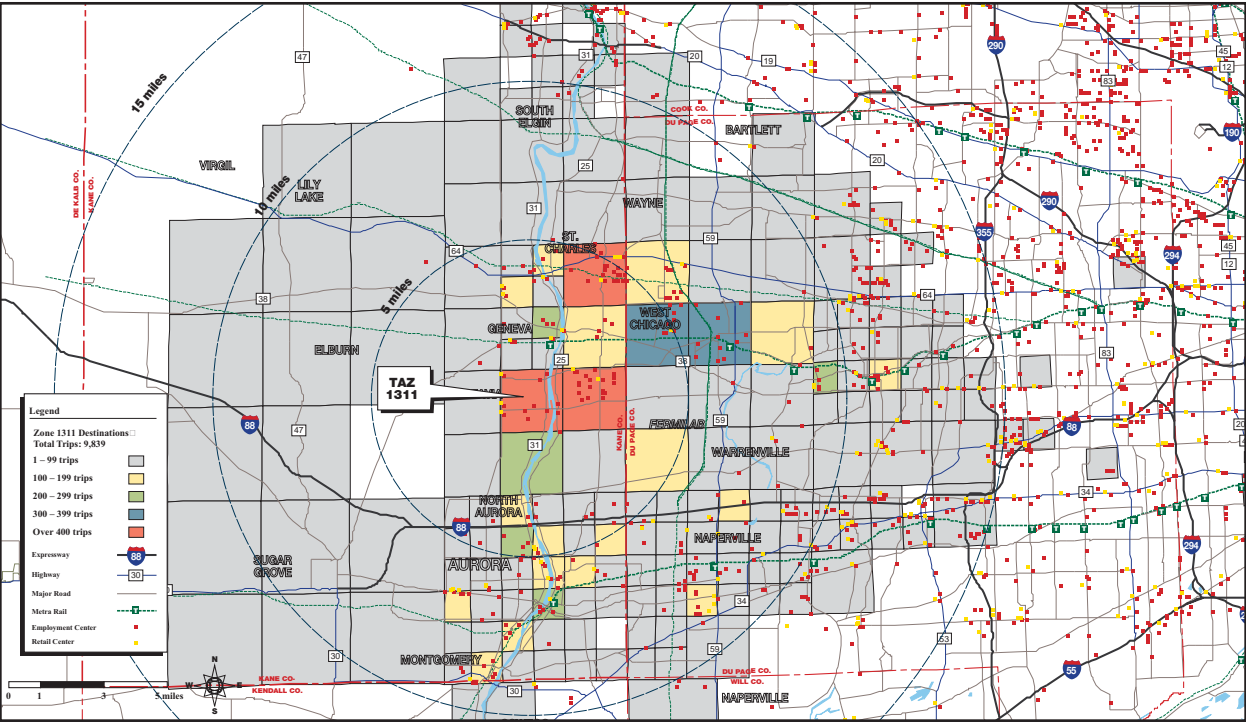
Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

HOME BASED NON-WORK DESTINATIONS: TAZ #1302



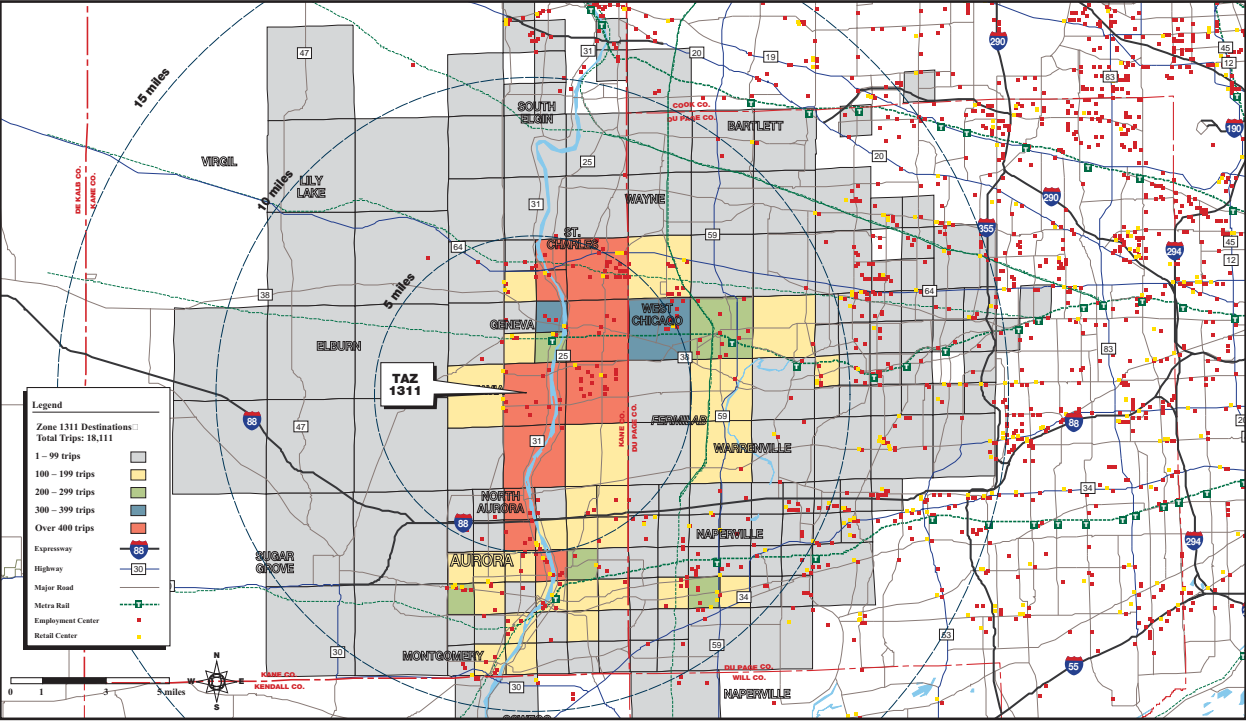
Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

TRI-CITIES TRANSIT AREA
HOME BASED WORK DESTINATIONS: TAZ #1311



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

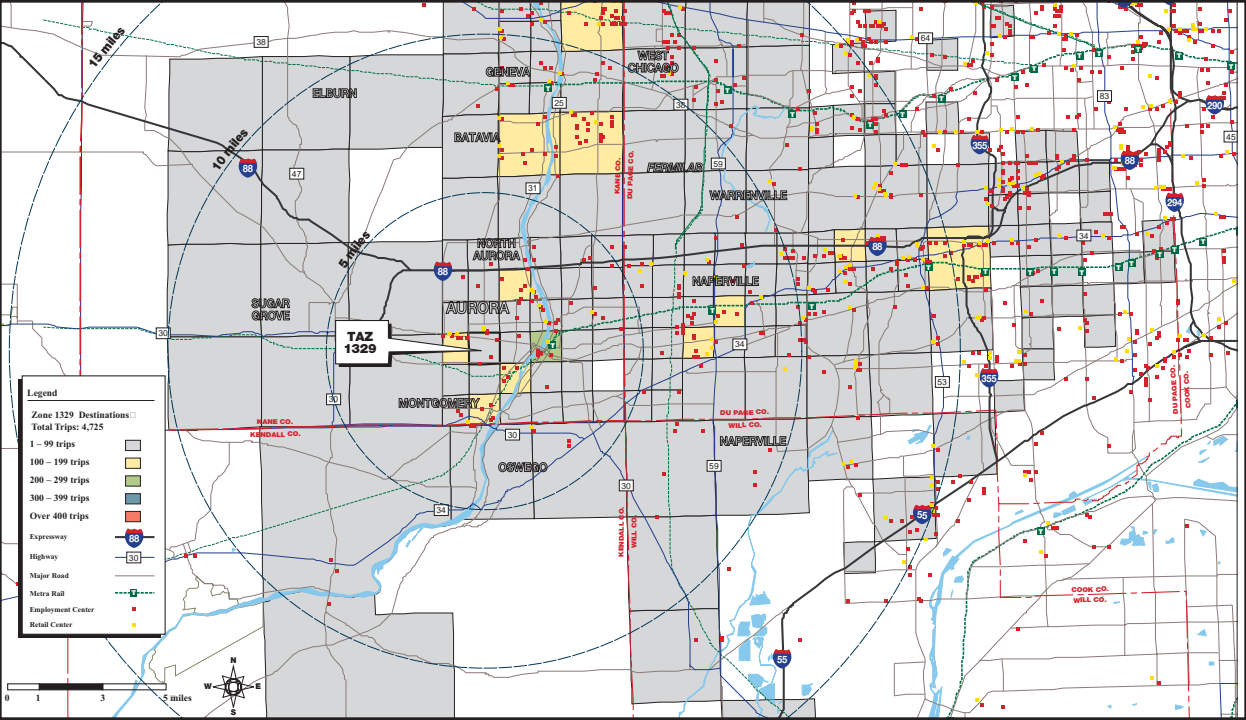
HOME BASED NON-WORK DESTINATIONS: TAZ #1311



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

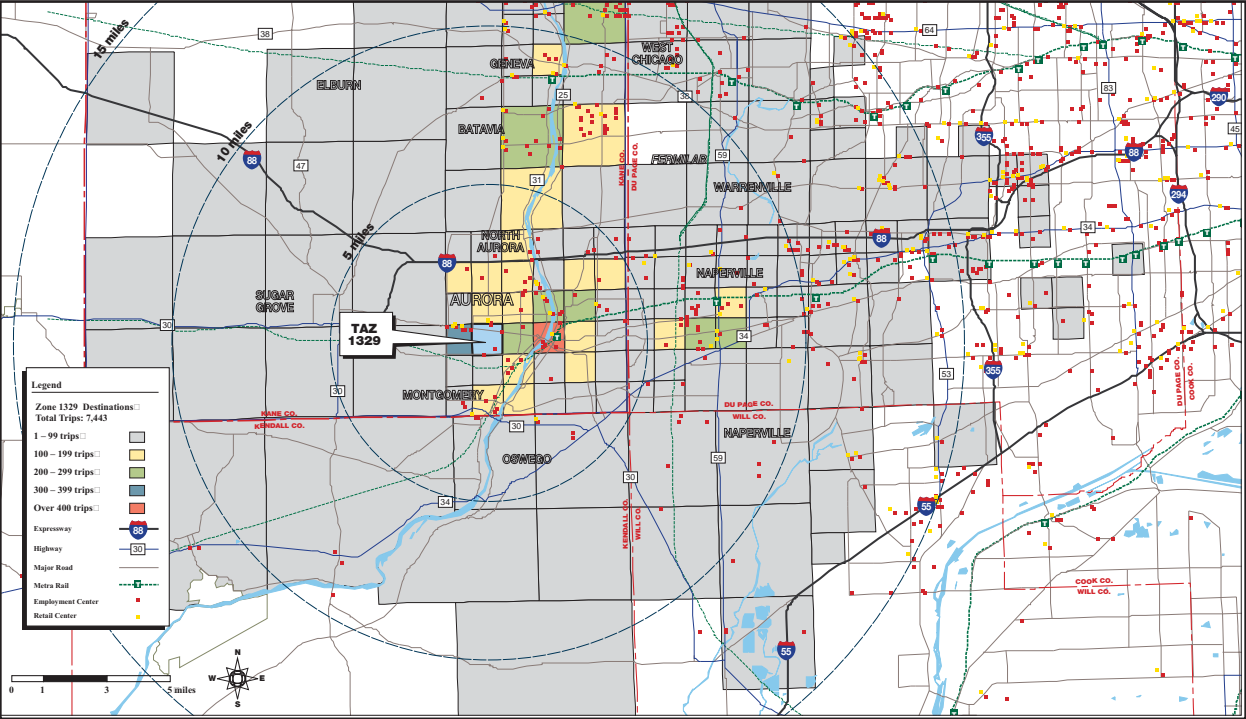
AURORA TRANSIT AREA

HOME BASED WORK DESTINATIONS: TAZ #1329



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

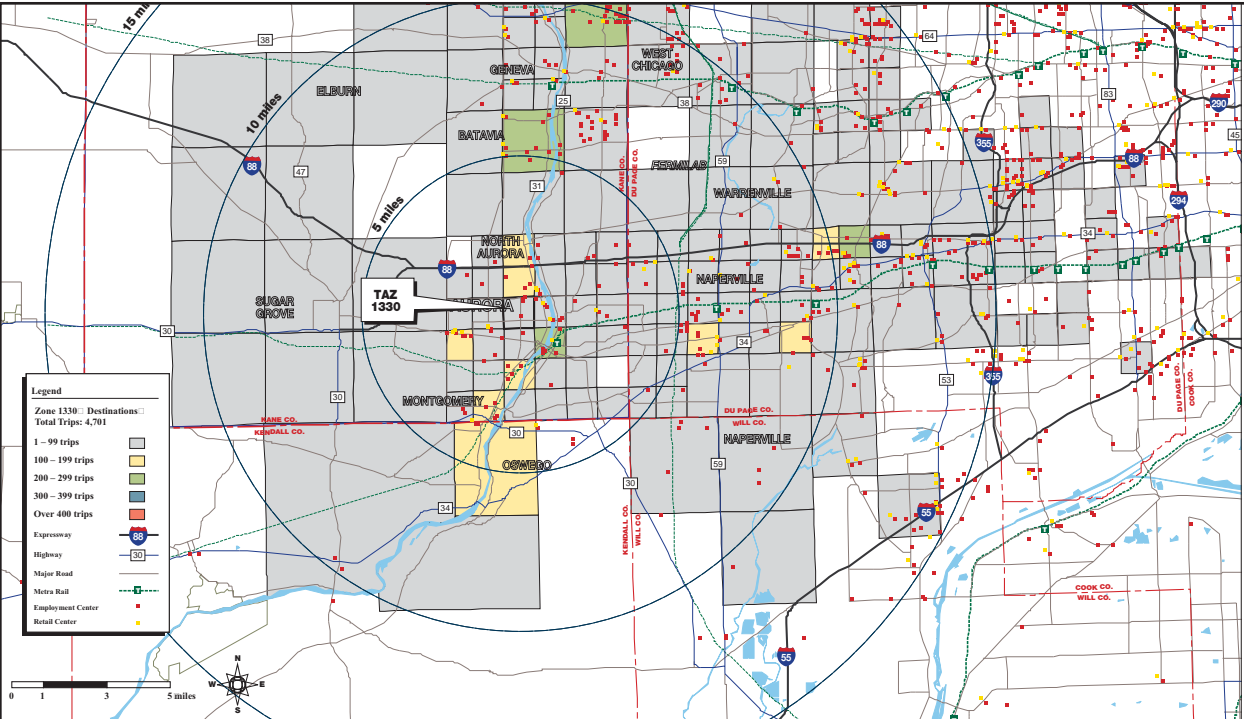
HOME BASED NON-WORK DESTINATIONS: TAZ #1329



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

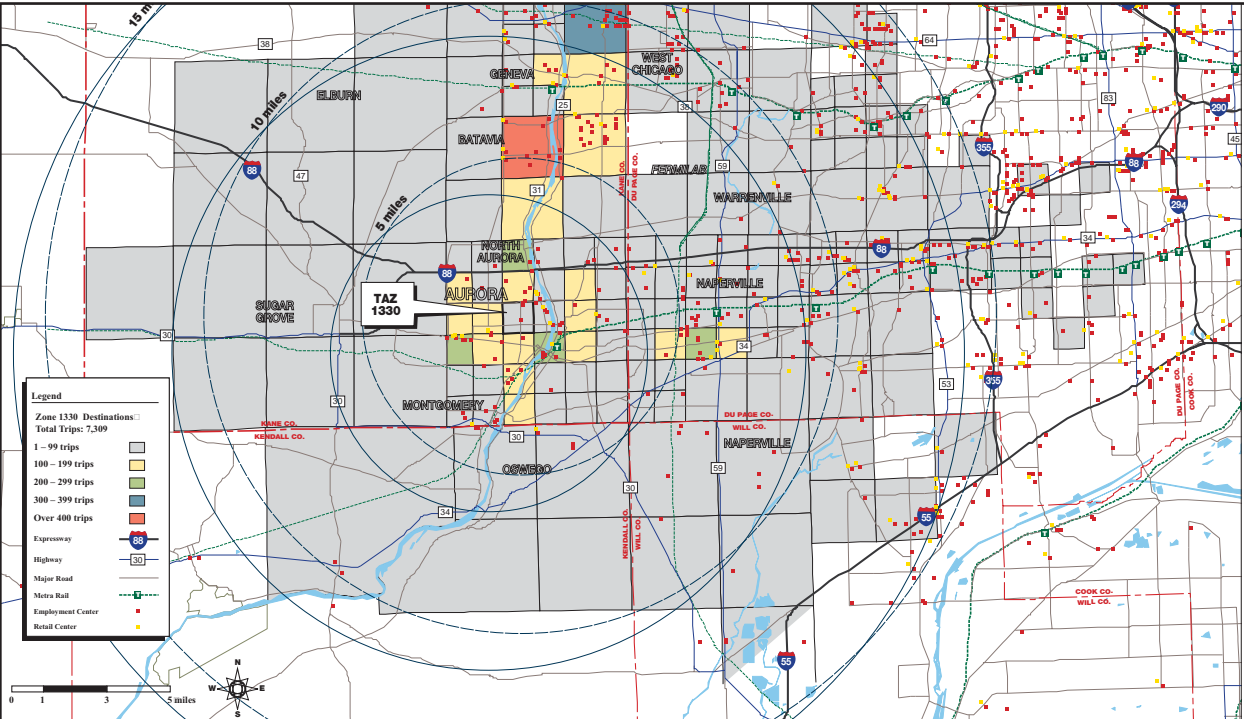
AURORA TRANSIT AREA

HOME BASED WORK DESTINATIONS: TAZ #1330



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

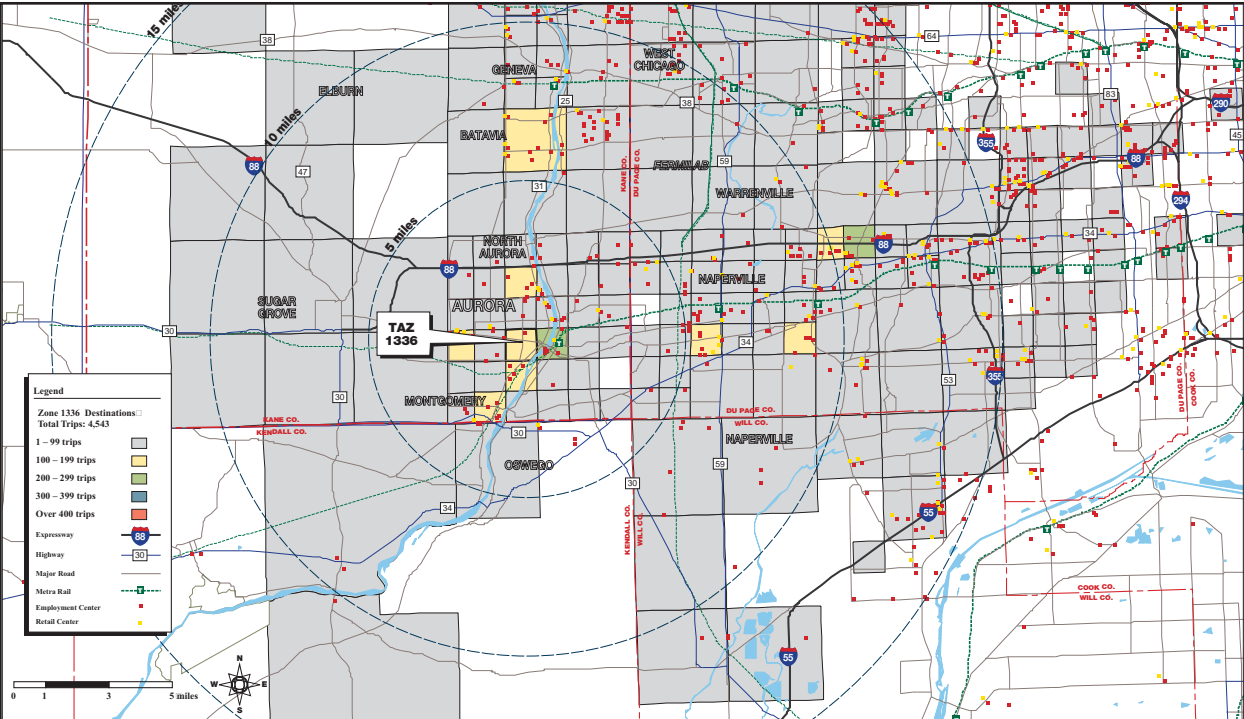
HOME BASED NON-WORK DESTINATIONS: TAZ #1330



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

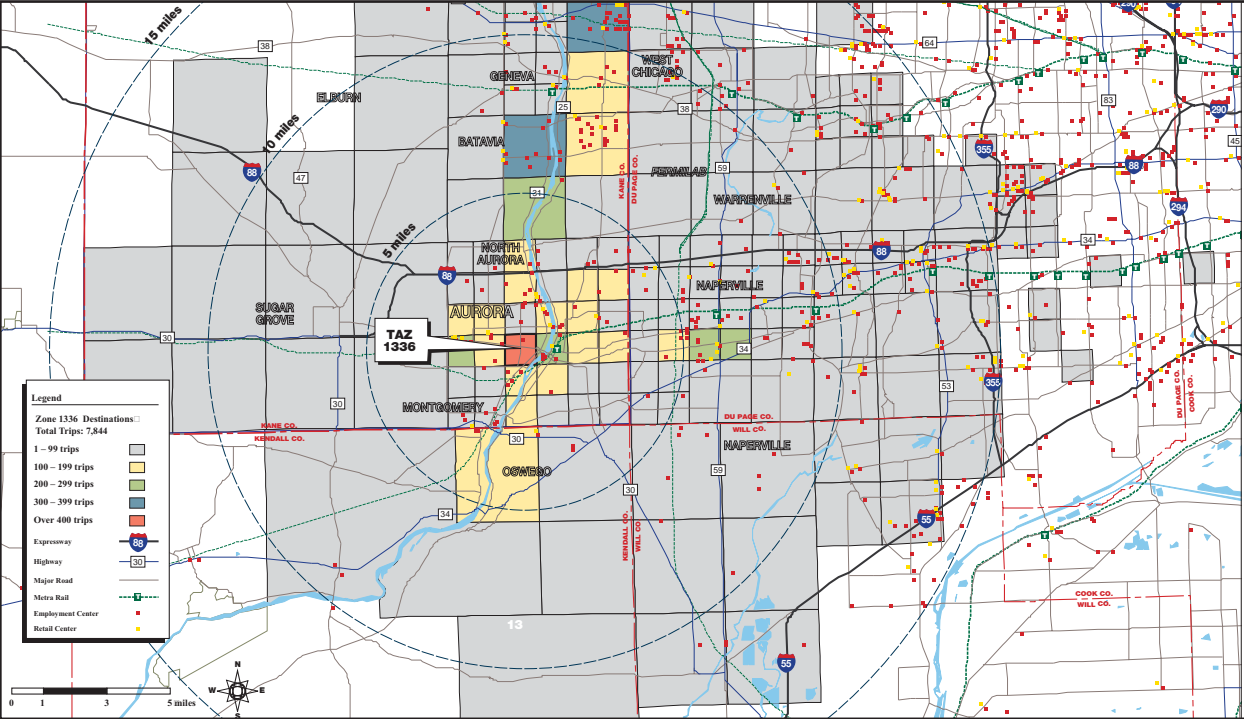
AURORA TRANSIT AREA

HOME BASED WORK DESTINATIONS: TAZ #1336



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

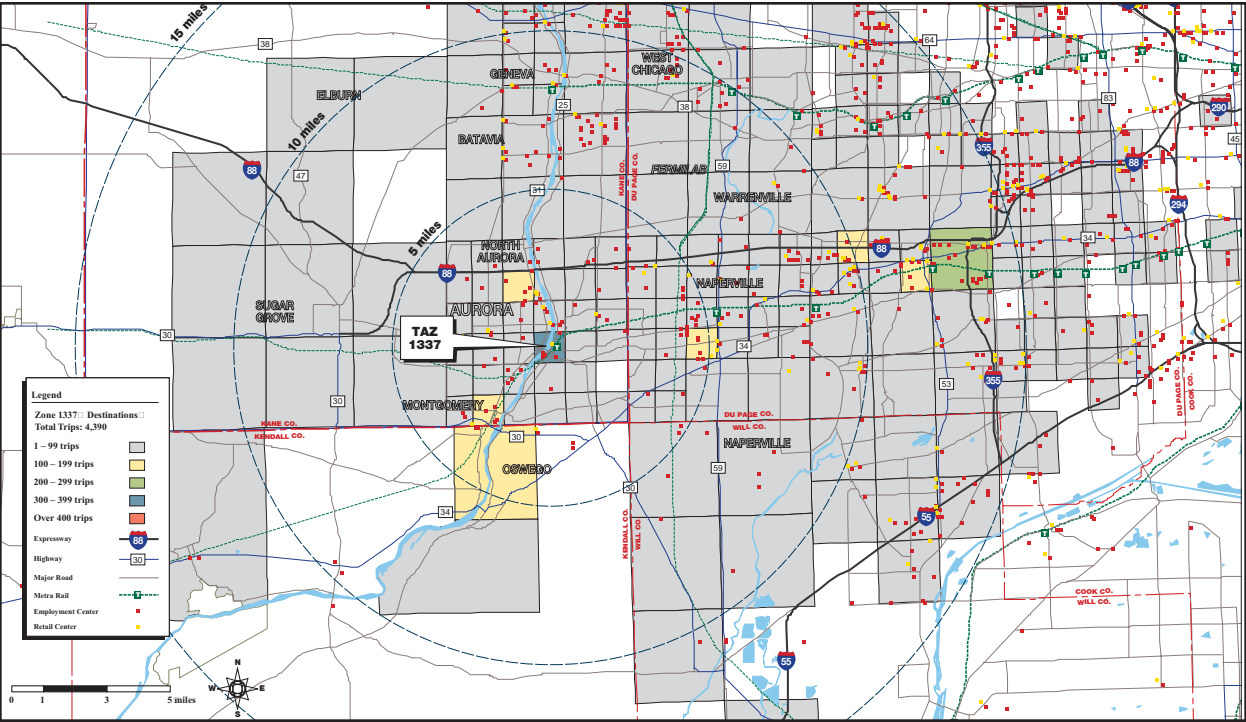
HOME BASED NON-WORK DESTINATIONS: TAZ #1336



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

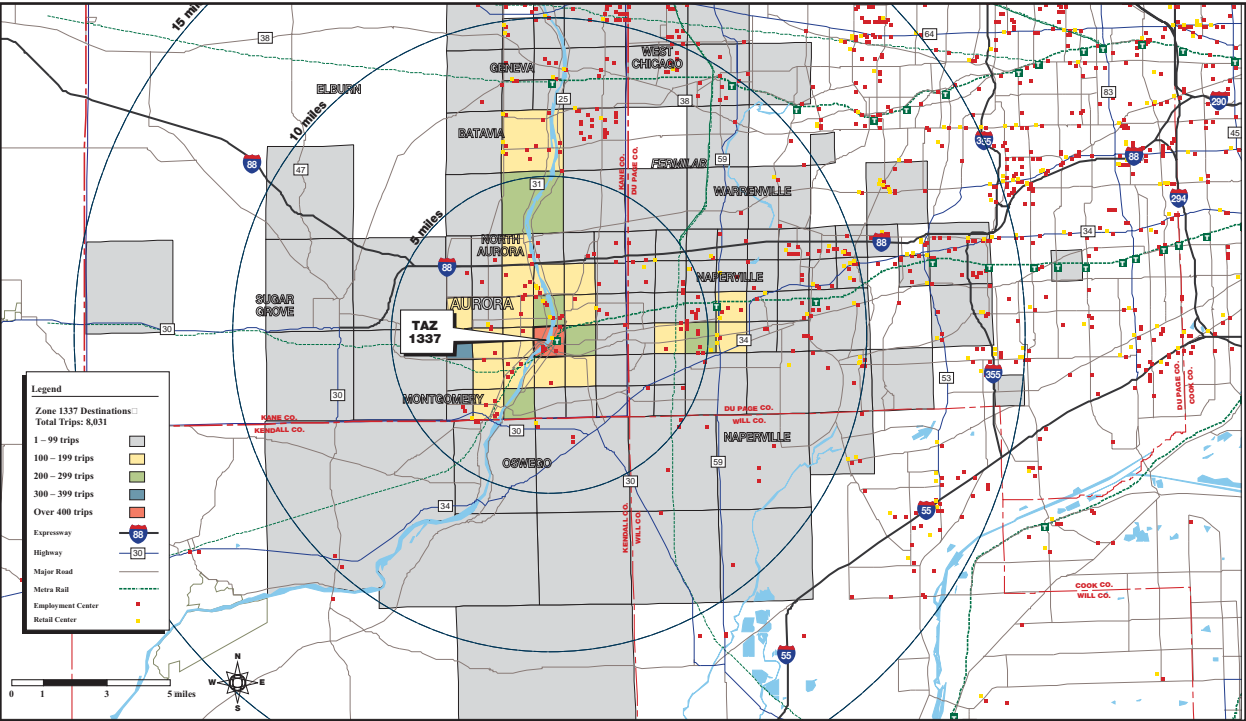
AURORA TRANSIT AREA

HOME BASED WORK DESTINATIONS: TAZ #1337



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

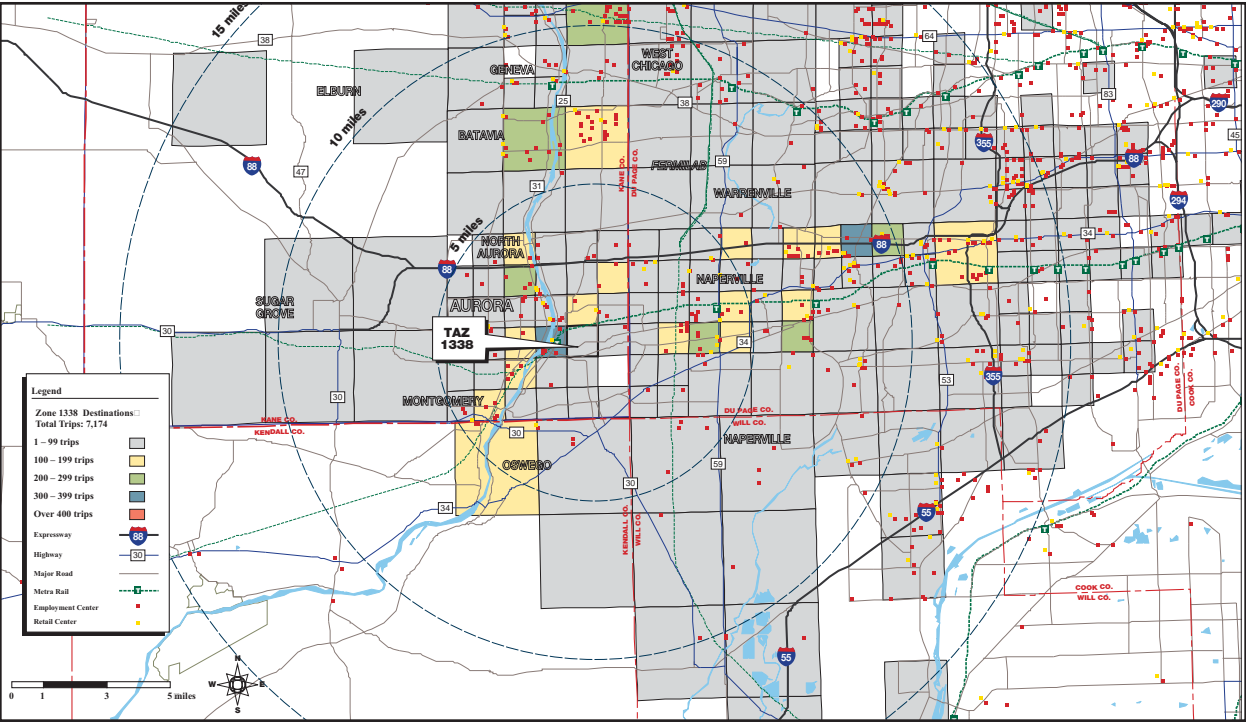
HOME BASED NON-WORK DESTINATIONS: TAZ #1337



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

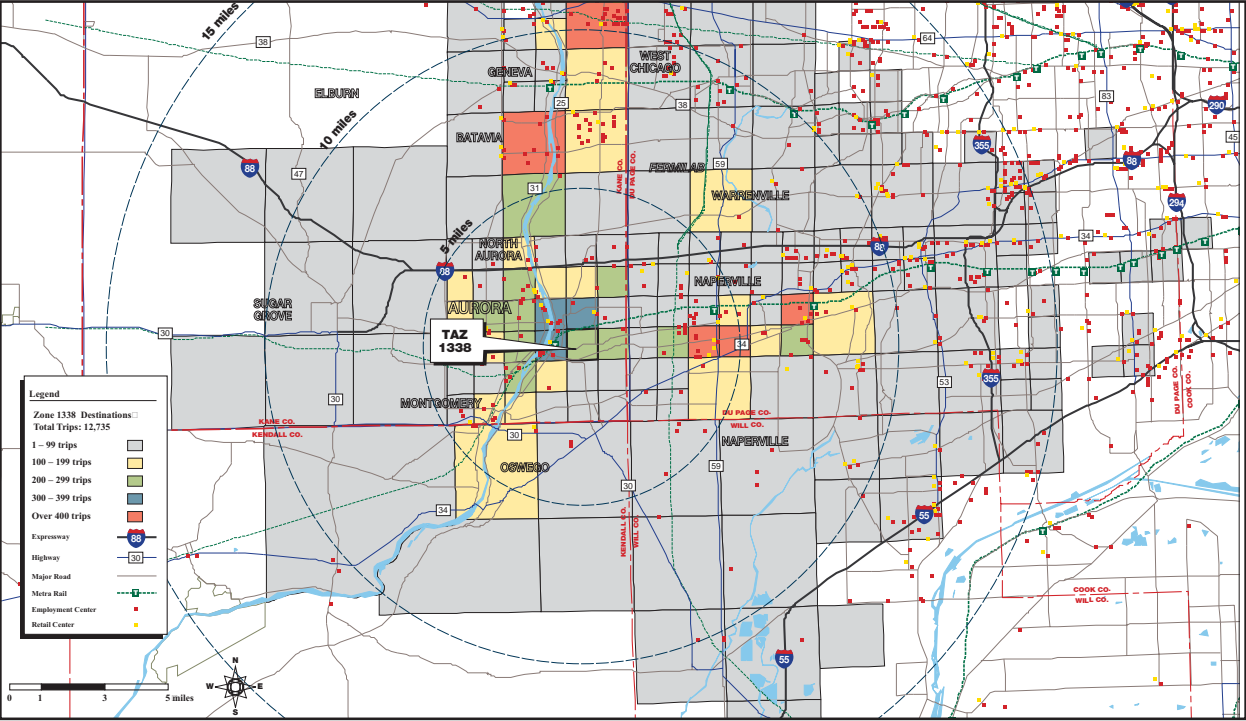
AURORA TRANSIT AREA

HOME BASED WORK DESTINATIONS: TAZ #1338



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

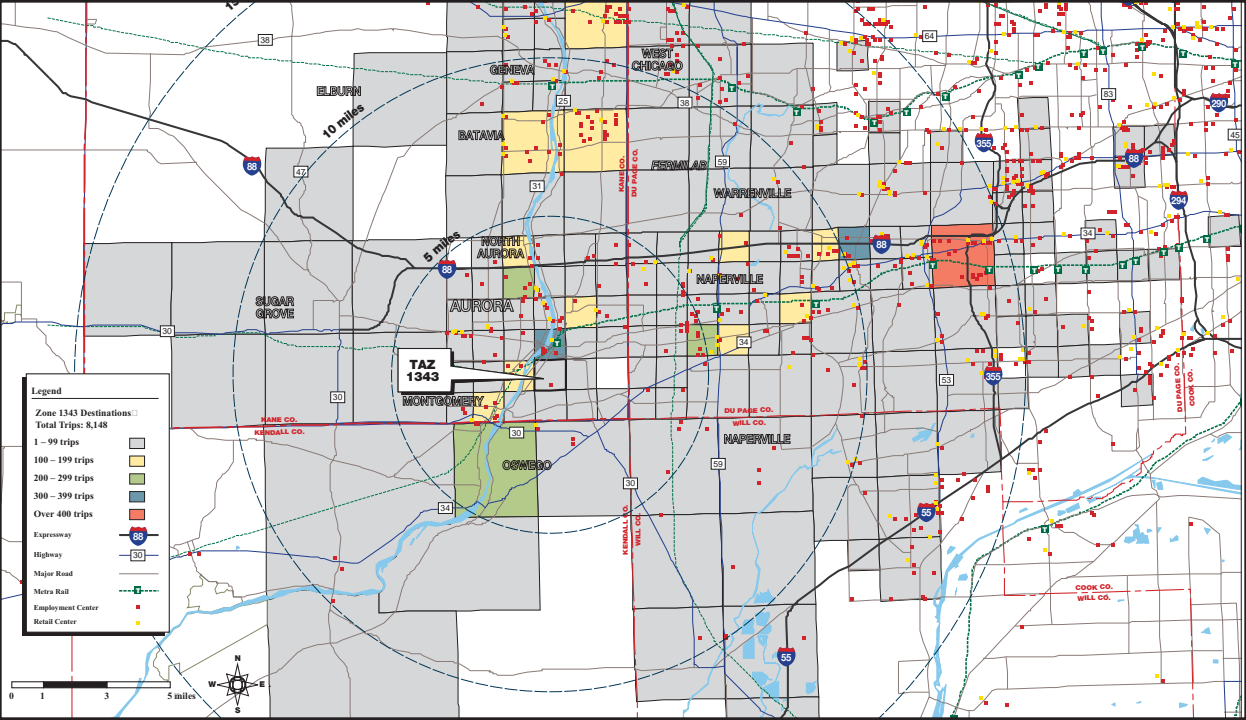
HOME BASED NON-WORK DESTINATIONS: TAZ #1338



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

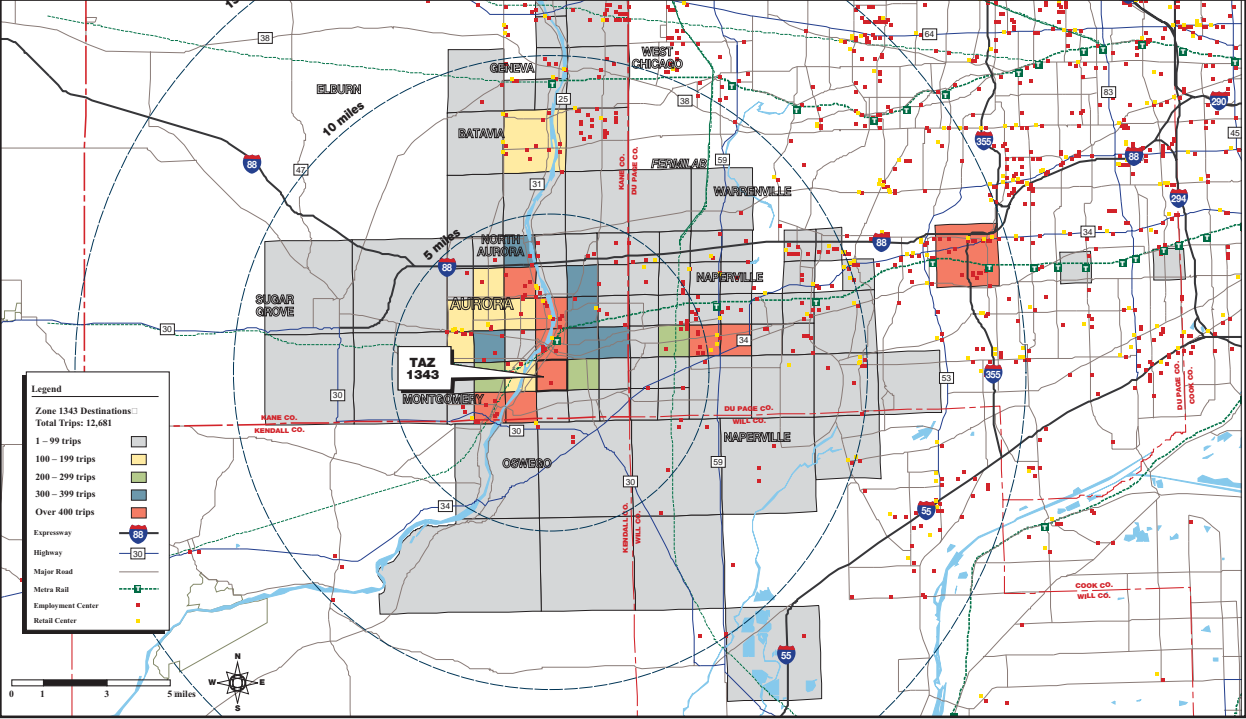
AURORA TRANSIT AREA

HOME BASED WORK DESTINATIONS: TAZ #1343



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.

HOME BASED NON-WORK DESTINATIONS: TAZ #1343



Source: Northeastern Illinois Planning Commission's Digital Map of the Region, NIPC, Chicago, Version 1.0, May 1999/C.A.T.S.