

Section 6

**Existing Transportation Facilities and System
Performance**

Existing Transportation Facilities and System Performance

6.1 Introduction

An important prerequisite to transportation planning is an understanding of the components and performance of the existing transportation system. A description of “existing” transportation facilities and operations in 1997-2001 was reported in *Kane County Transportation Planning Area Study – Existing Transportation Conditions and Forecasts of Future Travel Demand*. The report describes the existing transportation system in Kane County and presents a summary of travel demand, travel desire patterns, and performance. The inventory of facilities, operations and performance of highways in Kane County was updated to 2003 in preparation of the CRIP for the Transportation Impact Fee Study. Further modifications were made in preparation of this report in particular to updates in the functional classification of roadways.

6.2 Existing Highway System

Major freeways serving Kane County include the Northwest Tollway (I-90) and the East-West Tollway (I-88), both radiating from Chicago. Three U.S. highways and 11 state highways also serve the county.

There are roughly 550 miles of highway (excluding local roads) in Kane County. Figure 6-1 is a map of the existing highway system by jurisdictional classification; Interstate (including Illinois State Tollways), U.S. Highway, Illinois State Highway, and Kane County Highway. Table 6-1 summarizes the mileage of existing highway in each jurisdictional classification. County highways make up 311 route miles, or 27 percent of the existing highway system.

TABLE 6-1
Mileage of all Highways in Kane County by Jurisdiction Classification

Jurisdiction	Route Miles	Lane Miles
Interstates	47	211
U.S. Highways	30	68
State Highways	165	432
County Highways	311	702
Total	553	1,413

Functional classifications of highways in Kane County were discussed earlier in Section 4. Functional classifications extend from freeways, expressways and principal arterials

(primarily traffic service) to minor arterials, collectors and local streets (primarily service to abutting land uses. Figure 6-2 depicts the functional classification of highways in Kane County, and Table 6-2 shows the existing mileage of highways by functional classification. Functional class of just the Kane County highways is shown in Table 6-3.

TABLE 6-2
Mileage of Highways in Kane County by Functional Class—2003

Functional Class	Route Miles	Lane Miles
Freeways and Ramps	61	256
County Freeways and SRA	142	413
Principal Arterials	206	473
Minor Arterials	213	453
Collector	511	1,065
Total	1,133	2660

Note: Excludes local streets.

TABLE 6-3
Mileage of Kane County Highways by Functional Class—2003

Functional Class	Route Miles	Lane Miles
County Freeway and SRA	48	176
Principal Arterials	83	165
Minor Arterials	165	331
Collector	14	29
Total	310	701

The CATS 2010 *Transportation Development Plan* includes a SRA system that is integrated with the county highway system. The SRA system has been developed to serve as a second tier to the freeway system with a focus on throughput capacity. The system is planned to be a comprehensive transportation network that can handle long distance regional traffic. There are 1,340 designated miles of SRA routes in the Chicago metropolitan area of which 91 miles are located in Kane County. Parts of the County highway system that are also designated as an SRA are as follows:

- Orchard Road/Randall Road
- Fabyan Parkway
- Kirk/Dunham Road

6.3 Public Transportation

In Kane County, public transportation service is provided by Metra and Pace, operating divisions of the RTA. Metra operates commuter rail service throughout the region; three of its lines—the BNSF Line, the Union Pacific West (UP-W) Line, and the Milwaukee District West (MD-W) Line—serve Kane County. Pace, RTA’s suburban bus division, operates a variety of services including fixed route bus service, express bus service, dial-a-ride paratransit service, and vanpool/subscription bus service. These transportation services are part of one of the largest transit systems in the country. Figures 6-3 and 6-4 show the locations of Metra and Pace routes and stations in Kane County.

The BNSF Line extends nearly 38 miles west from Chicago’s Union Station to Aurora. This is the most heavily used line in the system, handling more than 53,000 passengers on an average weekday with over 80 percent of the trips made on peak hour/peak direction trains. There is one station on this line in Kane County, the ATC.

The UP West Line extends nearly 36 miles west from Chicago’s Ogilvie Transportation Center (OTC) to Geneva. Trains run from Chicago, west through Cook County, the center of DuPage, and into eastern Kane County. The line carries approximately 26,000 passengers on a typical weekday, with over 80 percent of the trips made on peak hour/peak direction trains. Currently there is one station on this line in Kane County - Geneva.

The MD-W Line extends nearly 40 miles west-northwesterly from Chicago’s Union Station to Big Timber Road in Elgin. The line carries approximately 23,000 passengers on a typical weekday with just fewer than 80 percent of the trips made on peak hour/peak direction trains. There are three stations in Kane County - Big Timber Road, Elgin, and National Street.

Pace’s fixed route bus service in Kane County is primarily provided by routes located in the cities of Elgin and Aurora. In total, 33 routes service Kane County. Dial-a-ride service provides curb-to-curb transportation to the general public, with special emphasis on the limited mobility population. At present, this service is offered in many parts of Kane County, including the townships of Aurora, Dundee, Burlington, Hampshire, Plato, Rutland, St. Charles, and Geneva, and the cities of Batavia and Elgin. Other special services are provided exclusively for persons with severe mobility disabilities as required by ADA regulations. These special transportation services are provided in portions of Aurora, Batavia, Dundee, Elgin, St. Charles, and the Sugar Grove Township.

6.4 Non-Motorized Travel

Another transportation option available to commuters in Kane County is bicycle and pedestrian paths. These paths provide commuters with an alternative to motorized transportation. Furthermore, when paths connect to rail and bus stations, public transportation becomes more easily accessible and ridership increases. Currently, Kane County offers a variety of bicycle and pedestrian paths, and many of these paths connect to rail stations and bus stops.

There are approximately 223 miles of trails in Kane County that provide opportunities for Kane County residents to complete a variety of tasks; however, they are used predominately for recreation. In addition, bicycle and pedestrian accommodations exist on some of the

county-maintained roads. These accommodations include 4-8 foot paved shoulders or wide curb lanes. Figure 6-5 illustrates current bicycle and pedestrian routes in Kane County.

6.5 Rustic Roads

A Rustic Roads program has been established in conjunction with the Kane County Development Department and consistent with the 2020 Long Range Plan to protect some of the rural roads and scenic vistas for future generations while incorporating new development and transportation improvements as subtly as possible. The Rustic Road program promotes the following:

- A Sense of Place by preserving community identity and quality of life
- Resource Preservation, by protecting the significant scenic natural and historic resources within road corridors
- Recreation by providing enjoyment for those who drive for pleasure and sightseeing
- Economic Development by generating tourist revenue through the promotion of the scenic beauty of the county

The Kane County Board adopted the Rustic Roads program in July of 2000. The program applies to roads located in unincorporated Kane County and can include municipal roads through intergovernmental agreements. A Corridor Management Plan is developed which defines the significant features of the road corridor that should be protected and enhanced while continuing to address traffic and safety issues. Table 6-4 illustrates the features of Rustic Roads. The first Rustic Road, Thurnau Road, was designated in March 2004. The second Rustic Road, Brundige Road, has been proposed for inclusion in the program. Expected completion date is November 2004. The county anticipates continued implementation of the program.

TABLE 6-4
Features of a Rustic Road

Natural Features	Built Features
Expansive views, such as those that overlook stream valleys	Churches and old cemeteries
Unusual land forms, ridgelines, ravines, narrow valleys, and rock outcrops	Farmsteads
Water	Architecturally and/or historically significant buildings
Woods	Monuments, memorials, statues, historical markers
Wildflower glades, evergreen groves, flowering native trees, and shrub masses	Concrete automobile club guideposts
Other areas of native vegetation	Railroad and accessory features
	Designed landscapes
	Roadway pavement, drainage, bridges, tunnels, and other features
	Local activity centers, such as farm supply stores, village stores, inns, mills, factories, and institutions

6.6 Travel Demand Model

6.6.1 Background

The Chicago Area Transportation Study developed a transportation model of the Kane County transportation system in 1996. After the model was tested and calibrated by CATS, it was applied in the development of the 2020 Transportation Plan.

The Kane County travel demand model was updated in 2000 for use in the Transportation Planning Area Studies. The update utilized new population and employment forecasts by the NIPC assuming the CATS O'Hare (ORD) scenario.

The model was applied again in 2003 for use in developing the CRIP for impact fees. Land use assumptions and population and employment forecasts utilized this latest application were based on 2020 and 2030 projections developed by the NIPC and interpolated for intervening years.

6.6.2 Methodology

The travel demand forecasting process utilized in Kane County relies on a series of mathematical models incorporating three primary components; 1) trip generation; 2) trip distribution and 3) trip assignment.

The CATS developed a traffic analysis zone (TAZ) system as part of the *Kane County Sub-Area Study, July 1996*. The zone system consisted of 1,379 TAZs representing the Chicago metropolitan area. Of these, 780 TAZs were located within Kane County. See Figure 6-6. This is a finer breakdown than the CATS regional zone structure. Figure 6-7 depicts the zone system utilized for the entire metropolitan area showing the larger external zones outside of Kane County and the external stations on the periphery of the area.

The trip generation model translates land use and demographic information into the number of trips created by an area. Four trip purpose categories were used to predict the number of daily vehicle trips: Home-Based Work (HBW); Home-Based Other (HBO); Non-Home Based (NHB); and truck (T). Estimated trips were calculated based upon TAZ land use information, including population and employment, by type.

The trip distribution model estimates where trips will be made within the study area. The primary objective is to distribute the total number of trips produced in each TAZ among all possible destination zones. The distribution model used for this study is commonly known as the gravity model. The gravity model assumes that trips between a zone of production and all other TAZ's is proportional to the number of attractions in all possible destination TAZ's and inversely proportional to some function of the impedance (expressed as travel time) between the TAZ's. The number of attractions in a TAZ is correlated with the number and type of employees in the TAZ.

Trip assignment models assign the distributed volumes of vehicle trips to individual network links representing roadway segments. An equilibrium trip assignment model was used in this study. This process is an optimization procedure that searches for the best combination of the current and previous assignment iterations. Equilibrium is said to be achieved when no trip can reduce travel time by changing paths.

The basic outputs of the travel demand modeling process are travel forecasts, estimated traffic volumes on each segment of the road network. These volume estimates are used to indicate whether the transportation system can adequately serve future developments.

6.6.3 Existing Traffic Demand

The existing traffic model used in Kane County was developed and calibrated in 2000 using the TRANPLAN suite of programs by the KCDOT. The model development and calibration process is described in detail in *Development and Calibration of Kane County Transportation Systems Planning Model* prepared for the Division of Transportation in 2000. The work closely followed earlier CATS model development reported in *Kane County Sub-Area Study, July, 1996*. The travel demand model developed for this project was determined to meet or exceed the accepted criteria for validation/calibration of a tool of this type.

Figure 6-8 shows ranges of existing (2003) Average Daily Traffic (ADT) on highways in Kane County. The 2003 ADT values were based on maps published by the IDOT Office of Programming and Planning and expanded peak period traffic counts made in 2002 as part of the *Transportation Impact Fee Study*. The Illinois State ADT data was also supplemented with additional counts provided by the county. Higher volume highways are located predominantly in the easternmost portion of the county. The heaviest traveled routes include the I-90 and I-88, Randall Rd., the Carpentersville/Dundee/North Elgin area and Tri-cities area.

Commercial vehicle (truck) traffic is also an important consideration in the analysis of current transportation facilities and in developing future plans. The IDOT provided data regarding the daily volume of heavy commercial vehicle traffic on state and federal routes in Kane County. As would be expected, the Tollways carry a large percentage of commercial traffic, but truck traffic was also heavy on portions of IL 47 and IL 64.

6.7 Existing Travel Desires

Examination of travel desires is especially useful in planning transportation facilities. This analysis technique considers the travel desires of motorists regardless of the underlying traffic network. By assigning traffic to a network resembling a spiderweb that is unconstrained in terms of roadway availability and capacity, the trips follow a direct path from origin to destination. The travel desires are shown as bands with the width of the band proportional to the traffic volume on that link.

In order to portray travel desires, the 780 CATS TAZs within Kane County were aggregated into 15 larger zones. The trip table also was compressed to conform to the modified zone structure. Connecting the centroids of adjacent zones created a “spiderweb” network. A graphic portrayal of travel desires was produced by assigning the base year (2003) daily vehicular trips to the spiderweb network (Figure 6-9).

The prominent travel desire is oriented in a north/south direction in the eastern part of the county through urbanized areas along the Fox River, which coincides with the largest concentration of development in the County. Travel demand is greatest in the northern and southern portions of this corridor with a slight decrease in demand between St. Charles and Elgin. The north-south travel desires appear to be a combination of trips originating in and

destined to locations in the urban corridor, as well as regional trips traveling through the County. In general, travel demand drops off considerably toward the western parts of the County. Another trend is the travel desire pattern between Kane and surrounding counties. The following list highlights some of these travel patterns:

- Northwest-southeast direction in the northern portion of the county between Kane County and McHenry and Cook Counties.
- East-west direction in the central portion of Kane County along the eastern border between Kane and DuPage Counties.
- Northeast and southwest direction in the southern portion of the county between Kane County and Kendall and DuPage Counties.

This set of travel desires indicates the importance of examining travel demand in relationship to the surrounding Counties. Notably, the existing travel desires in the northeast portion of the County appear to be heaviest. The roadway system that is in place accommodates these travel desires as follows:

- The Northwest Tollway and US 20 support northwest-southeast directional movement in the northern portion of the county.
- IL 64, IL 38, and Fabyan Parkway support the east-west directional movement in the central portion of the county.
- I-88/IL 56/US 30 and IL 59/US 34 support the northeast-southwest directional movement in the southern portions of the county.

6.8 Performance Measures

Performance measures were established to assess the ability of the transportation system and its components in meeting set performance goals. This type of technical evaluation was used to evaluate system conditions in the study base year and for the year 2030. Three categories of performance were used to analyze performance:

- Traffic service measures
- Congestion measures
- Traffic safety measures

The basic tool used in calculating the performance measurements for both the existing and future transportation networks was the travel demand model.

6.8.1 Traffic Service Measures

Traffic service measures match a calculated performance value such as speed or travel time to a corresponding level of congestion. VMT is a facility-based measure indicating system usage. It is the product of traffic volume over a specified length of highway. Vehicle hours of travel (VHT) is a user-based measure indicating the travel time spent from origin to destination. Summing the travel times of vehicles using a segment of highway produces VHT. Another traffic service measure is vehicle hours of delay (VHD). The delay function (VHD) can be calculated for each link by comparing the travel time produced at desirable speed for a

particular roadway as defined by its functional classification to the congested time that results from the traffic assignment. VHD is a product of traffic volume multiplied by the change in travel time. The system-wide delay can be calculated by summing delays for all links. Separate summaries may be produced by functional class or by individual route.

Another measure used to evaluate traffic performance is travel speed. Travel speed is a measure that evaluates the operating characteristics of a facility. The travel speed measure can be determined by comparing the VMT and VHT by roadway segment.

6.8.2 Congestion Measures

Congestion is generally measured in terms of LOS and v/c . Definitions of LOS for both roadway segments and intersections were presented earlier in Section 5. As explained, LOS on roadway segments is described by operating speed and delay experienced by motorists. For purposes of long-range planning, the ratio of v/c is often used as a surrogate measure to estimate the level of congestion on each facility segment in the travel model output. This measure of congestion is reflective of driver comfort and the degree of maneuverability within the traffic stream. The levels of v/c assumed to represent the approximate degree of congestion are presented below. Table 6-5 describes the v/c ratios used for the level of congestion categories.

TABLE 6-5
Level of Congestion Measures

Level of Congestion	Max v/c
Little or none	>0.66
Moderate	0.79
Severe	1.00
Extreme	>1.00

Source: Highway Capacity Manual, TRB Special Report 209, Table 7-1. Levels of congestion correspond generally with LOS C or better through LOS E

6.8.3 Traffic Safety Measures

Among transportation performance criteria, traffic safety is most universally accepted. A quantitative index or measure of safety performance is appropriate, therefore, as one of the basic performance measures for the Kane County transportation system.

Safety is often discussed only in general or qualitative terms. To include safety as a more useful performance measure, it is desirable to quantify safety in readily understandable terms. Of course, any effort to quantify safety must be fully supportable. Highway safety can best be characterized by the number of highway crashes and the resulting injuries and fatalities that might occur or be expected to occur over a given time period. Developing a highway safety performance measure thus becomes an exercise in relating basic transportation system features and attributes to an expected number of highway crashes. There are a number of basic, well-established principles relating highway safety to elements of the highway. These

include 1) the relationship of vehicular traffic volume to crash frequency and 2) differences in the safety performance of different highway types.

6.9 Existing Traffic Performance Analysis

The traffic performance analysis of the existing Kane County highway system relied on data related to travel demand and existing facilities, as well as, measures of effectiveness derived from the county's travel demand model.

6.9.1 Existing Traffic Service Measures

The traffic service measures of VMT, VHT, and VHD on all highways stratified by functional classification, as well as, county roads only are summarized in Table 6-6. In examining the traffic performance of all highways, principal arterials, which account for only 28 percent of the lane-miles within the county, were found to carry the bulk of traffic (approximately 50 percent of VMT) and experience approximately 52 percent of VHD. The same trend is increased by 50 percent when looking exclusively at the county roadway network. For county highways alone, principal arterials were only 26 percent of the system, but carried approximately 72 percent of traffic and experienced 89 percent of the VHD.

TABLE 6-6
Traffic Performance – 2003

Functional Class	VMT		VHT		VHD	
	Miles	%	Hours	%	Hours	%
2003 All Highways						
Freeways and Ramps	2,446,911	27	43,467	18	994	15
County Freeway and SRA	2,554,148	28	73,753	30	1,824	27
Principal Arterials	1,901,738	21	56,353	23	1,518	23
Minor Arterials	711,079	8	22,517	9	580	9
Collectors	1,454,211	16	50,807	20	1,745	26
Totals	9,068,087	100	246,896	100	6,661	100
2003 County Highways						
County Freeway and SRA	1,233,610	71	36,548	71	667	86
Principal Arterials	201,550	11	5,759	11	73	10
Minor Arterials	289,641	17	8,803	17	30	4
Collectors	20,308	1	636	1	1	< 1
Totals	1,745,108	100	51,747	100	771	100

6.9.2 Existing Congestion Measures

Congestion on all highways for 2003 based on daily traffic is illustrated in Figure 6-10. Only roadway segments that were found to be operating at LOS D, E, or F are shown. The congestion level has been designated in three categories related to levels of service as follows:

- Moderate Congestion (LOS D)
- Severe Congestion (LOS E)
- Extreme Congestion (LOS F)

When considering all highways in Kane County, only 18 percent of route miles and 23 percent of lane-miles were classified as congested. For just county roads, only 12 percent of route miles and 17 percent of lane-miles were deemed to be congested. Only 6 percent to 7 percent of the county highways were congested with a concentration of these roadways in Carpentersville/Dundee/Elgin, St. Charles/Geneva, and Aurora.

Table 6-7 shows the length and percentage of route miles and lane-miles at each LOS for all highways and for county highways only.

TABLE 6-7
Congestion – 2003

Level of Service	Route Miles		Lane Miles	
	Miles	%	Miles	%
2003 All Highways				
A	635	57	1,325	50
B	173	16	399	15
C	104	9	298	11
D	70	6	218	8
E	81	7	250	10
F	58	5	145	6
Total	1,121	100	2,635	100
Total Congested*	209	18	613	24
2003 County Highways				
A	230	74	460	65
B	26	8	63	9
C	18	6	56	8
D	20	6	76	11
E	9	3	21	3
F	8	3	25	4
Total	311	100	701	100
Total Congested*	37	12	122	18

*LOS D, E and F

6.9.3 Existing Safety Measures

In October 2001, the Kane County Transportation Committee directed the staff of the KCDOT to proceed forward with an on-going analysis of safety enhancements in five areas located in the easternmost portion of the county. In response to this directive, the KCDOT prepared a separate memorandum for each study area as part of the *County Wide Safety Enhancement Plan*. The categories and types of recommendations incorporated into each study area plan are as follows:

Speed Limit Reductions

Intersection Improvement Modifications

- Traffic signal installation and channelization
- Addition of protective only left turn signalization
- Installation of left and right-turn lanes
- Inclusion of pedestrian signalization with traffic signals
- Reconfiguration of existing timing scheme, red light enforcement and supplemental signing
- Installation of temporary traffic signals
- Increased turning radius to facilitate safer turning movements by trucks

Sight Distance Improvements

- Removal of vegetation
- Provision or relocation of stop bars and supplemental signing
- Re-grading of berms
- Acquisition of easement or additional right-of-way to eliminate an existing intersection sight distance obstruction

Roadway Maintenance/Repairs

- Re-paving roadway/end sections
- Replacement of existing guardrail
- Patching potholes
- Re-striping

Additional Warning/Regulatory Signs/Markings

- “Blinker” type signs to replace existing stop/warning signs at various locations
- Additional advisory signs such as chevrons, curve ahead, deer crossing, advisory speed, etc.
- Placement of reflective pavement markings
- Placement of additional pavement markings

- Traffic calming
- Reduction of speed limits
- Installation of barrier medians

6.9.4 Existing Public Transportation System Performance

In 1990, approximately 2.8 percent of the total work trips made by Kane County residents were made using rail or bus. Other means of transportation (taxicab, bicycle, etc.) constituted 0.8 percent of total work trips. Between 1980 and 1990, the proportion of work trips made by rail or bus declined by about 1 percent, while the proportion of work trips made by other means of transportation remained the same (*Kane County Transportation Planning Area Study – Transit System Performance*).

Although the proportion of trips made by rail and bus use declined between 1989 and 2002, the overall number of transit riders increased. As another example, in Kane County, Metra ridership increased 62 percent from 1989 to 2002. Table 6-8 shows the overall change in weekday boardings for each station in Kane County from 1989 to 2002.

TABLE 6-8
Change in Weekday Boardings from 1989 to 1999 in Kane County

Station	1989	2002	Percent Change
Aurora	1056	1646	+56%
Geneva	1290	1698	+32%
National Street	255	551	+116%
Elgin	465	554	+19%
Big Timber Road	33	581	+1661%
Total	3099	5030	+62%

Source: Commuter Rail System Station Boarding/Alighting Count, Summary Results Fall 2002

The ability of commuter rail lines to serve residential areas is often limited by the number of available parking spaces. Parking for automobiles is available at all Metra stations in the county, and many stations offer bicycle storage. Metra considers parking capacity to be exhausted when utilization exceeds 85 percent. In the county, Aurora, Geneva, and Elgin all exceed 85 percent of parking capacity. Average daily usage of parking spaces at these three stations combined is approximately 99.9 percent.

Pace, the RTA's suburban bus division had annual ridership of over 38 million riders in 2000. It provides commuter and local services within Kane County. Services include fixed route, dial-a-ride, park-n-ride to Metra stations and paratransit.

The 1996 Pace Comprehensive Operating Plan identifies a long-range business plan for the delivery of bus transit service in northeastern Illinois. As a rule, a combined density of 4,000 persons (employed and/or residing) per square mile is a criterion for a successful fixed route operation. Feeder bus services for commuter rail lines need a density of 2,500 persons per

square mile. Only the Aurora and Elgin areas meet these thresholds in Kane County. Relationship of the present Pace bus service area with combined year 2000 population and employment density is shown in Figure 6-11.

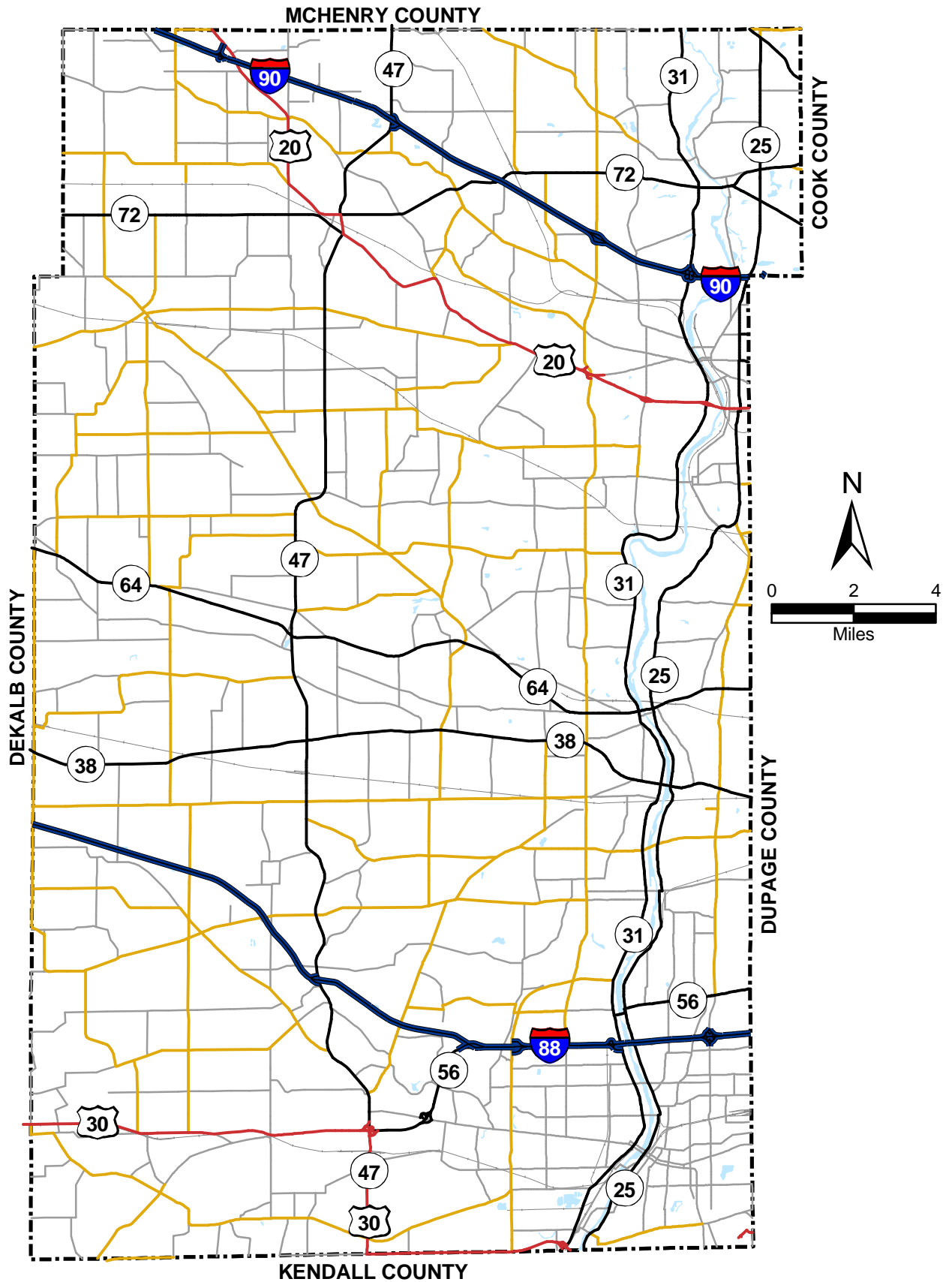
The average weekday ridership for the Pace system is 9,205 in Kane County. Thirty-three fixed route services operate in the county, 16 in the Aurora area and 17 in the Elgin area (Table 6-9). This transit service provides both intra-community service and links between neighborhoods and Metra rail stations.

TABLE 6-9
Fixed Route Service

Area	Number of Routes	Average Weekday Riders
Elgin	17	4601
Aurora	16	4604
Total	33	9205

Source: Pace Ridership Data, January 2001

Section 6
Figures



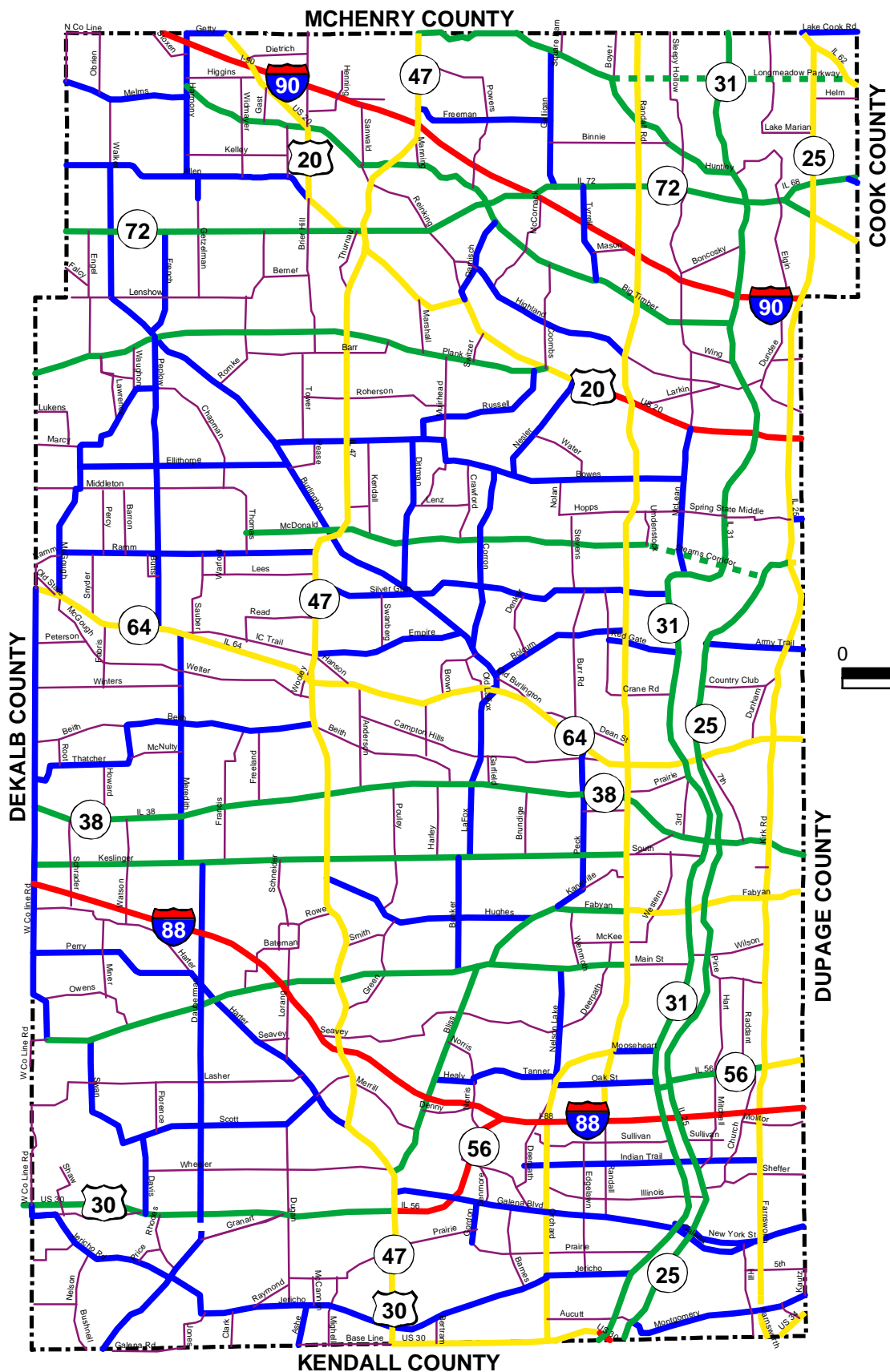
Kane County Roads

- Interstate
- U.S. Highway

- State Highway
- County Highway
- Other

Jurisdictional Classification of Existing Highways - 2004

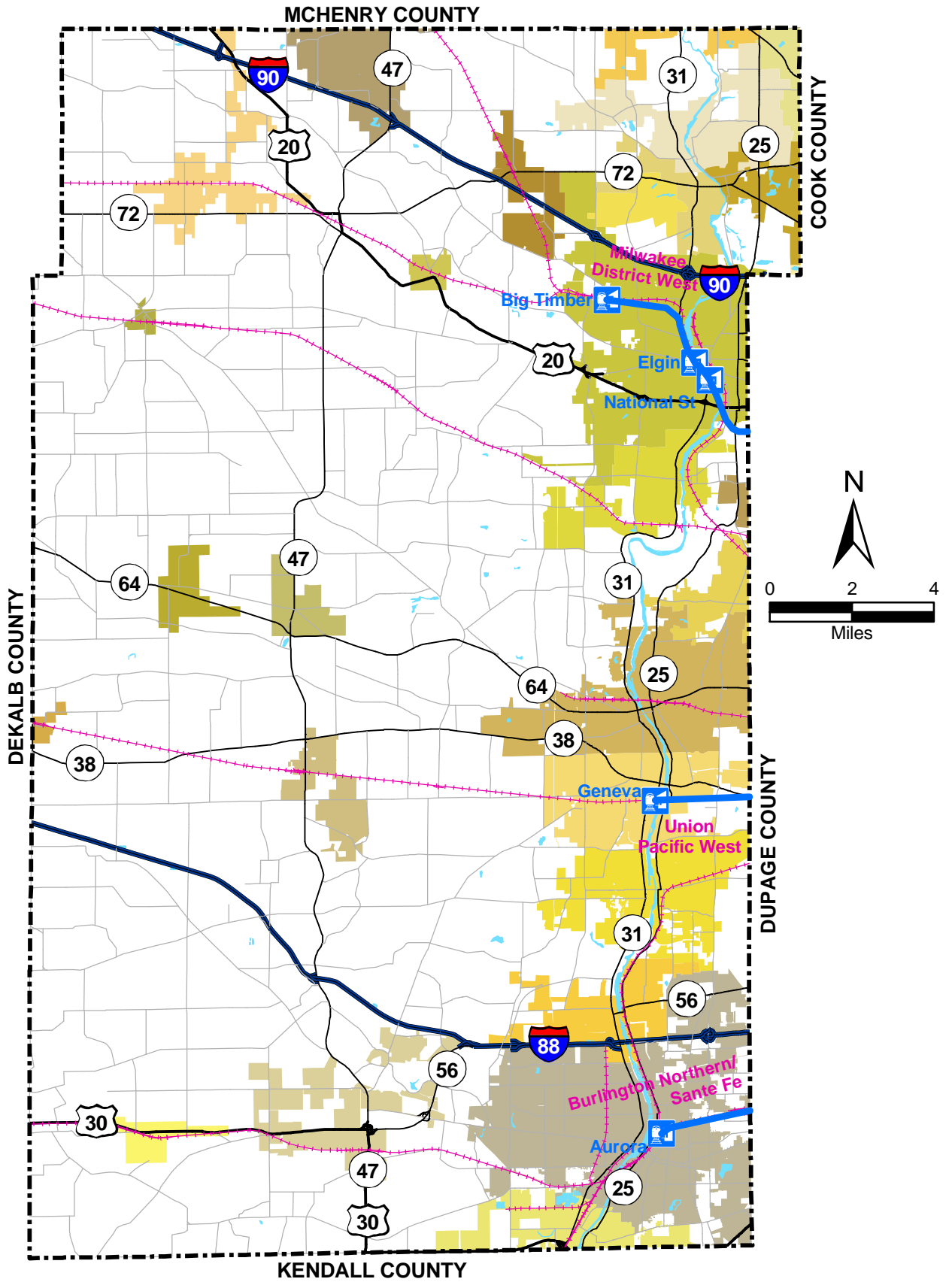
Figure 6-1
Kane County 2030 Transportation Plan



- Expressway
- SRA
- - - Proposed SRA
- Principle Arterial
- - - Proposed Principle Arterial
- Minor Arterial
- - - Proposed Minor Arterial
- Collector

Roadway Functional Classification
 Adopted by Kane County Board
 January 2004

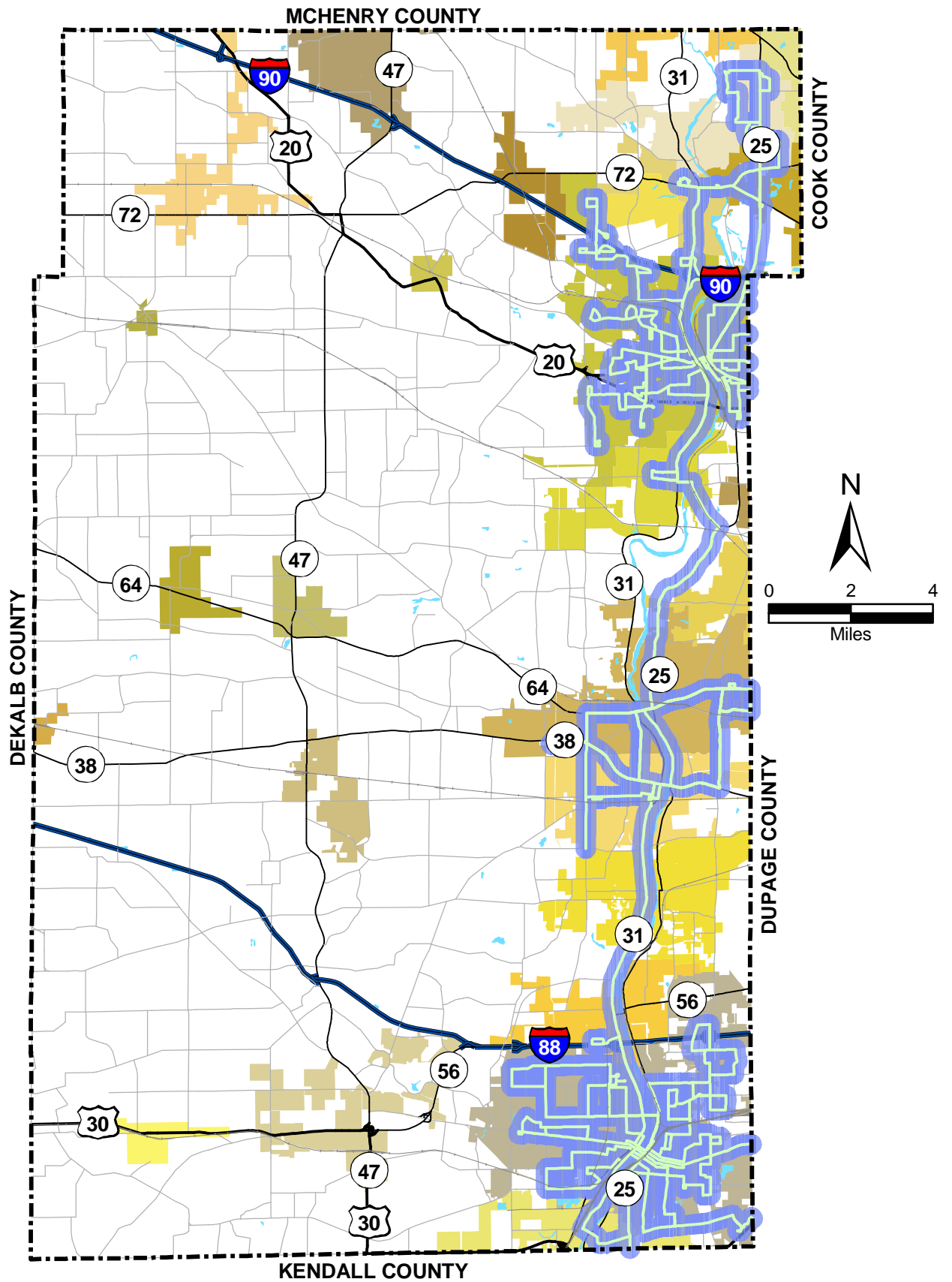
Figure 6-2
 Kane County 2030 Transportation Plan



- Existing Rail Service Lines
- Existing Metra Stations
- - - Railroad

2004 Metra Rail Service

Figure 6-3
Kane County 2030 Transportation Plan

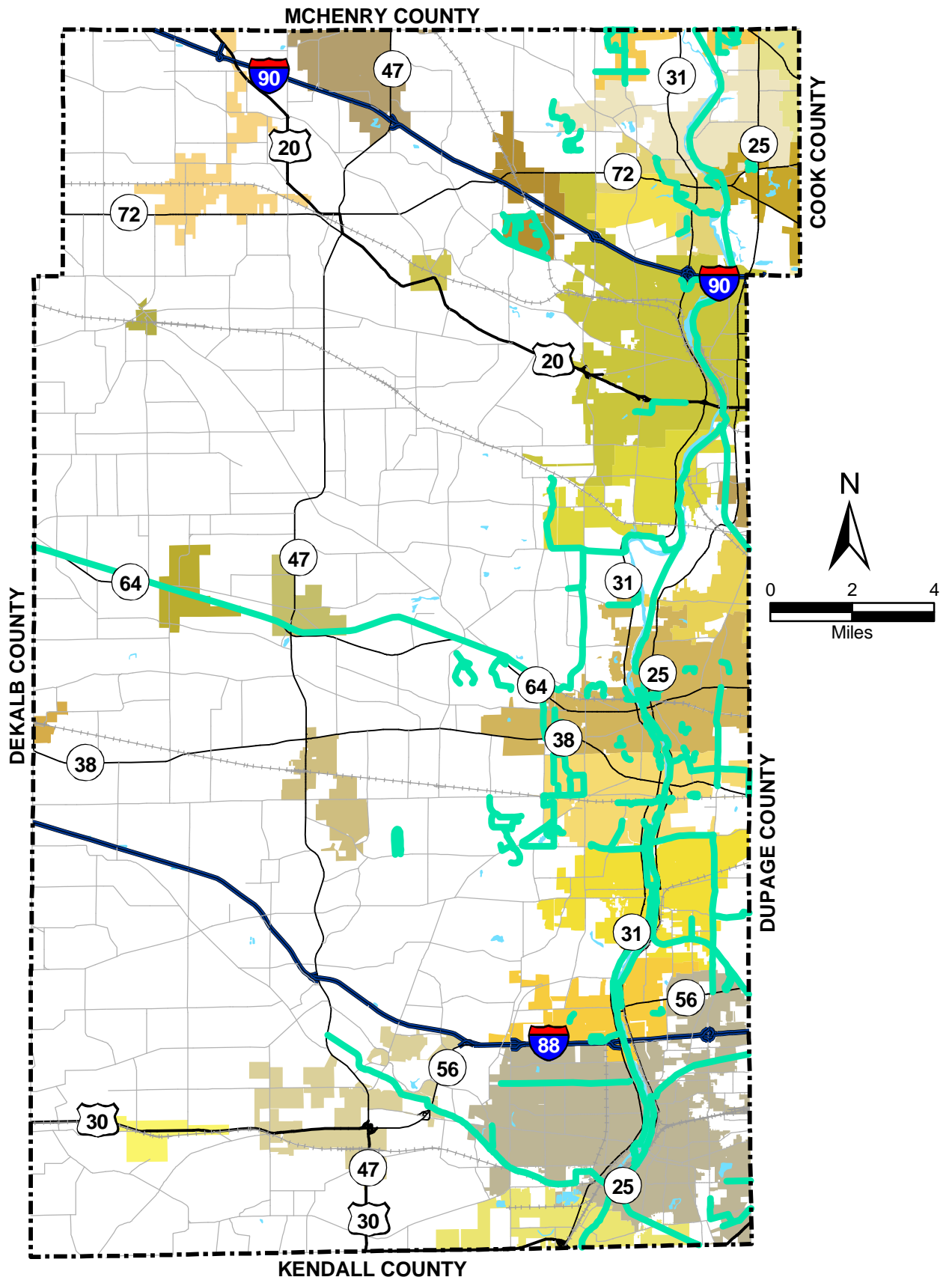


2004 Pace Bus Service

- Existing Pace Bus Service
- Pace Bus Service Area



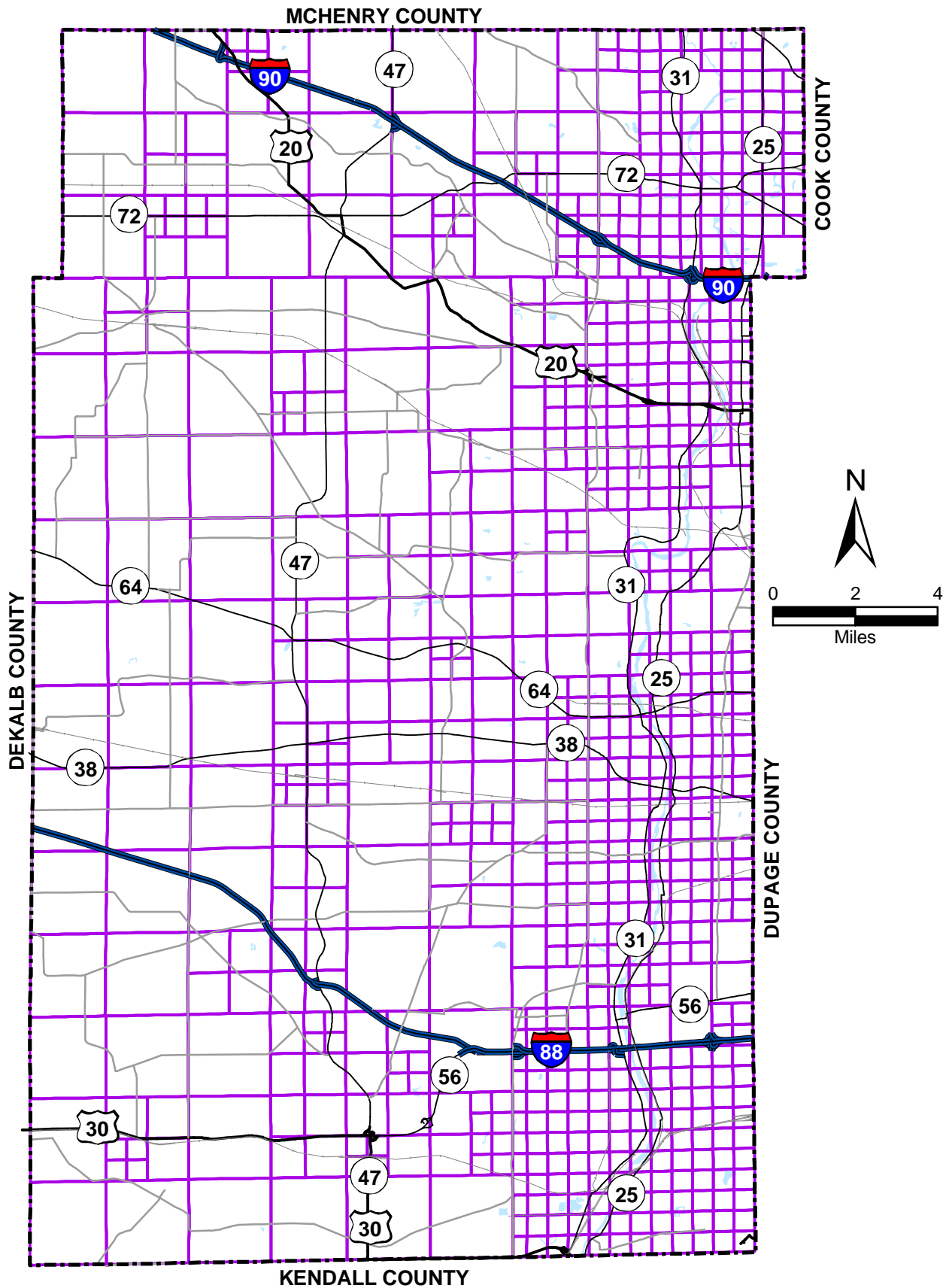
Figure 6-4
Kane County 2030 Transportation Plan



2004 Bicycle and Pedestrian Trails

 Existing Bicycle and Pedestrian Trails

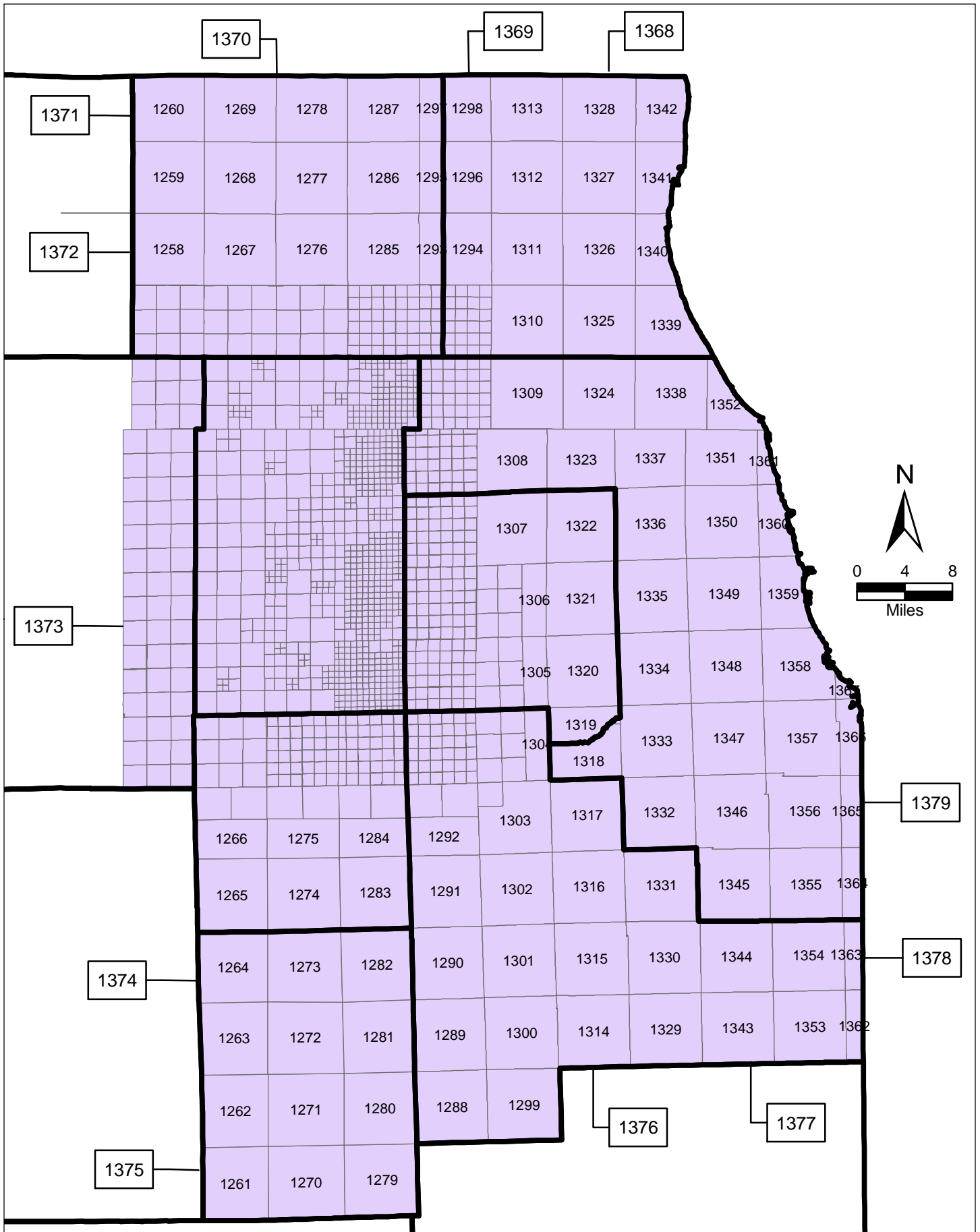
Figure 6-5
Kane County 2030 Transportation Plan



Kane County Traffic Analysis Zones

Traffic Analysis Zone

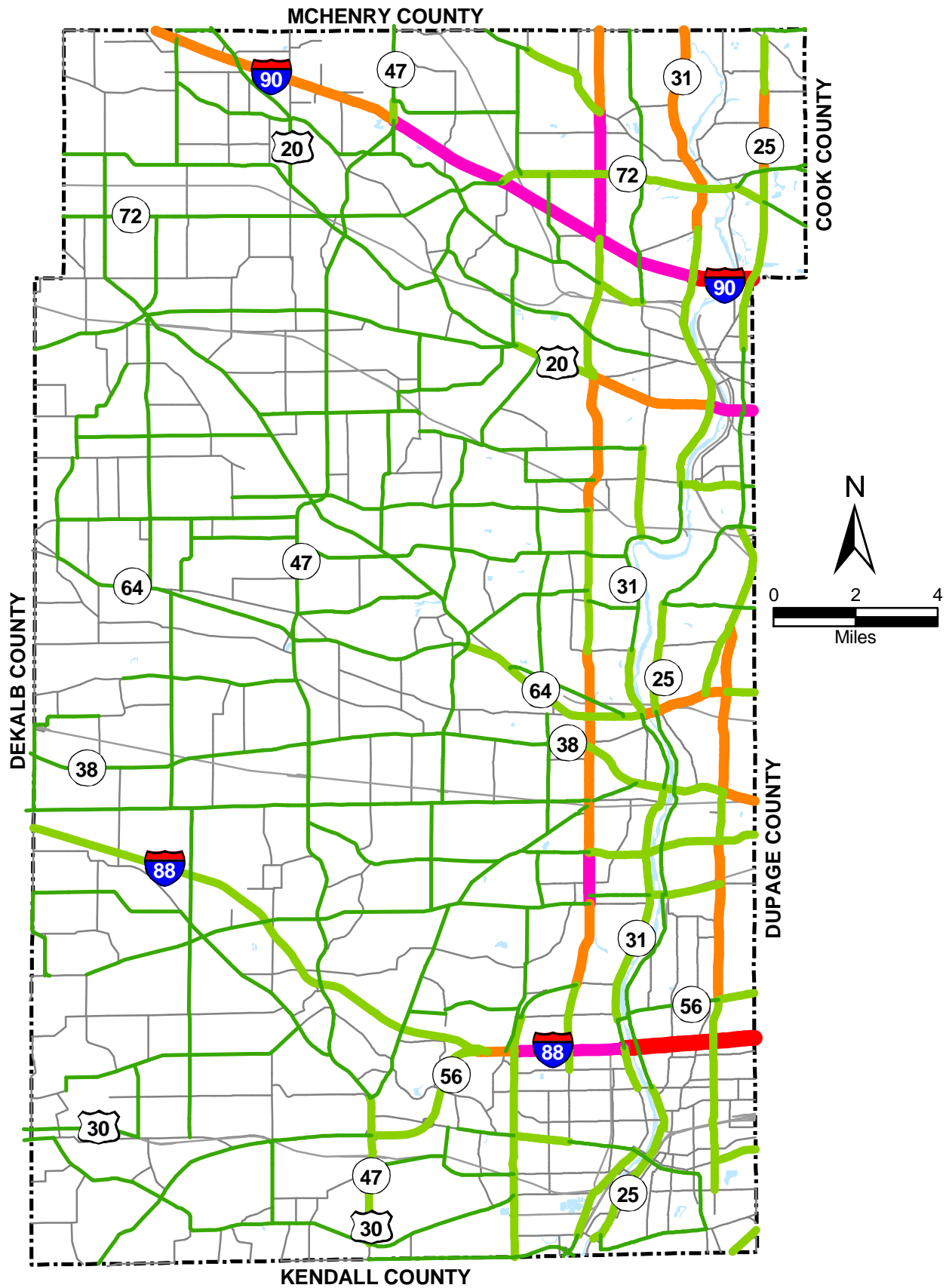
Figure 6-6
Kane County 2030 Transportation Plan



TAZ
 County

Kane County Travel Demand Model
Full Metropolitan Area Traffic Analysis Zones

Figure 6-7
Kane County 2030 Transportation Plan

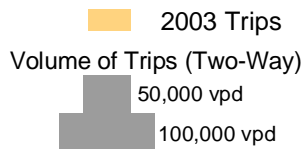
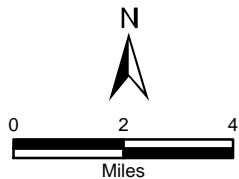
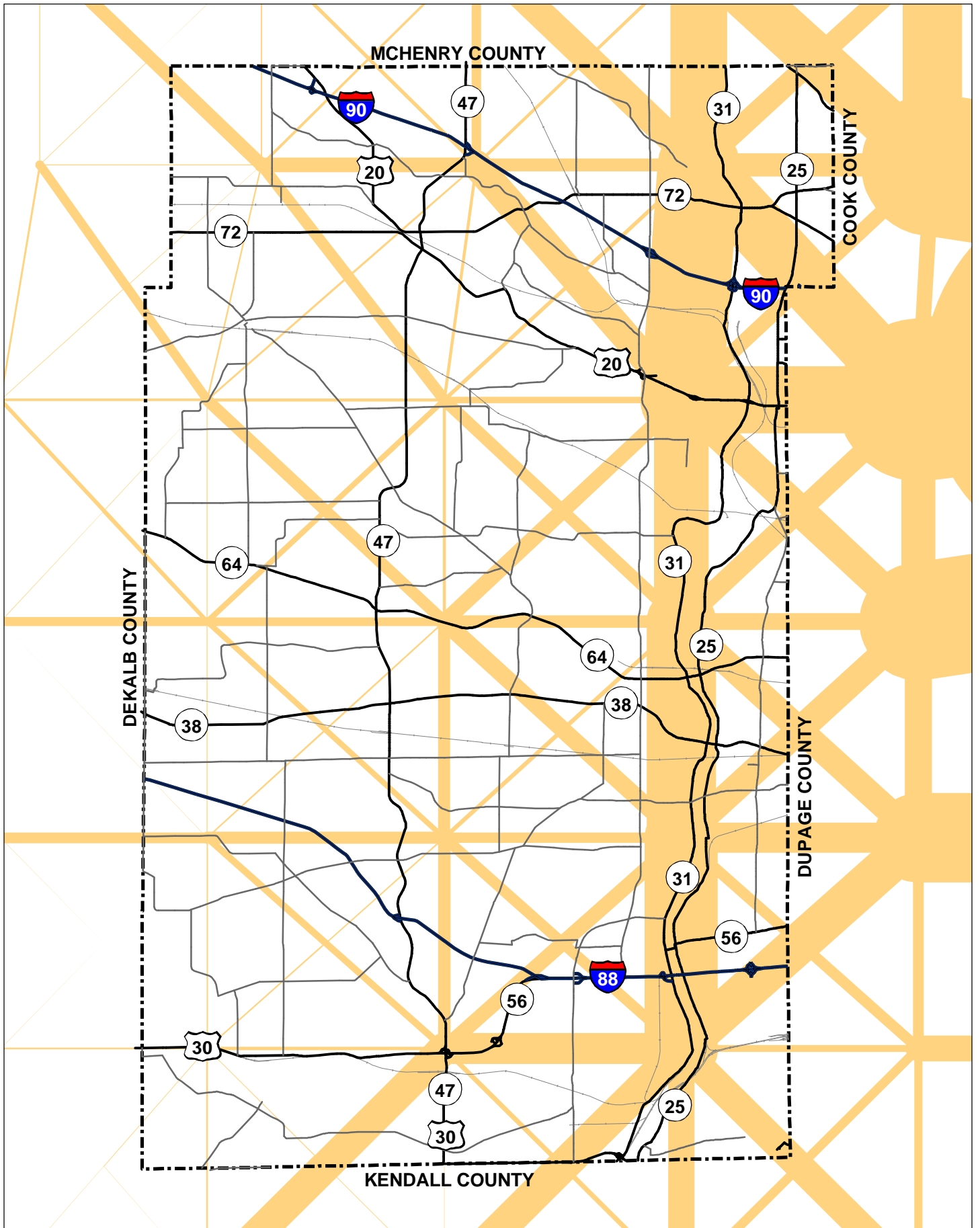


- | | | | |
|---|-------------------|---|-----------------|
| — | No Data Available | — | 30,001 - 45,000 |
| — | 0 - 15,000 | — | 45,001 - 60,000 |
| — | 15,001 - 30,000 | — | > 60,000 |

Sources:
 - Kane County Division of Transportation, July 2004

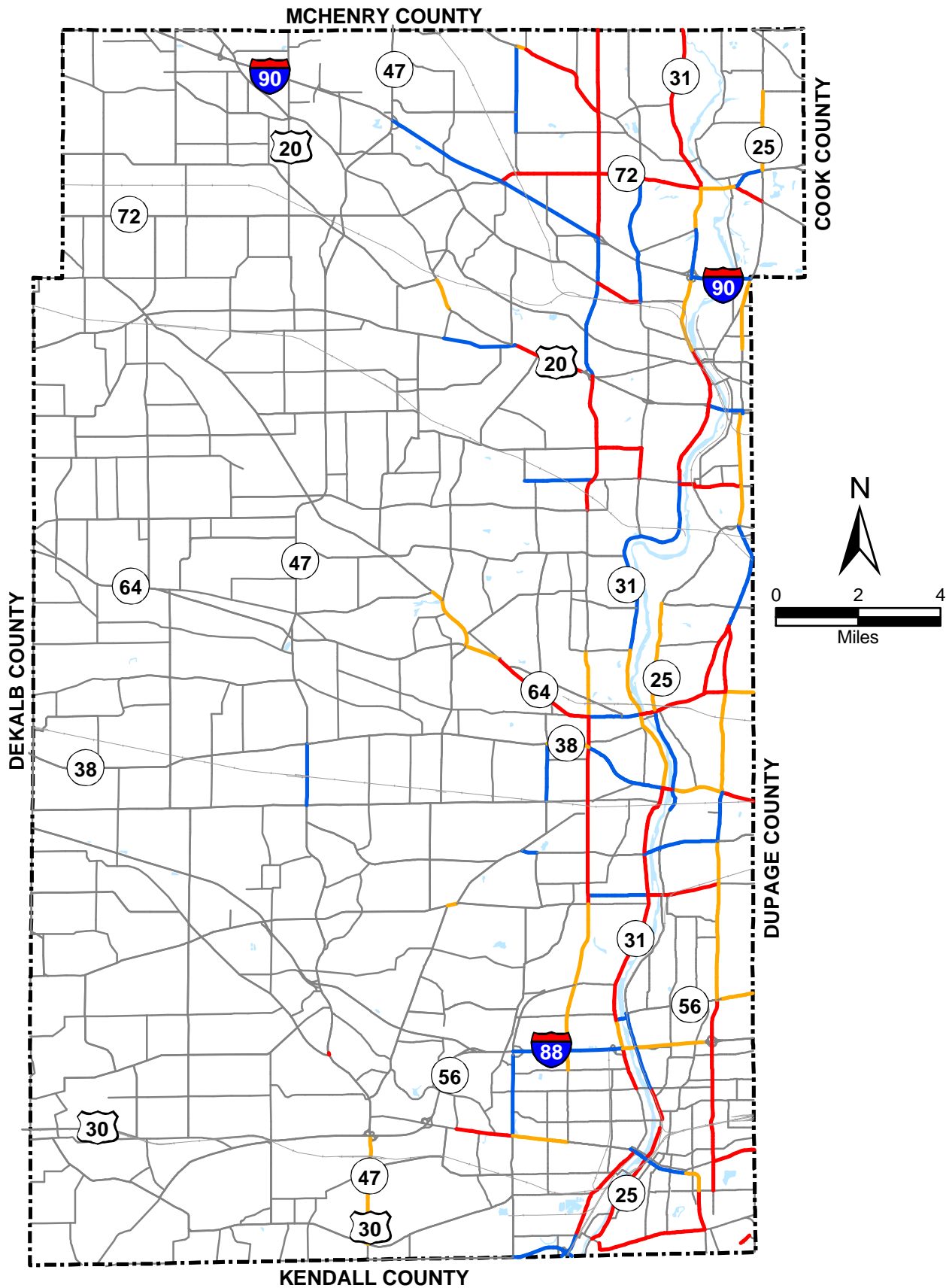
Average Daily Traffic
 Existing Year 2003

Figure 6-8
 Kane County 2030 Transportation Plan



2003 Travel Desire

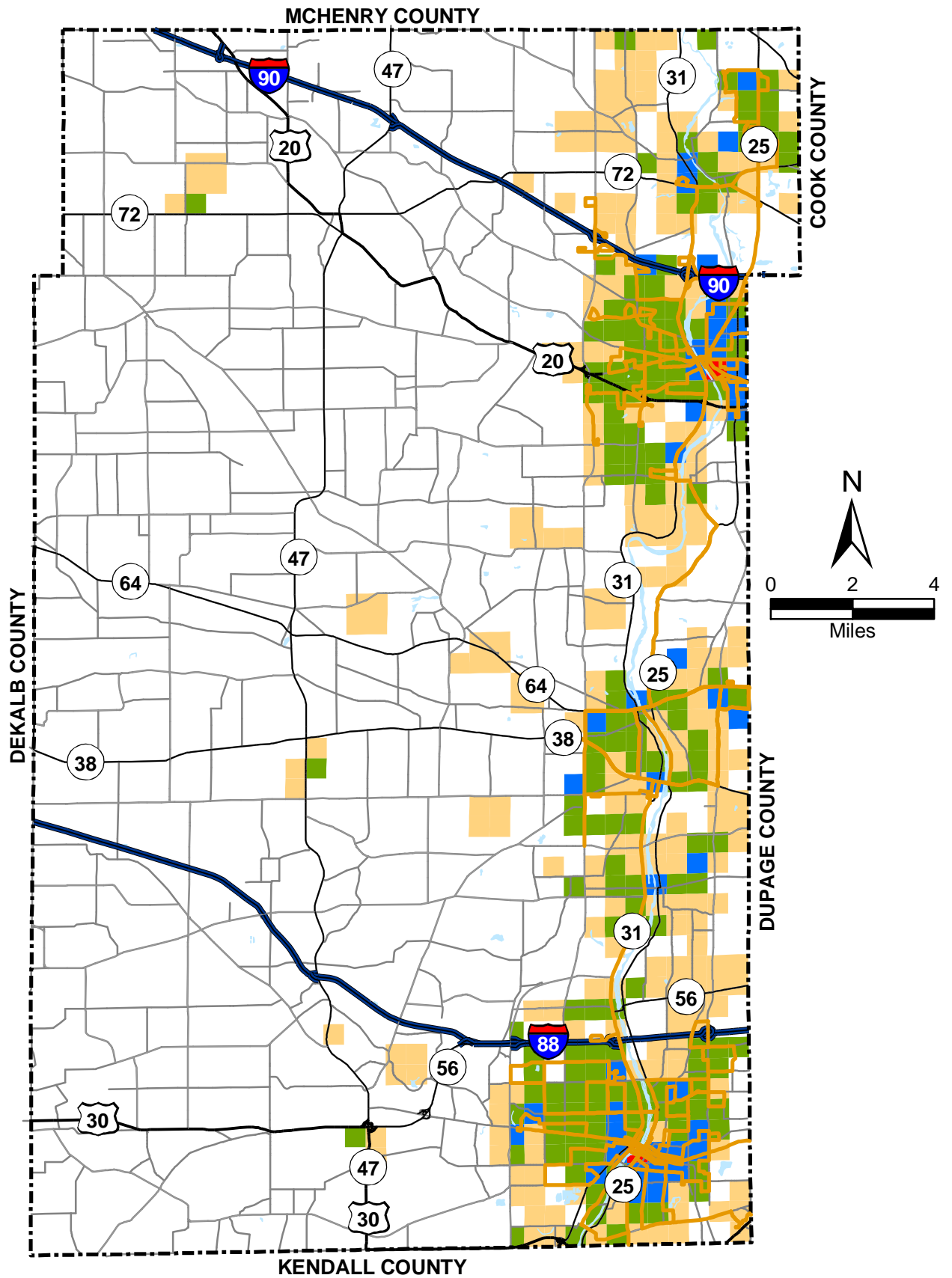
Figure 6-9
Kane County 2030 Transportation Plan



- No Congestion
- Moderate Congestion
- Severe Congestion
- Extreme Congestion

Existing Year 2003 Congested
Roadway Segments
Based on Average Daily Traffic

Figure 6-10
Kane County 2030 Transportation Plan



Population & Employment per Square Mile

- 1,001 - 4,000
- 4,001 - 10,000
- 10,001 - 30,000
- > 30,000

Existing Pace Bus Service

Pace Bus Service
2000 - Population and
Employment Density

Figure 6-11
Kane County 2030 Transportation Plan