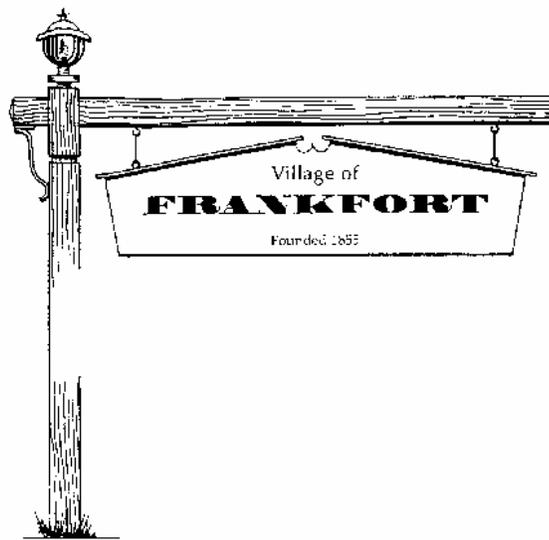


# Village of Frankfort

## Transportation Master Plan



Prepared for  
Village of Frankfort, Illinois

Prepared by



Adopted January 8, 2007

# Contents

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## *List of Figures and Tables, ii*

1. Introduction	1
2. Goals, Objectives, & Policy Statements	4
3. Existing Transportation Conditions	6
Roadway Cross Sections / Intersection Traffic Controls	6
Existing Traffic Volumes	6
Designated Truck Routes / Truck Traffic Volumes	9
Public Transportation	9
4. Thoroughfare System - Functional Heirarchy/Design Standards	11
Functional Classification System	12
Geometric Design Standards	18
Street System Planning Guidelines	23
5. Existing Transportation System Needs	25
Network Continuity	25
System Capacity	26
6. Future Land Use and Traffic Volumes	29
Future Development and Traffic Generation	29
Distribution of Future Development Traffic	30
7. Recommended Plan	39
Functional Roadway Classification System Modifications	39
Truck Route System Modifications	41
Roadway System Improvements	42
Transit Elements	49
Bicycle System Elements	49
Transportation Action Program	51
8. Conclusions	55

## Appendix

*Village of Frankfort*

*Transportation Master Plan*

# List of Figures and Tables

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## Figures

1. Transportation Planning Area	2
2. Existing Roadway Cross Sections and Intersection Traffic Controls	7
3. Existing Daily Traffic Volumes	8
4. Designated Truck Routes and Existing Daily Truck Traffic Volumes	10
5. Relationship Between Access and Movement	13
6. Roadway Functional Classification System	14
7. Existing Roadway System Deficiencies	28
8. Traffic Analysis Zones	31
9. Residential Growth to 2021	32
10. Retail Growth to 2021	33
11. Industrial Growth to 2021	34
12. Office Growth to 2021	35
13. Daily Traffic Generated by Future Development	37
14. Projected 2021 Daily Traffic Volumes	38
15. Recommended Roadway Improvements	43

## Tables

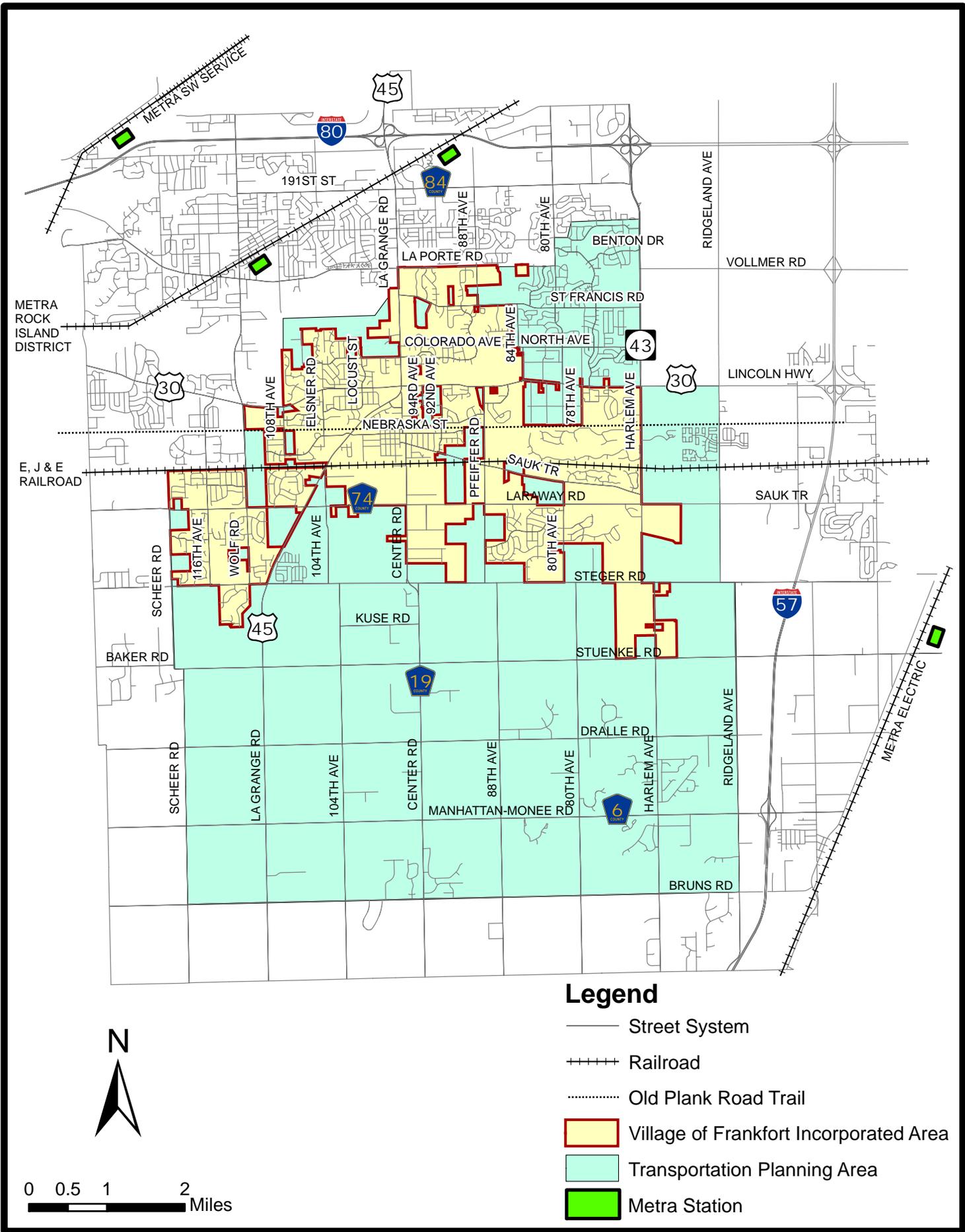
1. Roadway Functional Classification Characteristics	15
2. Roadway Geometric Design Standards by Functional Classification	19
3. Transportation Action Program	52

# 1. Introduction

The Village of Frankfort has experienced rapid residential and commercial growth since the previous Transportation Master Plan was prepared in 1996. The population has grown from approximately 9,400 people in 1996 to approximately 16,500 today and is estimated to more than double over the next 20 years.

As the population has grown, the transportation planning area has also expanded from approximately 36 square miles to 57 square miles and now extends further east to Ridgeland Avenue (as opposed to Harlem Avenue in 1996) and further south to Bruns Road (as opposed to Stuenkel Road). The north (La Porte Road) and west (Scheer Road) study area boundaries are approximately the same as in 1996. Figure 1 illustrates the planning area for the Transportation Master Plan.

The Village's 2004 Comprehensive Plan envisions expansion of residential land uses around all sides of the Village, with infill development around existing neighborhoods and significant growth opportunities to the south of Steger Road in Green Garden Township. Commercial land uses are expected to fill in along the two major transportation corridors (U.S. Route 45 and U.S. Route 30) and the evolving commercial corridors of Harlem Avenue, Laraway Road, and Wolf Road. Major expansions of the industrial and business parks are proposed along Laraway Road, between U.S. Route 45 and Pfeiffer Road, with additional business park opportunities envisioned east of Harlem Avenue. The potential extension of I-355 across the southwest corner of Frankfort, with a proposed interchange at U.S. Route 45, would create another major commercial/business park hub in the vicinity of this interchange. The potential development of a third regional airport in eastern Will County, to be known as the Abraham Lincoln National Airport, will also affect land development plans in Frankfort.



### Legend

- Street System
- ++++ Railroad
- ..... Old Plank Road Trail
- Village of Frankfort Incorporated Area
- Transportation Planning Area
- Metra Station



0 0.5 1 2 Miles

Residents that responded to the community survey administered by the Village in Spring 2003 indicated a strong concern about traffic congestion caused by steady development in the south suburban region. However, the majority of residents also desire more development of quality commercial and industrial uses, a more vibrant historic district, and a decrease in the pace of residential development. Increased development throughout the community will place demands on the roadway infrastructure, accentuating road capacity and continuity needs.

The purpose of the Transportation Master Plan is to provide for the long-term transportation needs of the community and accommodate projected growth over the next 15 years, while protecting the existing residential and historic areas of the village from unnecessary traffic incursions. This will require improvements to existing facilities and the addition of new facilities. An improved arterial network will relieve congested areas, improve travel times, and reduce traffic delays and vehicle emissions. An expanded collector street network will ensure that local traffic can move throughout the community without having to use arterials for all trips. If the arterial and collector network is adequate, meaning a continuous system with sufficient capacity, cut-through traffic within neighborhoods and the historic district will not be a significant problem.

The Transportation Master Plan has been organized to (1) identify the goals and objectives of the plan, (2) summarize existing transportation conditions, (3) describe the recommended functional hierarchy of roadways, (4) identify transportation system needs, (5) estimate traffic conditions based on land-use projections contained in the Comprehensive Plan, and (6) develop a recommended plan of future transportation improvements to address roadway system capacity, continuity, traffic control, and intersection alignment needs, with consideration given to truck routing, the bicycle trail system, and potential future transit opportunities. This plan is based on a 15-year planning horizon to the year 2021.

This study references several other planning documents in an effort to achieve a consistent vision for the Village of Frankfort. These documents include the following:

- *Village of Frankfort Comprehensive Plan*, prepared by Teska Associates, nc., August 16, 2004.
- *Village of Frankfort Bicycle Trail Plan*, prepared by Robinson Engineering, Ltd., September 2005.
- *Village of Frankfort Transportation Master Plan*, prepared by Barton-Aschman Associates, Inc., November 1996.
- *Village of Frankfort Design Standards*, prepared by the Village of Frankfort, adopted December 16, 2002.
- *Green Garden Township Comprehensive Land Use Plan*, prepared by the Green Garden Township Planning Commission and the Comprehensive Plan Committee, January 25, 2006.

## 2. Goals, Objectives & Policy Statements

Goals, objectives and policy statements for the Village's transportation system were developed in the 2004 Comprehensive Plan. These goals, objectives and policy statements were utilized in the development of the Transportation Master Plan. By definition, **goals** are expressions of value and representations of a desired condition. **Objectives** are more specific, measurable aspects of goals. **Policies** are general procedures and planning principles used as guidelines to achieve objectives.

### Goals

- Provide and maintain adequate transportation and public infrastructure systems
- Reduce reliance on the automobile
- Protect environmentally sensitive areas
- Provide for a planned and orderly expansion of the Village
- Protect Frankfort's Historic District and established residential areas from intrusion of regional traffic
- Encourage local airport service

### Objective 1

Design a variety of travel mode options to provide safe, convenient, and efficient travel within the community and to reduce dependence on the automobile.

### Policies

- Provide a cohesive transportation network consisting of the street and sidewalk system, bike trails, commuter railroad, and air service.

- Maintain a current transportation plan and bicycle trail master plan that addresses area growth.
- Require developers to integrate relevant components of the bicycle trail master plan into their developments.

## **Objective 2**

Improve the efficiency of the major street system in the planning area.

### **Policies**

- Create safer residential neighborhoods via a street system that separates through traffic and local traffic.
- Route through traffic to major arterial roads to minimize adverse impacts on land use and local traffic flows.
- Limit the number of curb cuts and driveways along major arterial and collector roads.
- Control access to sites and improve signalization or signage at intersections.
- Require developers to dedicate and improve all streets in newly developing areas and expand the local collector street system.
- Work with other units of government to increase the traffic capacities of U.S. Route 45, U.S. Route 30, Laraway Road, Harlem Avenue, La Porte Road, Wolf Road, St. Francis Road, Steger Road, Ridgeland Road, and other principal roadways serving the Village.
- Work with other units of government, IDOT, and ISTHA so as to effectively locate the proposed interstate extension of I-355 from I-80 south to the planned Abraham Lincoln National Airport in Peotone.
- Prohibit the installation of streets that are not logical extensions of the existing road system.

## **Objective 3**

Promote efficiency and economy in operations of the transportation systems.

### **Policies**

- Implement a systematic street improvement and maintenance program.

### **3.**

## **Existing Transportation Conditions**

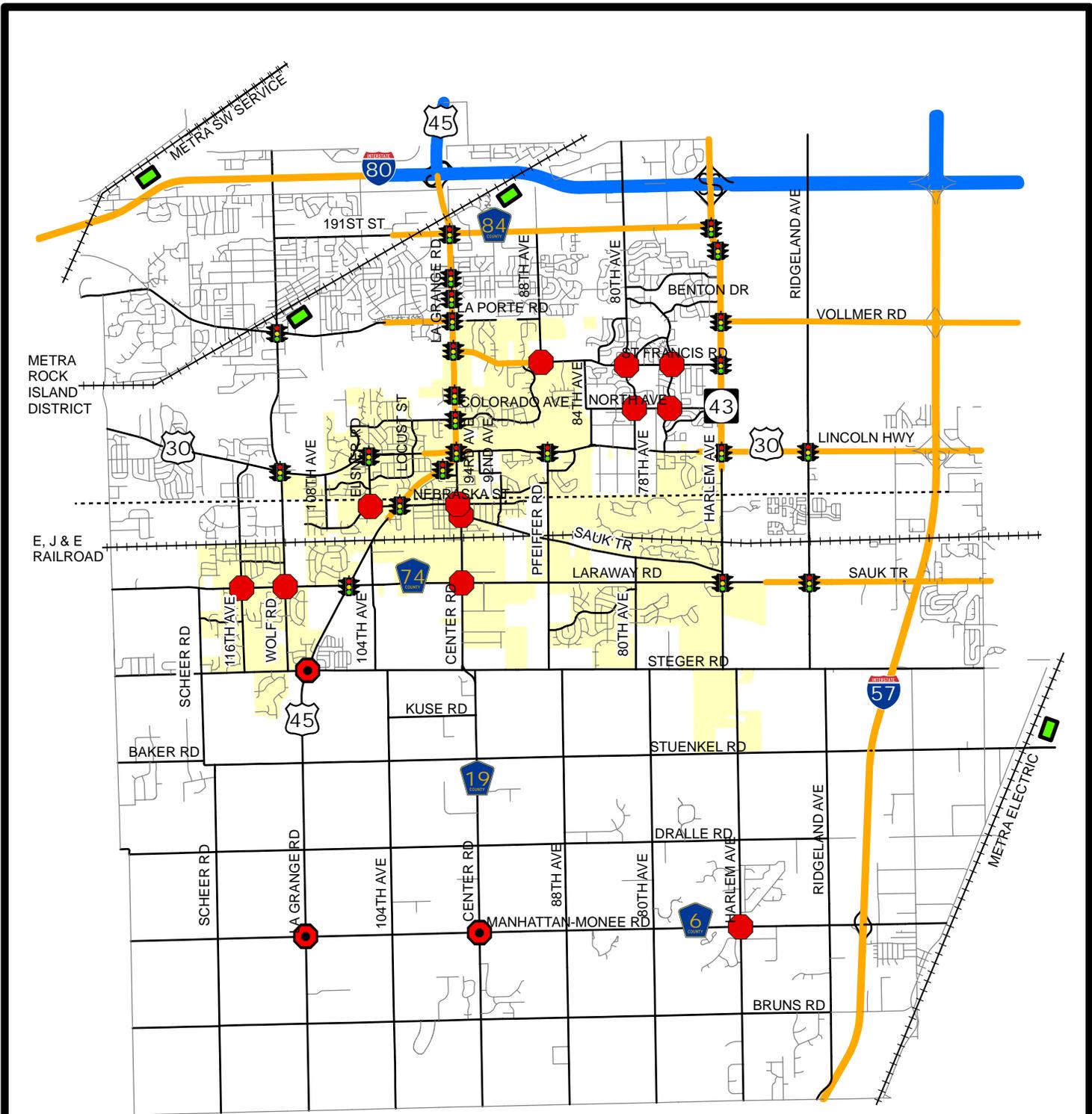
A long-range transportation study requires a large amount of data as a foundation for recommendations. As part of this master planning effort, data was collected from Village staff, IDOT, Will County, Cook County, and through field reviews. These data included an inventory of roadway cross sections, intersection traffic control devices, regulatory information, traffic volumes, and planned regional roadway system improvements.

### **Roadway Cross Sections / Intersection Traffic Controls**

Figure 2 illustrates the existing roadway cross sections (i.e., number of lanes) in the Village and traffic controls at intersections controlled by traffic signals or multiway stop sign control. There are also numerous intersections in the Village not depicted in Figure 2 that are under two-way stop sign or Yield sign control. There is presently one closed-loop traffic signal system in the Village, located along U.S. Route 45. The system consists of 11 traffic signals extending from 179<sup>th</sup> Street on the north to U.S. Route 30 and Old Frankfort Way on the south. The system is maintained by IDOT.

### **Existing Traffic Volumes**

Traffic volume data was obtained from IDOT and Will County and generally represents traffic counts collected in 2005. The average daily traffic volumes on the key arterial and collector roadways serving the Village of Frankfort are shown in Figure 3. The volume data is presented in the form of a traffic flow map with higher volume streets illustrated with heavier lines. This map clearly shows the major travel corridors in Frankfort and the dominant role played by U.S. Route 45, U. S. Route 30, and Harlem Avenue (IL Route 43) in moving traffic through the Village, in part due to the lack in continuity of the east-west and north-south community arterial and major collector street system.

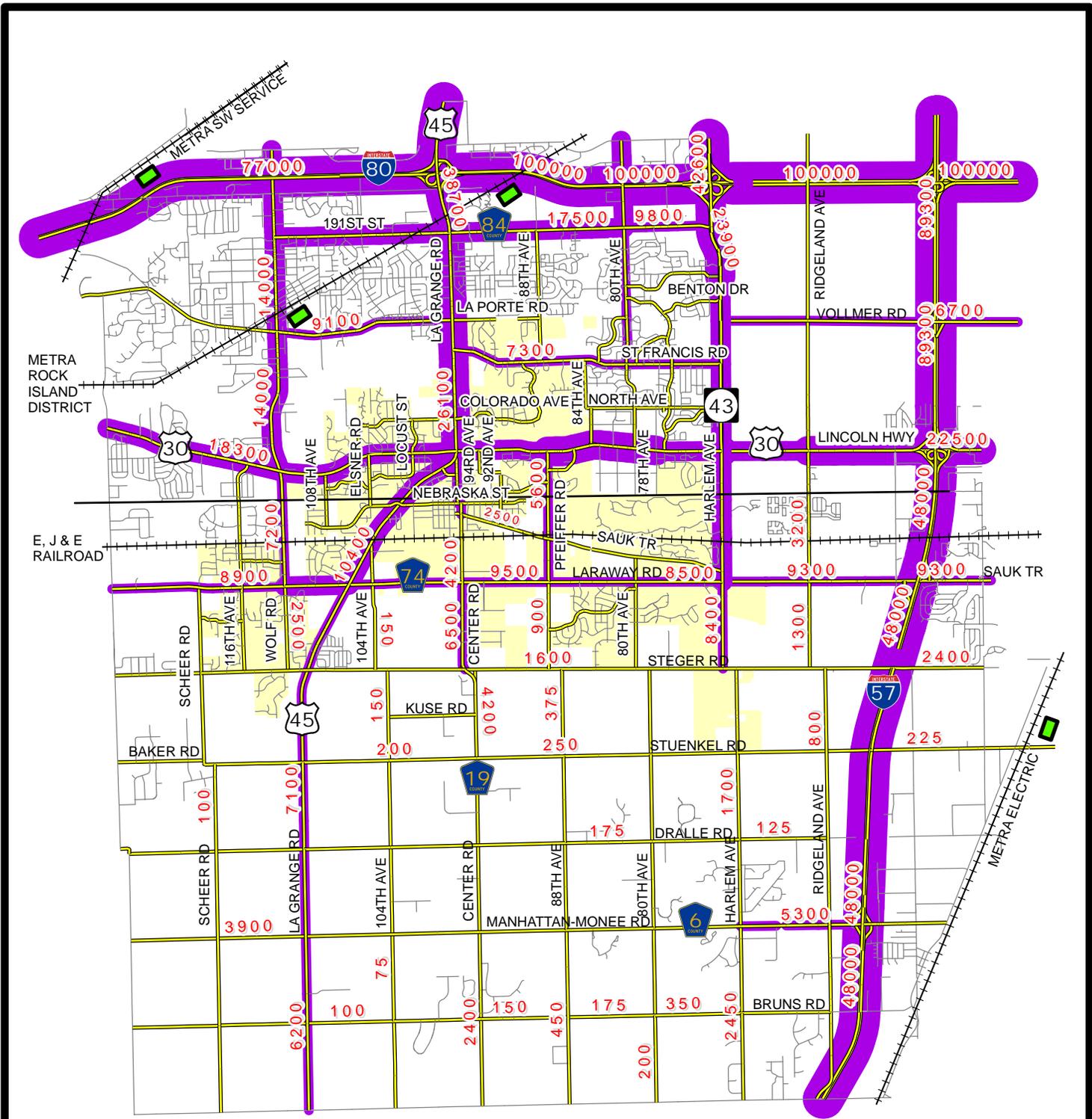


**Legend**

- All Way Stop Signs
- All Way Stop Signs With Flashers
- Traffic Signal
- Village of Frankfort Incorporated Area
- Metra Station
- 2/3 Lanes
- 4/5 Lanes
- 6/7 Lanes
- Railroad
- Old Plank Road Trail



0 0.5 1 2 Miles



**Legend**



0 0.5 1 2 Miles

- < 5,000 Vehicles
- 5,000-10,000 Vehicles
- 10,000-20,000 Vehicles
- 20,000-40,000 Vehicles
- > 40,000 Vehicles
- Street System
- Railroad
- Old Plank Road Trail
- Village of Frankfort Incorporated Area
- 3900 Traffic Volume
- Metra Station

The utilization of U.S. Route 45 and U.S. Route 30 for access to I-80 and I-57, respectively, is also clearly identifiable in Figure 3. A comparison of the existing traffic volume data with historic traffic counts indicates that over the past 10 years traffic levels have increased, on average, from 5-10 percent on the arterial streets serving the Frankfort community due to increased development within the Village and adjoining communities.

## **Designated Truck Routes / Truck Traffic Volumes**

The Village of Frankfort has a designated truck route system designed to accommodate heavy vehicles traversing the Village and connecting with the interstate and state highway system. The system includes roadways that are under the jurisdiction of, and designated as truck routes by, IDOT, Will County, Cook County, and the Village of Frankfort. Figure 4 shows the designated truck routes in the Village and the average daily truck traffic volumes on these roadways, as obtained from IDOT.

## **Public Transportation**

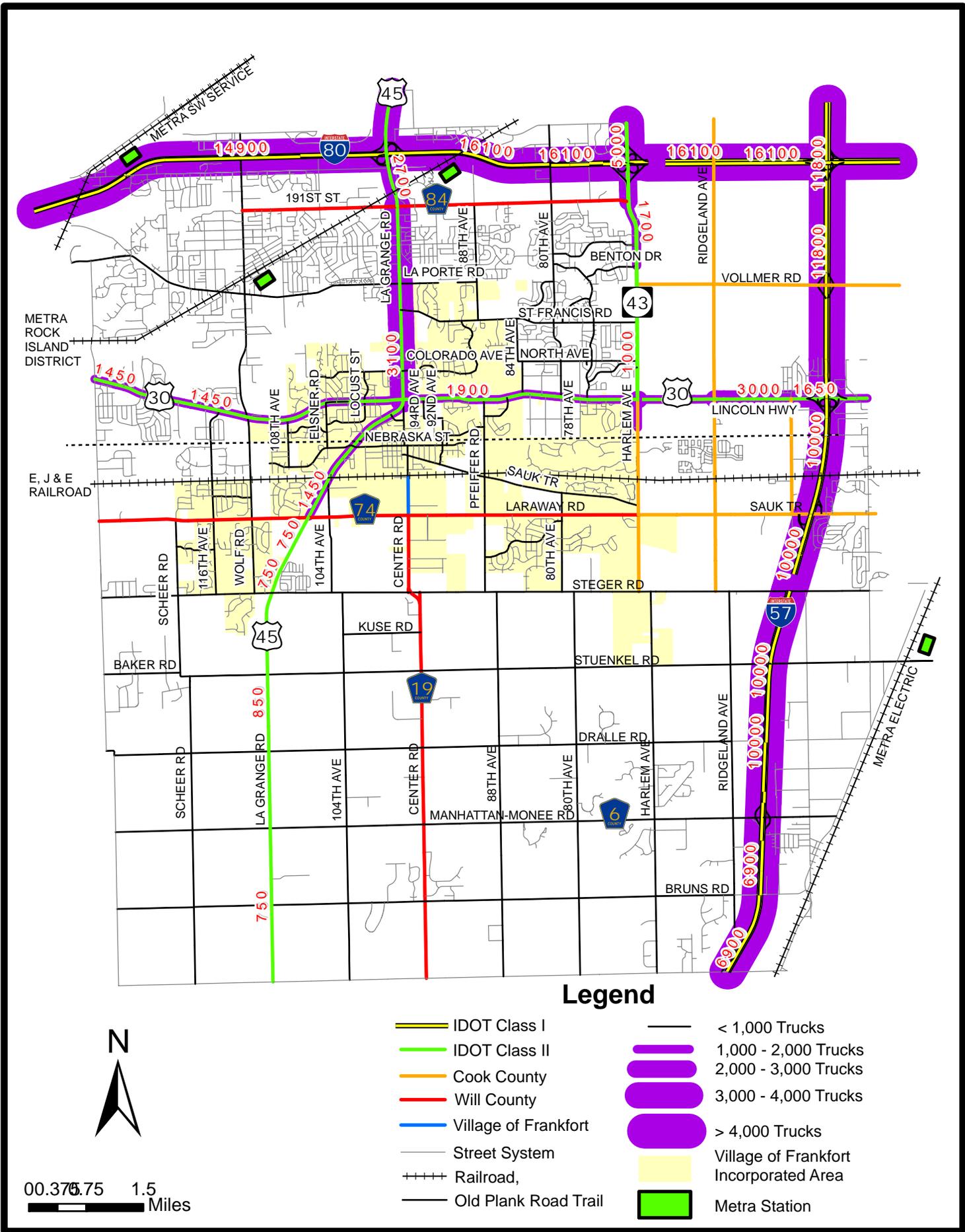
The Village of Frankfort presently is not directly served by public transportation. However, Metra commuter rail service is located in close proximity to the Village. There are three Metra lines that operate within a couple of miles of the Frankfort Village limits, as shown in Figure 1.

The Rock Island District line offers daily service between Joliet's Union Station and Chicago's LaSalle Street Station with nearby stations located in Mokena on Front Street (East of Wolf Road) and on Hickory Creek Drive (East of La Grange Road) and in Tinley Park on 80<sup>th</sup> Avenue (at 179<sup>th</sup> Street).

The SouthWest Service line offers weekday service between Manhattan and Chicago's Union Station with nearby stations located in Orland Park on 179<sup>th</sup> Street (East of Southwest Highway) and in New Lenox on Laraway Road (East of Cedar Road).

The Metra Electric line offers daily service between University Park and Chicago's Millennium Station with nearby stations located in University Park on University Parkway (at Governors Highway), in Richton Park on Sauk Trail (East of Governors Highway), in Matteson at 215<sup>th</sup> Street and Main Street, and in Olympia Fields on U.S. Route 30 (at Olympian Way) and on 203<sup>rd</sup> Street (East of Kedzie Avenue).

There are presently no Pace suburban bus routes serving the greater Frankfort community.



**Frankfort Transportation Master Plan**  
KLOA, Inc.

**Designated Truck Routes and Existing Daily Truck Traffic Volumes**  
**Figure 4**

## 4.

# Thoroughfare System – Functional Hierarchy/Design Standards

Streets and traffic control devices are interrelated elements of the highway transportation system. The characteristics and operation of these elements, in conjunction with the area development program, influence traffic patterns (amount of traffic on each street), level of service (how well traffic moves), and, indirectly, traffic safety (number of vehicular collisions). Because these elements are part of a system, decisions to alter their characteristics or operation should be considered in relation to their impact on the other elements in the system. The decisions to close streets, install stop signs, impose turn restrictions, restrict parking, widen a street, etc., should be considered in terms of their impact upon adjacent streets, intersections, and neighborhoods. Without a systematic approach, a mixture of policies, practices, and devices results; this can create confusion, inconvenience, accidents, and other problems.

The most widely accepted approach to “sorting out” the complex interrelationships among these elements is, first, to classify each street in a community according to the function it performs. Next, the classification should be revised to reflect the function each street should perform in order to accommodate expected future traffic volumes safely and efficiently. Decisions regarding traffic control devices and restrictive measures can be made, and restrictive measures can then be prescribed in a relatively straightforward manner, to assure that the functions are achieved. In addition, this procedure permits the identification of deficiencies in the street system and facilitates the analysis of street system needs.

## Functional Classification System

Roadways have two basic functions:

- To provide mobility
- To provide land access

From a design standpoint, these functions are incompatible. For mobility, high speeds and uniform traffic flows are desirable; for land access, low speeds are desirable, usually accompanied by inconsistent flows. More restrictive access controls permit increased mobility and travel at higher speeds in a more uniform manner.

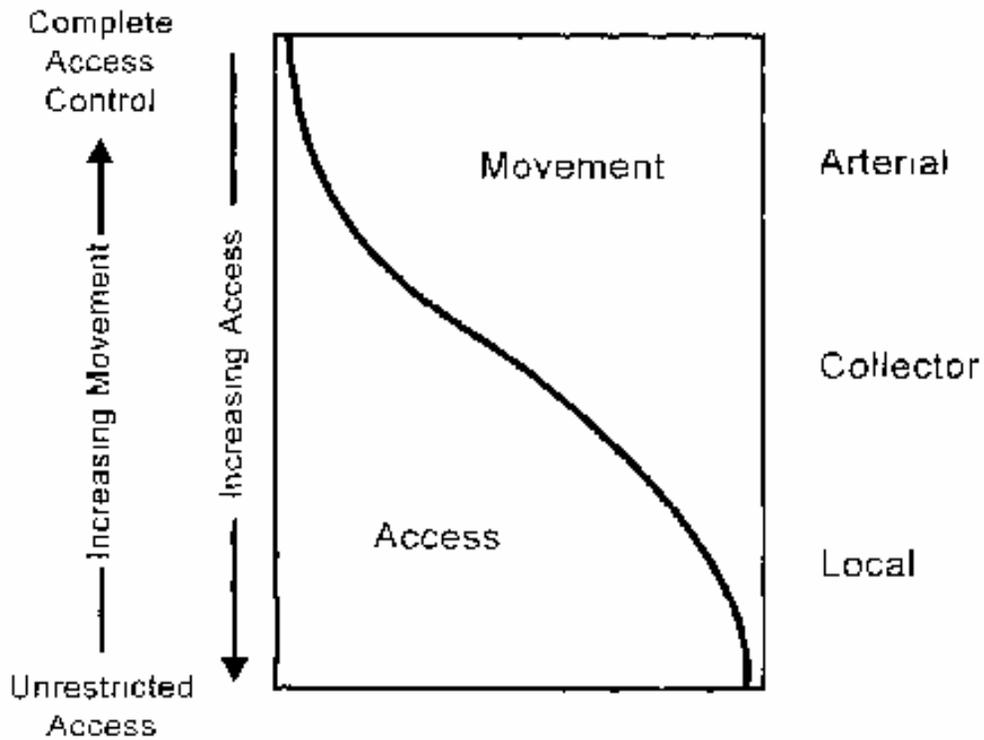
Travel involves movement through a network of roadways. For transportation planning purposes, as well as for design purposes, roadways are most effectively classified by function to provide for the movement of traffic through this network. Functional classification reflects four distinct stages of trip-making, including primary movement, collection/distribution, access, and termination<sup>1</sup>. To facilitate these movements, four general classes of roadways are recognized: freeways, arterials, collectors, and local streets. Arterials and collectors are commonly subdivided into major and minor designations based on location, service function (i.e., mobility, land access) and design features (i.e., right-of-way, road capacity, continuity within system, speed limits, parking controls, traffic signal spacing, etc.).

Each element of a functional hierarchy serves as a collecting/distributing facility for the next higher element of the system, and each functional class should intersect with facilities of the same or adjacent classifications. Figure 5 schematically shows the general relationship of functionally classified systems in serving land access and mobility.

The Village of Frankfort currently uses a functional classification system with five (5) street classifications; regional (major) arterials, community (minor) arterials, major collectors, neighborhood (minor) collectors, and local streets. As part of this master planning effort, the existing system was reviewed with respect to traffic volumes, roadways designs, access controls, future freeway interchanges, and roadway function. The system was then modified based on this review and the extended planning area. The recommended roadway functional classification system for the Village of Frankfort is shown in Figure 6. The characteristics of the facilities within each roadway classification are summarized in Table 1 and described below. The rationale behind the classification changes from the previous Transportation Master Plan is discussed in Chapter 7.

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<sup>1</sup> *Transportation and Land Development*, 2<sup>nd</sup> Edition, Institute of Transportation Engineers, 2002.  
Village of Frankfort



**Figure 5**  
**Relationship Between Access and Movement**

**Freeways**

Freeways provide a high-degree of mobility, with access limited to grade-separated interchanges, spaced at least one mile apart, to preserve the high-speed (45-65 mph), high-volume characteristics of the facility. These facilities are typically part of the state or federal highway system. There are two freeways that interchange with roadways that directly serve the Frankfort community.

- Interstate 80
- Interstate 57



**Legend**

- Freeway
- Regional Arterial
- Community Arterial
- Major Collector
- Neighborhood Collector
- Local Streets
- Railroad
- Old Plank Road Trail
- Village of Frankfort Incorporated Area
- Metra Station

**TABLE 1  
ROADWAY FUNCTIONAL CLASSIFICATION CHARACTERISTICS**

CLASSIFICATION	CHARACTERISTICS												
	Function	Mobility	Location	Link to Freeway System	Continuity	Direct Land Access	Spacing	Intersection Spacing	Speed Limit (typ.)	Typical ADT	Trucks	Management Tools	Frankfort System
Freeway	Regional Traffic Movement	Provides high level of mobility within and between metropolitan areas	Within natural community separations; defining development, not separating it	n/a	Continuous	None	4 miles	1 mile	55-65 mph	30,000-200,000	No Restrictions	Interchange spacing; no land access	I-80 I-57
Regional Arterial	Primary – Inter-community, intra-metro traffic movement  Secondary – Land Access	Provides high level of mobility within and between major subareas of a metropolitan area	Within natural community separations; defining development, not separating it	Yes	Continuous	Limited; major generators only	1-2 miles	½ mile	35-45 mph	10,000-65,000	No Restrictions	Land access spacing; traffic signal timing, preferential access for transit	US Route 45 US Route 30 IL Route 43/Harlem Ave Laraway Rd Manhattan-Monee Rd Stuenkel Rd Vollmer Rd
Community Arterial	Primary – Inter-community, intra-metro traffic movement  Secondary – Land Access	Provides mobility within and between adjacent subareas of a metropolitan area	On edges of development and neighborhoods	Generally not desirable	Continuous	Restricted; some movements may be prohibited; number/spacing of driveways controlled	½-1 mile	¼-½ mile	30-40 mph	5,000-30,000	Restricted as necessary	Traffic signal timing, land access spacing	191 <sup>st</sup> St Center Rd (s of Laraway) LaPorte Rd (w of US 45) St. Francis Rd Steger Rd Wolf Rd (n of Laraway)
Major Collector	Primary – Collect/distribute traffic between local streets and arterial system  Secondary – Land access  Tertiary – Inter- neighborhood traffic movement	Provides mobility between neighborhoods and other land uses	On edges or within neighborhoods	No	Not necessarily continuous	Safety controls; limited regulation	½ mile or less	300 ft-¼ mi.	25-35 mph	2,000-15,000	Restricted as necessary	Geometry, number of lanes, access	80 <sup>th</sup> Ave 84 <sup>th</sup> Ave 88 <sup>th</sup> Ave 104 <sup>th</sup> Ave 108 <sup>th</sup> Ave 116 <sup>th</sup> Ave Bruns Rd Center Rd/White St Colorado Ave Dralle Rd Elsner Rd LaPorte Rd (E of US 45) Nebraska St North Ave Pfeiffer Rd Ridgeland Ave Sauk Trail Scheer Rd Wolf Rd (s of Laraway)
Neighborhood Collector	Primary – Collect/distribute traffic between local streets and major collector/arterial system  Secondary – Land access  Tertiary – Intra- neighborhood traffic movement	Provides mobility between and within neighborhoods and other land uses	Within neighborhoods	No	Not continuous	Safety controls; limited regulation	½ mile or less	300 feet	25-30 mph	1,000-5,000	Permitted as necessary	Geometry, access, stop signs	92 <sup>nd</sup> Ave 94 <sup>th</sup> Ave Benton Dr Butternut Trail Charrington Dr Flagstone Turn Frankfort Square Rd Franklin Ave Hickory Creek Dr Kingston Dr Kuse Rd Lakeside Dr Larch Rd Locust St Old Frankfort Way Pine Hill Rd Pine Ridge Dr Sandlewood Dr Williamsburg Tr Windy Hill Dr
Local	Land Access	Provides mobility within neighborhoods and other uniform land use areas	Within neighborhoods and other uniform land use areas	No	Not continuous	Safety controls only	As needed	300 feet	25 mph	< 2,000	Permitted as necessary	Stop signs, cul-de-sacs, diverters	

## Arterials

Regional arterials are intended to provide a high degree of mobility and function as the primary routes for vehicles traveling within and through urban areas. They are generally located about a mile apart to form a grid street system and are intended to carry high volumes at high operating speeds (35-45 mph) with adequate capacity to operate at high levels of service. Although regional arterials do interconnect with major developments such as central business districts, large suburban commercial centers, industrial parks and residential areas, access management is essential to preserve capacity. Signalized intersections should be spaced far enough apart (typically ¼-½ mile to permit efficient two-way progression of traffic, and left- and right-turn lanes should be provided at these intersections to maintain capacity and level of service.

In the Chicagoland area, the Illinois Department of Transportation has identified a network of regional arterials called Strategic Regional Arterials (SRAs), which are intended to accommodate a significant portion of long-distance, high-volume automobile and commercial traffic in the region as a supplement to the interstate system. The SRA system is a 1,387-mile network of existing roads encompassing route segments in Will, Cook, DuPage, Kendall, Kane, Lake, and McHenry counties. Design concepts have been developed for three types of SRA routes (urban, suburban, and rural) and studies have been or will be prepared for the facilities in the system. In the Frankfort area, U.S. Route 45, U.S. Route 30, IL Route 43, and Manhattan-Monee Road are designated SRAs and Laraway Road/Sauk Trail and Wolf Road are identified as potential SRAs.

Community arterials interconnect and augment the regional arterial system by accommodating somewhat shorter trips to and from residential, shopping, employment, and recreational activities at the community level. As such, operating speeds and road capacity may be less than that of regional arterials, with less stringent controls on property access.

The following facilities are classified as regional and community arterials in Frankfort:

### Regional Arterials

- U.S. Route 45 (La Grange Rd)
- U.S. Route 30 (Lincoln Hwy)
- IL Route 43/Harlem Ave<sup>2</sup>
- Laraway Rd
- Manhattan-Monee Rd<sup>1</sup>
- Stuenkel Rd<sup>2</sup>

### Community Arterials

- 191<sup>st</sup> Ave.<sup>1</sup>
- Center Rd (S. of Laraway Rd)
- LaPorte Rd (W. of US Route 45)
- St. Francis Rd
- Steger Rd<sup>2</sup>
- Wolf Rd (N. of Laraway Rd)

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<sup>1</sup> Street not included in Functional Classification Plan from 1996 Transportation Master Plan.

<sup>2</sup> Functional classification of this street has been modified from the 1996 classification map.

## Collectors

The collector street system is designed to support the arterial network. Collector streets are generally located at the ½-mile points within the grid system and consist of medium-capacity, medium volume streets that serve to link high-level arterial streets to lower level local streets. Operating speeds are typically lower on collectors than arterials and should have limited continuity to not encourage through traffic but still provide for local movement of vehicles between residential, commercial and industrial areas of the community. The collector system provides for some direct land access, but unlike local streets, curb cuts are generally limited to the extent possible to. Major collectors in Frankfort tend to be located on the edges of residential neighborhoods, while neighborhood collectors penetrate the neighborhoods and may permit curbside parking.

The following facilities are classified as major and neighborhood collectors in Frankfort:

### Major Collectors

- 80<sup>th</sup> Ave
- 84<sup>th</sup> Ave<sup>2</sup>
- 88<sup>th</sup> Ave
- 104<sup>th</sup> Ave
- 108<sup>th</sup> Ave<sup>2</sup>
- 116<sup>th</sup> Ave<sup>2</sup>
- Bruns Rd
- Center Rd/White St (N. of Laraway Rd)
- Colorado Ave
- Dralle Rd<sup>1</sup>
- Elsner Rd<sup>2</sup>
- LaPorte Rd<sup>2</sup> (E. of US Route 45)
- North Ave
- Nebraska Rd
- Pfeiffer Rd<sup>2</sup>
- Ridgeland Ave<sup>1</sup>
- Sauk Trail (W. of Harlem Ave)
- Scheer Rd
- Wolf Rd (S. of Laraway Rd)

### Neighborhood Collectors

- 92<sup>nd</sup> Ave
- 94<sup>th</sup> Ave
- Benton Dr
- Butternut Trail
- Chariington Dr
- Flagstone Turn<sup>1</sup>
- Frankfort Square Rd
- Franklin Ave
- Hickory Creek Dr
- Kingston Dr
- Kuse Rd<sup>2</sup>
- Lakeside Dr
- Larch Rd
- Locust St
- Old Frankfort Way<sup>1</sup>
- Pine Hill Rd<sup>2</sup>
- Pine Ridge Dr<sup>1</sup>
- Sandlewood Dr<sup>1</sup>
- Williamsburg Trail
- Windy Hill Drive<sup>1</sup>

<sup>1</sup> Street not included in Functional Classification Plan from 1996 Transportation Master Plan.

<sup>2</sup> Functional classification of this street has been modified from the 1996 classification map.

## **Local Streets**

Local streets provide direct land access. Movement on local streets is incidental and involves traveling to or from a collector facility. Therefore, trip lengths on local streets are typically short and, as a result, volumes and speeds on these streets are typically low. The local street system is also typically planned to ensure that all neighborhoods are accessible by at least two routes for emergency service vehicles.

The role of the local street system is to carry traffic and provide for safe and convenient access to residential areas and other land uses. Local streets also serve a social function for residents. Neighborhood streets are often a place where neighbors can meet, children can play, or residents can bike or walk when sidewalks are not provided. These two roles can, however, create potential conflicts.

### Guidelines for Uses of Local Streets<sup>2</sup>

- Local streets should be protected from through traffic.
- Local streets should be protected from vehicles traveling in excess of 30 mph.
- Local streets should be protected from parking unrelated to residential or commercial activities of the neighborhood.

### To Achieve the Above Uses:

- Street layout, design, and control should express and reinforce the street function.
- The overall street network for the community should include higher-capacity streets capable of accommodating through traffic.
- Residential streets should be linked to traffic-carrying streets (arterials and collectors) in a way that simultaneously provides good access to other parts of the community and region and minimizes the chances of residential streets being used by through traffic.

## **Geometric Design Standards**

Street geometric design criteria are established in the Village's Engineering Design Standards for each of the Village's roadway classifications, as shown in Table 2 and discussed below. These guidelines pertain to right-of-way width, roadway and sidewalk widths, roadway capacity (i.e., number of lanes), on-street parking provisions, design speeds, and pavement design details. Additional standards to be considered include provisions of turn lanes at intersections, intersection traffic controls, roadway and intersection sight distance, and traffic calming techniques.

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<sup>2</sup> *Residential Street Design and Traffic Control*, Institute of Transportation Engineers, 1989.  
Village of Frankfort

**TABLE 2  
ROADWAY GEOMETRIC DESIGN STANDARDS BY FUNCTIONAL CLASSIFICATION**

CLASSIFICATION	GEOMETRIC DESIGN STANDARDS					
	Right-of-Way Width	Design Speed	Roadway Width <sup>1</sup>	Number of Traffic Lanes	On-Street Parking	Sidewalk Width
Freeway/ Expressway	150-300 feet (typ.)	65 mph	varies	4-6	Prohibited	n/a
Regional Arterial	120 feet	65 mph	53-77 feet	4-6	Prohibited	6 feet
Community Arterial	80-100 feet	30-55 mph	36-53 feet	2-4	Prohibited	6 feet
Major Collector	80 feet	30-45 mph	36-51 feet	2-4	Prohibited	5 feet
Neighborhood Collector	66 feet	30 mph	36 feet	2	Permitted - one side	5 feet
Local	66 feet	25 mph	32 feet	2	Permitted – both sides	5 feet
<sup>1</sup> Back-of-curb to back-of-curb.			n/a – not applicable			

### **Right-of-Way**

The provision of adequate right-of-way is one of the key issues in the long-range design of a roadway system. With adequate right-of-way, capacity improvements can be made as traffic demand increases. The right-of-way standards should be used to guide the roadway planning process as new streets are developed and as property is dedicated from the development or redevelopment of existing parcels.

## Roadway Width

Roadway width is determined by the functional classification and projected volumes. The width is dependent on the number of driving lanes and parking lanes and the median type (if any). Village standards only permit on-street parking on neighborhood collectors and local streets, with parking on neighborhood collectors limited to one side of the street only. Driving lanes on arterial and collector streets are normally 12 feet wide. Driving lanes on local streets can be 10-11 feet wide, which provides an element of traffic calming.

If adequate right-of-way has been reserved, new road projects may be built in phases, such as two lanes in the first phase, with additional through lanes or turn lanes implemented in a later phase.

Turning lanes should be provided at intersections where a significant volume of turning traffic is expected and where turning vehicles would otherwise impede through traffic. The width of turn lanes can vary from 10 to 12 feet, depending on the volume and type of traffic that will be using the street (i.e., cars, trucks) and the relative speed of vehicles in the adjacent through lanes. The following guidelines should be used with respect to the number and type of turn lanes at key intersections for each functional classification of roadway:

<u>Functional Classification</u>	<u>Intersection Turn Lane Requirements</u>
Regional Arterials	1 or 2 left-turn lanes plus right-turn lanes
Community Arterials	Left-turn lanes and/or right-turn lanes
Major Collectors	Left-turn lanes and/or right-turn lanes
Neighborhood Collectors	Left-turn lanes
Local Streets	Occasional left-turn lanes at major streets

## Sight Distance

A driver's ability to see ahead is of the utmost importance in the safe and efficient operation of a vehicle on a roadway. Two aspects of sight distance are critical in roadway planning and design: (1) stopping sight distance and (2) intersection sight distance. Stopping sight distance is the length of the roadway ahead that is visible to the driver and needed to stop a vehicle. Intersection sight distance is the length of intersecting roadway visible to a driver in a stopped position at a cross-street. The intersection sight distance should be sufficient to permit drivers to safely enter or cross the intersecting roadway.

Both aspects of sight distance are related to the design speed of the roadway and the type of intersection traffic control. The American Association of State Highway Transportation Officials (AASHTO) and IDOT provide guidelines to determine minimum sight distances.

## **Intersection Traffic Control**

Decisions concerning intersection traffic control should be based on factual analysis and objective considerations as established in the Federal Highway Administration's (FHWA) *Manual on Uniform Traffic Control Devices* (MUTCD), IDOT's supplement of the MUTCD, various publications by the Institute of Transportation Engineers (ITE), and the Transportation Research Board's (TRB) *Highway Capacity Manual* (HCM). Improper use of traffic controls may result in agency or individual liability for damages resulting from such improper use.

The hierarchy of intersection traffic control ranges from no control to Yield signs to Stop signs to traffic signals. Warrants for each type of traffic control are established in the MUTCD and are based on traffic volumes, traffic speeds, and other considerations such as pedestrian volumes, school crossings, crash experience, coordinated signal systems, and engineering judgment. Intersection traffic controls should reinforce the desired functional classification of the street.

For new subdivisions or developments that connect with the Village's street system, an intersection traffic control plan should be provided by the developer to ensure that adequate intersection control and system continuity are being provided. Traffic control strategies for the intersections of various roadway classifications are discussed below.

### Intersections of Two Local Streets

Traffic control at these intersections varies from no control to multi-way stop signs. Several agencies and associations, including FHWA, IDOT, and ITE have produced guidelines for when each type of traffic control is appropriate and which streets should be controlled. These guidelines are based on the volume of traffic entering the intersection from each of the intersection approaches during the peak hours of the day, pedestrian crossing activity and/or school walking routes, sight distance, and the distance of uninterrupted flow on the intersecting streets.

### Intersections of Local Streets with Neighborhood Collectors

In accordance with the MUTCD, traffic control signs, such as Yield signs or Stop signs, should be posted on the less important street, which is the local street in this situation. Yield control is typically acceptable at T-intersections when sight distance is adequate. Where sight distance is limited and/or intersection volumes are higher, stop signs should be used on the local street.

### Intersections of Local Streets with Major Collectors and Community/Regional Arterials

In accordance with the MUTCD, traffic control signs should be posted on the less important street. Because major collectors and arterials typically carry higher volumes at higher speeds than local streets, stop signs should be posted on the local streets, unless traffic signal warrants are satisfied.

### Intersections of Two Neighborhood Collectors

In accordance with the MUTCD, multi-way stop sign control is appropriate at the intersection of two neighborhood collectors of similar design and operating characteristics.

### Intersections of Neighborhood Collectors with Major Collectors and Arterials

Appropriate traffic controls would include either two-way or multi-way stop signs or traffic signals. For two-way stop sign controls, stop signs should be posted on the less important street in accordance with the MUTCD, unless there would be sight distance concerns in doing so. The level of control provided will depend on whether multi-way stop sign warrants or traffic signal warrants are satisfied and on the traffic control schemes along the intersecting streets. For example, if a major collector or arterial corridor is under traffic signal control, stop signs would not be placed on that roadway. Instead, either a traffic signal would be used or two-way stop sign control would be used on the minor street.

### Intersections of Major Collectors with Major Collectors or Arterials

Same as above.

### Intersections of Arterials with Arterials

Same as above.

## **Traffic Calming**

One important feature of a balanced transportation system is lower vehicle speeds in areas that attract pedestrians and bicyclists, particularly on residential streets and streets in the Historic District. A wide range of measures is available to local jurisdictions for controlling traffic movements, reducing motor vehicle speeds on local streets, and providing safer and more pleasant conditions for pedestrians and bicyclists. Traffic calming is a term that has emerged to describe these measures. The objectives of traffic calming include the following:

- Promote safe and pleasant conditions for motorists, bicyclists, pedestrians, and residents on neighborhood streets and in the Frankfort Historic District.
- Mitigate the impacts of vehicular traffic, including air pollution, accidents, and noise.
- Offer more equal status to all road users.
- Increase landscaping opportunities and play space on public rights-of-way.

The primary rationale for traffic calming as a pedestrian and bicycle planning tool is the relationship between motor vehicle speed and the number and severity of accidents. Studies have found that pedestrian and bicycle accidents are substantially reduced on streets where traffic calming techniques have been employed.

Traffic calming techniques range from non-physical measures (e.g. targeted speed enforcement, lane striping, high visibility crosswalks) to vertical deflections (e.g. speed humps) to horizontal deflections (e.g., chicanes, traffic circles) to street narrowing devices (e.g. intersection bulbs, chokers, medians) to diverters (full or partial street closures). Recent ITE publications discuss these strategies in more detail. Possible locations for traffic calming measures should be considered based on traffic analysis and citizen input. Measures can be implemented incrementally and tested for effectiveness, beginning with the less restrictive measures. Typically, traffic calming is applied as an areawide technique, rather than on a specific street, so as not to risk diverting traffic or operational problems from one neighborhood street to another.

## **Street System Planning Guidelines**

Several planning criteria should be considered when developing any street system, be it suburban or downtown. The Village of Frankfort has a unique situation in that the area of the Village that would be identified as a traditional downtown or central business district (CBD) in other communities is known in Frankfort as the Historic District. The functional business district in Frankfort is located along the U.S. Route 45 and U.S. Route 30 corridors. While both areas have similar access requirements, the access schemes in the Historic District must be sensitive to the unique character of that area. In developing the functional hierarchy of streets in Frankfort, the following considerations were used:

- *Area streets should function as a cohesive system.* Two ways of approaching street development are “specific development” and “system development.” Specific development involves specific traffic problems and/or specific site land-use development and attempts to solve problems on an individual basis, with hope that the resulting solutions can be tied together into an overall system. This method is similar to what has taken place in many communities in past years. The result is a street system that accommodates past demand rather than existing and future needs. While short-term problems are addressed by specific development, long-term problems or constraints are often created.

System development attempts to create a cohesive street system that will address and solve specific traffic and site problems. While similar to specific development in that operations at specific locations are considered, system development gives a high priority to the function and operation of the entire network. Planning studies and practices in numerous cities have shown that the system approach is the more effective planning and development methodology. Not only can potential future development and traffic needs be addressed at a very early stage, but issues such as right-of-way reservation and access control can be identified and adequately evaluated before costly decisions are made.

- *Area streets should be designed to have adequate capacity to serve existing and anticipated traffic volumes.*
- *Streets should be designed, controlled, and operated in a way that clearly conveys to the user what function the street is serving.* While this is not to say that a given street cannot serve multiple purposes, the principal function should be clear. This message can be conveyed in several ways, including:
  - Type of paving
  - Regulations
  - Illumination
  - Signing and marking
  - Parking
  - Roadway width
  - Traffic control
  - Speed limit
  - Pedestrian Ways
- *Access for specific developments should be designed to minimize impacts to efficient traffic operations on the adjacent street system.*
- *Transit routes, when developed, should be related to the historic and business districts and the adjacent area arterial street system.* Pedestrian and bicycle trail connections should be provided along with sufficient parking.
- *Connections between different travel modes should be provided to maximize the opportunity for people to transfer between modes or select alternate modes of travel.* These connections could include park-and-ride locations for commuter rail and bus service, and connections for both off-street and on-street bicycle and pedestrian facilities.
- *Truck service should be adequately accommodated via designated truck routes that are designed to handle heavy vehicle loads.*
- *Emergency service vehicles should be provided multiple routes of access to all developments.* This is especially important if some streets are being considered for closure.
- *Parking systems should be well-related to development.* Not only should the parking supply be balanced with the demand in both quantity and location, but ingress and egress during peak loading and unloading times should not cause undue stress on the operation of the street system. Entrances located on busy streets may require dedicated turn lanes or internal queuing areas to accommodate occasional vehicle stacking.

## 5.

# Existing Transportation System Needs

The Frankfort roadway system was reviewed in terms of function, continuity, capacity and accessibility. System needs can be described in terms of network continuity and system capacity.

### Network Continuity

There are several arterial and collector streets within the Village that lack network continuity. This lack of continuity contributes to (1) a double loading of traffic on some roadway segments; (2) inefficient traffic flow that requires turning movements, increases travel time, and decreases through capacity; (3) greater utilization of the regional arterial system for local trips, and (4) greater utilization of local streets for longer-distance trips that should be on the collector or arterial system. The most apparent examples of discontinuity in the Frankfort street system are the north-south roadway misalignments along the Frankfort/Green Garden Township line (Steger Road). However, there are also a few key missing links in the collector street system.

### Missing Linkages in the Collector Street System

- Nebraska Street. This major collector street does not presently connect with the arterial street system at its east and west ends.
- LaPorte Road. St. Francis Road provides the only continuous east-west facility serving the north end of the Village between U.S. Route 45 and Harlem Avenue. The presence of Hickory Creek makes it difficult to extend North Avenue westward to Colorado Avenue without disturbing environmentally-sensitive areas. Another east-west collector street can be developed via LaPorte Road by constructing the missing link between Aine Drive to Wildflower Drive.

- Pfeiffer Road. In the absence of a continuous north-south roadway through the central part of the Village (between U.S. Route 45 and Harlem Avenue), U.S. Route 30 carries a heavier traffic burden routing traffic between the various north-south roadway segments. Some of the traffic demand on U.S. Route 30 can be relieved by constructing the missing link of Pfeiffer Road between U.S. Route 30 and Colorado Avenue, thereby creating a continuous north-south collector road between Steger Road and St. Francis Road.

### **Intersection Misalignments**

- 104<sup>th</sup> Avenue at Steger Road
- Pfeiffer Road/88<sup>th</sup> Avenue at Steger Road
- 80<sup>th</sup> Avenue at Steger Road
- Harlem Avenue at Steger Road
- Ridgeland Avenue at Steger Road
- 84<sup>th</sup> Avenue at North Avenue
- Scheer Road at Stuenkel Road/Baker Road

### **System Capacity**

There are presently five arterial roadways in Frankfort that either lack adequate road capacity to efficiently accommodate peak traffic flows or handle traffic volumes that are approaching capacity of these roadways. These deficiencies contribute to traffic delays and congestion, poor levels of service, inefficient access to adjacent properties or neighborhoods, and/or traffic diversions through residential areas. The existing traffic volume data, in combination with the existing roadway cross-sections, were utilized in the identification of roadways with capacity deficiencies, as listed below:

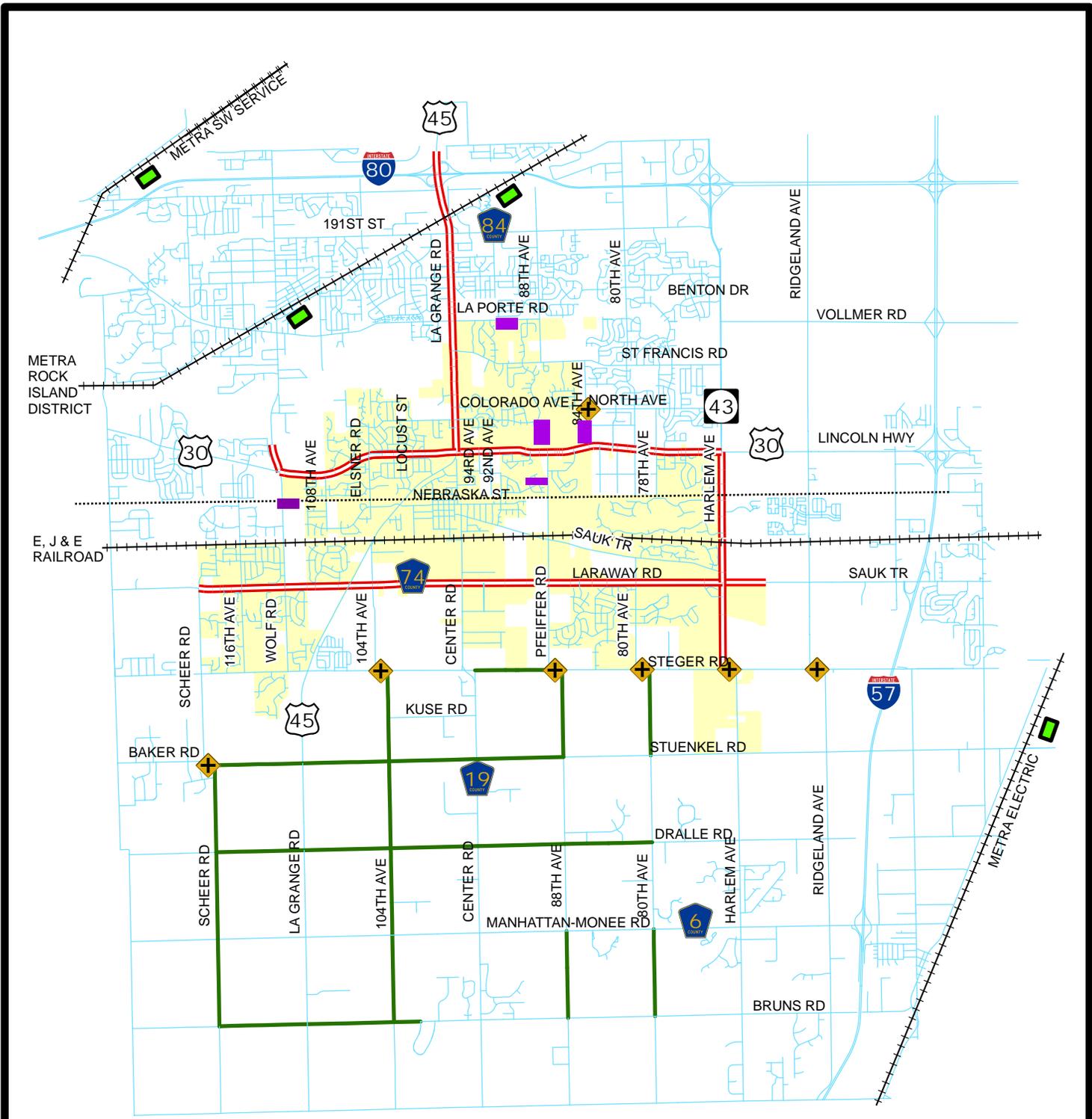
- U.S. Route 30. The current two-lane cross-section (with and without left-turn lanes) of this Strategic Regional Arterial, from 95<sup>th</sup> Avenue to just west of Harlem Avenue and from Wolf Road to just west of U.S. Route 45, is inadequate to accommodate the current traffic demand, which ranges from 18,000-20,000 vehicles per day.
- U.S. Route 45. The current four-lane cross section (with left-turn lanes) of this Strategic Regional Arterial, from U.S. Route 30 to 191<sup>st</sup> Street, is operating near capacity in accommodating 26,000-30,000 vehicles per day. Between 191<sup>st</sup> Street and I-80, U.S. Route 45 carries volumes in excess of 38,000 vehicles per day, which exceeds the roadway capacity.
- Harlem Avenue. The existing traffic volumes (10,000-15,000 vehicles per day) on the two-lane section of Harlem Avenue from U.S. Route 30 to Laraway Road are approaching the capacity of this roadway.

- Laraway Road. The current two-lane cross section (with and without left-turn lanes) of this potential Strategic Regional Arterial is approaching capacity from Scheer Road to just west of Ridgeland Avenue. Traffic volumes on Laraway Road range from 8,400-11,100 vehicles per day.
- Wolf Road. The current two-lane cross section (with and without left-turn lanes) of this potential Strategic Regional Arterial (north of U.S. Route 30) is inadequate to efficiently accommodate the existing traffic volumes (14,000 vehicles per day) to the north of U.S. Route 30.

In addition, there are several roadway segments in Green Garden Township that are unpaved, in disrepair, or are paved of a quality that does not satisfy Frankfort's design standards (i.e., chip seal or fog seal methods). In addition, there are bridges on these roadways that need to be replaced due to deterioration or insufficient width for two-way travel. These roadways, which are listed below, are inefficient and must be traversed at slower speeds, which in turn will limit development potential if not improved.

- 80<sup>th</sup> Avenue (Steger Rd.-Stuenkel Rd., Manhattan-Monee Rd.-Bruns Rd.)
- 88<sup>th</sup> Avenue (Steger Rd.-Stuenkel Rd., Manhattan-Monee Rd.-Bruns Rd.)
- Steger Road (88<sup>th</sup> Ave.-Center Rd.)
- Stuenkel Road (88<sup>th</sup> Ave.-Sheer Rd.)
- Dralle Road (80<sup>th</sup> Ave.-Sheer Rd.)
- Bruns Road (Wildgrass Turn-Scheer Rd.)
- 104<sup>th</sup> Avenue (Steger Rd.-Prairie Schooner Drive, Manhattan-Monee Rd.-Bruns Rd.)
- Scheer road (Stuenkel Rd.-Bruns Rd., one lane bridge over Prairie Creek)

Figure 7 shows the locations of the existing roadway system deficiencies.



**Legend**

-  Misaligned Intersection
-  Capacity Deficiency
-  Unpaved/Poor Quality Roadway
-  Railroad
-  Old Plank Road Trail
-  Street System
-  Village of Frankfort Incorporated Area
-  Network Continuity Deficiency
-  Metra Station



## 6.

# Future Land-Use and Traffic Volumes

The type, density, and distribution of future developments will shape, as well as be shaped by, the future transportation system in the Village. The capacity, connectivity, and types of traffic control are interrelated with the type and amount of development adjacent to particular roadways, as well as along various corridors. The amount of traffic generated by any development is a function of the type and density of that development. The distribution of the traffic generated is a function of the locations of the streets designed to accommodate that traffic and the origins and destinations of the traffic entering and exiting a site.

### Future Development and Traffic Generation

Estimates of future development to the 2021 planning horizon year were prepared by the Village of Frankfort based on the future land use recommendations contained in the Comprehensive Plan. First the number of developable acres by land-use type was estimated for the transportation planning area. Then development ratios were determined based on development trends in Frankfort. The development ratios are in units per acre for residential developments and floor-area-ratios (FAR) for office, retail, industrial, or other non-residential developments. Next, development densities were estimated by multiplying the developable acreage by the development ratios.

The future development densities were then utilized to calculate daily (24-hour) traffic volumes that would be generated by these developments using trip generation equations published by the Institute of Transportation Engineers (ITE) in *Trip Generation*, 7<sup>th</sup> Edition, 2003.

Due to the large size of the planning area (57 square miles), the area was subdivided into 70 zones for traffic analysis purposes. Generally, each zone represents adjacent parcels of similar land use. Similar to the previous Transportation Master Plan, the zone boundaries follow major physical features of the community, such as arterial and collector roadways, stream valleys, rail lines, bike trails, and Village limits.

Figure 8 illustrates the boundaries of the traffic analysis zones (TAZs). A summary of the future land-uses, projected development densities, and traffic generation for each of the TAZ's is contained in the Appendix. Figure 9 illustrates where residential growth is anticipated to occur. Some infill development is expected within the central part of the Village, but the vast majority will occur to the south of Laraway Road.

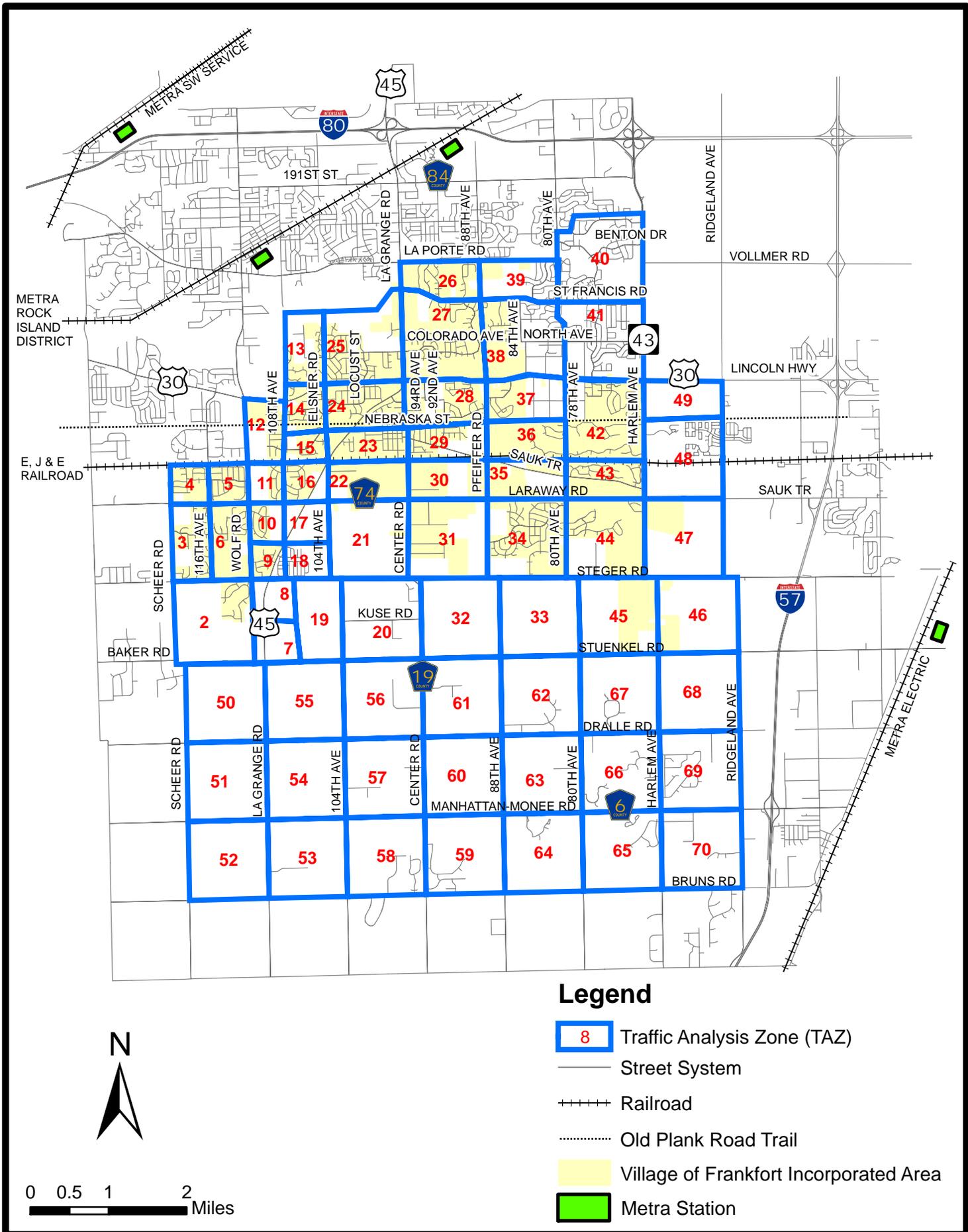
Figure 10 illustrates where retail growth is anticipated to occur. Retail growth will occur in the form of neighborhood level centers, community level centers, and regional level centers. The highest concentrations of new retail growth will continue to develop along the U.S. Route 45, U.S. Route 30, Harlem Avenue and Laraway Road corridors. Neighborhood and community level retail space will also follow residential development in the southern part of the planning area along Manhattan-Monee Road and Center Road and near the I-57 interchange at Manhattan-Monee Road.

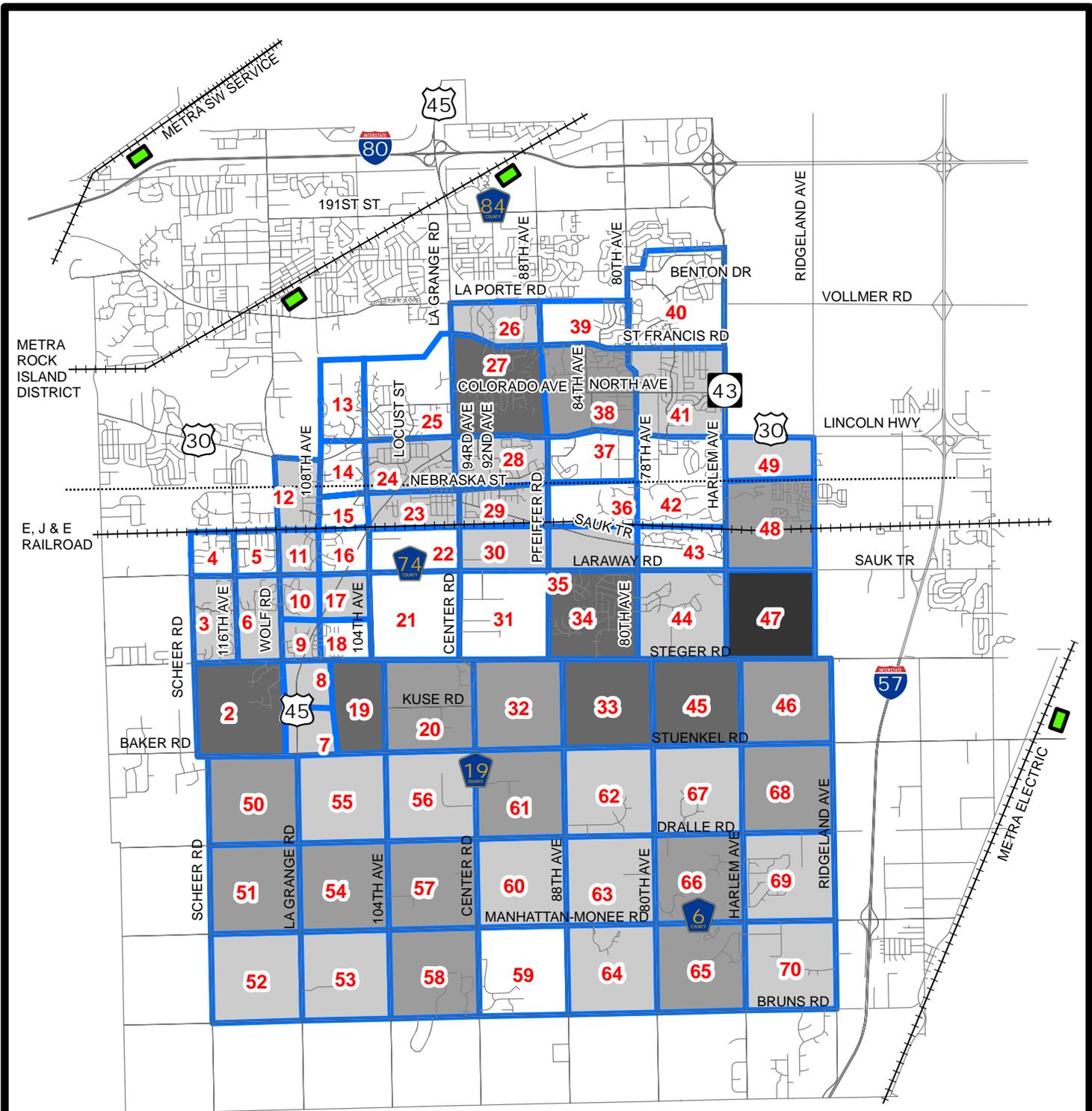
Figure 11 illustrates the anticipated industrial growth area. There are two primary locations in which significant industrial expansion is expected. The first is in the area generally bounded by Laraway Road, Pfeiffer Road, Steger Road, and 104<sup>th</sup> Avenue. The second area is in the area bounded by Steger Road, Ridgeland Avenue, Bruns Road, and Harlem Avenue. Growth in office/service uses is anticipated to be focused within the U.S. Route 45 corridor, notably between Laraway Road and Steger Road and between LaPorte Road and U.S. Route 30, and along Harlem Avenue and Ridgeland Avenue between Steger Road and Dralle Road, as illustrated in Figure 12.

The potential I-355 extension, with an interchange at U.S. Route 45, would create another major development node for retail, industrial, and office land uses.

## **Distribution of Future Development Traffic**

The traffic generated by future development within the traffic analysis zones was assigned to the roadway system based on several factors. The first was existing traffic patterns on the roadways in the planning area. The second was home-to-work trip data obtained from census data summarized by the Chicago Area Transportation Study (CATS) for the Census tracts that comprise the planning area (Tracts 8300, 8835, 8836). The third was discussions with the Village of Frankfort regarding projected development patterns and travel corridors.



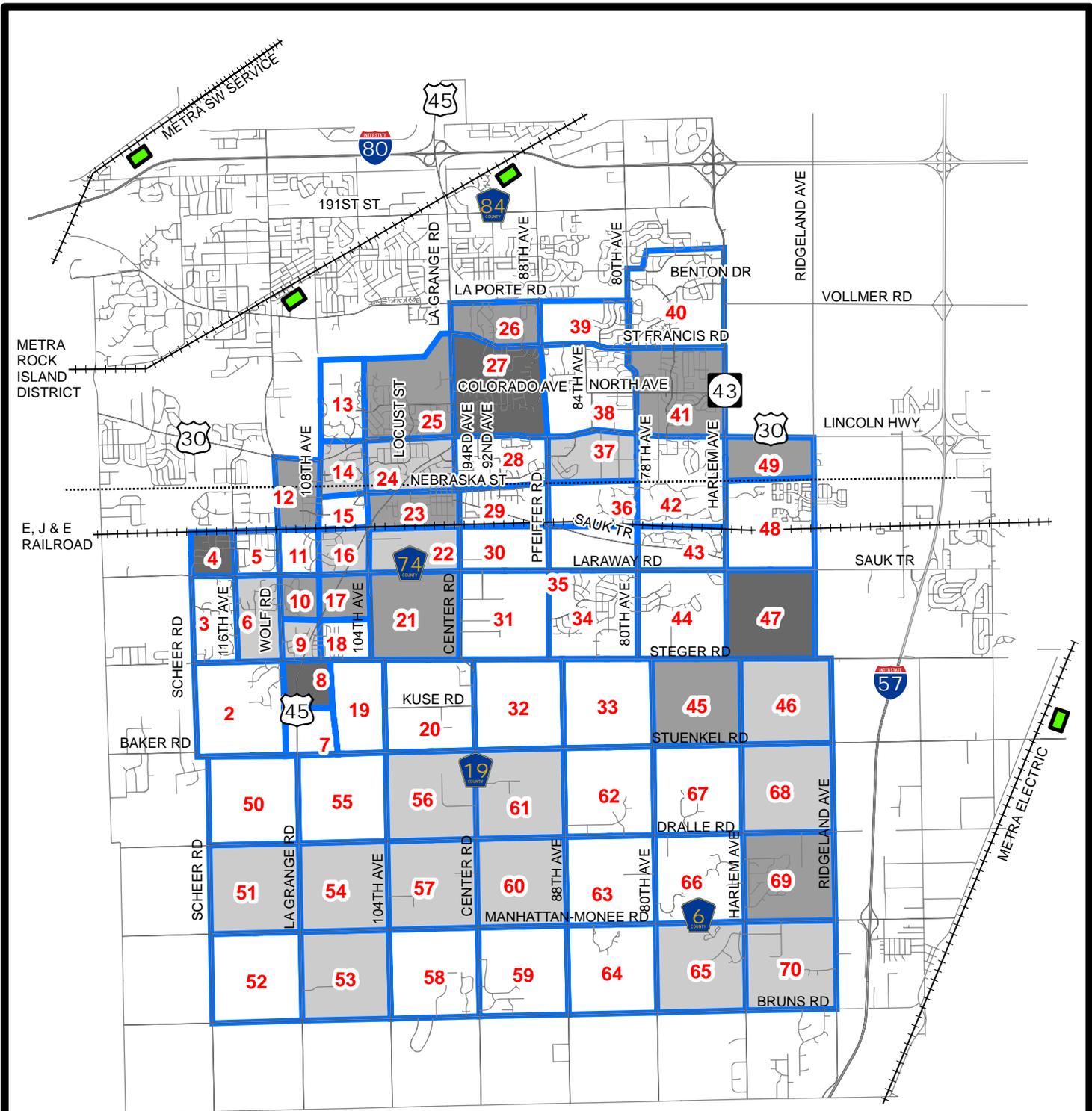


### Legend



0 0.5 1 2 Miles

- |                                                                                                    |                       |                                                                                                    |                       |
|----------------------------------------------------------------------------------------------------|-----------------------|----------------------------------------------------------------------------------------------------|-----------------------|
| <span style="border: 2px solid blue; padding: 2px;">8</span>                                       | Traffic Analysis Zone | <span style="border: 2px solid blue; width: 20px; height: 10px; display: inline-block;"></span>    | No Significant Change |
| —                                                                                                  | Street System         | <span style="background-color: #e0e0e0; width: 20px; height: 10px; display: inline-block;"></span> | < 200 New Units       |
| ++++                                                                                               | Railroad              | <span style="background-color: #a0a0a0; width: 20px; height: 10px; display: inline-block;"></span> | 200-400 New Units     |
| .....                                                                                              | Old Plank Road Trail  | <span style="background-color: #606060; width: 20px; height: 10px; display: inline-block;"></span> | 400-600 New Units     |
| <span style="background-color: #00ff00; width: 15px; height: 10px; display: inline-block;"></span> | Metra Station         | <span style="background-color: #303030; width: 20px; height: 10px; display: inline-block;"></span> | > 600 New Units       |

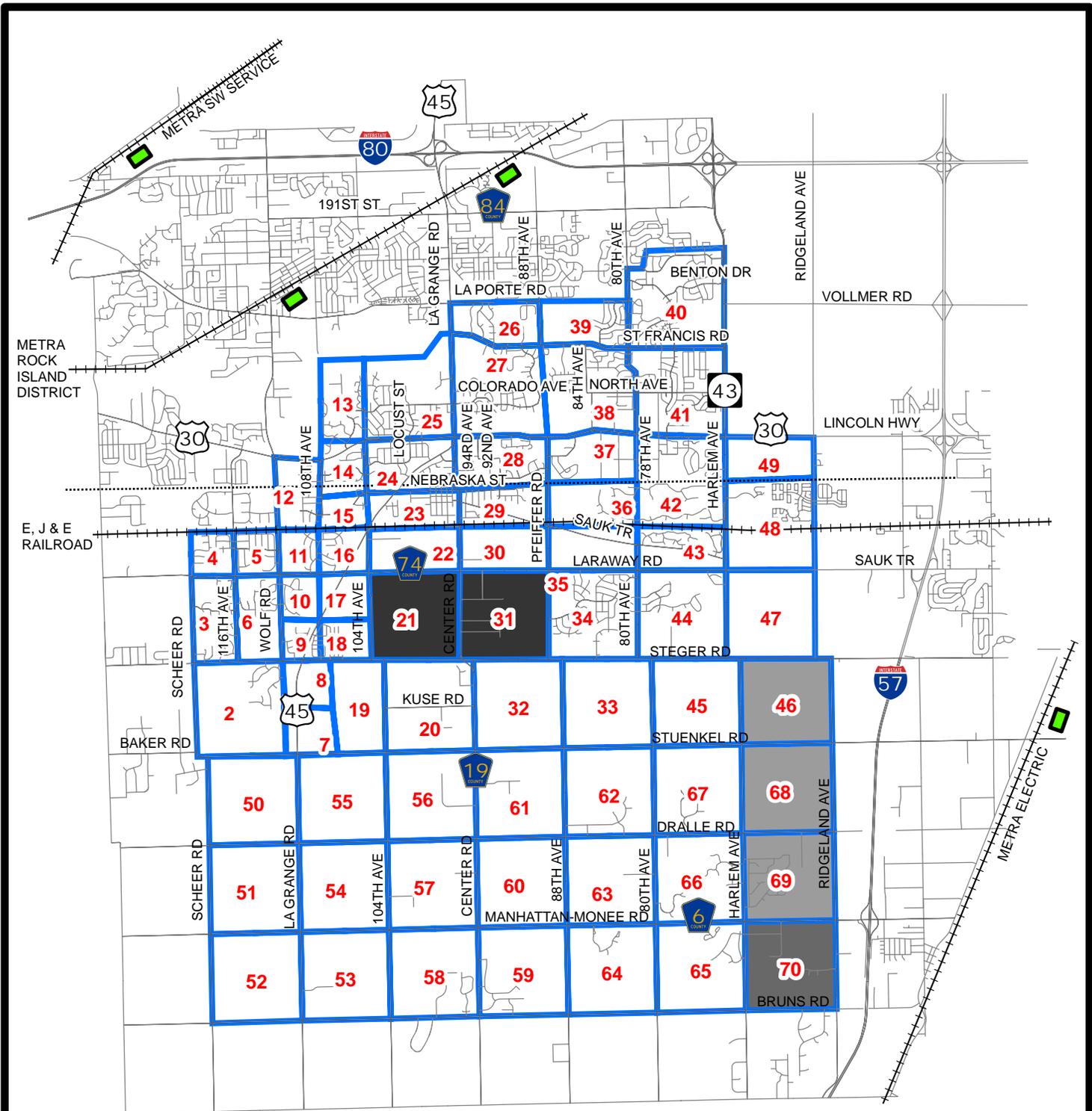


### Legend



0 0.5 1 2 Miles

- |                                                                                                                  |                                                                                                                       |
|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <span style="border: 2px solid blue; padding: 2px;">8</span> Traffic Analysis Zone                               | <span style="border: 2px solid blue; display: inline-block; width: 20px; height: 10px;"></span> No Significant Change |
| — Street System                                                                                                  | <span style="background-color: #e0e0e0; display: inline-block; width: 20px; height: 10px;"></span> < 100,000 SF       |
| ++++ Railroad                                                                                                    | <span style="background-color: #a0a0a0; display: inline-block; width: 20px; height: 10px;"></span> 100,000-250,000 SF |
| ..... Old Plank Road Trail                                                                                       | <span style="background-color: #606060; display: inline-block; width: 20px; height: 10px;"></span> 250,000-750,000 SF |
| <span style="background-color: #00ff00; display: inline-block; width: 20px; height: 10px;"></span> Metra Station | <span style="background-color: #303030; display: inline-block; width: 20px; height: 10px;"></span> > 750,000 SF       |

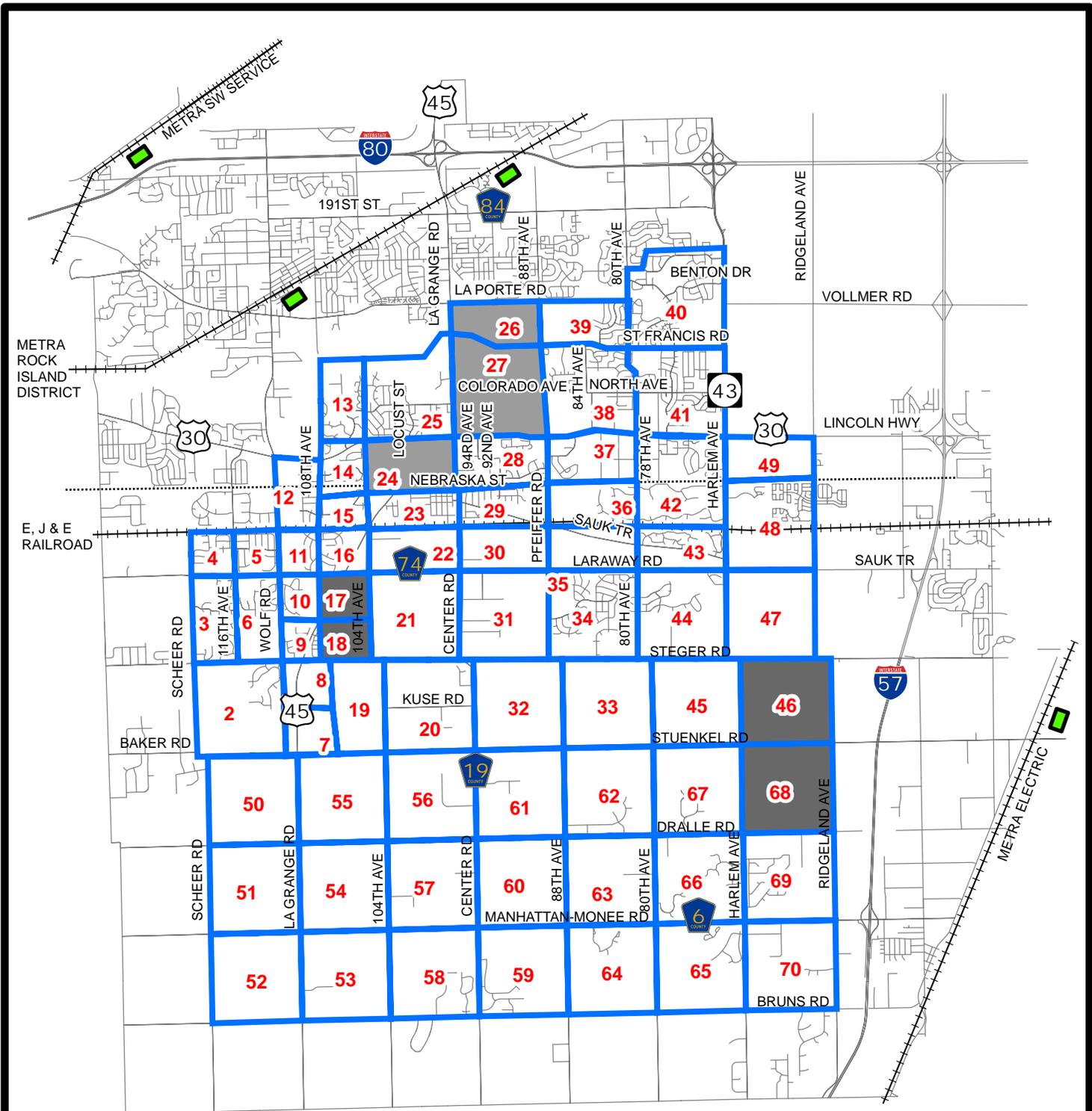


### Legend

- |                                                                                                    |                       |                                                                                                    |                       |
|----------------------------------------------------------------------------------------------------|-----------------------|----------------------------------------------------------------------------------------------------|-----------------------|
| <span style="border: 2px solid blue; padding: 2px;">8</span>                                       | Traffic Analysis Zone | <span style="border: 2px solid blue; width: 20px; height: 10px; display: inline-block;"></span>    | No Significant Change |
| —                                                                                                  | Street System         | <span style="background-color: #cccccc; width: 20px; height: 10px; display: inline-block;"></span> | < 500,000 SF          |
| +++++                                                                                              | Railroad              | <span style="background-color: #808080; width: 20px; height: 10px; display: inline-block;"></span> | 500,000-1,000,000 SF  |
| .....                                                                                              | Old Plank Road Trail  | <span style="background-color: #404040; width: 20px; height: 10px; display: inline-block;"></span> | > 1,000,000 SF        |
| <span style="background-color: #00ff00; width: 15px; height: 10px; display: inline-block;"></span> | Metra Station         |                                                                                                    |                       |



0 0.5 1 2 Miles



### Legend

- |                                                                                                    |                       |                                                                                                    |                       |
|----------------------------------------------------------------------------------------------------|-----------------------|----------------------------------------------------------------------------------------------------|-----------------------|
| <span style="border: 2px solid blue; padding: 2px;">8</span>                                       | Traffic Analysis Zone | <span style="border: 2px solid blue; width: 20px; height: 10px; display: inline-block;"></span>    | No Significant Change |
| —                                                                                                  | Street System         | <span style="background-color: #cccccc; width: 20px; height: 10px; display: inline-block;"></span> | < 100,000 SF          |
| ++++                                                                                               | Railroad              | <span style="background-color: #808080; width: 20px; height: 10px; display: inline-block;"></span> | 100,000-500,000 SF    |
| .....                                                                                              | Old Plank Road Trail  | <span style="background-color: #404040; width: 20px; height: 10px; display: inline-block;"></span> | > 500,000 SF          |
| <span style="background-color: #00ff00; width: 15px; height: 10px; display: inline-block;"></span> | Metra Station         |                                                                                                    |                       |



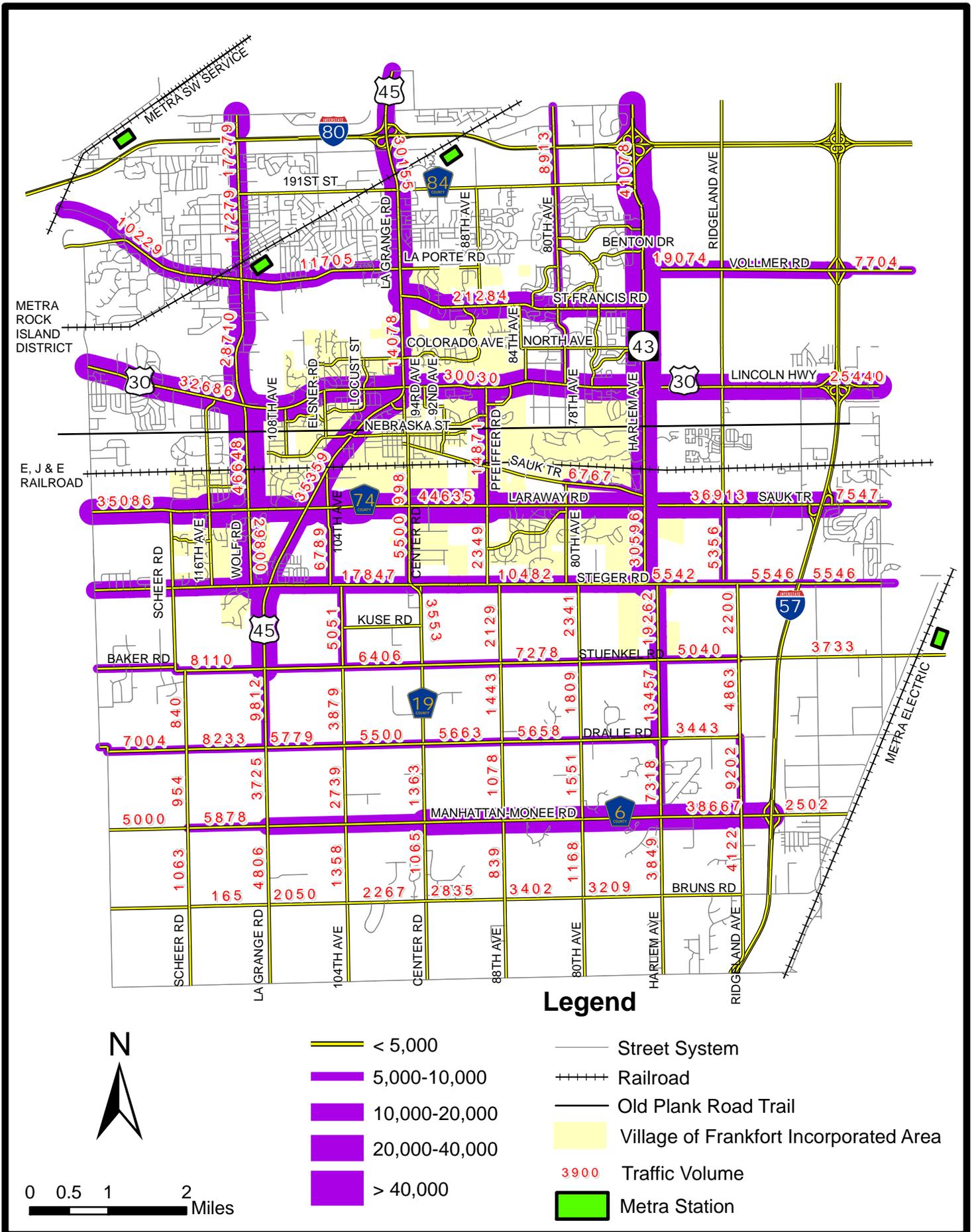
0 0.5 1 2 Miles

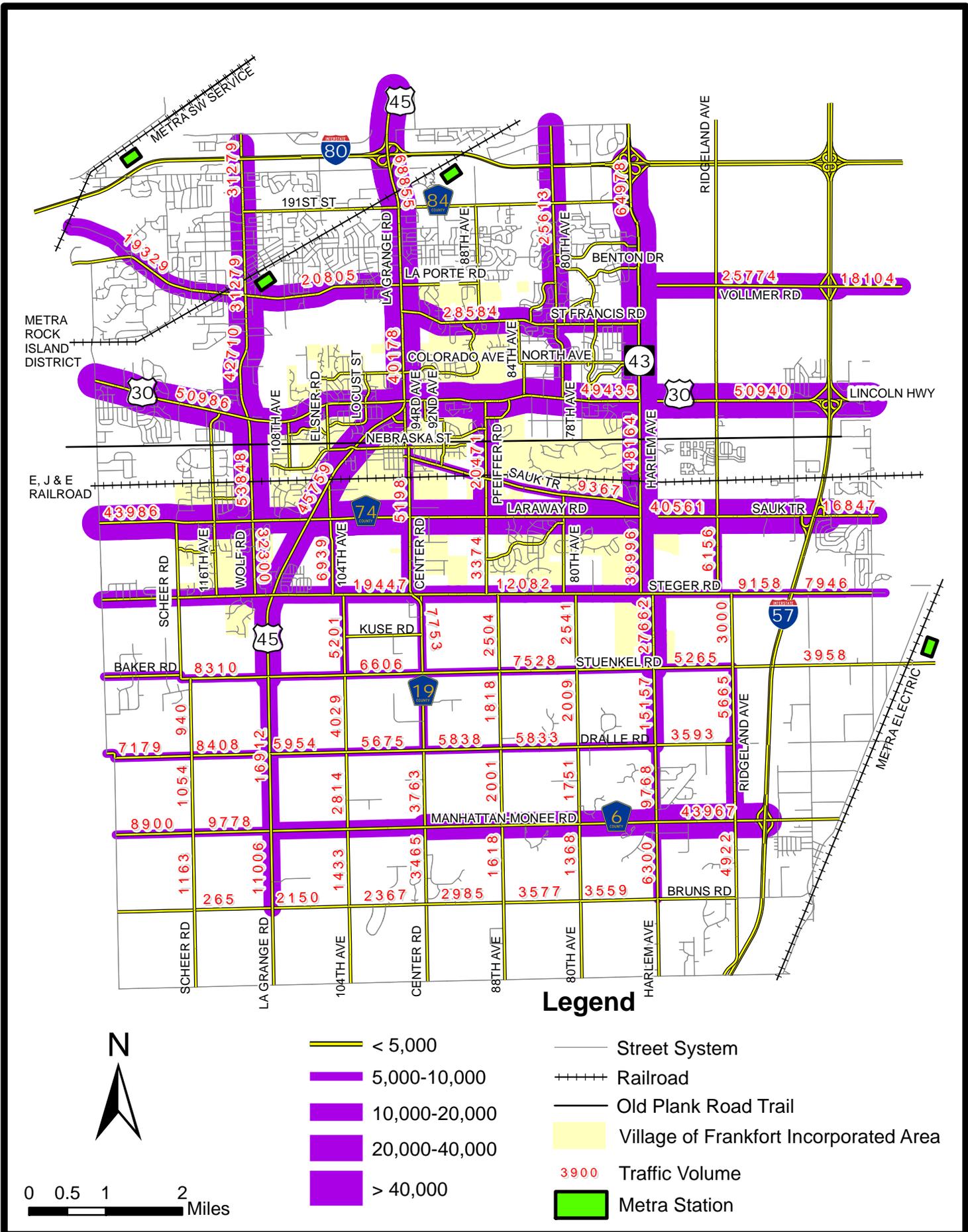
The traffic assignment process was performed manually based on a modified gravity model methodology that considered all network roadway options and functional classifications. Traffic assignments were made for trips both originating in and destined to the Frankfort planning area, as well as trips internal to Frankfort.

Figure 13 shows the assignment of the daily traffic volumes generated by future development in the planning area by 2021. The assignment of future development traffic was then combined with the existing daily traffic volumes (Figure 3) to obtain the projected 2021 daily traffic volumes, which are shown in Figure 14.

The 2030 Regional Transportation Plan prepared by CATS includes several new transportation corridors for further study. The corridor most significant to Frankfort is the South Suburban Corridor, which envisions the extension of I-355 from I-80 southeast to I-57, then continuing east to I-65 in Northwest Indiana via other new transportation corridors such as the I-57/IL 394 Connector and the Illiana Corridor. These other corridors will also provide access to the proposed Abraham Lincoln National Airport.

The Village's Comprehensive Plan depicts an alternative land use plan for the development of the South Suburban Corridor that envisions employment/business development and regional commercial land uses around a future interchange on the I-355 extension at U.S. Route 45, in place of residential development. Similar to the Comprehensive Plan, the traffic assignment process was modified to determine additional transportation improvements that would be necessary with the development of the South Suburban Corridor by 2021.





# 7.

## Recommended Plan

The recommended plan was developed to address roadway, transit, and bicycle trail elements of the Frankfort transportation system. Roadway improvements are based on the current use of the system, functional classification, the evaluation of road system deficiencies, the projected land uses and traffic volumes, and geometric design standards. Transit elements reflect longer-range plans for a future station on the E,J&E Railroad. Bicycle trail elements address traffic control concerns at major roadway crossings.

### Functional Roadway Classification System Modifications

Recommended changes and additions to the Village of Frankfort's roadway functional classification system are displayed in Figure 6 and listed in Table 1. As discussed in Chapter 4, the changes were based on several factors, including traffic volumes, roadways designs, access controls, spacing, continuity, future freeway interchange locations, existing and future adjoining land uses, and roadway function. In addition, new roadways were added to the functional classification map to cover the extended planning area and subdivisions that have been developed since the previous Transportation Master Plan was developed in 1996. The rationale behind the recommended classification changes and additions is discussed below.

1. Stuenkel Road. IDOT and Will County plans call for a new I-57 interchange at Stuenkel Road and the upgrading/widening of Stuenkel to arterial street standards. As such, Stuenkel Road should be reclassified from a major collector to a regional arterial through Frankfort.
2. Colorado Avenue. The existing major collector classification of Colorado Avenue should be extended east from Ashley Court to its terminus at Pfeiffer Road.

3. Harlem Avenue. The current regional arterial classification of Harlem Avenue (to the north of Laraway Road) should be continued south of Laraway Road to Bruns Road due to its function as the most important north-south facility serving the east side of the Village. Currently, Harlem Avenue is classified as a community arterial south of Laraway Road.
4. Steger Road should be reclassified from a major collector to a community arterial roadway through Frankfort due to its one-mile spacing between regional arterial roadways (Laraway Road and Stuenkel Road), its function serving intensive industrial, retail, office, and residential development, and its projected design requirements (i.e., four lanes).
5. 116<sup>th</sup> Avenue (Owens Road). Due to its spacing (½-mile between Wolf Road and Scheer Road), generally straight alignment, access controls, and continuity between U.S. Route 30 and Steger Road, 116<sup>th</sup> Avenue should be reclassified from a local street to a major collector road.
6. Elsner Road should be reclassified from a neighborhood collector to a major collector. Major collectors provide links between the arterial street system. Elsner Road, together with Nebraska Avenue, provides this linkage between U.S. Route 45 and U.S. Route 30. Furthermore, the primary function of Elsner Road is to collect and distribute traffic to the local and neighborhood collector street system and the road has been designed with minimal direct property access. Elsner is also spaced one-mile to the east and west of the nearest continuous north-south arterials, Wolf Road and U.S. Route 45, respectively.
7. 108<sup>th</sup> Avenue should be reclassified from a neighborhood collector to a major collector street between U.S. Route 30 and Nebraska Avenue. This roadway has also been designed to collect and distribute traffic to the neighborhood collector and local street system with minimal direct property access. It is spaced ½-mile to the east and west of other north-south arterial or collector roadways, namely Wolf Road and Elner Road, respectively.
8. 84<sup>th</sup> Avenue should be reclassified from a neighborhood collector to a major collector between U.S. Route 30 and St. Francis Road, both arterial roadways. Similar to 80<sup>th</sup> Avenue, the roadway has been designed to collect and distribute traffic to the local street system with minimal direct property access to the north of North Avenue. It is designed in a straight alignment and is spaced ½-mile to the east and west of other major collector roadways (i.e., Pfeiffer Road and 80<sup>th</sup> Avenue).
9. Kuse Road is a local street located midway (½-mile) between two east-west arterial roadways (Stuenkel Road and Steger Road). As the adjoining properties develop in the future, its straight alignment and spacing will allow it to function as a neighborhood collector road for this area with the ability to be extended to the east and west. As such, it should be reclassified accordingly.

10. Old Frankfort Way should be classified from a local street to a neighborhood collector street between U.S. Route 45 and White Street as it functions as a collector-distributor of local residential and commercial traffic between a regional arterial (U.S. Route 45) and a major collector (White Street/Center Road).
11. Sandlewood Drive should be classified as a neighborhood collector street between Wolf Road and 116<sup>th</sup> Avenue.
12. Windy Hill Drive should be classified as a neighborhood collector street between U.S. Route 30 and Pfeiffer Road.
13. Pine Ridge Drive should be classified as a neighborhood collector street between 80<sup>th</sup> Avenue and Pfeiffer Road.
14. Lakeside Drive should be classified as a neighborhood collector street between IL Route 43 and 80<sup>th</sup> Avenue.
15. Pine Hill Road should be reclassified as a neighborhood collector street between 80<sup>th</sup> Avenue and St. Francis Road.
16. Flagstone Turn should be classified as a neighborhood collector street between 116<sup>th</sup> Avenue and Scheer road.

## **Truck Route System Modifications**

The most intensive industrial development planned for the Frankfort area will occur between Laraway Road and Steger Road, from 104<sup>th</sup> Avenue east to Pfeiffer Road, and between Steger Road and Bruns Road, from Harlem Avenue east to Ridgeland Avenue. Significant retail growth is also projected to occur in the Laraway Road and Steger Road corridors. As these developments occur, the truck route system should be expanded to designate truck access routes to these areas to insure they are constructed to adequate standards to support the heavy vehicle loads. The recommended truck route system modifications are as follows:

- 104<sup>th</sup> Avenue (Laraway Road-Steger Road)
- Manhattan-Monee Road (I-57 to U.S. Route 45)
- Harlem Avenue (Steger Road- Bruns Road)
- Ridgeland Avenue (Steger Road-Bruns Road)

Manhattan-Monee Road should be designated as part of the Will County truck route system. The other roadways would be designated as part of the local (Village of Frankfort) truck route system.

## Roadway System Improvements

Several roadway improvements were identified in the previous (1996) Transportation Master Plan or the Will County 2020 Transportation Framework Plan but have yet to be constructed. Those projects that are still recommended from these documents are listed below. In addition, there are several other roadway improvement projects recommended in this plan to address existing and projected road system continuity deficiencies and capacity constraints, intersection misalignments, and traffic control needs. Furthermore, the arterial and collector streets in Green Garden Township are presently narrow two-lane roadways, some of which are not paved. As development occurs in Green Garden Township and property is annexed into the Village of Frankfort, these roadways will need to be improved to the Village's design standards. Lastly, improvements are identified for the southern part of the planning area to accommodate projected capacity needs created by the potential extension of I-355 with an interchange at U.S. Route 45 near Manhattan-Monee Road. The recommended roadway system improvements are discussed below and shown in Figure 15.

### Continuity Improvements

- Nebraska Street. Extend Nebraska Street from Morning Dove Lane to Wolf Road opposite Marilyn Way, and from Nebraska Court to Pfeiffer Road, to complete this major collector that connects a community arterial (Wolf Road) with a major collector (Pfeiffer Road).
- Pfeiffer Road. Extend Pfeiffer Road north from U.S. Route 30 to Colorado Avenue. This extension will provide a continuous major collector between Steger Road and St. Francis Road and will provide a north-south alternative to U.S. Route 45 for the central part of the Village.
- LaPorte Road. Extend LaPorte Road from Aine Drive to Wildflower Drive. Classify road as a major collector between U.S. Route 45 and 88<sup>th</sup> Avenue.

### Capacity Improvements

- I-80. The CATS 2030 Regional Transportation Plan recommends the widening of I-80 to six lanes from just west of U.S. Route 45 to I-55.
- I-57. The CATS 2030 Regional Transportation Plan recommends the widening of I-57 to six lanes from I-80 south to the proposed I-355 extension.
- I-355 Extension. The CATS 2030 Regional Transportation Plan recommends the extension of I-355 (South Suburban Corridor) from I-80 east to I-57, between Pauling Road and Gorman Road. The tollway would then continue east to IL 394, south of Burville Road, to serve the proposed Abraham Lincoln National Airport, continuing further east to I-65 in Indiana (Illiana Corridor).



**Legend**



0 0.5 1 2 Miles

-  New Freeway Interchange
-  New Traffic Signal
-  Widen to 3 Lanes
-  Widen to 4/5 Lanes
-  Widen to 6/7 Lanes
-  Potential I-355 Extension
-  New Road
-  Street System
-  Pave/Repave Roadway
-  Railroad
-  Old Plank Road Trail
-  Metra Station

- U.S. Route 45. Widen this Strategic Regional Arterial to six lanes (plus turn lanes) from I-80 to Laraway Road and to four lanes (plus turn lanes) from Laraway Road to Manhattan-Monee Road. The IDOT SRA study for U.S. Route 45, completed in 1993, recommended a six lane roadway from 191<sup>st</sup> Street north to 143<sup>rd</sup> Street and a four lane roadway from 191<sup>st</sup> street south to County Line Road. However, buildout of the development densities projected in Chapter 6 will generate traffic volumes requiring a six lane facility as far south as Laraway Road. The extension of I-355, with a new interchange at U.S. Route 45 surrounded by regional commercial and business land uses, would require the six lanes section of U.S. Route 45 to continue south from Laraway Road to Bruns Road.
- U.S. Route 30. Widen this Strategic Regional Arterial to six lanes (plus turn lanes) from I-57 to Wolf Road. The IDOT SRA study for U.S. Route 30, completed in 1992, recommended a six lane roadway from U.S. Route 45 to I-57 and a four lane roadway to the west of U.S. Route 45. This Transportation Master Plan is consistent with the IDOT recommendations, with the caveat that the six-lane section will need to be carried west of U.S. Route 45 to at least Wolf Road. In the near term, IDOT's current Highway Improvement Program (FY 2007-2012) includes Phase 2 engineering for the widening of U.S. Route 30 to four lanes (with turn lanes) from William Street in New Lenox to Harlem Avenue.
- Laraway Road, which is identified in the CATS 2030 Regional Transportation Plan as a Potential Strategic Regional Arterial to be added to the SRA system, should be widened to six lanes (plus turn lanes) from Scheer Road to I-57 to accommodate the large concentrations of retail and industrial development proposed in the Laraway Road corridor. In the interim, the Cook County Department of Highways has developed plans to widen Laraway Road to four lanes (with median) from just west of Harlem Avenue to the existing four-lane section just west of Ridgeland Avenue.
- Harlem Avenue. Widen this Strategic Regional Arterial to six lanes (plus turn lanes) from I-80 to Laraway Road and to four lanes (plus turn lanes) from Laraway Road to Manhattan-Monee Road. The IDOT SRA study for Harlem Avenue recommended a six lane roadway from U.S. Route 30 north to 183<sup>rd</sup> Street. While the recommendations of this Master Plan are consistent with the IDOT recommendations, buildout of the development densities projected in Chapter 6 will generate traffic volumes requiring the six lane facility to extend farther south to Laraway Road. In the interim, the Cook County Department of Highways, as part of their Highway Transportation Plan (2005-2009), intends to widen Harlem Avenue to four lanes (with median) from U.S. Route 30 to Steger Road, including the realignment of the Steger Road intersection, a new traffic signal at the Harlem Avenue/Sauk Trail intersection (to the north of Laraway Road), and widening of the Sauk Trail (west) approach to Harlem Avenue to provide separate left- and right-turn lanes. The Harlem Avenue median will accommodate left-turn lanes into existing residential subdivisions such as Prestwick Country Club (Aberdeen Road and Prestwick Drive) and Georgetown Commons.

- Manhattan-Monee Road. IDOT's Highway Improvement Program includes the reconstruction of the I-57 interchange at Manhattan-Monee Road and the signalization of the interstate ramps. The Will County 2020 Transportation Framework Plan recommends the future widening of this Strategic Regional Arterial to four lanes (plus turn lanes) around the I-57 interchange. This Transportation Master Plan recommends the further widening of Manhattan-Monee Road from the I-57 interchange west to Scheer Road.
- Sauk Trail. This major collector road will require widening to a three-lane section between Center Road and Harlem Avenue to provide a center left-turn lane. The Village plans to widen the section between Center Road and Larch Road to a three-lane urban cross section in 2006.
- Wolf Road. This potential Strategic Regional Arterial will carry traffic volumes that warrant a four lane roadway (plus turn lanes) from I-80 south to Laraway Road and a three-lane roadway from Laraway Road south to Steger Road. As a policy, the Village of Mokena may elect to maintain Wolf Road as a two-to-three lane roadway. However, the section of Wolf Road in Frankfort (U.S. Route 30 to Steger Road) should be widened, as noted, to accommodate the projected traffic demand.
- St. Francis Road. To the north of U.S. Route 30, St. Francis Road is the only continuous east-west roadway serving Frankfort between U.S. Route 45 and Harlem Avenue. By running parallel to U.S. Route 30, it offers a local, alternative east-west route to using U.S. Route 30 and thus will attract traffic volumes that will require a four lane roadway (plus turn lanes). The Village has already widened St. Francis Road to four lanes from U.S. Route 45 to just east of Crystal Lake Way and is nearing completion on widening the section of St. Francis Road from Crystal Lake Way to 88<sup>th</sup> Avenue. Further widening will be required from 88<sup>th</sup> Avenue east to Harlem Avenue.
- Pfeiffer Road. As the only continuous north-south roadway serving central Frankfort between U.S. Route 45 and Harlem Avenue, Pfeiffer Road will attract traffic volumes that will require a three lane roadway (including turn lanes) between U.S. Route 30 and Steger Road. The Village is currently widening Pfeiffer Road to a three-lane urban cross section between U.S. Route 30 and the Old Plank Road Trail.
- Center Road. To accommodate the high density industrial and retail land uses projected to develop along this roadway, it will need to be widened to four lanes (with turn lanes) from the E,J & E Railroad south to Steger Road. South of Steger Road, Center Road should be widened to three lanes between Steger Road and Manhattan-Monee Road to provide a continuous dedicated left-turn lane to serve the numerous local streets and private driveways along this community arterial. In the interim, the Village plans to widen Center Road to a three-lane urban cross section from the E,J & E Railroad to Laraway Road by 2009.

- Steger Road. Steger Road will also serve high density industrial and retail land uses. As such, this arterial roadway will need to be widened to four lanes (with turn lanes) between Wolf Road and Harlem Avenue to accommodate the projected traffic volumes by 2021.
- Ridgeland Avenue. The Cook County Department of Highways has developed plans to align Ridgeland Avenue at Steger Road by extending the east segment of the offset roadway northwest to align with the west segment of the offset. The new segment will be built as a three-lane rural cross-section, which will be continued north to Sauk Trail. As part of this project, all approaches of the Ridgeland Road/Steger Road intersection will be widened to provide separate left- and right-turn lanes.
- Dralle Road. The extension of I-355 would require the widening of Dralle Road to four lanes (with turn lanes) between Scheer Road and 104<sup>th</sup> Avenue.
- 104<sup>th</sup> Avenue. The extension of I-355 would require the widening of 104<sup>th</sup> Avenue to four lanes (with turn lanes) between Steger Road and Dralle Road.
- Scheer Road. The extension of I-355 would require the widening of Scheer Road to four lanes (with turn lanes) between Steger Road and Dralle Road.
- Stuenkel Road. IDOT's Highway Improvement Program includes Phase 1 engineering for a new I-57 interchange at Stuenkel Road to serve the developing residential, industrial, and commercial areas of University Park and Frankfort, along with expanding facilities at Governors State University and Governors State Industrial Park. The interchange would be appropriately spaced two miles south of the Sauk Trail interchange and two miles north of the Manhattan-Monee Road interchange. In conjunction with the new interchange, Stuenkel Road would be upgraded to arterial standards and potentially in need of widening to four lanes (with turn lanes). The extension of I-355 would for certain require the widening of Stuenkel Road to four lanes (with turn lanes) within the Frankfort planning area.

Several of the arterial and collector roadways in Green Garden Township are narrow two-lane roadways, some of which are not paved or are paved but in disrepair. As development occurs in Green Garden Township and property is annexed into the Village of Frankfort, these roadways will need to be improved to the Village's design standards. Priority should be given to the following roadway sections:

- 80<sup>th</sup> Avenue (Steger Rd.-Stuenkel Rd., Manhattan-Monee Rd.-Bruns Rd.)
- 88<sup>th</sup> Avenue (Steger Rd.-Stuenkel Rd., Manhattan-Monee Rd.-Bruns Rd.)
- Steger Road (88<sup>th</sup> Ave.-Center Rd.)
- Stuenkel Road (88<sup>th</sup> Ave.-Scheer Rd.)
- Dralle Road (80<sup>th</sup> Ave.-Scheer Rd.)
- Bruns Road (Wildgrass Turn-Scheer Rd.)
- 104<sup>th</sup> Avenue (Steger Rd.-Prairie Schooner Dr., Manhattan-Monee Rd.-Bruns Rd.)
- Scheer Road (Stuenkel Rd.-Bruns Rd., one lane bridge over Prairie Creek)

### **Intersection Realignments**

- 84<sup>th</sup> Avenue at U.S. Route 30. Reconfigure 84<sup>th</sup> Avenue to T into U.S. Route 30.
- 84<sup>th</sup> Avenue at North Avenue. Align 84<sup>th</sup> Avenue to the north and south of North Ave.
- 104<sup>th</sup> Avenue at Steger Road. Realign 104<sup>th</sup> Avenue to the south of Steger Road and install two-way stop sign control on 104<sup>th</sup> Avenue.
- Pfeiffer Road/88<sup>th</sup> Avenue at Steger Road. Realign Pfeiffer Road with 88<sup>th</sup> Avenue to the south of Steger Road.
- 80<sup>th</sup> Avenue at Steger Road. Realign 80<sup>th</sup> Avenue to the south of Steger Road.
- Harlem Avenue at Steger Road. Part of Cook County's Harlem Avenue improvement project discussed above.
- Ridgeland Avenue at Steger Road. Part of Cook County's Ridgeland Avenue improvement project discussed above.
- Scheer Road at Stuenkel Road/Baker Road. As noted in the Will County 2020 Transportation Framework Plan, realign this intersection to create a four-leg intersection with two-way stop sign control on Scheer Road.
- Center Road at Steger Road. Center Road has already been aligned at Steger Road. However, two roadway stubs remain on Center Road at the former offset intersection points. The west stub can be vacated and removed, possibly in combination with an increased intersection radius at the northwest corner of the current Center Road/Steger Road intersection. The east stub can remain to serve the three residences on the east side of the roadway, but it should be disconnected from Center Road.

## **Traffic Control Improvements**

Based on projected traffic volumes and other germane factors such as proximity to schools, the following intersections are anticipated to require traffic signal control in the future. Traffic volumes at these intersections should be periodically monitored and traffic signals should only be installed when warranted based on MUTCD guidelines. Signals located in arterial corridors, such as U.S. Route 45, U.S. Route 30, Harlem Avenue, Laraway Road, and Wolf Road, should be interconnected into a signal system to maximize vehicle progression and traffic flow efficiency while minimizing vehicle delays.

- U.S. Route 45/Steger Rd
- U.S. Route 45/Stuenkel Road
- U.S. Route 45/Manhattan-Monee Road
- U.S. Route 30/Locust Street
- U.S. Route 30/94<sup>th</sup> or 95<sup>th</sup> Avenue
- U.S. Route 30/Franklin Square Road
- Harlem Avenue/North Avenue
- Harlem Avenue/Sauk Trail
- Harlem Avenue/Steger Road
- Harlem Avenue/Stuenkel Road
- Harlem Avenue/Manhattan-Monee Road
- Laraway Road/80<sup>th</sup> Avenue
- Laraway Road/Pfeiffer Road
- Laraway Road/Center Road
- Laraway Road/104<sup>th</sup> Avenue
- Laraway Road/Wolf Road
- Laraway Road/116<sup>th</sup> Avenue
- Sauk Trail/Pfeiffer Road
- Center Road/Steger Road
- Center Road/Stuenkel Road
- Center Road/Manhattan-Monee Road
- Pfeiffer Road/Steger Road
- Wolf Road/Nebraska Road
- St. Francis Road/80<sup>th</sup> Avenue
- St. Francis Road/88<sup>th</sup> Avenue

## **Transit Elements**

The CATS 2030 Regional Transportation Plan includes transit improvements to the existing Metra commuter rail lines utilized by Frankfort residents. The plan includes capacity improvements and line extensions to provide higher levels of service on the Rock Island District line, SouthWest Service line, and Metra Electric line.

In addition, feasibility studies and alternatives analyses have been completed on the Suburban Transit Access Route (STAR) line, which will initially provide commuter rail-style service that will use the Northwest Tollway to connect O'Hare International Airport to Hoffman Estates and use the the Elgin, Joliet & Eastern (E,J&E) freight rail line to connect Hoffman Estates to Joliet. The portion of the STAR line to the east of Joliet, which would extend through Frankfort to Gary, Indiana, has been targeted for further study. Two locations have been identified as possible station locations, Wolf Road and the west side of Center Road with access from Laraway Road. The development of this additional transit service will likely occur beyond the 2021 planning horizon of this Master Plan.

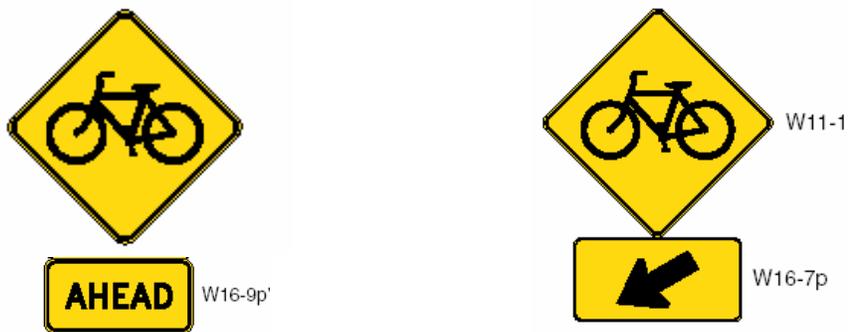
## **Bicycle System Elements**

Frankfort is served by the beginnings of a bicycle trail system with the 21-mile long Old Plank Road Trail as the backbone of the system. In 2005, the Village developed a Bicycle Trail Master Plan to guide the expansion of the bicycle system throughout the Village. The majority of the existing and planned bicycle facilities are shared-use paths, which typical run parallel to the roadway but are physically separated from it and are shared by cyclists, pedestrians, in-line skaters, and in some areas, equestrians.

Some of the planned bicycle facilities will be on-street, either as dedicated bicycle lanes, marked for exclusive use by bicyclists, or as signed shared roadways. The determination on roadway width for future roadway improvement projects should consider the use of the facilities as part of the bicycle trail system in addition to the roadway's functional classification. Striped bicycle lanes will require a minimum width of four feet at the edge of the traffic lane and shared roadways typically require a wider outside traffic lane (15-17 feet).

While shared paths, bicycle lanes, and signed shared roadways typically cross the roadway system at intersections that are under stop sign or traffic signal control, the Old Plank Road Trail crosses the roadway system at several busy mid-block locations with higher travel speeds, including Wolf Road, Elsner Road, Pfeiffer Road, Harlem Avenue, and Ridgeland Avenue.

The MUTCD contains guidelines for providing advance notice and warning of mid-block bicycle crossings. These guidelines include posting of bicycle warning signs (W11-1) in advance of the mid-block crossing, supplemented with the AHEAD legend (see below). A second bicycle warning sign should be located at the crossing location, supplemented with a diagonal downward pointing arrow (see below). The bicycle warning signs should have a fluorescent yellow-green background color for maximum visibility. If additional motorist advisement is desired, due to sight distance constraints or traffic speeds, flashing yellow beacons can be attached to the bicycle warning signs. Stop signs should be posted on the bike trail at the crossing locations to advise bicyclists that motorized traffic has the right-of-way. In addition, pavement markings should be used to identify the bicycle crossing and the crosswalk should be illuminated at night. The Village presently uses white diagonally-striped crosswalk markings on the Old Plank Road Trail.



Where traffic volumes reach levels where there are insufficient gaps for bicyclists to safely cross the roadway, and/or where roadway widening projects result in lengthy crossing distances, consideration should be given to grade separate the bike trail from the roadway (similar to the Old Plank Road Trail bridge over U.S. Route 45) or install bicyclist/pedestrian actuated traffic signals at the mid-block crossing if the crossing is appropriately spaced from the nearest traffic signal controlled intersections to the north or south of the trail. An example of a signalized mid-block bicycle crossing is shown on the following page.



**Example of Traffic Signal Controlled Mid-Block Bicycle Crossing**

## **Transportation Action Program**

Table 3 summarizes the recommended improvements contained in this Transportation Master Plan, together with the purpose for the improvements, probable timeframe for implementation, and agencies that would participate in the funding and implementation process.

TABLE 3  
TRANSPORTATION ACTION PROGRAM

Action	Purpose	Timeframe	Participants
1. Nebraska St. Extensions to Wolf Rd. and Pfeiffer Rd.	To improve street system continuity by completing this east-west major collector between two community arterials.	Near Term	Frankfort, Private, Frankfort Township
2. Pfeiffer Rd. Extension from US 30 to Colorado Ave.	To improve street system continuity by providing a continuous north-south major collector for central Frankfort.	Near Term	Frankfort, Private, IDOT
3. LaPorte Rd Extension from Aine Dr. to Wildflower Dr.	To improve street system continuity by providing a continuous east-west major collector between US 45 and 88 <sup>th</sup> Ave.	Near Term	Frankfort, Private
4. US 45 Widening from I-80 to Manhattan-Monee Rd. (including potential I-355 interchange)	To increase street capacity and regional access on this SRA to serve projected traffic demand.	Long Term	IDOT, ISTHA, Will Co., Private, Frankfort, Mokena, Frankfort Twp., Green Garden Twp.
5. US 30 Widening from I-57 to Wolf Rd.	To increase street capacity of this SRA to serve projected traffic demand.	Long Term	IDOT, Will County, Private Frankfort, Frankfort Twp., Matteson, Rich Twp.
6. Laraway Rd. Widening from Scheer Rd. to I-57.	To increase street capacity of this SRA to serve projected traffic demand.	Near Term/ Long Term	Will Co., Cook Co., Private Frankfort, IDOT, Frankfort Twp., Richton Park, Rich Twp.
7. Harlem Ave. Widening from I-80 to Manhattan-Monee Rd.	To increase street capacity and improve intersection operations	Near Term/ Long Term	IDOT, Cook Co., Tinley Park, Private, Frankfort, Frankfort Twp, Green Garden Twp, Rich Twp, Monee Twp, Matteson
8. Manhattan-Monee Rd. Widening from Scheer Rd. to I-57.	To increase street capacity of this SRA to serve projected traffic demand.	Long Term	IDOT, Will Co., Frankfort, Private, Green Garden Twp.
9. Sauk Trail Widening from Center Rd to Harlem Ave.	To upgrade roadway and provide a center left-turn lane.	Near Term	Frankfort, Cook County, Private.
10. Wolf Rd. Widening from I-80 to Steger Rd.	To increase street capacity to serve projected traffic demand.	Near Term/ Long Term	IDOT, Frankfort, Mokena, Frankfort Twp., Private
11. St. Francis Rd. Widening from 88 <sup>th</sup> Ave to Harlem Ave.	To increase street capacity to serve projected traffic demand.	Near Term/ Long Term	Frankfort, Private
12. Pfeiffer Rd. Widening from US 30 to Steger Rd.	To increase street capacity to serve projected traffic demand.	Near Term/ Long Term	Frankfort, Frankfort Twp., Private
13. Center Rd. Widening from E,J&E Railroad to Manhattan-Monee Rd.	To upgrade roadway, increase street capacity to serve projected traffic demand, and provide center left-turn lane.	Near Term/ Long Term	Frankfort, Frankfort Twp, Will Co, Green Garden Twp, Private
14. Steger Rd. Widening from Wolf Rd to Harlem Av.	To increase street capacity to serve projected traffic demand.	Long Term	Frankfort, GG Twp, Frankfort Twp, Cook Co, Private
15. Ridgeland Ave. Widening from Sauk Trail to Steger Rd.	To improve intersection operations at the Ridgeland/Steger intersection and provide a center left-turn lane.	Near Term/ Long Term	Cook County, Rich Township, Private
16. New I-57 Interchange at Stuenkel Road/Stuenkel Road Upgrade	To improve regional access to area and upgrade roadway, particularly in conjunction with I-355 extension.	Long Term	IDOT, GG Twp., University Park, Monee Twp., Private
17. I-80 Widening from US 45 to I-55	To increase capacity to serve regional traffic demand.	Long Term	IDOT

TABLE 3 (Continued)  
TRANSPORTATION ACTION PROGRAM

Action	Purpose	Timeframe	Participants
18. I-57 Widening from I-80 to I-355 extension	To increase capacity to serve regional traffic demand.	Long Term	IDOT
19. I-355 Extension from I-80 to I-57, IL 394 & I-65	To increase capacity to serve regional traffic demand.	Long Term	ISTHA, IDOT
20. Dralle Rd. Widening from Scheer Rd. to 104 <sup>th</sup> Av.	To increase street capacity to serve projected traffic demand associated with I-355 extension.	Long Term	Frankfort, Green Garden Twp., Private
21. 104 <sup>th</sup> Ave. Widening from Steger Rd. to Dralle Rd	To increase street capacity to serve projected traffic demand associated with I-355 extension.	Long Term	Frankfort, Green Garden Twp., Private
22. Scheer Rd Widening from Steger Rd to Dralle Rd	To increase street capacity to serve projected traffic demand associated with I-355 extension.	Long Term	Frankfort, Green Garden Twp., New Lenox, Manhattan, Private
23. 80 <sup>th</sup> Ave. Reconstruction (Steger Rd-Stuenkel Rd & Manhattan-Monee Rd-Bruns Rd)	Upgrade street to Village standards to support development	Near Term/ Long Term	Frankfort, Green Garden Twp. Private
24. 88 <sup>th</sup> Ave. Reconstruction (Steger Rd-Stuenkel Rd & Manhattan-Monee Rd-Bruns Rd)	Upgrade street to Village standards to support development	Near Term/ Long Term	Frankfort, Green Garden Twp. Private
25. Steger Rd Reconst. (88 <sup>th</sup> Ave-Center Rd)	Upgrade street to Village standards to support development	Near Term/ Long Term	Frankfort, Frankfort Twp., Green Garden Twp. Private
26. Stuenkel Rd Reconst. (88 <sup>th</sup> Av.-Scheer Rd)	Upgrade street to Village standards to support development	Long Term	Frankfort, GG Twp., Private
27. Dralle Rd Reconst. (80 <sup>th</sup> Ave-Scheer Rd)	Upgrade street to Village standards to support development	Long Term	Frankfort, GG Twp., Private
28. Bruns Rd. Reconstruction (Wildgrass Turn-Scheer Rd)	Upgrade street to Village standards to support development	Long Term	Frankfort, Green Garden Twp. Private
29. 104 <sup>th</sup> Ave. Reconstruction (Steger Rd-Prairie Schooner Dr & Manhattan-Monee Rd-BrunsRd)	Upgrade street to Village standards to support development	Long Term	Frankfort, Green Garden Twp. Private
30. Scheer Rd. Reconst. (Stuenkel Rd-Bruns Rd)	Upgrade street to Village standards to support development	Long Term	Frankfort, GG Twp., Manhattan, Private
31. 84 <sup>th</sup> Ave./US 30 Intersection Realignment	To improve operational efficiency and traffic safety.	Long Term	IDOT, Frankfort, Frankfort Twp., Private
32. 84 <sup>th</sup> Ave./North Ave Intersection Realignment	To improve operational efficiency and traffic safety.	Long Term	Frankfort, Frankfort Twp., Private
33. 104 <sup>th</sup> Ave./Steger Rd. Intersection Realignment	To improve operational efficiency and traffic safety.	Long Term	Frankfort, Private, GG Twp.
34. Pfeiffer Rd./88 <sup>th</sup> Ave./Steger Rd. Intersection Realignment	To improve operational efficiency and traffic safety.	Long Term	Frankfort, Private, Green Garden Twp.
35. 80 <sup>th</sup> Ave./Steger Rd. Intersection Realignment	To improve operational efficiency and traffic safety.	Long Term	Frankfort, Private, GG Twp.
36. Harlem Av/Steger Rd Intersection Realignment	To improve operational efficiency and traffic safety.	Near Term	Cook County, Private, GG Twp.
37. Ridgeland Ave./Steger Rd. Intersection Realign	To improve operational efficiency and traffic safety.	Near Term	Cook Co., Private, Rich Twp
38. Scheer Rd/Stuenkel Rd/Baker Rd Intersection Realignment	To improve operational efficiency and traffic safety.	Long Term	Frankfort, Private, Green Garden Twp.
39. Center Rd./Steger Rd. Intersection Reconfiguration	To improve operational efficiency and traffic safety.	Near Term	Frankfort, Will Co., Frankfort Twp., Green Garden Twp.
40. US 45/Steger Rd. Traffic Signal Installation	To improve traffic operations.	Near Term	Frankfort, IDOT, Private
41. US 45/Stuenkel Rd. Traffic Signal Installation	To improve traffic operations.	Long Term	Frankfort, IDOT, Private

TABLE 3 (Continued)  
TRANSPORTATION ACTION PROGRAM

Action	Purpose	Timeframe	Participants
42. US 45/Man.-Monee Rd Traffic Signal Install	To improve traffic operations.	Near Term	Frankfort, IDOT, Will Co.
43. US 30/Locust St. Traffic Signal Installation	To improve traffic operations.	Near Term	Frankfort, IDOT, Private
44. US 30/94 <sup>th</sup> Ave. Traffic Signal Installation	To improve traffic operations.	Near Term	Frankfort, IDOT, Private
45. US 30/Frankfort Sq Rd Traffic Signal Installation	To improve traffic operations.	Near Term	Frankfort, IDOT, Private
46. Harlem Ave/North Ave Traffic Signal Installation	To improve traffic operations.	Long Term	Frankfort, IDOT, Private
47. Harlem Ave/Sauk Tr Traffic Signal Installation	To improve traffic operations.	Near Term	Cook County, Private
48. Harlem Ave/Steger Rd Traffic Signal Install	To improve traffic operations.	Near Term	Cook County, Private
49. Harlem Av/Stuenkel Rd Traffic Signal Installation	To improve traffic operations.	Long Term	Frankfort, Private, GG Twp.
50. Harlem Ave./Man.-Monee Rd Traffic Signal Install	To improve traffic operations.	Long Term	Frankfort, Will County, Private
51. Laraway Rd./80 <sup>th</sup> Ave. Traffic Signal Installation	To improve traffic operations.	Near Term	Frankfort, Will Co., Private
52. Laraway Rd./Pfeiffer Rd. Traffic Signal Install	To improve traffic operations.	Near Term	Frankfort, Will Co., Private
53. Laraway Rd./Center Rd. Traffic Signal Install	To improve traffic operations.	Near Term	Frankfort, Will Co., Private
54. Laraway Rd./104 <sup>th</sup> Ave. Traffic Signal Install	To improve traffic operations.	Near Term	Frankfort, Will Co., Private
55. Laraway Rd./Wolf Rd. Traffic Signal Install	To improve traffic operations.	Near Term	Frankfort, Will Co., Private
56. Laraway Rd./116 <sup>th</sup> Ave. Traffic Signal Install	To improve traffic operations.	Near Term	Frankfort, Will Co., Private
57. Sauk Trail/Pfeiffer Rd. Traffic Signal Install	To improve traffic operations.	Near Term	Frankfort, Private
58. Center Rd./Steger Rd. Traffic Signal Install	To improve traffic operations.	Long Term	Frankfort, Will Co., Private
59. Center Rd./Stuenkel Rd. Traffic Signal Install	To improve traffic operations.	Long Term	Frankfort, Will Co., Private
60. Center Rd/Man.-Monee Rd Traffic Signal Install	To improve traffic operations.	Near Term	Frankfort, Will Co., Private
61. Pfeiffer Rd./Steger Rd. Traffic Signal Install	To improve traffic operations.	Long Term	Frankfort, Private
62. Wolf Rd./Nebraska Rd. Traffic Signal Install	To improve traffic operations.	Long Term	Frankfort, Private
63. St. Francis Rd./80 <sup>th</sup> Ave. Traffic Signal Install	To improve traffic operations.	Long Term	Frankfort, Private
64. St. Francis Rd./88 <sup>th</sup> Ave. Traffic Signal Install	To improve traffic operations.	Long Term	Frankfort, Private
Near term – within 5 years (by 2011)		Long term – from 5 to 15 years (between 2011 and 2021)	

## **8. Conclusions**

This Transportation Master Plan describes a program of improvements intended to accommodate growth in the Frankfort community over the next 15 years to 2021. The plan should be used to guide public and private sector decisions regarding land development, access, and roadway system capacity needs. The plan, however, is just one step in a continuous ongoing process and should be reviewed and updated periodically to adjust to changing conditions within the Village of Frankfort and surrounding area. Funding for the plan improvements will come from several public sources including federal, state, county, and local agency programs, as well as from private sector development.

# Appendix

Background data is available upon request