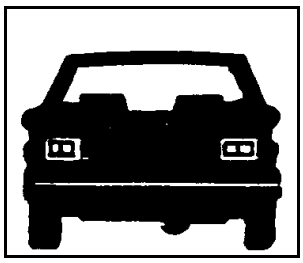
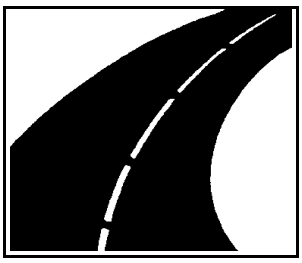
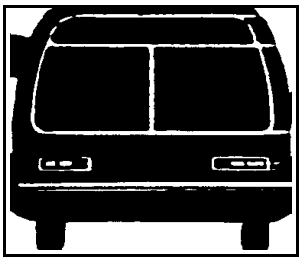
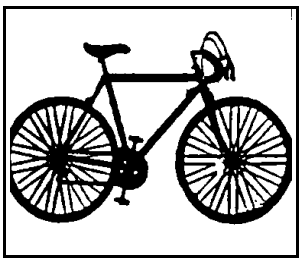
JANESVILLE AREA
2005-2035
LONG RANGE
TRANSPORTATION PLAN









STREETS & HIGHWAYS

May 10, 2006 Section IV

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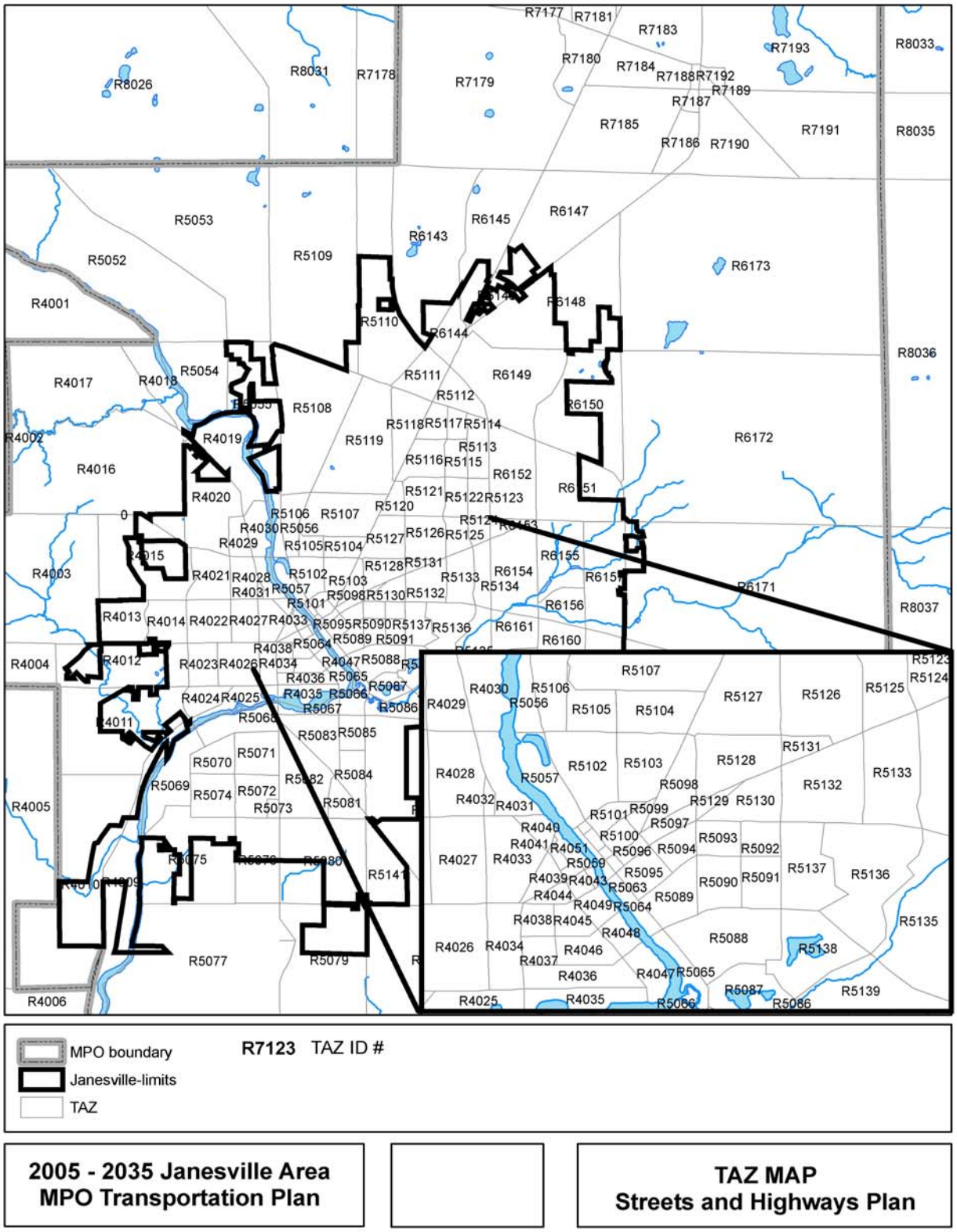
I. INTRODUCTION

The Streets and Highways Element of the *2005-2035 Janesville Area Long Range Transportation Plan* (JALRTP) is an update to the *1998-2020 Long Range Transportation Plan*, the most recent long-range transportation plan adopted for the Janesville planning area. In an attempt to support and maintain the highest possible level of personal mobility, the Streets and Highways element evaluates the existing traffic circulation system, analyzes the street systems current and projected deficiencies, and identifies short and long-range improvement projects.

STUDY AREA BOUNDARY

The study area boundary for the *2005-2035 Long Range Transportation Plan* (LRTP) is consistent with the planning area boundary depicted in the Introduction. The study area encompasses the Janesville and Milton urban area and includes parts of Harmony, Janesville, LaPrairie, Milton and Rock townships. For highway planning purposes, the study area is subdivided into 181 traffic analysis zones (TAZs). The TAZs, illustrated in Figure IV- 1, are generally defined by census boundaries, and physical boundaries; zone boundaries typically fall along arterials or natural physical boundaries.

FIGURE IV - 1 PLANNING AREA AND TRAFFIC ANALYSIS ZONES



GOAL AND OBJECTIVES

The goal and objectives for highway planning in the Janesville Planning Area coincide with the goal and objectives listed in the introduction. The objectives specifically pertaining to highway transportation are summarized below:

Goal: To develop and maintain an increasingly energy efficient transportation system which includes and integrates all modes of travel and provides for the safe and effective movement of people and goods, while optimizing the financial resources of the community.

Objective: By utilizing existing transportation facilities and services to their full potential.

Objective: By providing expanded facilities and services in accordance with the present and future demand to accommodate travel by auto, truck, bus, air, rail, bicycle, and foot with the intent of creating a balanced, coordinated, and efficient transportation system.

Objective: By minimizing the loss and damage to persons and property due to transportation related accidents.

Objective: By developing and implementing programs which would lessen peak hour traffic congestion.

Objective: By reducing injuries and fatalities in all transportation modes.

Objective: By providing adequate intermodal connections within the transportation system.

Objective: By designing future street and highway improvements which are compatible with existing land uses, and which compliment the land use plan.

II. EXISTING CONDITIONS

CURRENT TRAFFIC VOLUMES

The Wisconsin Department of Transportation conducts average daily traffic (ADT) counts along urban and rural road segments in Rock County every three years. The most recent ADT count was done in 2003, the results are shown in Tables IV-1 and 2 and in aggregate in Figure IV – 2. ADT is utilized in several ways: it is a measure of congestion, indicating when roadway improvements may be needed, and is one tool used to classify roadways, as discussed in the following section on classification systems.

The 2003 traffic counts were compared to those from 1992, to obtain the percent change in traffic volume over time, as shown in Table IV - 1 and Table IV – 2. United States Highway (USH) 14, from Ruger Avenue to STH 11, experienced the largest overall increase in ADT in the MPO, 66%. West

Court Street, had the second highest increase, 57%. Jackson Street showed a significant decrease in ADT, 99%, followed by Franklin Street with a 58% decrease. Figure IV – 2 illustrates the MPO's 2003 ADT counts in aggregate.

TABLE IV- 1 CHANGE IN TRAFFIC VOLUMES ON RURAL ROADS

Rural Roads and Highways		ADT's		Change (1992-2003)	
U.S./State Hwys	**From/To**	**1992**	**2003**	**#**	**%**
USH 14	Ruger Ave/STH 11	3,200	9,400	6,200	66%
USH 51	Town Line Rd./ UAB 1990	7,200	11,300	4,100	36%
USH 51	Manoguge Rd. / USH 14.	5,180	7,600	2,420	32%
STH 11	COJ Boundary / Milton - Shopiere	4,100	5,800	1,700	29%
STH 26 North	I-90/John Paul Rd.	19,250	25,200	5,950	24%
USH 14	Ruger Ave/E. Milwaukee St.	7,230	9,100	1,870	21%
STH 11	Wuthering Hills/CTH 0	1,830	2,200	370	17%
STH 11	CTH H/STH 184	5,450	5,500	50	1%
I-90 North	City Limits/Newville Rd.	***	45,200	***	***
I-90 South	Avalon Rd./CTH S	***	46,700	***	***
STH 11	Old 1990 AUB/River Rd./IH 39	***	7,300	***	***
USH 14	Rock River-1990 Adj. UAB/USH 51	***	12,900	***	***
USH 14	USH 51/CTH F	***	***	***	***
		ADT's		**Change (1992-2003)**	
County Highways	**From/To**	**1992**	**2003**	**#**	**%**
CTH F	USH 14/Russell Rd.	1140	1600	460	29%
CTH G	Town Line Rd. / STH 11	6720	9100	2380	26%
CTH O	CTH J/USH 14	1830	2200	370	17%
CTH E	COJ Boundary / USH 14	3110	3400	290	9%
CTH A	COJ Boundary/ N. Marion	2510	2400	-110	-5%
CTH A	CTH H / COJ Boundary	1800	1700	-100	-6%
CTH D	Eau Claire Rd/ COJ Boundary	3620	3400	-220	-6%
CTH A	N. Marion / N. Oakhill Dr.	6010	5300	-710	-13%
Rockport Rd.	Hayner Rd/STH 11	1500	1300	-200	-15%

*** Data was not available

UAB: Urban Area Boundary COJ: City of Janesville

Source: Wisconsin DOT Traffic Counts: 1992 & 2003

J:\Development\Planning\MPO\Long Range Plan\2004\Streets & Highways\[Milton's street standards.xls]Sheet1

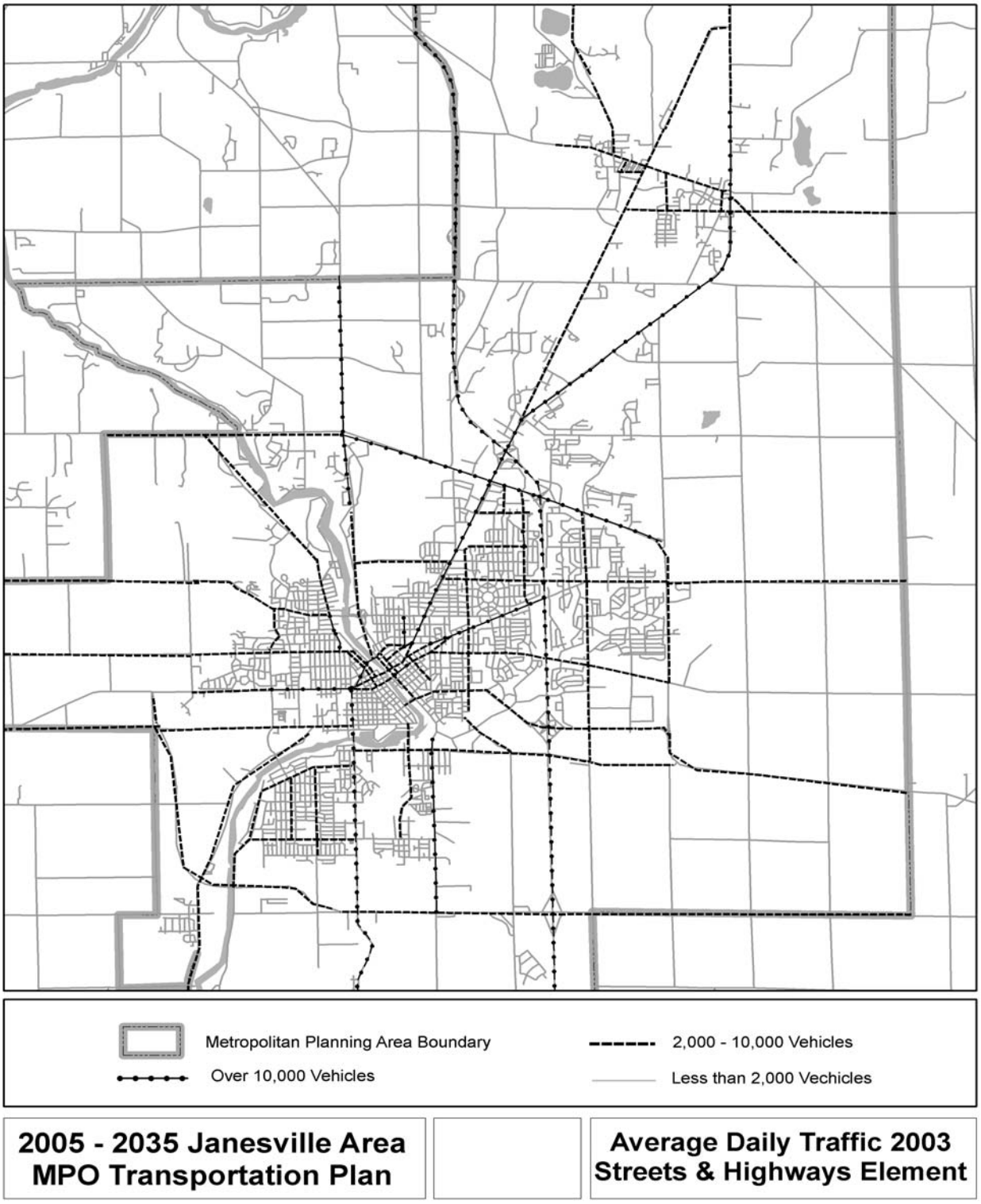
TABLE IV- 2 CHANGE IN TRAFFIC VOLUMES ON URBAN ROADS

Janesville		ADT's		Change (1992-2003)	
Street	**From/To**	**1992**	**2003**	**#**	**%**
W. Court St.	Centerway/City Limits	5400	12600	7200	57%
Mt. Zion Ave.	Pontiac Dr/Wright Rd	6850	10000	3150	32%
USH 14	Milton Ave/I-90	16540	23600	7060	30%
Milton Ave	I-90/City Limits	19250	25200	5950	24%
Milton Ave	Randolph Rd/Holiday Dr	22160	28900	6740	23%
Pontiac Dr.	Milwaukee St./Mt. Zion Ave.	6490	8300	1810	22%
USH 14	Kennedy Rd/Milton Ave	15830	20200	4370	22%
Delavan Dr.	Jackson St./Beloit Ave.	7400	9400	2000	21%
Pontiac Dr.	Holiday Dr. / Hwy 14	7580	9600	2020	21%
Milton Ave	Mt. Zion Ave./Randolph Rd.	21910	26500	4590	17%
W. State St.	Oakhill Ave/Willard Ave.	2730	3300	570	17%
Racine	Center Ave./River St.	4840	5500	660	12%
N. Crosby Ave	Mineral Point/W. Court St.	7300	8200	900	11%
Milwaukee St	Lexington Dr/Pontiac Dr	11780	13100	1320	10%
E. Court St.	Main St./Wisconsin Ave.	9510	10200	690	7%
W. State St.	Center Ave./Oakhill Ave.	4210	4500	290	6%
Court St.	USH 51/Jackson St. S.	5090	5400	310	6%
Milwaukee St	Ringold St./Randall Ave.	10220	10800	580	5%
Pontiac Dr.	Mt. Zion Ave./ Holiday Dr.	9940	10100	160	2%
S. Crosby Ave	W. Court St./Rockport Rd	8880	9000	120	1%
Kellogg Ave	Center Ave./Jackson St.	8300	8400	100	1%
Randall Ave	Milwaukee St./Memorial Dr.	6840	6800	-40	-1%
Milwaukee St	Randall Ave./Lexington Dr.	13240	13100	-140	-1%
Washington St.	Memorial Dr./City Limits	4350	4100	-250	-6%
Racine	Main St/Randall Ave	10090	8400	-1690	-20%
Main St.	Centerway/Milwaukee St.	6140	4000	-2140	-54%
Franklin St	Milwaukee St./Centerway	4580	2900	-1680	-58%
Jackson St.	W. Court St./Racine St.	6560	3300	-3260	-99%
I-90	USH 14/City Limits	***	***	***	***
I-90	USH 14/STH 26	***	47100	***	***
Franklin St	Court St./Milwaukee St.	4420	***	***	***
Court St.	STH 11 Bypass/Sunset Ave.	***	***	***	***
		ADT's		**Change (1992-2003)**	
Bridges	**From/To**	**1992**	**2003**	**#**	**%**
Crosby-Willard	W.State St./Rockport Rd.	5940	8300	2360	28%
Center Ave.	Riverside St./Delevan Dr.	16310	21200	4890	23%
Memorial Dr.	Washington St./Parker Dr.	18320	19200	880	5%
Centerway	River St./Main St.	17280	17100	-180	-1%
Court St.	River St./Main St.	9500	9000	-500	-6%
Racine St.	River St./Main St.	11850	9900	-1950	-20%
Milwaukee St.	River St./Main St.	11340	7800	-3540	-45%
Jackson St.	Riverside St./Delevan Dr.	***	7600	***	***

Milton		ADT's		Change (1992-2003)	
Street	**From/To**	**1992**	**2003**	**#**	**%**
STH 59	STH 26/UAB 2000	3960	6200	2240	36%
W. High St.	CTH Y / Plumb St.	3780	4700	920	20%
W. High St.	Plumb St./ STH 26	3520	3800	280	7%
CTH Y	McCormick Dr./High St.	5560	6000	440	7%
John Paul Rd.	High St./STH 59	***	1500	***	***
STH 59	N 2000 UAB/CTH Y/John Paul	***	***	***	***

*** Data was not available
UAB: Urban Area Boundary COJ: City of Janesville
Source: Wisconsin DOT Traffic Counts: 1992 & 2003

FIGURE IV - 2 AVERAGE DAILY TRAFFIC



Traffic Volumes by Vehicle Type

The Wisconsin Department of Transportation conducted an Origin and Destination Study in May and June of 2003. Trucks and passenger vehicles were surveyed at twenty data collection stations throughout Rock County to determine trip origin and destination, vehicle type, and trip purpose. The data collection stations, and the key findings of the study are provided in the Appendix.

Trips surveyed during the origin and destination study were classified as either local trips or through trips based on information provided by motorists and commercial vehicle operators. Through trips are trips that had both an origin and destination outside the Rock County study area. Local trips had either an origin or destination within the Rock County study area. During a 24 hour period, 193,717 trips were surveyed at stations located on the County's perimeter.

The I 39/90 survey stations had the greatest number of trips surveyed, 98,182 of the total 193,717. The majority of trips surveyed (60%) were through trips with the remaining 40% of trips classified as local trips. Passenger cars were the most common vehicles surveyed in the county, followed by light trucks, pick-ups, vans and mini-vans. Heavy Trucks (2 axles with 6 tires, 3 axles, etc) made up 19% of the surveyed trips.

TABLE IV- 3 TRIP DATA BY VEHICLE TYPE

	Survey Station							
	I-39 North	I-39 South	STH 26	USH 14 East	USH 51 South	STH 11 West	USH 51 North	County Average
Vehicle Type								
Passenger Car	42%	38%	53%	49%	60%	61%	65%	49%
Light Trucks	35%	33%	34%	16%	37%	27%	27%	32%
Heavy Trucks	23%	29%	13%	35%	3%	12%	8%	19%

Source: Wisconsin Department of Transportation, 2003 Origin-Destination Survey for the Rock County Transportation Study

Note: Survey stations were located along the county's perimeter. A map of the stations locations is provided in the appendix.

CLASSIFICATION SYSTEM

A hierarchical system of urban streets and rural roads serves the Janesville planning area. A roadway is classified according to its function, population served, the type of surrounding land uses, average daily traffic volumes, and whether its primary purpose is to provide mobility or access. Streets with a high classification, such as interstates or principal arterials, primarily serve through trips or cross-town movement. These routes are often designated as limited access roadways, carrying the areas highest levels of traffic. Intermediate classifications, such as minor arterials or collectors, provide connections between principal arterials and local streets. Local streets serve adjoining lands and function primarily as access routes to and from residential neighborhoods to higher density commercial and industrial land uses. The role of mobility and land access in the classification system is illustrated in Table IV - 4.

TABLE IV- 4 FUNCTIONAL CLASSIFICATION SYSTEM

Classification	Typical Land Access	Personal Mobility
Principal Arterials	No direct access to property	Highest
Minor Arterials	Limited access to property.	High
Collectors	Common Access to property.	Moderate
Local Roads	Unrestricted access to property	Low

Rural principal and minor arterials provide connections within the region and throughout the state, necessitating their development on a statewide level. Similarly, because of the nature of rural major and minor collectors, which provide routes for inter-county and intra-county travel, these types of roads must be developed on a countywide basis. Figure IV - 3 illustrates the classification of the roadways within the planning area, Table IV - 13 lists the roadways by classification.

National Functional Classification System

The functional classification system is the process by which roadways are grouped into categories according to the type of trips served, traffic volumes, and the types of traffic generators they provide access to. The following criteria is WisDOT's, which is based on FHWA's standards.

Rural Street Classification System

The rural functional classification system consists of routes that connect communities within the state. The determinates of rural road classification are the population served, surrounding land use, distance between road types, and average daily traffic (ADT). The items considered in classifying rural roads are shown in Tables IV - 5 through 8.

TABLE IV- 5 RURAL PRINCIPAL AND MINOR ARTERIAL CLASSIFICATION

Rural Principal Arterials (RPA) Includes Interstate (RPAI) and Other (ROPA)						
County Population Density (Rural)	**Basic Criteria** **Must meet any 2 of the below:**				**Supplemental Criteria** **or must meet both of the below plus 90% of Current ADT Volume**	**Desirable Mileage Percent of System Range**
	Population Service*	**Land Use Service**	**Spacing**	**Current ADT**		
≥43	Connect places: ≥50,000 to ≥50,000 5,000 – 49,999 to ≥50,000.	Provide access to major recreation areas of the state (see text).	Maximum 30 miles between Principal Arterials.	≥6,000	None	2.0-4.0% statewide
<43				≥2,000		
Rural Minor Arterials (RMA)						
≥43	Connect places: 1,000 – 4,999 to ≥50,000 5,000 – 49,999 to 5,000 – 49,999	Serve all traffic generating activities with an annual visitation of ≥300,000, if not served by a principal arterial.	Maximum 30 miles between Arterials	≥2,000	1. Alternate population connection 2. Major river crossing/restrictive topography	4.0-8.0% statewide
<43	1,000 – 4,999 to ≥50,000 1,000 – 4,999 to 5,000 – 49,999 or to principal arterials			≥1,000		

* A place is considered served by a principal arterial, if the principal arterial either penetrates its boundary or comes within 10 miles of the center of the place and penetrating service is provided by a minor arterial. A place is considered served by a minor arterial, if the minor arterial either penetrates its boundary or comes within two miles of the center of the place and a major collector provides penetrating service.

Source: Functional Classification Criteria, Wisconsin Department of Transportation

TABLE IV- 6 RURAL MAJOR COLLECTOR CLASSIFICATION

Rural Major Collector (RMAC)*						
County Population Density (Rural)	**Basic Criteria** **Must meet any 2 of the below or the Parenthetical Current ADT Volume Alone**				**Supplemental Criteria** **or must meet 2 of the below plus 90% of Current ADT Volume**	**Desirable Mileage Percent of System Range**
	Population Service**	**Land Use Service (served if within a ½ mile of place)**	**Spacing**	**Current ADT**		
≥43	Connect places: 1,000 – 4,999 to 1,000 – 4,999 500 – 999 to ≥50,000 500 – 999 to 5,000 – 49,999 500 – 999 to 1,000 – 4,999	Land Use Service Index ≥16.	Maximum 10 miles between Major Collectors or Higher Function Routes	≥1,000 (≥4,000)***	1. Alternate population connection 2. Major river crossing 3. Restrictive topography 4. Interchanges with a freeway 5. Parallel to a principal arterial.	5.0-18.0% countywide Most counties should be at 7.0 - 14.0%
<43	500 - 999 to 500 - 999 100 – 499 to ≥50,000 100 – 499 to 5,000 – 49,999 100 – 499 to 1,000 – 4,999 100 - 499 to 500 – 999 or to higher function routes	Land Use Service Index ≥12.		≥400 (≥1,600)***		

* Loop routes and stub ended routes less than 5 miles long and meeting the basic criteria for a major collector should be limited to a minor collector classification.
** A place is considered served by a major collector, if the major collector comes within a ½ mile of the center of the place.
*** The highway segment must be a minimum of a ½ mile long.

Source: Functional Classification Criteria, Wisconsin Department of Transportation

TABLE IV- 7 RURAL MINOR COLLECTOR CLASSIFICATION

Rural Minor Collectors (RMIC)						
County Population Density (Rural)	Basic Criteria				Supplemental Criteria	Desirable Mileage Percent of System Range
	Must meet any 2 of the below or the Parenthetical Current ADT Volume Alone				or must meet 2 of the below plus 90% of Current ADT volume	
	Population Service*	Land Use Service (served if within ½ mile of place)	Spacing	Current ADT		
≥43	Connect places: 100 – 999 to 100 – 999 50 – 99 to ≥50,000 50 – 99 to 5,000 - 49,999	Land Use Service Index ≥8.	Maximum 10 miles between Minor Collectors or Higher Function Routes	≥400 (≥1,600)**	1. Alternate population connection. 2. Major river crossing. 3. Restrictive topography. 4. Interchange with freeway. 5. Parallel to a principal arterial.	5.0-10.0% countywide
<43	50 – 99 to 1,000 – 4,999 50 – 99 to 500 – 999 50 – 99 to 100 - 499 or to higher function routes	Land Use Service Index ≥5.		≥200 (≥800)**		

*A place is considered served by a minor collector, if the minor collector comes within a ½ mile of the center of the place.
** The highway segment must be a minimum of a ½ mile long.
Source: Functional Classification Criteria, Wisconsin Department of Transportation

TABLE IV- 8 RURAL LOCAL ROAD CLASSIFICATION

All public roads not classified as arterials or collectors.	65.0 – 75.0% countywide Most counties should be at 68.0 – 72.0%

Source: Functional Classification Criteria, Wisconsin Department of Transportation

Rural Principal Arterials: Principal arterials provide interregional connections. These routes generally serve urban populations or greater (populations 5,000 and over).

Rural Minor Arterials: Minor arterials work in conjunction with principal arterials to serve moderate to large-sized places (places or clusters of communities with population of 1,000 or more), and other traffic generators providing intra-regional and inter-area traffic movements.

Rural Major Collectors: Major collectors provide service to smaller-to-moderate sized places (those with population of 100 or more) and other intra-area traffic generators; linking those traffic generators to larger populations nearby.

Rural Minor Collectors: Minor collectors provide service to all remaining smaller places (generally populations of 50 or more), link the locally important traffic generators with their rural hinterland, and their spacing is consistent with population density so as to collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road.

Rural Local Roads: Local roads provide access to adjacent land and provide for travel over relatively short distances on an inter-township or intra-township basis. All rural roads not classified as arterials or collectors will be local function roads.

Urban Street Classification System

In urban areas an urban roadway classification is used. An urban area is a place or cluster of places inside an urban boundary with a population of 5,000 or more. There are four classifications of streets in urban areas: principal arterials, minor arterials, collectors, and local streets. Tables IV – 9 through 12 summarize the criteria used to classify urban routes. Under TEA-21 provisions, all urban streets classified as collector or higher are eligible for federal funding. Figure IV - 3 illustrates the application of the functional classification system within the MPO, Table IV- 13 lists the classification of the roadways.

TABLE IV- 9 URBAN PRINCIPAL ARTERIAL CLASSIFICATION CRITERIA

Urban Principal Arterials (UPA)
Includes Interstate (UIPA), Other Freeway (UFPA), High Level Expressway (UXPA) and Other (UOPA)

Urban Area Population	First apply Rural – Urban Interface then apply Basic Criteria					Desirable Mileage Percent of System
	Rural – Urban Interface An RPA becomes an UPA. An RMA or UMA changes to an UPA when it meets one of the following:		Basic Criteria Must meet either Land Use Service or Spacing plus Current ADT OR Parenthetical ADT Alone			
	Parenthetical ADT Alone	Intersects with an UPA or UMA PLUS Current ADT of: (OR-the intersection is on the urban boundary and intersects a RPA or RMA)	Land Use Service A UPA should be within one (1) mile of the following Land Uses:	Spacing	Current ADT	
5,000 to 24,999	(≥6,000)	≥3,750	a. Main CBD of urban area b. Intermodal terminal (airport, rail passenger, etc). c. Regional shopping center d. Major college/ university e. Regional/Community park f. Industrial park g. Large stadium, arena, or convention center h. Primary Medical Center i. Gambling facilities	Maximum CBD = 1 mile Other = 3 miles Milwaukee County = 5 miles	≥3,750 (≥15,000)*	5.0% to 10.0%
25,000 to 49,999	(≥10,500)	≥6,000			≥6,000 (≥22,500)*	
50,000 +	(≥15,000)	≥9,000			≥9,000 (≥30,000)*	

* The highway segment must be a minimum of a mile long.

Source: Functional Classification Criteria, Wisconsin Department of Transportation

TABLE IV- 10 URBAN MINOR ARTERIAL CLASSIFICATION CRITERIA

Urban Minor Arterials (UMA)
Includes Other Freeway (UFMA), and High Level Expressway (UXMA) and Other (UOMA)

Urban Area Population	First apply Rural – Urban Interface then apply Basic Criteria					Supplemental Criteria	Desirable Mileage Percent of System
	Rural – Urban Interface An RMA becomes a UMA until it meets UPA criteria. An RMAC or RMIC changes to an UMA when it meets one of the following:		Basic Criteria Must meet either Land Use Service or Spacing plus Current ADT OR Parenthetical ADT Alone				
	Parenthetical ADT Alone	Intersects with an UCOL, UMA or UPA PLUS ADT of:	Land Use Service A UMA should be within a ½ mile of the following Land Uses:	Spacing	Current ADT	Must meet two (2) below PLUS 90% of Current ADT	
5,000 to 24,999	(≥3,000)	≥1,500	a. CBD of each satellite community b. Type 3, 4, & 5 airport c. Community shopping center d. Junior or community college e. Large industrial plant f. High school g. Large office building(s) h. Community hospital i. Clinic j. Sub-community park k. Golf course l. Theatre Complex m. Civic Center All commercial retail strip development over ¼ mile in length not on a UPA. Interconnection of main CBD with satellite community CBD's.	Maximum CBD = ½ mile Other = 2 miles	≥1,500 (≥6,000)*	1. Bus Route 2. Truck route 3. Signalization 4. Interchanges with a freeway 5. Major river crossing or restrictive topography	10.0% to 15.0%
25,000 to 49,999	(≥6,000)	≥3,000			≥3,000 (≥10,500)*		
50,000 +	(≥9,000)	≥4,500			≥4,500 (≥15,000)*		

* The highway or roadway segment must be a minimum of a ½ mile long.

Source: Functional Classification Criteria, Wisconsin Department of Transportation

TABLE IV- 11 URBAN COLLECTOR CLASSIFICATION CRITERIA

Urban Collectors (UCOL)
Includes High Level Expressway (UXCOL) and Other (UOCOL)

Urban Area Population	First apply Rural – Urban Interface then apply Basic Criteria				Supplemental Criteria	Desirable Mileage Percent of System
	Rural-Urban Interface An RMAC or a RMIC becomes a UCOL until it meets UMA criteria.	Basic Criteria Must Meet either Land Use Service or Spacing plus Current ADT OR Parenthetical ADT Alone			Must meet two (2) below PLUS 90% of Current ADT	
		Land Use Service A collector should be within a ¼ mile of the following Land Uses:	Spacing	Current ADT		
5,000 to 24,999		a. Elementary, intermediate, or middle school b. Small industrial plant c. Large warehousing d. Neighborhood shopping center e. Small office building f. Neighborhood park g. Marina May penetrate each residential neighborhood and connect to nearby UMA. May include the logical street system for traffic circulation in the CBD (relative to land use service).	Maximum CBD = ¼ mile Other = 1 mile	≥750 (≥3,000)*	1. Bus route 2. Truck route 3. Signalization 4. Interchanges with a freeway 5. Major river crossing or restrictive topography	5.0% to 10.0%
25,000 to 49,999				≥1,500 (≥6,000)*		
50,000 +				≥2,250 (≥9,000)*		

*Highway or roadway segment must be a minimum of a ¼ mile long.

Source: Functional Classification Criteria, Wisconsin Department of Transportation

TABLE IV- 12 URBAN LOCAL CLASSIFICATION CRITERIA

All public streets not classified as UPA, UMA or UCOL.	65.0 - 80.0%

Source: Functional Classification Criteria, Wisconsin Department of Transportation

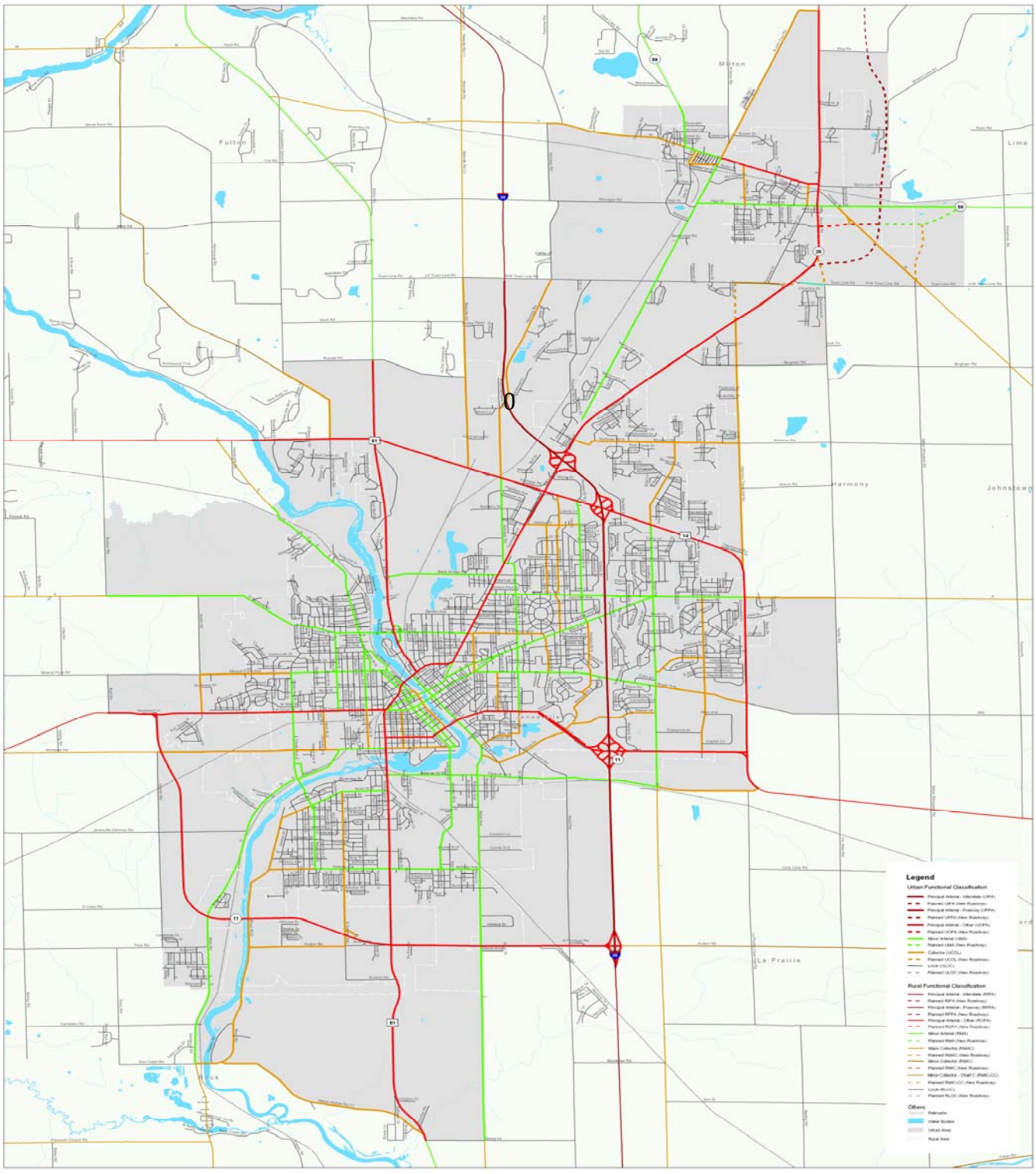
Principal Arterials: Principal arterials serve the major economic activity centers of an urban area, the highest ADT corridors, and regional and intra-urban trips. The long trip lengths and high ADT are indicative of these routes being the main entrance and exit routes, and that they are often extensions of the rural arterial system that carries people to and from the urban areas.

Minor Arterials: The main purpose of urban minor arterials is to provide traffic mobility, while providing greater land access than principal arterials. They serve important economic activity centers, have moderate ADT volumes, and serve intercommunity trips, interconnecting and augmenting the principal arterial system. Due to their function, minor arterials may be stub-ended at major traffic generators. Minor arterials should provide an urban extension of the rural collector system to the urban area CBD and connect satellite community CBD's with the regions main CBD.

Collectors: Collectors provide direct access to residential neighborhoods, commercial, and industrial areas, and serve inter-neighborhood trips while carrying a low ADT. They provide an equal amount of mobility and land access. As the name implies, these routes collect and distribute traffic between local streets and arterials. To aid traffic circulation, collectors should be linked to other collectors and arterials, however, they may stub-end to serve isolated traffic and penetrate neighborhoods.

Local Streets:. The primary purpose of local streets is to serve adjacent land uses. Local streets comprise the largest percentage of street mileage in the urban area. Trip lengths on local streets are typically one-half mile or less.

FIGURE IV - 3 URBAN AND RURAL FUNCTIONAL CLASSIFICATION MAP



Source: Wisconsin Department of Transportation

TABLE IV- 13 CLASSIFICATION OF MPO PLANNING AREA

Principal Arterial		Minor Arterial			Major Collector			Minor Collector			Collector		
Rural [1]	Urban [2]	Rural (RMA)	Urban (UMA)		Rural (RMAC)		Urban	Rural (RMIC)		Urban	Rural	Urban (UCOL)	
		Segment	Segment	Description	Segment	Description		Segment	Description			Segment	Description
I - 90	I - 90	STH 59	Afton Rd.	Rockport Rd. to UAB [3]	Avalon Rd.	I - 39 to CTH J	Not Assigned	Avalon Rd.	CTH J to PAB	Not Assigned	Not Assigned	Academy St	E. Court St. to Rockport Rd.
USH 14	USH 51	USH 51	Black Bridge Rd.	USH 51 to STH 26	CTH A	USH 14 to PAB		CTH F	CTH M to UAB			Arch St	West Court St. to Rockport Rd.
STH 26	USH 14		Court St.	USH 51 to Milwaukee St.	CTH A	PAB to Burdick RD						Austin Rd.	Mineral Point Ave. to W. Court St
STH 11	STH 26		Crosby Ave Ramp	Crosby Ave. St. to Afton Rd.	CTH D Rd.	UAB to PAB						Avalon Rd.	River Rd. S to Oakhill Ave. S
	STH 11		Crosby Ave. S.	Mineral Pt to State St. W	CTH E	URP to USH 14						CTH F	Consolidated School Rd. to USH 14
	Racine St		CTH Y	McCormic Dr. to High St.	CTH G	Sunny Ln.. to PAB						CTH M / Chicago St.	H-M Town Line Rd. to STH 59
	W. Court		Delavan Dr. W	USH 51 to Wright Rd.	CTH J	CTH O to PAB [4]						E. Memorial Dr.	Milton Ave. to Harmony Dr.
			Franklin St. N.	Mineral Pt to Milton Ave	CTH M east	UAB to PAB						Front St.	Vernal Rd. to STH 59
			Franklin St. S.	E Court St. to Rockport Rd.	CTH M west	USH 51 to UAB						Garfield Ave N.	E Memorial Dr to Ruger Ave
			High St	John Paul Rd. to UAB	CTH M west	PAB to USH 51						Happy Hollow Rd.	River Rd. to USH 51
			Jackson St.	Mineral Pt. Ave. to Kellogg	CTH O	Wright Rd. to USH 14						Harmony Dr.	E. Memorial Dr. to Ruger Ave
			John Paul Rd.	High St. to STH 59	Plymouth Church Rd.	PAB to CTH D Rd.						Hilltop Drive.	W. High St. to STH 59
			Kellogg Ave	Crosby Ave to Beloit Ave	Rockport Rd	Willowdale Rd. to Hayner Rd.						Holiday Dr.	STH 26 to Pontiac Dr
			Kennedy Rd.	USH 14 to Racine St. W.								Kellogg Ave	River Rd. S to Willard Ave. S
			Kennedy Rd.	USH 14 to STH 26								Kennedy Rd.	USH 14 to H-M Town Line Rd.
			Main St. S. / Beloit Ave.	USH 51 to STH 11								Lexington Dr. N.	USH 14 to Milwaukee St. E.
			Milwaukee St E.	UAB to USH 51								Liberty Ln..	Holiday Dr. to Mount Zion Ave.
			Mineral Point	Crosby Ave to Franklin								Madison Ave/ CTH M	Kennedy Rd. to STH 59
			Mount Zion	STH 26 to Wright Rd.								Merchant Row	Vernal to STH 59
			N River St.	Washington St. N to Franklin St. N.								Mineral Point Ave	Austin Rd. to Crosby Ave
			Oakhill Ave	Greenview to W. Court St								Mohawk Rd.	Palmer Dr. to Lexington Dr.
			Pearl St.	Highland to W. Court St								N John Paul Rd.	STH 26 to STH 59
			Pontiac Dr. N	USH 14 to Milwaukee St. E.								Newville Rd.	J-F Town line rd. to USH 14
			Randall Ave N.	USH 26 to Racine St								Oakhill Ave. S.	State St. W to Avalon Rd.
			Ruger Ave.	E Court St. to Wright Rd.								Palmer Dr.	Beloit Ave. to Wright Rd.
			State St W	Crosby to Washington St								Parkview Drive	W. High St. to STH 59
			STH 59	UAB to John Paul Rd.								Pearl St.	West Court St to Rockport Rd.
			Washington St North	UAB to Mineral Pt.								Pontiac Dr. S	Lexington Dr. to Milwaukee St.
			West Memorial Dr	UAB to Milton								Randall Ave S.	Racine St. E to Tyler St.
			Willard Ave S.	State St. W. to Kellogg Ave.								Ringold St.	Ruger Ave to Racine St.
			Wright Rd.	USH 14 to Delavan Dr. W.								River Rd. S	Afton Rd. to Crosby Ave.
			Prairie Ave	STH 11 to Sunny Lane								River St.	Franklin St to Racine St.
												Rockport Rd.	Hayner Rd. to Afton Rd.
												Rockport Rd.	USH 51 to Jackson St.
												Rotamer Rd.	STH 26 to Harmony Town Hall Rd.
												Ruger Ave	Wright Rd. to STH 14
												Skyview Dr.	Wright Rd. to Wuthering Hills Dr
												Spaulding Ave	USH 14 to Rotamer Rd.
												Tyler St.	Main St to Randall Ave. S
												Vernal Ave	Merchant Row to John Paul Rd.
												Wuthering Hills Dr.	Milwaukee St to STH 11

1. Interstate (RIPA), Freeway (RFPA), Other (ROPA)
2. Interstate (UIPA), Freeway (UFPA), Other (UOPA)
3. UAB- Urban Area Boundary.
4. PAB - Planning Area Boundary.

Local roads are all those not listed

Source: Wisconsin Department of Transportation

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CITY OF JANESVILLE STREET STANDARDS

The City of Janesville's street standards build upon the National Functional Classification Criteria, incorporating city specific standards for right-of-way width, sidewalk width, on-street parking, and pavement width. These standards were originally adopted by the City as part of the *1971 JATS Plan* and were reviewed when the *2005 Traffic Circulation Plan* was prepared. The City's standards are described in Table IV- 14 and depicted in Figure IV - 4.

While the basis for the City standards is functional classification, the City of Janesville's classifications differ slightly from the federal and state classifications in terminology and design specifics. The following lists illustrate the differences between the classification systems.

Federal/State Functional Classification	City of Janesville Standards
Principal Arterial	Primary Arterial
Minor Arterial	Standard Arterial
Collector	Collector
Local	Local

City Street Standards

The City of Janesville established standards for right-of-way width based on the City Engineer's recommended width for traffic lanes, parking lanes, curbs, sidewalks, and terrace areas.

Pavement width is a function of traffic volumes and parking availability.

- **Travel Lane Width**
  - Local roads with a low traffic volumes- 10 ft travel lane (minimum recommended width)
  - Collector and higher classifications or roads with a higher volume of traffic- 12 ft travel lane.
  - Parking, the number of intersections, speed limit, and type of traffic control devices are other considerations that affect the pavement width.

- **On-street parking** is determined by traffic volumes, adjacent land uses, and side street access. Pavement width for parking ranges from 8 to 10 feet.
  - Collector and local streets- 8 ft wide spaces.
  - Standard arterial and higher – 10 ft wide spaces.

- **Curb width** is 2 feet to curb face, and is typically used by vehicles parking on the street.

- **Remaining street right-of-way** is used for sidewalks and a terrace planting strips.

- **Terrace**
  - Area reserved for telephone, cable television and utility lines, sidewalks, planting strip and in winter it can be used for snow storage.
- **Planting Strip**
  - Local, collector and standard arterial- 5ft minimum.
  - Primary Arterial- 7 to 10 ft.

- **Sidewalks**

- Recommended width of 5 feet.
  - The construction of five-foot wide sidewalks within the terrace is governed by the City's sidewalk policy and recommendations from neighborhood plans.

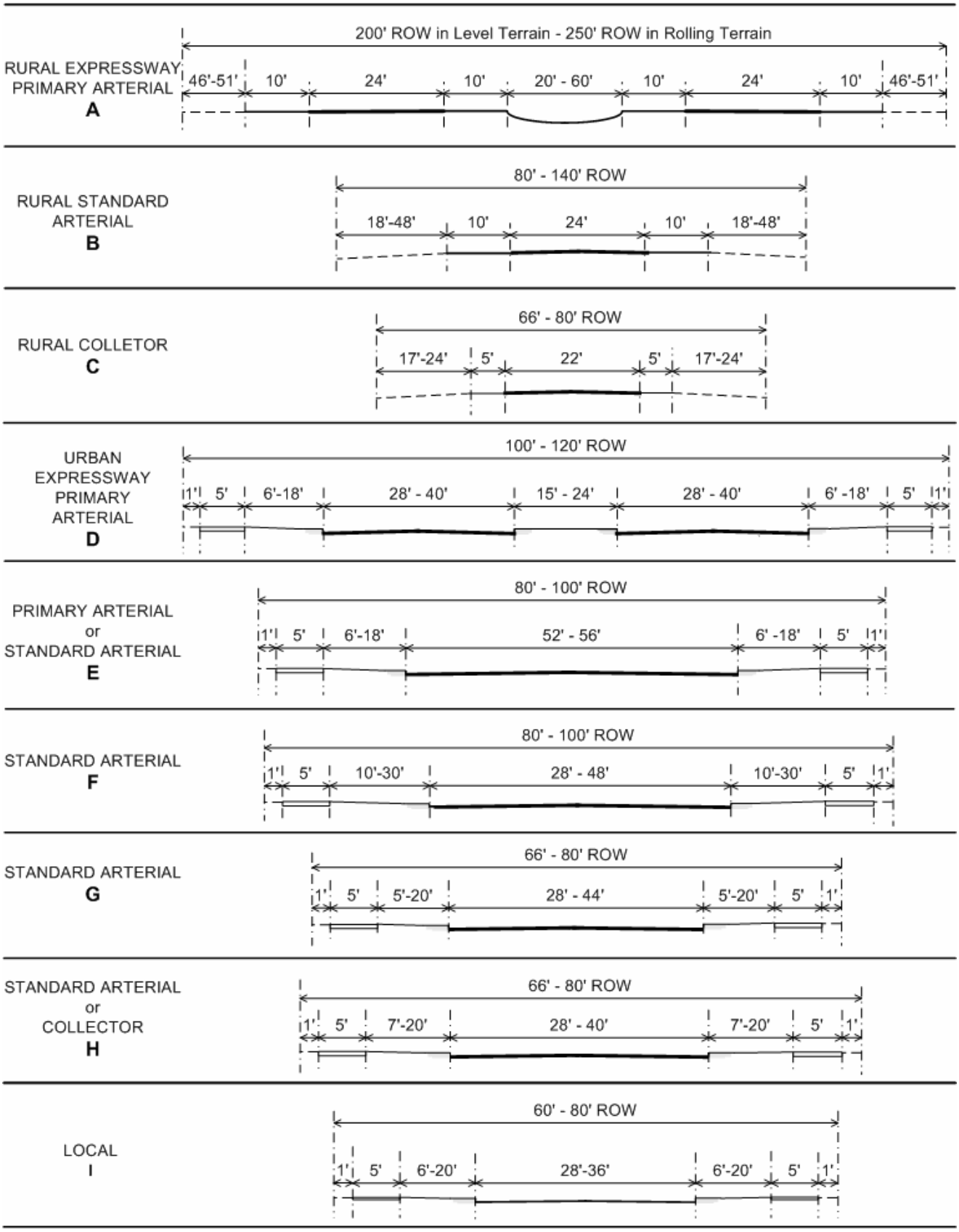
- **Bike Lanes**
  - See section on bike standards

TABLE IV- 14 CITY OF JANESVILLE GENERAL STREET STANDARDS

Functional Classification	ROW Width /(Pavement Width)	Min. Design Speed	Suggested Design Features
D) Urban Expressway - Primary Arterial	100' min.-120' des./ (56'- 80')	45 mph	4-6 lanes; no parking (divided roadway). Limited access, signals at major intersections. Left turn accommodations. Requires min. of 5' wide sidewalk. On-street bicycle facilities discouraged
E) Primary Arterial or Standard Arterial	80' min.-100' des./ (52'-56')	35-45 mph	4 lanes; no parking. Limited direct access. Signals at major intersections. Left turn accommodations. Min. 5' wide detached sidewalks. Bicycle facility: wide curb lanes or bike lanes.
F) Standard Arterial	80' min.-100' des./ (28' - 48')	30-40 mph	2-4 lanes; parking one or both sides. Left turn accommodations. Limited direct access. Signals where needed, stop signs on side streets. 10' wide min. planting strip with 5' wide detached sidewalks. Bicycle facility: wide curb lanes or bike lanes.
G) Standard Arterial	66' min.- 80' des./ (28' - 44')	30-40 mph	2 lanes; parking. Left turn accommodations. Signals where needed, stop signs on side streets. 5' wide min. planting strip with 5' wide detached sidewalks. Bicycle facility: wide curb lanes or shared roadway. Limited direct access drives.
H) Standard Arterial or Collector	66' min.- 80' des./ (28' - 40')	25-35 mph	2 lanes; parking. Left turn accommodations. Stop signs on side streets. 7' wide min. planting strip with 5' wide detached sidewalk. Bicycle facility: wide curb lane or shared roadway. Limited direct access drives.
I) Local	60' min.-70' des./ (28'-36')	25 mph	10' – 15' terrace. 5' wide detached sidewalk. Bicycle facility: shared roadway. Parking.

Source: 1983 Transportation Analysis Base Study Series; 1987-2005 Traffic Circulation Plan

FIGURE IV - 4 JANESVILLE STREET STANDARDS



Note: Gutter pan on D-I is 2.0'

CITY OF MILTON STREET STANDARDS

The City of Milton's street standards build upon the National Functional Classification Criteria, incorporating city specific standards for right-of-way width, sidewalk width, and pavement width. The City of Milton's street standards are listed below and have been adopted as part of their current city code.

TABLE IV- 15 MILTON'S STREET STANDARDS

Description	ROW	Pvmnt (1) Width	Lane Width	Sidewalks (3)	Min. Ret. Radius	Min. Radius	Rvrs/Curve Tangent	NEX. Grade (4)	Cul-De-Sac				Temp (5) Dead End	
									Max Length	ROW	Dis.	Pvmnt Width	Max Length	Pvmnt Width
Arterials	100'	48'	12'	2	30'	450'	150'	9%	--	--	--	--	1,000'	44'
Collector (2)	80'	36'	36'	2	20'	450'	150'	9%	--	--	--	--	1,000'	30'
Industrial	80'	36'	12'	Optional (3)	30'	320'	150'	9%	600'	120'	--	--	1,000'	36'
Local	66'	28'	10'	2	20'	200'	100'	9%	600'	120'	--	--	2,000'	28'
Frontage	50'	--	--	Optional (3)	--	--	--	--	--	--	--	--	--	--
Alleys	25'	18'	--	None	10'	--	--	--	--	--	--	--	--	--

1. Pavement width without curb and cutter (edge of pavement to edge of pavement).
2. If a vertical curve is under 500' radius, the maximum grade allowed is 5% minus, 0.5% for each 50' radius under 500'.
3. Requirements to be determined by the Plan Commission.
4. Minimum street grade 0.5% - Shall not exceed standards, unless necessitated by topography and approved by City Council upon recommendation by City Engineer.
5. "T" turnaround my be used. Turnaround shall extend a minimum of 20' behind the back of the curb on the permanent street and be 20 ' wide. Turnaround shall be paved.

Bike Lane Standards

Bike lane standards are based on the *Wisconsin Bicycle Facility Design Handbook* and are meant as general guidelines only. Illustrations of suggested lane and shoulder widths are provided in the Bicycle and Pedestrian element.

Rural Areas

In rural areas, a paved shoulder is normally provided in lieu of a dedicated and striped bike lane. The standard a paved shoulder is built to depends on actual vehicle and bicycle ADT, or the recommended bicycle ADT expected on the route. On roadways with very low ADT, less than 700 vehicles per day, there will typically be adequate facility space for bicycles and motorized vehicles to share the existing roadway.

TABLE IV- 16 RURAL STATE HIGHWAY BIKE LANE WIDTHS

Rural Two-Lane State Trunk Highway Paved Shoulder Width Requirements to Accommodate Bicycles		
Motor Vehicle ADT	Bicycle ADT (or Expected ADT)	
	0-24	≥ 25 [1]
Under 700	0 ft [2]	0 ft [2]
700 - 1500	0-3 ft [2]	4 ft [3]
1501 - 3500	3 ft [2]	5 & 6 ft [2, 5]
≥ 3501 [4,]	4 ft [2]	5 ft [2, 4, 5]

(1) 25 bicycles per day (existing or expected) OR the ADT recommended for the planned route.
(2) For roadways that do not meet the bicycle ADT requirement, a 3 ft. (0.9 m) shoulder should typically be provided. However, for roadways with ADTs over 3500, a minimum of a 4 ft. (1.2 m) paved shoulder is highly recommended.
(3) 3 ft. (0.9 m) is acceptable where shoulder widths are not being widened and/or vehicle ADT is close to the bottom of the range.
(4) When ADTs exceed 4,500, a 6 ft paved shoulder is advisable.
(5) A 6 ft. paved shoulder may be highly desirable for maintenance purposes since this class calls for 6 ft. gravel shoulders. Paving the shoulders entire width is often preferred over leaving only 1 ft. of gravel shoulder.

Source: WisDOT, *Wisconsin Bicycle Facility Design Handbook,* 2004.

NOTE: Additional resources for planning rural bicycle routes are available from WisDOT. Notably, *Planning for Rural Bicycle Routes* and the WisDOT *Guide to Rural Bicycle Facilities.*

Urban Areas

In urban areas, bike lanes should be on the right side of the street in most cases, and adequately marked or signed so they are not mistaken for additional vehicle travel lanes or parking areas. The lane widths recommended in Table IV - 16 are minimums, and may not be sufficient in high use areas, when the adjacent traffic lane is less than 11 ft wide, on high-speed facilities where wider shoulders are warranted or when the lane is shared with pedestrians. In general, the minimum combined width of bicycle and parking lanes should be approximately 13 ft. This is to allow for adequate room for bikers to maneuver around poorly parked vehicles and opening doors. When bus and bike lanes are combined the bike lane should be to the left of the bus lane so buses can easily pull to the curb, discharge and take on passengers.

TABLE IV- 17 URBAN ROADWAY BIKE LANE WIDTHS

Urban Roadway Paved Shoulder Width Requirements to Accommodate Bicycles	
Street Type	Bike Lane Width
Curbed asphalt or concrete, no parking	4 ft [1, 6]
Curbed concrete street, integral curb, no parking	5 ft [2]
Curbed street, parking	5 ft [3, 4]
No curb, speeds ≥ 35 mph	5 ft [5]
No curb, speeds < 35 mph	4 ft [5]

All measurements are minimum suggested widths.

(1) Measured from inside the stripe to the joint line of the gutter pan.

(2) Measured from face of curb to the inside of the bicycle lane stripe.

(3) May be wider if parking volumes or parking turnover is high

(4) Assumes a 8 to 10 ft. parking lane.

(5) Assumes these are not rural roadways. Rural roads have their own standards.

(6) Not including gutter pan.

Source: WisDOT, *Wisconsin Bicycle Facility Design Handbook*, 2004.

PARKING

The majority of the street network within the urbanized area is designed to provide at least one lane of parking. The availability of on-street parking relates to the design standards, functional classification, and speed limit of each street.

On-Street Parking

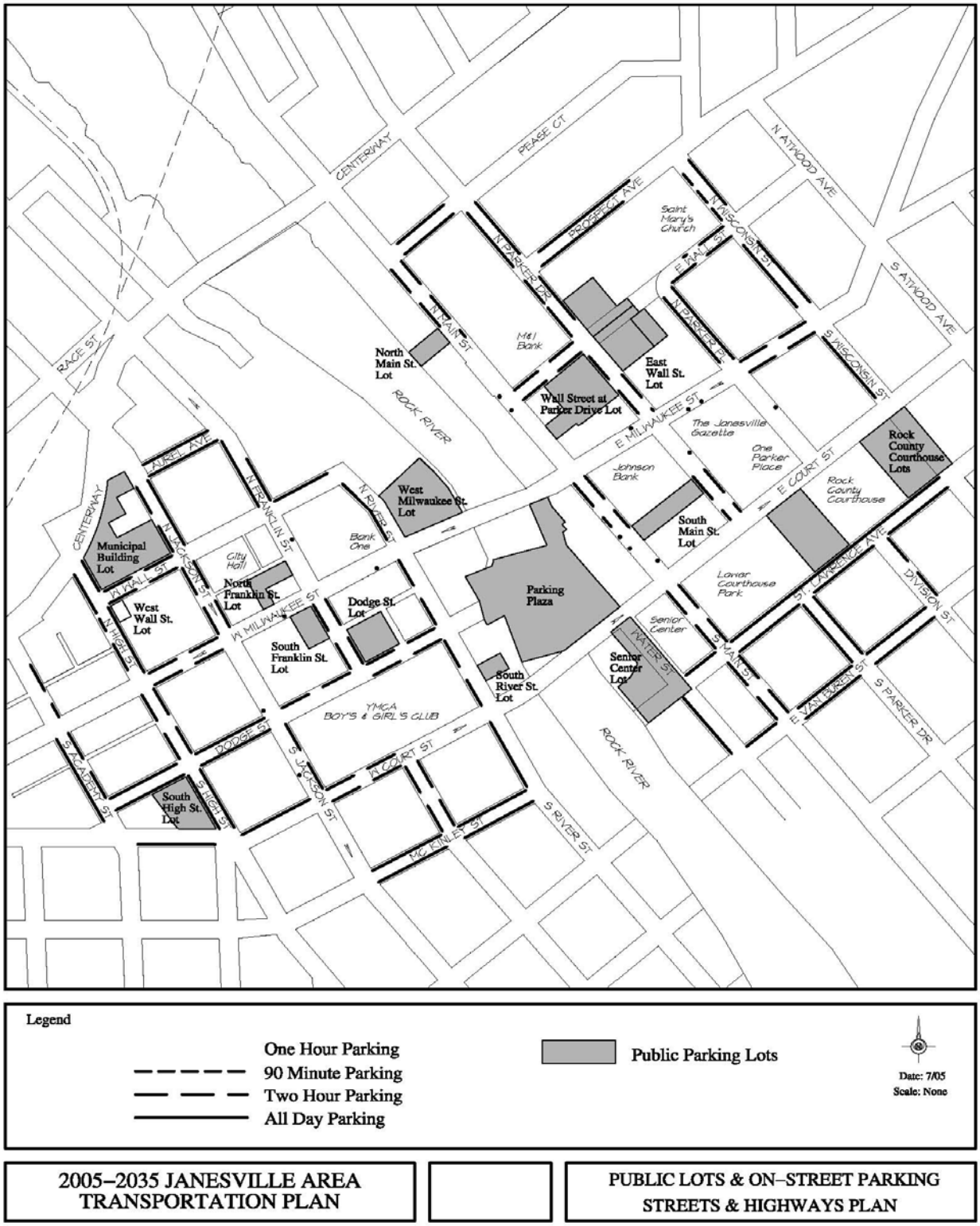
On-street parking acts as a traffic claming measure, reducing vehicle speeds by narrowing the perceived roadway and necessitating that drivers be prepared for other vehicles and pedestrians to entering or leave the roadway. In the City of Janesville, on-street parking is restricted on several of the City's major arterials. The commercial development along major arterials where parking is restricted provides ample private parking for consumer needs.

On-street parking is more common along streets with lower average daily traffic and in business areas that developed during the City of Janesville's inception. In Janesville's Downtown short-term on-street parking is currently a necessity for the offices and businesses located there. In residential neighborhoods with limited through traffic on-street parking is also common.

Public Parking

The largest capacity public lot in the MPO is the City of Janesville's parking plaza, located between Court Street and Milwaukee Street. The parking plaza provides 278 spaces. A map of parking availability within Janesville's downtown is provided in Figure IV – 5.

FIGURE IV - 5 PUBLIC PARKING MAP, CITY OF JANESVILLE'S DOWNTOWN



PUBLIC HEALTH AND SAFETY

Traffic Incidents

Traffic crashes are an indication of how well a locations existing traffic control and safety devices are functioning. The Wisconsin DOT provided crash data for the MPO from 2002 to 2005. There were a total of 6,174 crashes at approximately 2,850 locations within the MPO; for an average of 2,058 crashes a year. During the observation period, there were a total of 27 fatality crashes attributed to 24 locations, all locations but two had a single fatality each. The intersection of County Road A and North Henke Road was the site of 3 fatalities and 1 injury, with a total of 12 crashes at this location. The intersection of Highway 11 and County Road G was the site of 2 fatalities and 15 injuries, with a total of 43 incidents. During the three-year period, there were 2,070 injury crashes at approximately 1,104 locations. The locations where crashes resulted in an average of 5 or more injuries per year are listed in Table IV – 18. The remaining incidents, 4,080 over 3 years, resulted in property damage only.

Intersections with an average of 6 or more incidents per year were considered to be high accident intersections, 42 intersections fell within this category, they are listed in Table IV - 19 and shown in Figure IV – 6. Of the 42 crash locations, 39 were not interchanges. Of these 39 locations, 31 are signalized, 3 have stop signs and two are underpasses. Center Ave & Riverside St, Milton Ave & Matheson St, and USH 14 & CTH MM are non-signalized, high accident intersections. The high number of accidents in several locations in the urban area can be attributed to high traffic commercial centers where a concentrated mix of vehicles and pedestrians can lead to right-of-way confusion and the increased potential for driver error.

A safety planning study is scheduled to occur during the next 6 years. WisDOT will be working with the MPO to identify which locations have crash rates above the state average and provide the technical assistance needed to further study the issue. The MPO will be applying for Hazard Elimination Safety (HES) funds to improve qualifying locations on State Highways, and examining ways to fund projects on local and county roadways.

TABLE IV- 18 LOCATIONS WHERE CRASHES RESULTED IN AT LEAST 5 INJURIES
(Cumulative)

Location	Average Injuries Per Year	Average Number of Crashes Per Year
Total	690	2,058
I 39 & STATE HIGHWAY 26	14	23
HUMES RD & N PONTIAC DR	13	31
I 39 & RACINE	11	26
US HIGHWAY 51 & US HIGHWAY 14	10	21
US HIGHWAY 51 & STATE HIGHWAY 11	10	17
HUMES RD & N LEXINGTON DR	9	19
I 39 & US HIGHWAY 14	8	17
W COURT ST & S PEARL ST	6	11
MILTON AVE & LODGE ST	6	17
MILTON AVE & HUMES RD	6	23
MILTON AVE & RANDOLPH RD	6	9
CENTER AVE & ROCKPORT RD	5	8
STATE HIGHWAY 11 & COUNTY ROAD G	5	14

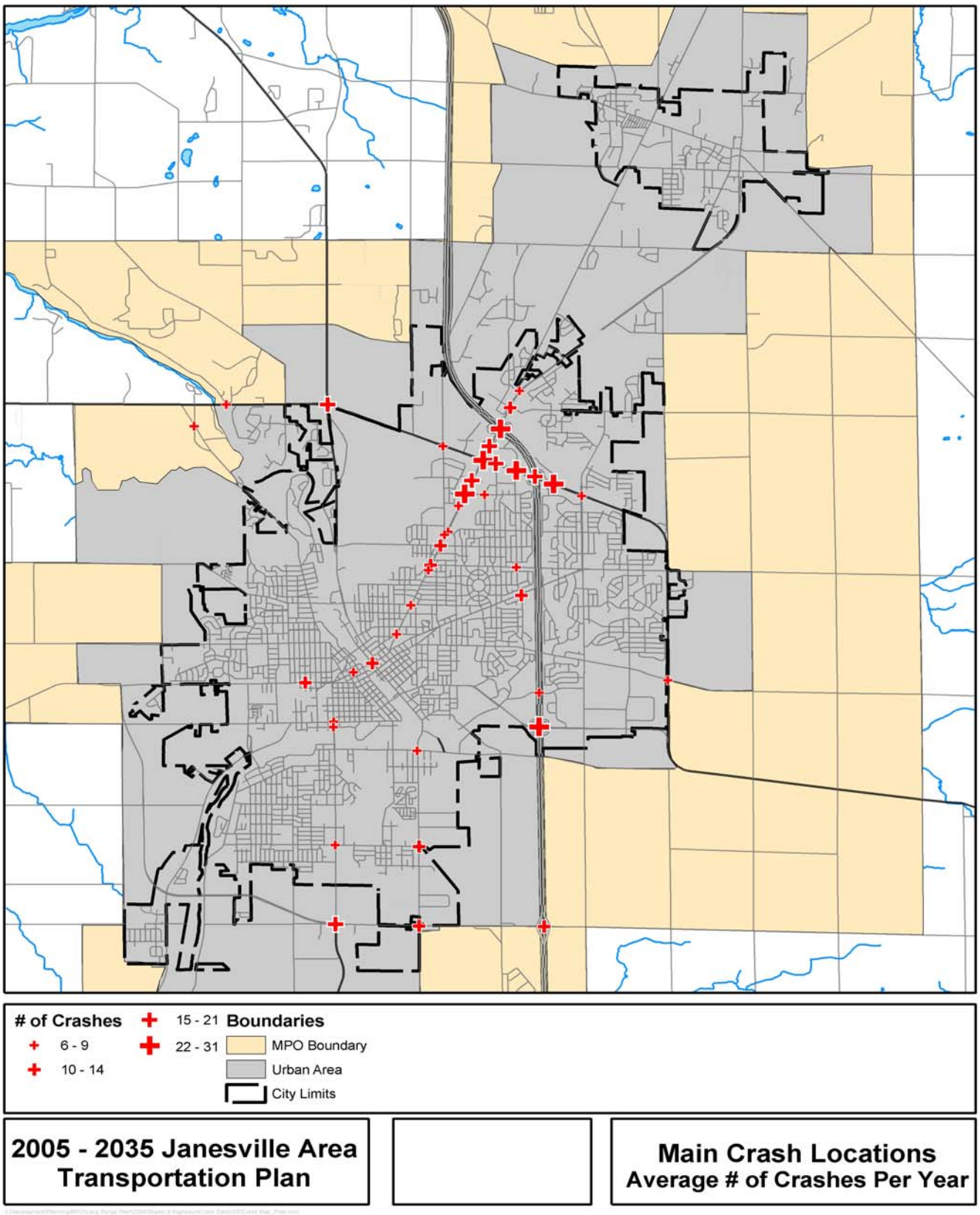
Source: WisDOT Crash Data

TABLE IV- 19 HIGH INCIDENT LOCATIONS

Location	Average Number of Incidents Per Year	Signal Type
HUMES RD & N PONTIAC DR	31	Signal
HUMES RD & DEERFIELD DR	27	Signal
I 39 & E RACINE ST	26	Underpass
I 39 & STATE HIGHWAY 26	23	Interchange
MILTON AVE & HUMES RD	23	Signal
MILTON AVE & HOLIDAY DR	22	Signal
US HIGHWAY 14 & US HIGHWAY 51	21	Signal
HUMES RD & N LEXINGTON DR	19	Signal
I 39 & US HIGHWAY 14	17	Interchange
MILTON AVE & LODGE DR	17	Signal
US HIGHWAY 51 & STATE HIGHWAY 11	17	Signal
MILTON AVE & MORSE ST	15	Signal
STATE HIGHWAY 11 & COUNTY ROAD G	14	Signal
MILTON AVE & MT ZION AVE	14	Signal
MILTON AVE & BLACK BRIDGE RD	13	Signal
MILTON AVE & KETTERING ST	13	Signal
I 39 & HWY11	13	Interchange
E MILWAUKEE ST & N PONTIAC DR	11	Signal
W COURT ST & PEARL ST	11	Signal
STATE HIGHWAY 26 & COUNTY ROAD N	10	Signal
BELOIT AVE & KELLOGG AVE	10	Signal
E MILWAUKEE ST & N MAIN ST	10	Signal
I 39 & PALMER DR	9	Interchange
HOLIDAY DR & LIBERTY LN	9	Stop Sign
MILTON AVE & CTH Y (John Paul Road)	9	Signal
US HIGHWAY 14 & N RIVER RD	9	Stop Sign
CENTER AVE & KELLOGG AVE	9	Signal
MILTON AVE & RANDOLPH RD	9	Signal
CENTER AVE & ROCKPORT RD	8	Signal
BELOIT AVE & DELAVAN DR	8	Signal
S JACKSON ST & W MILWAUKEE ST	8	Signal
HUMES RD & N WRIGHT RD	7	Signal
MILTON AVE & REFSET DR	7	Signal
US HIGHWAY 14 & COUNTY ROAD MM	7	None
MILTON AVE & E MEMORIAL DR	7	Signal
CENTER AVE & RIVERSIDE ST	7	None
HUMES RD & KENNEDY RD	7	Signal
MILTON AVE & E CENTERWAY	6	Signal
MILTON AVE & KENNEDY RD	6	Signal
COUNTY ROAD E & N WEST RIVER DR	6	Stop Sign
MILTON AVE & MATHESON ST	6	None
MT ZION & N PONTIAC	6	Signal

Source: WisDOT Crash Data

FIGURE IV - 6 TRAFFIC CRASH MAP



Source: WisDOT, Crash Data

Traffic Controls

Traffic control is an important safety and efficiency component of the MPO's street network. There are five main types of traffic controls: traffic signals, four-way stop signs, two-way stop signs, isolated stop signs, and yield signs. Currently, the City of Janesville is the only municipality to have a comprehensive listing of the location of these traffic control devices, and the historical data needed to evaluate how their numbers have changed over time. Therefore, the following discussion will focus on the data provided by the City of Janesville, but the issue is pertinent to all jurisdictions within the planning area. The MPO recommends that each jurisdiction conduct a comprehensive traffic control survey as soon as possible.

Within Janesville, the type of traffic control used at each intersection is determined by the functional classification of the intersecting streets, their traffic volumes, accident history, and the level of public concern expressed. From 1996 to 2003, the number of signals and four-way stops increased by 8%. New signals have been installed to serve development-related traffic increases along the city's arterial streets, and signs have been added along established and recently developed minor arterial, collector, and local streets. In addition to signals or signs located at intersections, several mid-block signals exist adjacent to specific sites such as General Motors, Gilman-Lewis, and Jefferson School.

TABLE IV- 20 TRAFFIC CONTROLS

	1996	2003	% Change
Signals	68	71	4%
Yield	30	49	63%
4-Way Stop	31	36	16%
Isolated Stop	21	34	62%
Crossing Guard	--	17	--

Pavement Conditions

The traffic volumes and number of heavy vehicles using a roadway affect the deterioration rate of pavement, which can impact the number of traffic crashes. The City of Janesville and the City of Milton monitor and maintain the pavement conditions of streets and highways within the city limits and the Rock County Highway Department is responsible for the county roads located in the five surrounding townships. WisDOT monitors and maintains the state trunk highways located in the MPO. It is the MPO's intention to maintain the road network at the highest feasible level, eliminating the potential for the poor physical condition of the roadway to be a factor in the cause of crashes.

Within the City of Janesville, city street and bridge surface conditions are based on a Pavement Condition Index (PCI) calculation and site inspection conducted by the City Engineering Department. PAVER software is used to calculate the PCI and prioritize resurfacing and reconstruction needs into a two-year program of projects which is updated on an annual basis. The City allots approximately $1,108,000 per budget year (at 2004 spending levels) on local pavement projects. The City has 321 miles of paved streets with an average life expectancy of 22 years, to keep up with the current system they should rehabilitate approximately 14.5 miles of street per year. However, between 1999 and 2004 they were only able to rehab an average of 11.3 miles each year.

The City of Milton has 27 road miles within their jurisdiction and they rehabilitate approximately 0.5 to 1.5 miles per year. The Public Works Department and City Council prioritize the projects done each year.

Air Quality Conditions

Air quality, emissions, and the efficiency of the highway network are all interrelated. Emissions are related to the density of traffic volumes in an area, vehicle type, speed and vehicle mode. Mode refers to whether a vehicle is idling, accelerating, cruising, or decelerating. Emissions dispersed during idling can increase if intersection congestion or uncoordinated signals are not corrected. Janesville does have isolated congestion during peak periods, however, the planning area is an attainment area for Ozone based on the National Ambient Air Quality Standards established by the U.S. Environmental Protection Agency (USEPA) in 1979. The Janesville planning area currently meets required clean air standards and is an attainment area. The entities within the planning area will work together to ensure that conformity with the standards specified in the Clean Air Act continues in the future.

RAIL TRANSPORTATION

Freight Rail

Although the focus of this chapter is on highways and streets, rail lines affect traffic flow along major streets such as West Court Street, Delavan Drive, USH 51 and USH 14 where at-grade crossings are located.

The City of Janesville is served by the Union Pacific and Wisconsin & Southern railways. The Wisconsin & Southern railroad uses Janesville as the hub from which they serve south central Wisconsin and northern Illinois. The Janesville area utilizes rail primarily to haul automotive parts, manufacturing components, and agricultural commodities. In several locations within the urban area, abandoned track has been converted into mixed-use recreation trails. A map of Janesville's existing rail lines is given in the Freight section of this plan.

Maintenance and repair of rail crossings along arterial streets is essential since these streets carry high volumes of traffic. Recent railroad improvements include the replacement of the at-grade-crossing, along Jackson Street, southeast of the GM Plant, with a 3-lane bridge that serves the Union Pacific Rail Road. The Wisconsin & Southern would like to see the existing Crosby Street Bridge replaced and the total number of tracks increased to five, by 2012.

III. TRAVEL DEMAND 2035

This section of the plan describes travel patterns within the Janesville planning area and the travel demand forecasting process used to predict future travel on the existing and planned street system. The Wisconsin Department of Transportation hired HNTB to do travel demand forecasting. Travel demand forecasting uses current socioeconomic, land use, and highway data to create a model of the road network and its use in 2035. Current traffic is modeled by establishing a relationship between trip-making behavior and current socioeconomic and land used data. Traffic growth can then be estimated by projecting this data to a future year, and using these same relationships, to generate future trips. These current and future trips are loaded onto the current street network in order to determine deficiencies in the ability of the street system to carry traffic efficiently. When "operational capacity" deficiencies in the current network appear, alternative networks can then be tested to see which combination of improvements might alleviate these deficiencies most effectively.

The main inputs into the modeling process were current socioeconomic, land use data that had been projected into the future, and the highway improvements expected by 2035. After trip-making relationships were established with the current data, the projected data and alternative vision of the future highway network enabled the forecasting of future traffic volumes on various alternative networks. Expected changes to the system, such as the addition of new roadways or the expansion of existing facilities were incorporated into the models future road network, increasing the models ability to accurately predict how each road segment will function in 2035. The travel demand modeling process provides an overall picture of how the MPO's street system works. The model is useful at several levels: first, at the planning level of analysis, to determine capacity deficiencies and for alternatives testing, and, second, in a micro level of analysis, as a tool in facilities forecasting, including turning movement analysis. The model can give an indication of intersection capacity, but operational evaluations, such as signal timing, require additional software.

BACKGROUND & MODEL INPUTS

Traffic Volumes

Traffic volumes on urban streets and rural roads are indicators of the functional classification of a route, the type of land use adjacent to the corridor, and the size of traffic generators located on that route. Current traffic is modeled by establishing a relationship between trip-making behavior and current socioeconomic and land use data. Traffic growth can be estimated by projecting this data to a future year and using these same relationships to generate future trips. These current and future trips are loaded onto the current street network in order to determine if the street system will be able to carry the predicted traffic efficiently, or if deficiencies will exist. When "operational capacity" deficiencies in the current network appear, alternative networks can then be tested to see which combination of improvements might alleviate these deficiencies most effectively. The level of congestion, or capacity deficiency, on any given street can be determined by comparing traffic volumes to its "operational capacity" or "level of service" (a numeric value representing a driver's "level of comfort"). The level of service (LOS) number tells us whether the street is operationally deficient. LOS concepts are described more fully below.

Trip Purpose

Traffic volumes help identify heavily-used arterial and collector streets and provide an indication of how traffic circulates near major traffic generators. Data on traffic volume is limiting in that it tells us where the traffic *is* but not necessarily where the traffic *is going*. Origin and destination studies provide a more macro-level indication of the types of trips being made, along with their beginning and ending points. In the modeling process information on trip purpose indicates different trip lengths and behaviors. For example, a home-based work trip will most likely be a longer trip in miles and have fewer stops than a home-based shopping trip, which may travel a shorter distance, stop multiple times and take a longer amount of time.

Socioeconomic Data

Forecasted population, households, and employment levels for the Janesville MPO Planning Area are used in the transportation planning process to determine the amount of future traffic which may be generated by households, businesses, shopping, schools, and industry. The ratio of population to available dwelling units directly affects trip production, as does auto ownership and employment. Shifts in employment, such as growth or decline in manufacturing, trade, or service employment impact the number of work-related trips generated or attracted to a particular employment sector.

The population of the Janesville Planning Area is projected to grow from 73,831 persons in 2000 to 104,337 persons in 2035, an increase of 41%. It is assumed that the household occupancy rate will remain stable at 96% for the entire planning area. Average household size will continue to decrease over the next thirty-five year period from 2.54 persons per household to 2.34 persons per household. The number of households in the planning area is expected to increase from 29,024 to 46,369 and total employment is forecasted to increase from 42,585 to 59,833 jobs in 2035.

Level-of-Service

The travel demand forecasting model process determines the level-of-service for streets within the planning area by incorporating land use, population, and traffic volume data.

Level-of-service (LOS) is one of the key indicators used to identify deficiencies in the system. LOS is determined through measuring the percentage of a roadways capacity being used during a given period, which is also know as the volume-to-capacity ratio. The volume (v) of the roadway represents the number of vehicles that pass a given point during a specified period. The roadways capacity (c) is the total number of vehicles the roadway was designed to carry. A v/c ratio indicates the percentage of the total capacity utilized for each segment, which translates into the LOS. LOS is labeled A through F and is described in Table IV-21.

TABLE IV- 21 LEVEL-OF-SERVICE

	LOS	V/C Ratio	LOS (Numeric Value)	Description
Best ↓ Worst	A	≤.60	1.01 to2.00	Not congested. Free flow - Users unaffected by one another. Free to maneuver and select desired speed. High level of comfort.
	B	≤.70	2.01 to 3.00	Not congested. Stable flow – Users notice the presence of other drivers. Free to select desired speed, but slight decrease in maneuverability. Comfort slightly less, due to increased presence of other drivers.
	C	≤.80	3.01 to 4.00	Minimal congestion. Stable to beginning of high-density flow - Other drivers affect your speed and force you to maneuver carefully. Comfort begins to decline noticeably. Point where other drivers being to significantly impact your driving.
	D	≤.90	4.01 to 5.00	Moderate congestion. High-density, stable flow - Speed and maneuvering are severely restricted. Comfort level is poor. Point where a minimal increase in traffic will cause problems.
	E	≤1.0	5.01 to 6.00	Severe congestion. Operating at or near capacity level. All speeds are reduced to a uniform low value. Maneuvering is very difficult. Comfort level are extremely poor, driver frustration levels are generally high. Point where small increases in traffic or minor problems in the traffic stream will cause backups.
	F	Varies	6.01 to ~	Extreme congestion. Forced or break-down flow. Characterized by stop and go traffic. Created when the amount of traffic approaching a point is greater than the capacity that can pass that point.

Source: Highway Capacity Manual, 1994. WisDOT, Facilities Development Manual, 2003 "Planning the Built Environment" 2000.

In the past, the Wisconsin DOT recommended a LOS of 4.0 for roadways in the State Trunk Highway System, portions of Highway 26, 14, 11, 51 and 59 in the MPO. Recently, WisDOT made the decision to allow higher levels of congestion on some portions of the State Trunk Highway System, so they developed LOS Thresholds. In the 2002 *Facilities Development Manual,* it states:

> *"These thresholds allow higher levels of congestion on some routes than under previous WisDOT policy. To arrive at these thresholds WisDOT had to balance the social, environmental, and dollar costs that would be incurred by using the traditional performance threshold of LOS 4.0 (moderate congestion) against the costs of accepting more congestion on some portions of the State Trunk Highway System". Facilities Development Manual. 2002.*

LOS Thresholds indicate the maximum desirable LOS, or congestion level, by roadway type in both rural and urban areas. The threshold system recognizes that the level of desirable congestion changes with a population's size and a roadways functional classification.

TABLE IV- 22 LEVEL-OF-SERVICE THRESHOLDS

(In MPO Planning Area)	Rural & Small Urban Areas Population ≤ 50,000	Urbanized Areas Population > 50,0000
C2020 Backbone Routes *(I-39)*	4.0	4.0
C2020 Connector Routes *(HWY 26 & 11)*	4.0	4.5
Other Principal Arterials	5.0	5.5
Minor Arterials	5.0	5.5
Collectors & Local Function Roads	5.0	5.5

Source: WisDOT, Facilities Development Manual, 2003

THE MODEL

In developing the Long Range Transportation Plan and evaluating the potential needs of the MPO for the next 30 years, over 50 projects were recommended to help meet projected transportation needs; these projects are listed in Table IV - 27 through Table IV – 30. Of the projects recommended, 20 were included in the model.

To evaluate how recommended projects would affect projected 2035 congestion levels in the MPO the travel demand model was developed in three steps that build upon one another. The steps are as follows: 1) the existing network, 2) the committed network (the existing plus completed and committed projects) and 3) the full-build network (the existing, plus completed and committed, plus planned projects). The existing network evaluates the effects of 2001 traffic volumes on the 2001 road network. The committed scenario is a prediction of what the road network will look like in 2035 should no further improvements occur, outside of those that are identified as committed. The 2035 committed scenario attempts to indicate how the predicted traffic volumes combined with minimum expansion projects will impact congestion levels. The committed network incorporates into the model's road network all major road projects completed between 2001 and 2005, the expansion and new roadway projects identified in the first three years of the current TIP (2006-2008), the planned HWY 26 improvements, and the planned conversion of Jackson and Franklin to two-way streets. The full-build network begins with the street network developed in the committed scenario and then adds to the network the major capacity expansion projects recommended for construction within the MPO. The current deficiency levels help illustrate where congestion relieving measures are needed, while the expected deficiencies indicate where they will be needed, aiding in the development of recommended projects.

Existing Network & Deficiencies

The existing scenario represents the road network as it was in 2001, and is used to give an idea of the current congestion levels throughout the MPO. Based on 2001 traffic counts, and the roadways capacity, a level-of-service (LOS) was calculated which defined the deficiency level of the segment. A full discussion of the methodology used to calculate deficiency levels can be found in the Appendix. Figure IV – 7 illustrates the projected state of our current road system.

Currently, there are few severely deficient segments, as shown in Figure IV- 7 and listed in Table IV - 23. The majority of US HWY 14, east of Janesville, is severely deficient, or deficient. Highway 26 (Janesville St) is deficient or severely deficient through a large portion of Milton. Along I – 39, the highest deficiency ratings are between US HWY 14 and the HWY 11 interchange. Outside of these segments, the network within the MPO experiences relatively little congestion. Tables IV - 27 through 31 list the projects planned for completion in the next 30 years. The State of Wisconsin is currently planning to realign HWY 26 and is studying the effects of expanding I-39 to 6 lanes.

The committed network refines the 2035 congestion level prediction by incorporating into the model the new and expansion projects that have been completed since the existing base year network (2001) and those projects that have funding secured for construction in the coming years (STH 26 realignment and the conversion of Jackson and Franklin Street to two-way). The transportation model was run with the existing plus committed network and the traffic volumes expected in 2035 to develop the deficiency levels that can be expected in 2035, which is shown in Figure IV-8. The expansion of I-39/90 to six lanes, a recommended project within this plan, may have a major impact on the region's congestion level. The project was added to the committed network, as illustrated in Figure IV-8 B, to show the incremental

effect of the interstate expansion project. The deficiency levels identified in the existing plus committed network help illustrate where congestion relieving measures will be needed, aiding in the development of the recommended projects.

In general, the townships had very few deficient segments. All of the deficient and severely deficient segments are listed in the tables, and were considered in the analysis, regardless of their jurisdictional location.

TABLE IV- 23 CURRENT DEFICIENCIES

Severely Deficient		Deficient	
Segment	From/To	Segment	From/To
E HWY 11/14	S Henke Rd/ CTH O	E HWY 11/14	S Henke Rd/S Milton Shopiere Rd
E. HWY 11/14	MPO Boundary/ S Milton Shopiere Rd.	I-39	Hwy 14 / Hwy 11 Interchange
S Janesville St (HWY 26)	Storrs Lake Rd/ E High St	N HWY 26*	E Klug Rd/John Paul Rd
		N HWY 26*	N Birdie St/ Storrs Lake Rd
		N HWY 26*	S. Janesville St/ N Harmony Town Hall Rd
		E HWY 11/14	S Henke Rd/S Milton Shopiere Rd

Source: HNTB, WisDOT

* Located in Milton's Urban Area.

TABLE IV- 24 DEFICIENCIES WITH COMMITTED PROJECTS (2035)

Severely Deficient		Deficient	
Segment	From/To	Segment	From/To
CTH G	STH 351 / MPO Boundary	Beloit St	S main St / Palmer Dr
E Racine St.	Jackson St / Forest Park St.	Center Ave	Center Ave. Bridge / W Delavan
I-39	Through MPO	CTH J	E Woodman Rd / MPO Boundary
Milton Ave.	Woodcrest Dr / Fox Hills Dr	CTH J	E HWY 11 / E Avalon Rd
Newville Rd	Hwy 14 / MPO Boundary	E Centerway St	Milton Ave / N Parker Dr.
STH 26	HWY 59 / Town Hall Rd	E Madison Ave	North St. / Rodger St
USH 11/14	USH 14 / MPO Boundary	E Madison Ave *	Dor Ell Dr / Parkview Terr
USH 51	Crystal Springs Rd / USH 51	Humes Rd	Newville Rd / Kennedy Rd
W Hwy 11	N Willdale Rd / S Kessler Rd	Humes Rd	Milton Ave / N Lexington Dr
		Hwy 59	CTH M / STH 26
		Kennedy rd	Barberry Dr / Refset Dr
		Milton Ave	Creston Park Dr. / Blain Ave
		Milton Ave	Woodcrest Dr / Braxton Dr
		N Crosby Ave	Johnson St / Rockport Rd
		N Crosby Ave	Mineral Pt/ Alexandria Pl
		N HWY 51	W CTH M / Black Bridge Rd
		N Parker Dr	Woodlane Dr / Sherman Ave
		N Pontiac	Holiday Dr. / Lucerne Dr
		N Pontiac Dr	Lilac Ln / Milwaukee St
		N Randall Ave	Randolph Rd / E Milwaukee St
		N Wright Rd	Midvale Dr / Randolph Rd
		N Wright Rd	Brunswick Ln / Palmer Dr.
		N Wright Rd	Mt Zion / Stuart St
		Randolph Rd	Milton Ave / Randall Rd
		S Janesville St	Greenmann St / E. High St
		S Randall Ave	Tyler St / Ruger Ave
		S. Main St.	E. Court St. / St. Lawrence Ave
		STH 26	CTH Y / E US HWY 14
		Tyler St.	S Randall St / S Main St.
		USH 14	N Wright Rd/ CTH M
		W Hwy 11	S Kessler Rd / W Hwy 11

Source: HNTB, WisDOT

* Located in Milton's Urban Area.

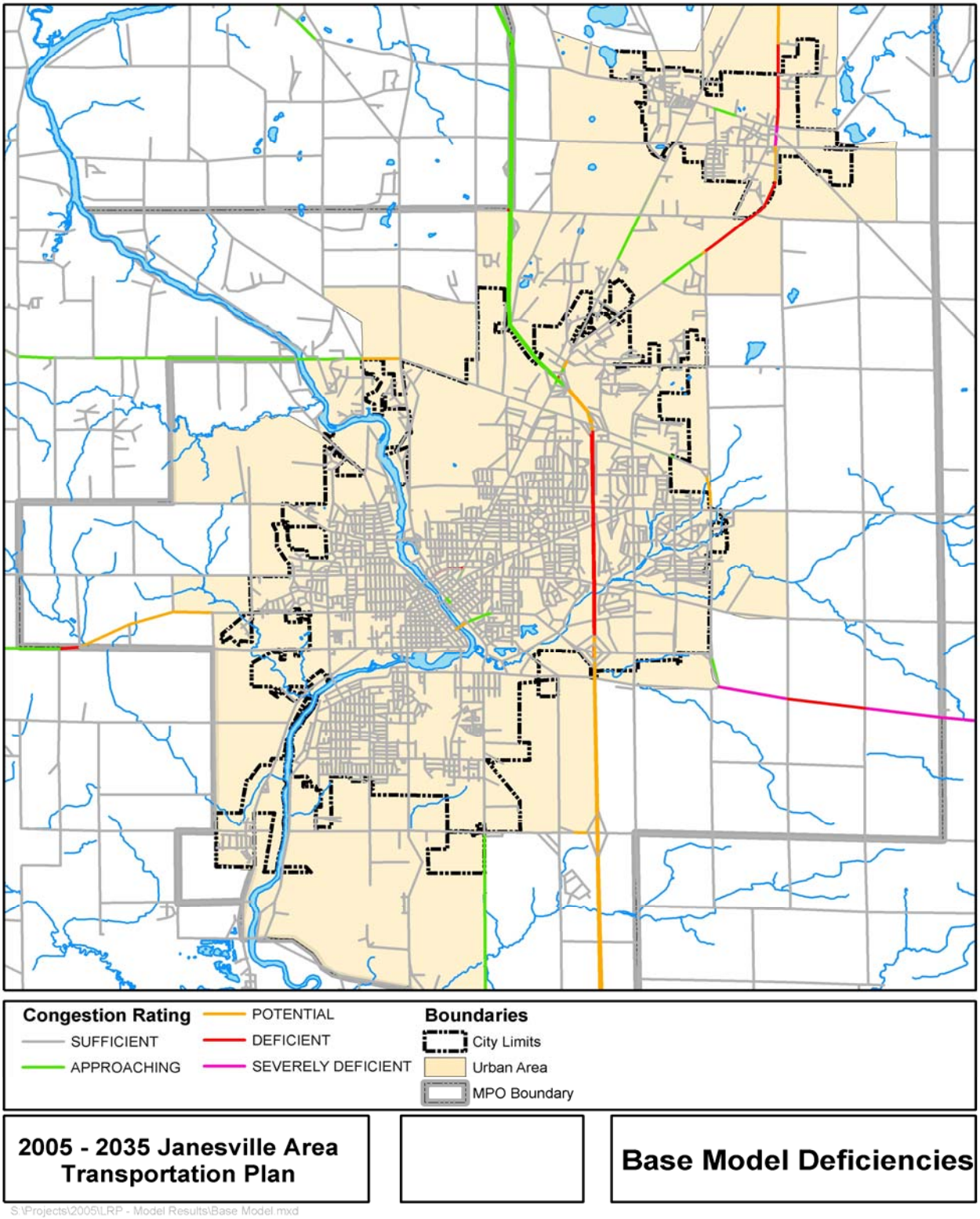
TABLE IV- 24 B DEFICIENCIES WITH COMMITTED PROJECTS AND I-39 EXPANSION

Severely Deficient		Deficient	
Segment	From/To	Segment	From/To
I-39	Humes Rd / Avalon Rd	Centerway	Milton Ave / N Parker Dr
Racine St	Forest Park Blvd / S Jackson St	Humes Rd	Crystal Springs Rd / USH 51
STH 11	CTH H / MPO Boundary	Humes Rd	Milton Ave / N Lexington Dr
STH 26	McCormick Dr / Morse St	Humes Rd	N Pontiac Dr / Deerfield Dr
USH 14	Town Hall Rd / MPO Boundary	I-39	Milton Ave / Humes Rd
		I-39	Avalon Rd / MPO Boundary
		Madison Ave*	Parkview Dr / Dunn St
		Madison Ave*	Plumb St / Rogers St
		Milton Ave	Creston Park Dr / Blaine Ave
		N Janesville St *	Storrs Lake Rd / E High St
		N Pontiac Dr	Lilac Ln / Mt Zion Ave
		S Crosby Ave	Court St / Rockport Rd
		STH 11	Hayner Rd / S Willing Rd
		STH 11	N Willowdale Rd / S Kessler Rd
		USH 14	N Wright Rd / Ruger Ave
		USH 51	CTH F / Black Bridge Rd
		USH 51	Humes Rd / CTH F

Source: HNTB, WisDOT

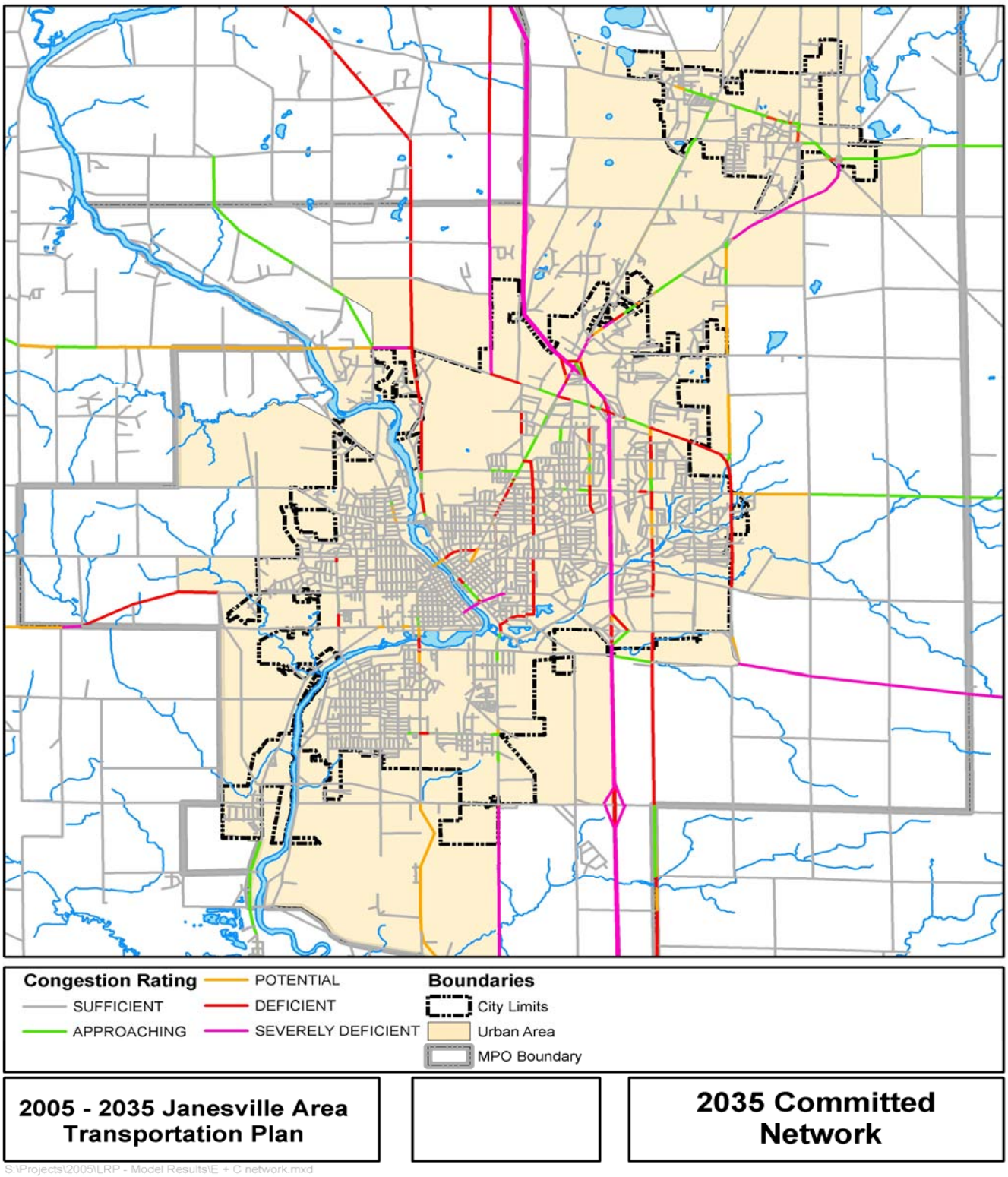
* Located in Milton's Urban Area.

FIGURE IV - 7 CURRENT DEFICIENCIES



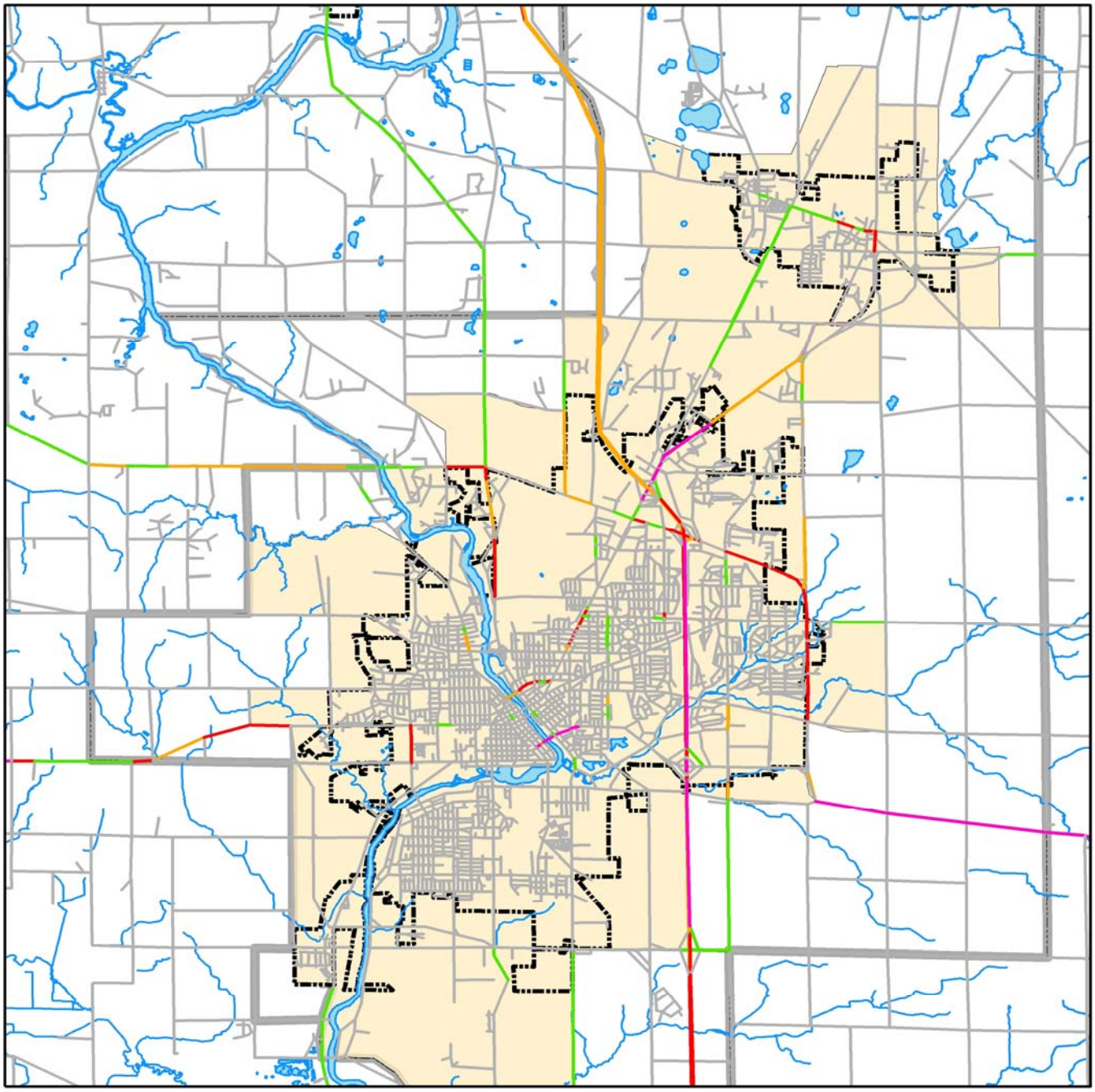
Source: HNTB Transportation Demand Model 2005

FIGURE IV - 8 DEFICIENCIES WITH COMMITTED PROJECTS



Source: HNTB Transportation Demand Model 2005

FIGURE IV – 8 B DEFICIENCIES WITH COMMITTED PROJECTS AND I-39 EXPANSION



Source: HNTB Transportation Demand Model 2005

IV. FUTURE CONDITIONS

The result of the travel demand model is to identify where the system will be deficient in 2035. Stated another way, the model predicts areas where our existing system and committed expansion and improvement will not be enough to offset the increase in demand for travel on particular roadways, resulting in unacceptable levels of congestion.

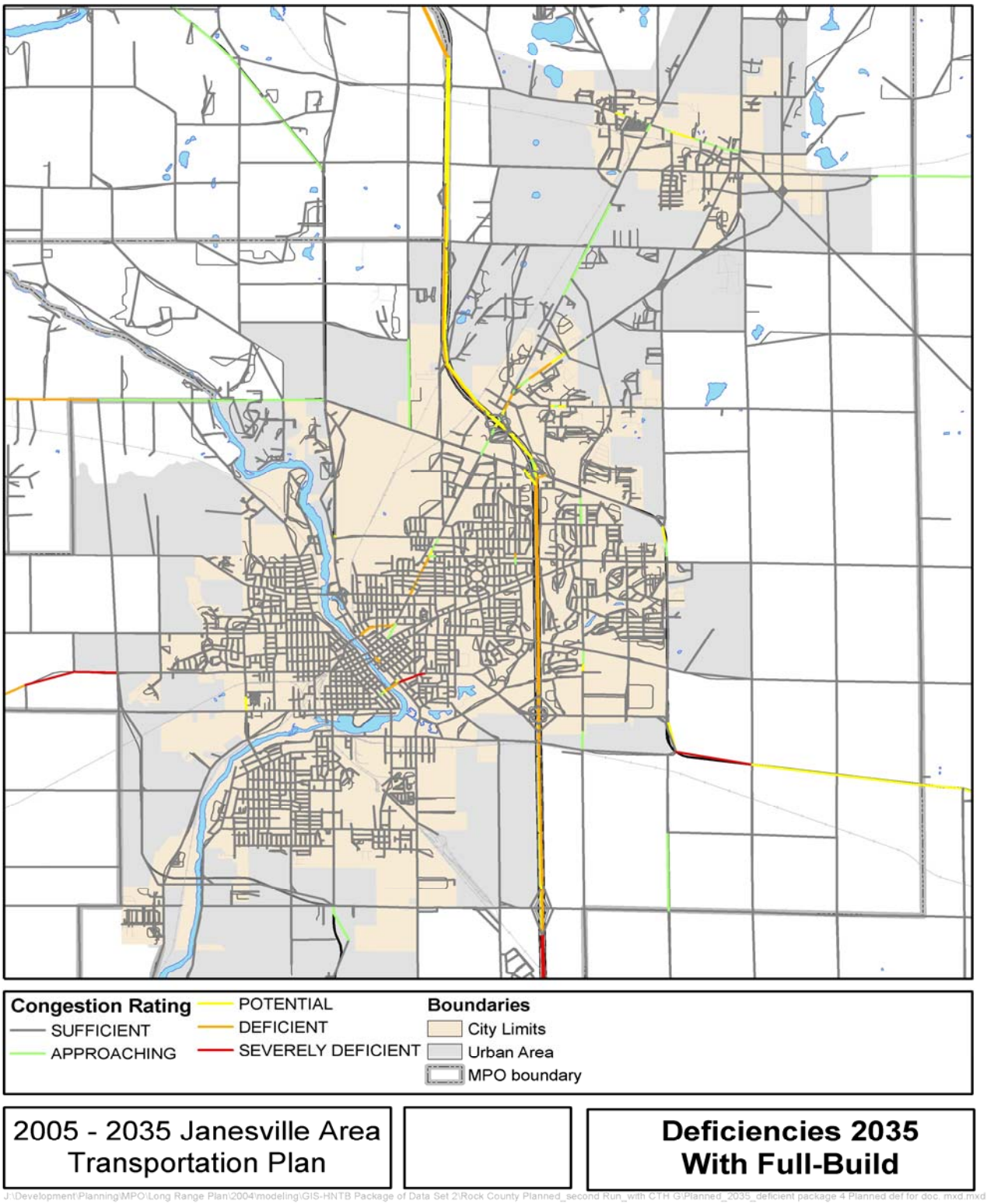
It is the intention of the planned projects to counteract the increases in travel demand and congestion predicted for 2035 on roadways that are currently in existence. To measure the recommended projects effectiveness at alleviating congestion, 10 of the 23 recommended expansion projects were incorporated into the model. Financial constraints limited the number of recommended expansion projects that could be modeled. The recommended projects that were modeled represent the full-build network; the street network as it will be in 2035 if all the modeled projects are constructed.

The new roads and expansion projects planned allow drivers to bypass the urban areas, alleviating many of the local congestion issues that have the potential to occur without these projects. While there is a reduction in the number of congested segments in the full-build scenario, there are still some deficiencies. The deficient segments expected on the 2035 network are listed in Table IV – 25 and shown in Figure IV – 9. An effort was made to model those projects expected to have the greatest impact on the traffic patterns of the MPO. The capacity expansion projects and new road projects that were modeled are listed in Table IV – 26 and mapped in Figure IV- 10.

TABLE IV- 25 2035 NETWORK DEFICIENCIES, FULL-BUILD SCENARIO

Severely Deficient		Deficient	
Segment	From/To	Segment	From/To
HWY 11	Hayner Rd / Willing Rd	Hwy 11	Willing Rd / MPO Boundary
Racine St	S Garfield / Main St	Hwy 14	New Westside Bypass / MPO Boundary
Hwy 11/14	S Henke Rd / Town Hall Rd	1-39 WB	HWY 26 Interchange / WB Wayside
		Milton Ave	Mt Zion / E Memorial
		Centerway	Milton Ave / N Main St
		I-39 EB	Racine Interchange / 351 Interchange
		Racine St Bridge	Racine St Bridge over Rock River
		I-39	US HWY 14 / Racine Interchange
		HWY 26	Interchange to Tanglewood
		HWY 26	Woodcrest / McCormick
		I-39	CTH M / MPO Boundary

FIGURE IV - 9 FULL-BUILD NETWORK'S DEFICIENCIES IN 2035



Source: WisDOT and HNTB

FIGURE IV - 10 LOCATION OF PROJECTS IN LRTP MODEL

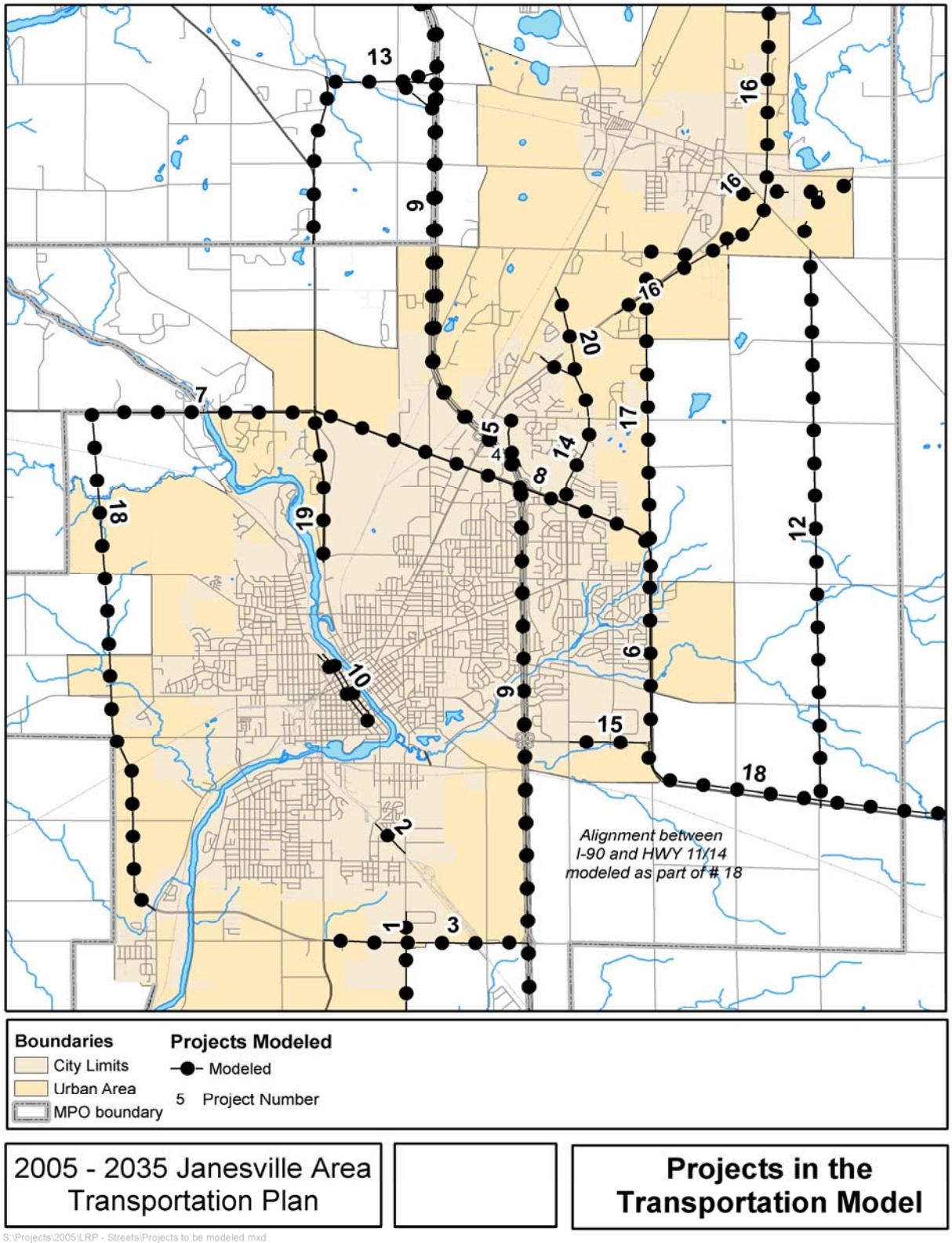


TABLE IV- 26 PROJECTS MODELED IN LRTP

Map Number	Route	To / From	Year	Description
1	Beloit Ave.	Venture Dr./STH 11	2005	Reconstruction to 4 lanes
2	Reuther Way	Beloit Ave/Jackson St.	2005	Construction of new 4 lane road
3	STH 11	USH 51/I-39/90	2004	Reconstruction to 4 lanes
4	CTH G	HWY 11 / South MPO boundary	2012-2035	Expansion to 4 lanes
5	Deerfield	Sandhill / Rotamer Rd	2006	Extension
6	HWY 14	HWY 11 / Wright Rd	2012-2035	Widen to 4 lanes
7	HWY 14	HWY 51 / Future HWY 11 Bypass	2015-2045	Widen to 4 lane divided highway
8	HWY 14	Wright Rd / HWY 51	2012-2035	Widen to 6 lane urban cross section
9	I-39/I-90	Through Rock County	2012	Expansion to 6 lanes
9	Ryan Rd (part of I-39 project)	Morse / Deerfield	2012	1-90 Underpass
10	Jackson & Franklin St.	Rockport Rd. / Mineral Pt. Ave.	2006	conversion to 2-way
11	McCormick Dr	McCormick Dr Termi. / New Wright Rd	2012-2035	Extension and overpass of STH 26
12	Milton-Shopiere	E HWY 11/14 / Townline Rd	2015-2045	Eastern bypass, 2 to 4 lane divided hwy, limited access.
13	North Bypass	USH 51 to Kidder Rd to CTH M From HWY 14/ I-39	2015-2045	Northern bypass, 2 to 4 lane divided highway with interchange at I-90/39.
14	North Wright Road	USH 14 / E. Rotamer Rd	2006	New road construction, 4 lanes
15	STH 11/USH 14	Wright Rd / CTH O	2008	Reconstruction to 4 lanes
16	STH 26	STH 26 Relocation	2009 - 2014	Milton Bypass
17	Town Hall Rd	HWY 14 /HWY 26	2012-2035	Widen to 4 lane urban cross section
18	USH 11/14	Janesville / Interstate 43	2015	Widen to 4 lane expressway
18	West Side Bypass	STH 11 / HWY 14	2011	Western Bypass extension. 4 lane divided highway from HWY D to HWY 14.
19	USH 51 North	Black Bridge / USH 14	2012-2035	Widen to 4 lane urban cross section
20	Wright Rd / McCormic Dr	E. Rotamer Rd / CTH Y	2010	Extension and overpass of STH 26

In the full build scenario, all projects listed in table were modeled.

V. RECOMMENDATIONS

The travel forecast modeling process predicts where congestion problems are likely to occur on the existing street network, given projected socioeconomic trends. The solutions used to alleviate congestion problems in the Janesville area typically fall within three categories: 1) Operations, 2) Transit Improvements, and 3) Roadway Improvements.

Operations

Operational improvements include Intelligent Transportation Systems (ITS), Transportation Demand Management (TDM), enhancements to the existing physical system and system preservation.

ITS incorporates technology into the transportation system. It can control the speed at which vehicles enter a given roadway or provide drivers with real-time information about roadway conditions, alternate route suggestions, and trip times. By controlling the flow of vehicles and allowing users to make informed decisions about their trip ITS aids in increasing the capacity of the transportation system.

TDM alleviates congestion by decreasing overall travel demand, reducing the number of single occupant vehicles and the need to make trips, or by altering the time periods users travel. To achieve the desired changes in demand TDM relies on incentives and disincentives, such as reducing the number of public parking spaces, increasing the cost of public parking, providing easy to access park 'n ride lots, more efficient bus service, and employer-supported transportation incentives such as flex-time work schedules and transit passes.

Improvements to the existing system improve the functioning of the physical capital already in place. Restriping, redirecting traffic, removal of parking or changes to traffic controls are examples of enhancements to the existing system. Restriping can make existing lanes more visible, increasing users confidence, which can aid the flow of traffic, and in some cases the number of people willing to use a route. Adding one and two-way lanes redirects traffic and creates new routes. Removing on-street parking may make an existing route more desirable, diverting traffic onto it from surrounding congested segments. Making the timing of traffic signals more efficient and changing the types of traffic controls at select intersections, such as adding a dedicated turn arrow are minimal operational changes that can greatly increase the flow of vehicles.

System preservation allows the system to be maintained at the level necessary for it to be used to its fullest capacity and for its intended lifecycle.

Transit Improvements

Transit improvements are intended to increase the viability of transit. Transit gives greater mobility to those without personal vehicles and provides an alternative mode of transport to those who would normally make their trips in single occupant vehicles.

Examples of ways to increase the viability of transit:

- Faster turnaround times
- Bike racks on buses
- Expanded service areas

- A greater number of stops
- All weather bus stops
- Express routes between key users origins and destinations

The Transit section of the Long Range Plan discusses Janesville's Transit System in greater depth, and how specific improvements can be implemented in the future.

System Enhancement

System Enhancements add capacity through new travel lanes on existing roadways or the creation of new road segments, which is one of the most obvious forms of congestion management and most expensive. The realignment of roadways, through the use of a bypass or other measure, is also within this category. Capacity expansion has the ability to alleviate both current and future congestion.

RECOMMENDED PROJECTS

The recommended projects were developed through evaluating the deficiency levels projected for 2035, should no major improvements occur to the street network, beyond the realignment of Highway 26, and the conversion of Jackson and Franklin to two-way streets. The expected funding availability was also incorporated into the decision making process.

Recommended preservation and capacity expansion projects for the Janesville MPO Area are listed in Tables IV - 27 through IV – 31. Projects have been divided into committed and planned projects. Committed projects are projects within the MPO planning area that are identified in the State's Six-Year Highway Improvement or Majors programs and /or the first three years of the MPO's 2005-2011 TIP, see Table IV – 27. The MPO realizes that needs and priorities may change over the course of this 30-year plan. Therefore, the construction dates shown within this plan are tentative. The MPO's actual needs and funding availability will govern when recommended projects are constructed.

Preservation projects, both committed and planned, include the reconstruction, rehabilitation, resurfacing, and reconditioning of roadways and bridges, as well as signal installation and rail-crossing improvements. Capacity expansion projects include the complete rebuilding of an existing roadway to improve geometrics or create additional travel lanes, or the construction of a new alignment to provide additional capacity or access. Some of the preservation projects are also intended to address safety concerns through rebuilding the existing roadway. The capacity expansion projects have the potential to address safety by addressing congestion issues on existing corridors.

NOTES:

The MPO, and all those jurisdictions participating within its boundary, realize that needs may change over time. The final prioritization and implementation schedule will be based upon the MPOs current needs, and funding availability. In addition, the recommended projects may be subject to the requirements of the National Environmental Policy Act (NEPA), which may also affect the implementation of the projects. The jurisdiction responsible for each project will need to approve funding prior to its implementation. The timelines shown, funding sources, projects scopes and the projects themselves may change significantly, projects may be added and deleted between the time this plan is published and the implementation of projects.

All project cost estimates are based on 2005 constant dollars. Listing any portion of a project, design, study, etc. indicates the MPO's intention to implement the project in its entirety.

The alignments shown in Figure IV – 12 are for illustrative purposes only. Early in the design phase, the responsible jurisdiction will provide the final alignment. For projects in the design, study, and planned phases, only proposed alignments are shown.

The long range plan will need to be amended to include any projects identified through studies listed in the plan, before the projects can move into the most current TIP or STIP.

Committed Projects

Any project with committed funding in the *2006 TIP, 2006 STIP,* or the *State 2004 -2009 Six-year Highway Improvement Plan* is listed as committed in the *2005-2035 Long Range Transportation Plan.*

Recommended Projects

The recommended projects fall within five subcategories: planned expansion, preservation (short and long range), under study, recommended for study and future consideration. The recommended projects were drawn from several sources including: the *1987-2005 Traffic Circulation Plan*, the *Urban Corridors Needs Study*, local roads inventory listings, and the State, County, participating jurisdictions, and the results of the transportation model.

Expansion Projects

Expansion projects add capacity to the network by adding additional lanes to an existing roadway, or creating a new roadway. Table IV – 30 lists recommended expansion projects and their projected costs. In the table, the projects are separated into capacity expansion projects, and new roadway projects. The towns are not expected to undertake any significant expansion projects within the timeframe of the plan.

For expansion projects, it was assumed that any additional lanes could be added to the existing roadway. Project costs were estimated using the project type, new road or expansion, the number of lanes being added and the projects lineal feet. The type of project, expansion or new roadway, dictated the per lane cost used. The per lane costs used are listed in the Appendix.

Preservation Projects

Annually, each jurisdiction will determine the projects that best serve their community, based on the available funds and current needs. Some of the projects will be resurfacing and some reconstruction; the combined activities create the rehabilitation activities for each jurisdiction.

Short Range Preservation

Short range preservation is a listing of projects that are expected to occur in the near future (2005 – 2011). These projects have already been identified in the *2006-2011 TIP,* but they do not have committed funding; they are not in the first three years of the TIP.

Long Range Preservation

Long range preservation is scheduled to occur in 2012-2035. Specific projects were not identified due to the difficulty associated with identifying preservation projects that far in the future. For the Cities of

Janesville and Milton the average rehabilitation budget and the average per mile rehabilitation costs within each municipality was used to calculate the number of miles that they can reasonably expect to rehabilitate in the next 30 years, shown in Table IV – 30. The average roadway lifecycle of 22 years was used to determine the miles that will need to be rehabilitated yearly within the Townships and the County. The average rehabilitation cost was based on the roadways jurisdiction, town, county or State Highway. The Appendix provides the methodology used to identify the average mileage for each jurisdiction and the costs applied.

Projects Under Study

Some of the planned projects are under study. A study is to determine need, feasibility and once warranted, the projects description, such as its scope and alignment.

The following projects are Majors Projects under study:

- The I-39 corridor from the Illinois Stateline to Madison.
- The HWY 11/14 corridor would potentially extend from Highway 14 on Janesville's west side to Interstate Highway 43 to the east. As a part of this project, a new alignment would be created between the Highway 11 bypass and Highway 14.

The realignment of Highway 26 is a Majors project that has been approved for construction.

Recommended for Study

These are state projects that require further action, such as a study.

Future Consideration

These are projects that do not have an identified project scope, such as the 5 Points project, or are thought to be outside of the current planning period (ie. Beyond 2035). To aid in efficient regional growth, many of these projects need to be in our thoughts as plans are updated in the future. By identifying the projects early, benefits and costs can be evaluated in a timely manor, and, should the project be justified, funding gathered. The potential regional impact of these projects makes early and thorough discussion and planning especially important.

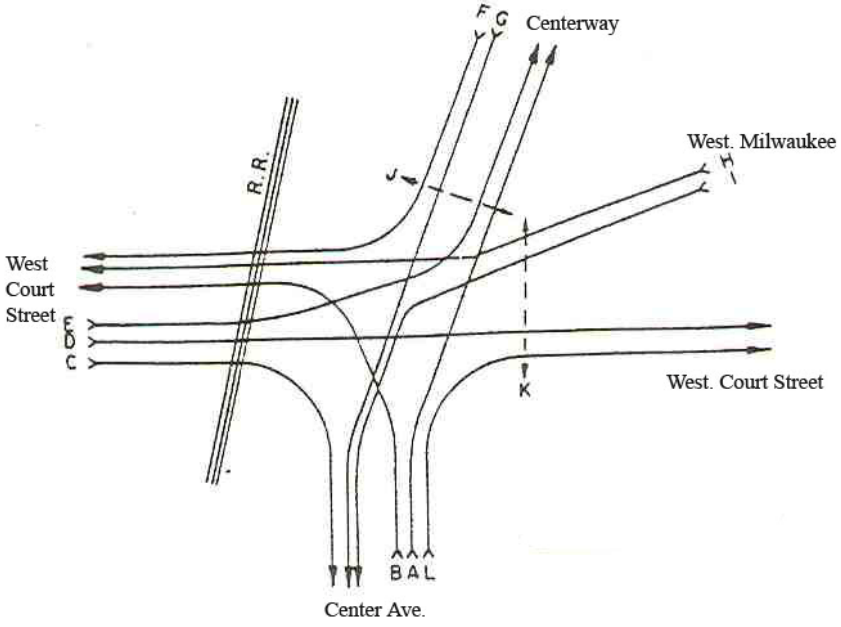
The Westside Gateway Project

On the Westside of Downtown Janesville, West Court Street, Centerway, Center Avenue, and West Milwaukee Street converge at this five-point intersection. The redesign of the five-points intersection has been identified as a need within the long range plan. However, at this time the scope of the final project is undefined. A feasibility study that would identify potential projects, rank the alternatives and gather public input is suggested as a first step. In the long range plan the study for the scope of the final project is listed as a planned project. The project is listed under future action since the scope has not been defined.

The figure below illustrates the flow of traffic at the 5-points and how the roadways bisect one another. The presence of USH 51 makes it likely that a larger than average number of non-residents will encounter this intersection. The convergence of such a large number of major streets at unusual angles, in

conjunction with the multiple turning movements, can be disorienting for drivers, especially those unfamiliar with the area. On average, there are 13 crashes a year, resulting in seven injuries and no fatalities. In the last 9 years there have been six incidents involving bicyclists or pedestrians in the immediate vicinity of the intersection, none resulted in a fatality.

FIGURE IV - 11 FIVE POINTS INTERSECTION



Adding to the confusion and visual disorder created by the "usual" intersection, are two sets of railroad tracks immediately to the west of the intersection, along West Court Street. One set of tracks serve the Wisconsin & Southern railyard, Union Pacific utilizes the other. The presence of the Wisconsin & Southern railyard means that many of the trains coming through on their tracks have the potential to stop across West Court Street for long periods as cars and goods are loaded and unloaded. Efforts are made to minimize delays drivers experience due to trains, but they are imperfect. The signal at West Court is preemptive in that it can sense the approach of trains and allows waiting cars to move on before the train reaches the roadway and blocks traffic.

The Five Points intersection serves approximately 40,000 vehicles per day. The existing signals were installed in 1987, and are considered antiquated. The signals operate on a preprogrammed timer that dictates the length of each signal. Efforts have been made to minimize the delays drivers experience due to trains, but they have not been entirely successful. Crosswalks along West Court Street, West Milwaukee Street, and Centerway help pedestrians navigate the difficult intersection, but improvements could be made.

Due to the complexity of the intersection, a study of the options and the impact on the surrounding area is a necessary first step. Some of the potential options that may be explored are an overpass of the railroad tracks or a more subtle redesigning of the intersection. In the late 1950's and 1970's the City examined the engineering aspects associated with bringing West Court Street over the railroad tracks. The planned study would evaluate the benefits and costs of this option, and the impact on the surrounding parcels. Realigning the existing roadway, improving the signage and signalization of the intersection to increase its visual appeal and operating efficiency, and the installation of electronic message boards to alert drivers of train delays are some of the more subtle improvements that may be evaluated.

Once the project scope is defined, and a funding source identified and enumerated, the project will be added to the list of committed projects.

KEY RECOMMENDATIONS

In summary, the key highway recommendations are listed below:

- Construct a transportation system that is compatible with existing and future development patterns.
- Implement resurfacing, rehabilitation, and reconditioning projects in Tables IV-27 through IV - 31 of this chapter to preserve the existing roadway system and its functionality.
- Implement committed and proposed capacity expansion projects to meet future growth and proactively relieve anticipated congestion; as listed in Tables IV-27 through IV – 31.
- Continue to develop plans for alternate routes around the urbanized areas that will eliminate unnecessary through traffic and congestion.
- Continue planning and monitoring activities to maintain traffic data, and aid in the prioritization and funding of street and highway projects.
- Continue programming, financing, and traffic monitoring procedures such as pavement management, intersection studies, and traffic counting programs, to achieve the MPO's general transportation goals and objectives.

FIGURE IV - 12 RECOMMENDED PROJECTS

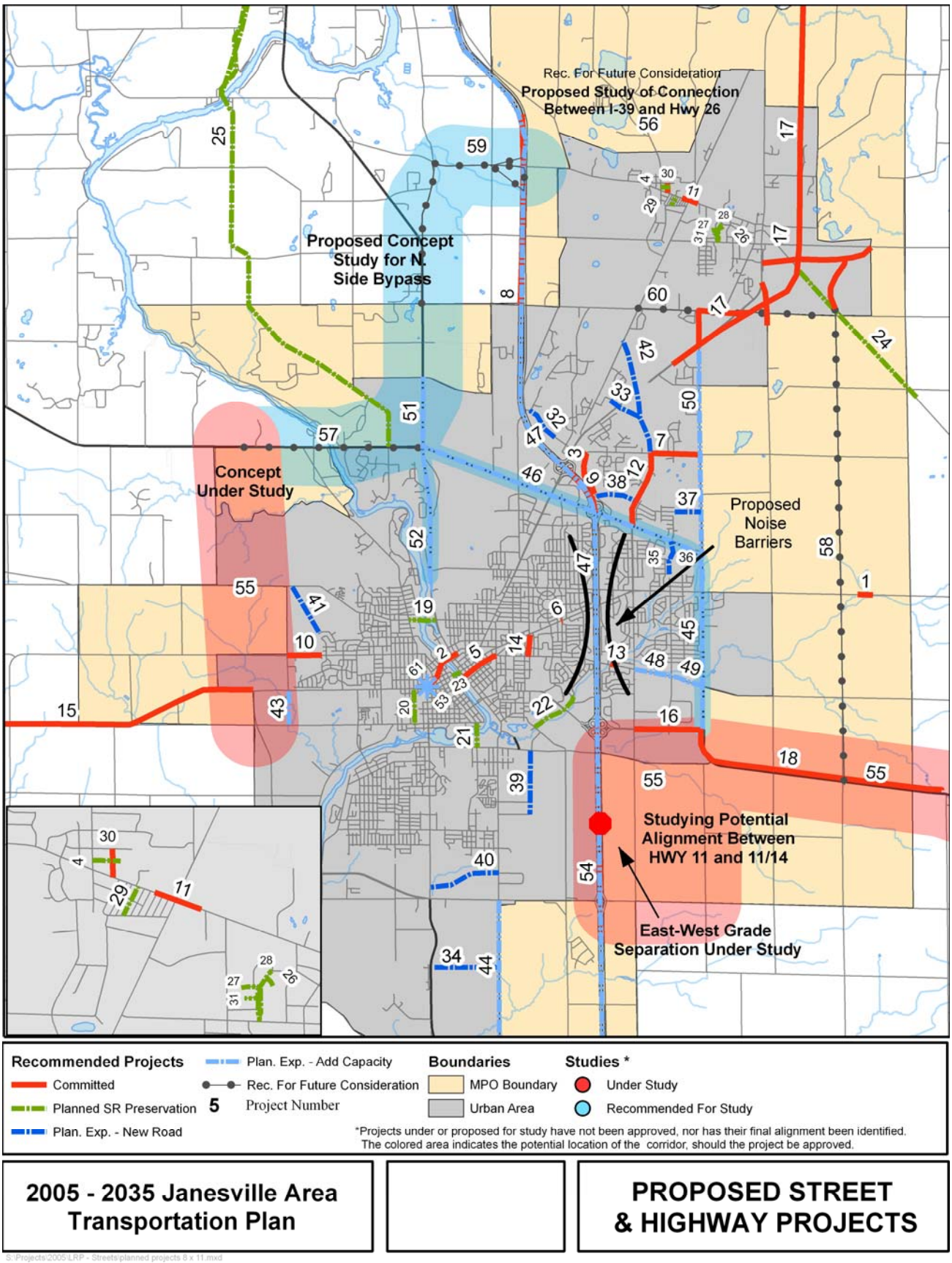


TABLE IV- 27 COMMITTED PROJECTS

Project Number	Type	Route	From/To	Year	Estimated Total Cost $ '05	Estimated Cost Share		Funding Program	
						Federal/State	Local		
1	P	Black Hawk Creek Bridge	Located on CTH A	2008	$256,000	205,000	51,000	BR	
2	P	Centerway	N. Parker Drive / Five Points Intersection	2006	$1,551,000	1,538,000	13,000	STH	COJ
3	E	Deerfield	Sandhill / Rotamer Rd	2006	$1,070,000	0	1,070,000	COJ	
4	P	Division Street	Hwy 59 / Lamar	2008	$43,600	0	43,600	COM	
5	P	E. Court Street	Main St / Garfield Ave	2007	$1,553,000	1,242,000	311,000	URB	COJ
6	P	East Milwaukee St	Lexington Dr Intersection	2006	$122,000	110,000	12,000	STH	COJ
7	E	East Rotamer Road	N. Wright Rd/Town Hall Rd	2008	$1,817,000	1,453,000	364,000	URB	COJ
8	P	I-39 / I-90	STH 26 / USH 51	2006	$1,070,000	1,070,000	0	STH	
9	E	I-39/I-90	USH 14 & STH 26 overpass	2011	$5,191,000	5,191,000	0	STH	
10	P	Mineral Point Avenue	Parker H.S. / Austin Rd	2007	$170,000	0	170,000	COJ	
11	P	N. John Paul Rd	Madison Ave Intersection	2007	$137,000	0	137,000	COM	
12	E	North Wright Road	USH 14 / E. Rotamer Rd	2006	$730,000	0	730,000	COJ	
13	P	Ruger Ave Bridge	Also known as Spring Brook Bridge	2007	$1,817,000	1,453,000	364,000	BR	
14	P	S. Randall Ave	Ruger Ave / East Milwaukee St	2007	$320,000	153,300	166,700	LRIP	COJ
15	P	STH 11	Footville / Janesville Bypass	2010	$711,500	711,500	0	STH	
16	E	STH 11/USH 14	Wright Rd / CTH O	2008	$2,315,000	1,788,000	527,000	STH	COJ
17	E	STH 26 - Phase 2	CTH Y / Town line Road	2012	$3,000,000	3,000,000	0	MAJ	
17	E	STH 26 - Phase 3	CTH N / Townline	2013	$12,540,000	12,540,000	0	MAJ	
17	E	STH 26 - Phase 4 & 5	Town line Road / South Fort Interchange	2014	$22,130,000	22,130,000	0	MAJ	
17	E	STH 26- Phase 1	STH 59 Relocation	2009	$1,700,000	1,700,000	0	MAJ	
18	P	USH 14	Janesville limits / STH 89	2010	$2,239,000	2,239,000	0	STH	
Total - Committed Projects					$60,483,100	$ 56,523,800	$ 3,959,300		

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E: Expansion P: Preservation

STH 26 Projects: Elaboration of activity planned within each phase and maps illustrating proposed alignment provided in appendix.

Recommended committed projects have been identified in the 2006-2011 TIP or 2005 STIP
NOTE: Some of these projects may also address safety issues.

TABLE IV- 28 STH 26 PROJECTS

STH 26 Projects	Construction Year	Cost
Phase 1	**2009**	**$ 1,700,000**
STH 26----STH 59 Relocation- **Phase 2**	**2012**	**$ 3,000,000**
STH 26----CTH Y to Town line Road ---Pedestrian/bike Overpass just south of CTH Y ---CTH Y to Woodcrest Drive Frontage Roads ---McCormick Drive Intersection ---Harmony Town Hall Road Interchange **Phase 3**	**2012-2013**	**$ 12,540,000**
STH 26----Townline Road to CTH N ---STH 26 new 4 lanes, grading and structures ---Town Hall Road extension ---Town line Road improvements and overpass ---Henke Road extension and overpass ---CTH M relocation to STH 59 **Phase 4**	**2013-2014**	**$ 10,150,000**
STH 26----CTH N to South Fort Interchange ---Grading and structures **Phase 5**	**2014**	**$ 11,980,000**
STH 26----Townline Road to South Fort Interchange ---Base and pavement		

TABLE IV- 29 SHORT RANGE PLANNED PRESERVATION

Project Number	Route	From/To	Year	Estimated Total Cost $ '05	Possible Funding Splits		Funding Program	
					Fed / State	Local		
19	Memorial Drive	N. Washington St / Parker Dr. Bridge	2010	$731,000	585,000	146,000	BR	COJ
20	Pearl St	Court St. / Rockport Rd	2010	$506,000	153,300	352,700	LRIP	COJ
21	Jackson Street	Bridge over Rock River	2010	$2,000,000	1,600,000	400,000	BR	COJ
22	Palmer Drive	Sharon Rd./ Mohawk Road	2010	$96,000	77,000	19,000	URB	COJ
23	E. Milwaukee St Bridge	Bridge over Rock River	2010	$150,000	120,000	30,000	BR	COJ
24	CTH M	CTH MM / COM Limits	2011	$1,286,200	1,029,000	257,200	RU- STP	RC
25	CTH F	USH 14 / MPO Boundary	2008	$1,956,250	1,484,000	472,250	RU-STP	RC
26	Garden Lane	Greenhill to Cul-de-sac	2007	$8,000	4,000	4,000	LRIP	COM
27	Wallace Way	Greenhill West to Dead-end	2007	$26,000	13,000	13,000	LRIP	COM
28	Homestead	Greenhill West to Dead-end	2007	$28,000	14,000	14,000	LRIP	COM
29	First Street	Hwy 59 /Vernal	2007	$42,000	0	42,000	COM	
30	Burdick St	Clear Lake Ave. / Termi.	2007	$36,000	18,000	18,000	LRIP	COM
31	Greenhill Drive	High St / Larch Lane	2007	$850,000	425,000	425,000	LRIP	COM
Total - Planned Short Range Preservation Projects				$7,715,450	5,522,300	2,193,150		

NOTE: Some of these projects may also address safety issues.

TABLE IV- 30 RECOMMENDED EXPANSION & STUDY PROJECTS

Project Number		Route	From/To	Length (FT)	Project Type	Functional Classification	Proposed Cross-section	Proposed Number of Lanes	Year	Estimated Total Cost $ '05	Possible Funding Splits Fed / State	Possible Funding Splits Local	Funding Program
New Roads - extension of existing roadways to increase connectivity and provide for orderly growth.						*(Functional classification of adjoining segment if extension)*							
32		Kettering Street	Kennedy Rd/N Brentwood Dr	2750	NEW ROAD	Collector	H	2	2012-2035	$ 1,435,593	1,148,474	287,119	URB
33		McCormick Dr	McCormick Dr Termi. / New Wright Rd	2200	NEW ROAD	Local	G	2	2012-2035	$ 1,148,474	0	1,148,474	COJ
34		NEW ROAD Rd (by airport)	HWY 51/ CTH G	5300	NEW ROAD	--	H	2	2012-2035	$ 2,766,779	0	2,766,779	COJ
35		North Wuthering Hills Drive	Mackinac / HWY 14	2500	NEW ROAD	Collector	H	2	2012-2035	$ 1,305,085	1,044,068	261,017	URB
36		Randolph Road	Holly Dr/Wuthering Hills Dr	300	NEW ROAD	Local	H	2	2012-2035	$ 156,610	0	156,610	COJ
37		Sandhill Road	Wuthering Hills / Townhall	2000	NEW ROAD	Local	H	2	2012-2035	$ 1,044,068	0	1,044,068	COJ
38		Sandhill Road	Deerfield / Sandhill Termi	3000	NEW ROAD	Local	H	2	2012-2035	$ 1,566,102	0	1,566,102	COJ
39		Todd Drive	Todd Dr Termi/Conde St	2260	NEW ROAD	Local	G	2	2012-2035	$ 1,179,796	0	1,179,796	COJ
40		Venture Dr	Venture Drive Termi/ HWY 51	4750	NEW ROAD	Local	H	2	2012-2035	$ 2,479,661	0	2,479,661	COJ
41		Waveland Road	Waveland Termi/CTH A	3500	NEW ROAD	Local	H	2	2012-2035	$ 1,827,118	0	1,827,118	COJ
42		Wright Rd	E. Rotamer Rd / CTH Y	8500	NEW ROAD	Collector	E	2	2012-2035	$ 4,437,288	2,218,644	2,218,644	URB
Total - New Roads										$ 19,346,574	$ 4,411,186	$ 14,935,388	
Planned or Potential Expansion Projects On Existing Roadways													
Expansion Projects - capacity expansion projects on existing roadways.													
43		Austin Road	W. Court St/Rockport Rd	2500	EXPANSION	Collector	H	2	2012-2035	$ 966,729	773,383	193,346	URB
44		CTH G	HWY 11 / South MPO boundary	13074	EXPANSION	Minor Arterial	E	4	2012-2035	$ 5,055,608	3,121,745	1,933,863	URB
45	*	HWY 14 (Rec. For Study)	HWY 11 / Wright Rd	18500	EXPANSION	Principal Arterial	D	4	2012-2035	$ 7,153,797	7,153,797	0	STH
46	*	HWY 14 (Rec. For Study)	Wright Rd / HWY 51	17000	EXPANSION	Principal Arterial	--	6	2012-2035	$ 6,573,760	6,573,760	0	STH
47		I-39/I-90	Through Rock County	—	EXPANSION	Principal Arterial	—	6	2012	$ 58,853,900	58,853,900	0	MAJ
47 b		*Ryan Rd (part of I-39 project)*	*Morse / Deerfield*	—	*NEW ROAD*	*Local*	—	*2*	*2012*	—	—	—	—
48		Ruger Ave	S. Wright Rd / Wuthering Hills Dr	3000	EXPANSION	Collector	F	4	2010	$ 117,000	94,000	23,000	URB
49		Ruger Ave	Wuthering Hills Dr / USH 14	2500	EXPANSION	Collector	F	4	2010	$ 100,000	80,000	20,000	URB
50		Town Hall Rd	HWY 14 /HWY 26	15500	EXPANSION	Collector	E	4	2012-2035	$ 5,993,722	3,872,237	2,121,485	URB
51	*	USH 51 North (Rec. For Study)	Russell Rd. / USH 14	5250	EXPANSION	Principal Arterial	--	4	2012-2035	$ 2,030,132	2,030,132	0	STH
52	*	USH 51 North (Rec. For Study)	Black Bridge Rd / USH 14	7920	EXPANSION	Principal Arterial	E	4	2012-2035	$ 3,062,599	3,062,599	0	STH
53		Westside Gateway	5 Points Feasibility Study	—	STUDY	Principal Arterial / Minor Arterial	—	—	2007	—	—	—	—
Total - Expansion Projects										$ 89,907,246	$ 85,615,552	$ 4,291,694	
Under Study													
Map Number		Route	From / To	Proposed Final Project		Listed In…			Year	Cost	Federal	Local	Funding Program
54		I-39 / I-90	Illinois State Line / Madison	EXPANSION		2006 TIP			2006	$ 375,000	375,000	0	MAJ
55		USH 14	Janesville / Interstate 43	EXPANSION & NEW ROAD		2006 TIP			2006	$ 750,000	500,000	250,000	STH & COJ
55 b		*West Side Bypass*	*STH 11 / HWY 14*	*New Road*		*2006 TIP*			*2011*	—	—	—	—
Total - Under Study										$ 750,000	$ 875,000	$ 250,000	
Recommended for Future Consideration													
Map Number		Route	From/To	Length (FT)	Project Type	Functional Classification	Proposed Cross-section	Proposed Number of Lanes	Year	Estimated Engineering Cost $ '05	Possible Funding Splits Fed / State	Possible Funding Splits Local	Potential Funding Program
56		E Klug Rd Extension	HWY 26 / I-39	21120	NEW ROAD	Primary Arterial	--	2	2015-2045	$ 2,205,071	1,764,057	441,014	URB
57		HWY 14	HWY 51 to future HWY 11 Bypass	12000	EXPANSION	Principal Arterial	D	4 Divided	2015-2045	$ 835,254	835,254	0	STH
58		Milton-Shopiere	E HWY 11/14/Townline Rd	5333	EXPANSION	Local	D	2-4 Divided	2015-2045	$ 371,201	296,961	74,240	URB
59		North Bypass	USH 51 to Kidder Rd to CTH M From HWY 14/ I-90	21120	EXPANSION	Minor Arterial / Local	E	2	2015-2045	$ 735,024	735,024	0	MAJ
60		Town Line Rd	Milton - Shopiere / County Y	10560	EXPANSION	Local	E	4	2015-2045	$ 735,024	588,019	147,005	URB
61		Westside Gateway	5 points	--	EXPANSION	Principal Arterial / Minor Arterial	--	--	2015-2045	—	—	—	DEMO / SAF
Total - Illustrative Projects										$ 4,881,573	$ 4,219,314	$ 54,901,963	

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Cross-sections:

A: Divided Rural Expressway/Primary Arterial
B:24' Rural Standard Arterial
C: 22' Rural Collector
D: Divided Urban Expressway/ Primary Arterial
E: 52-56' Primary or Standard Arterial
F:44' Standard Arterial
G: 44' Standard Arterial
H: 40' Standard Arterial or Collector
I: 36' Local
J: 28' Local

*State projects recommended for study.

Note: On the corresponding map the alignments shown for all new roads are for general illustrative purposes only. The final alignment has not been determined, nor is it being indicated.

NOTE: Some of these projects may also address safety issues.

TABLE IV- 31 PLANNED PRESERVATION

Town of Janesville	Average Miles Rehabbed Per Year	Average Cost Per Mile	Average Annual Budget	23 Year Budget
Rehabilitation	1.7	$70,000	$118,300	$2,720,900

Town of La Prairie	Average Miles Rehabbed Per Year	Average Cost Per Mile	Average Annual Budget	23 Year Budget
Rehabilitation	1.2	$70,000	$83,714	$1,925,414

Town of Milton	Average Miles Rehabbed Per Year	Average Cost Per Mile	Average Annual Budget	23 Year Budget
Rehabilitation	1.5	$70,000	$102,168	$2,349,868

Town of Rock	Average Miles Rehabbed Per Year	Average Cost Per Mile	Average Annual Budget	23 Year Budget
Rehabilitation	0.9	$70,000	$60,964	$1,402,164

Town of Harmony	Average Miles Rehabbed Per Year	Average Cost Per Mile	Average Annual Budget	23 Year Budget
Rehabilitation	2.1	$70,000	$147,477	$3,391,977

State Highways: based on the assumption that the 75 miles in the MPO have a 22 year life span.
Budget amounts are based on local decisions and may vary.

City of Janesville	Average Annual Budget	Average Miles Rehabbed Per Year	Average Cost Per Mile	23 Year Budget
Rehabilitation	$1,000,000	11.4	$90,000	$2,070,000

City of Milton	Average Annual Budget	Average Miles Rehabbed Per Year	Average Cost Per Mile	23 Year Budget
Rehabilitation	$105,000	1.0	$105,000	$2,415,000

State Highways	Average Annual Budget	Average Miles Rehabbed Per Year	Average Cost Per Mile	23 Year Budget
Rehabilitation	$1,182,955	3.4	$347,000	$27,207,955

County Highways	Average Annual Budget	Average Miles Rehabbed Per Year	Average Cost Per Mile	23 Year Budget
Rehabilitation	$280,000	2.0	$140,000	$3,220,000

MPO - Total	Average Annual Budget	23 Year MPO Budget
Rehabilitation	**$3,080,577**	**$70,853,277**

LR Bridge Projects	Location	Year	Total	Fed/State	Local	Funding Source
Sharon Rd Bridge	Spring Brook	2012-2035	$3,000,000	1,500,000	1,500,000	BR
USH 51 - Center St	CNW RR	2012-2035	$500,000	250,000	250,000	BR
Total - BR Funds			$3,500,000	1,750,000	1,750,000	BR

NOTE: Some of these projects may also address safety issues.

VI. FINANCIAL PLAN

The type of highway funding resources that can be used to implement the recommendations in this plan come from a variety of programs at the federal, state and local levels. Table IV - 32 summarizes the federal financial requirements for all preservation and capacity expansion projects identified in Tables IV- 27 through IV- 31 and the resources that could be used to fund these projects. The programs that the MPO has identified as funding sources for the committed and recommended highways projects are briefly described below. All estimated revenues and expenditures are given in 2005 constant dollars. WisDOT provided the funding levels estimated to be available over the next 30 years. At the time a project moves into the committed years of the TIP, the projects cost will be reevaluated and the funding method to be used will be revisited. The actual funding source will depend on the current allocation levels. MPO will pursue alternate funding mechanisms, if appropriate, as the design and construction phases of projects in the 2011-2035 planning period approach.

AVAILABLE FUNDING SOURCES

Urban Surface Transportation Program – STP-Urban - (URB) – Federally funded program administered by the state with a 80% federal share and 20% local match. The MPO's current, biannual federal allocation is $969,484. STP-Urban funding provides for a wide range of transportation-related activities and local safety improvements. To qualify, projects must be on roadways functionally classified as collector or higher, and the projects cannot be on roadways that are part of the State Trunk Highway system.

Existing Majors Enumerated for Construction – (MAJ) – Major Project is a state designation that can use federal or state funding for implementation. Major Projects must meet a specific definition and follow a specific process for approval. The Transportation Project Commission and the Legislature must enumerate these projects. Projects designated as a Major Project do not need a local match. The Majors Highway Development Program is for expansion projects greater than 5 miles, or new state highway segments greater than 2 ½ miles.

State Trunk Highway (STH) Preservation – (STH) – State and federally funded program administered by the State, with a variable local match. The majority of projects require no local match. However, some activities may require a local match resulting in a funding split that is project specific. STH funds include "Backbone" and "Non Backbone 3R" funds. Backbone funds can be used on the backbone routes identified in the 2020 plan. Non Backbone 3R (3R) funds can be used on the rest of the state highway system. Backbone and 3R funds can be used for preservation, reconstruction, resurfacing and reconditioning projects. In the LRTP, STH funds cover projects that had a funding source of NHS, IM, STP-SAFE, or FLEX in the TIP. STH funds can be used for reconstruction, resurfacing and reconditioning projects along State Trunk Highways, including bridge projects.

The projected allocation is based on the average yearly funding identified in the first three years of the *2006-2011 TIP*. A map of the State Trunk Highways, and Backbone and Non Backbone routes is provided in the Appendix.

State Trunk Highway (STH) Operations and Maintenance – (STH O & M) State program. Funds can be used for operations and maintenance activities associated with State Trunk Highways, including bridge projects.

Local Bridge Improvement Assistance – (BR)- State and federally funded program administered by the state with a 80% federal /state share and 20% local match. Counties, cities, villages, and towns are eligible for rehabilitation funding on bridges with sufficiency ratings less than 80, and replacement funding on bridges with sufficiency ratings less than 50. Local jurisdictions submit information to WisDOT, to calculate the bridges sufficiency rating. Bridges are rated based on a federally bridge rating methodology, which is designed to measure the relative adequacy of a bridge in terms of structural and safety aspects, serviceability and functional obsolescence, and suitability for public use.

The majority of bridge work recommended in the MPO, is classified as preservation, the bridges will be rehabbed as needed using bridge funds. Should a bridge need major rehabilitation, or replacement, the appropriate steps will be taken to provide for this. The work done during an unforeseen bridge replacement will fall under the category of preservation maintenance, unless the capacity of the structure is significantly increased, which will classify it as an expansion project.

Local Road Improvement Program – (LRIP) – State program with a 50% local match. The program assists local governments with improvements on seriously deteriorating county highways, town roads, city, and village streets. LRIP money can be split between multiple projects, however only 50% of each project's total cost will be funded by LRIP, assuming that their combined federal portions do not exceed the federal allocation. One project substitution is allowed per allocation cycle. From the time the LRIP money is awarded we have six years to complete the project and seek reimbursement.

In most cases, the jurisdictions within the MPO use LRIP money for preservation projects. As need warrants, and local funds become available, LRIP money will be used to meet the preservation needs of the MPO.

Connecting Highway Aids – (CHA)- State program with no local match. The CHA program is designed to assist municipalities with the costs associated with the increased traffic and maintenance of roads that connect segments of the State Trunk Highway System. The funds are given as yearly, lump allocations. In Janesville, the Connecting Highways are USH 14, from Kennedy to Wright Road, USH 51, from Kellogg to Black Bridge Rd and STH 26, and from Parker Drive to Kettering. A map of the Connecting Highways is provided in the Appendix.

Rural Surface Transportation Program – (RU-STP) Federally funded program administered by the State, that receives 80% federal share and requires a 20% local match. Funds can be used to complete a variety of improvements to rural highways (primarily used on county highways). The objective of the STP-R is to improve federal aid eligible highways outside of urban areas. Projects must meet federal and state requirements. Communities are eligible for funding on roads classified higher than rural minor collectors. WisDOT did not provide future projections for STP-Rural funds because there is no way of knowing where the planning boundary will be in 30-years, so it is difficult to determine if a project currently identified as being eligible for STP rural funds will still be outside of the planning area in the future.

Federal Safety Programs -- (SAF) – Federal programs requiring a local match. The match varies by the specific SAF program, in general they have a 80 percent federal share and a 20 percent local match. Funds are for hazard elimination projects, such as railroad crossing improvements along State Highways.

General Transportation Aids –(GTAs)- No local match. State program to return to local governments a portion of the state-collected transportation revenues (fuel taxes and vehicle registration fees). GTAs are allocated to the local governments 4 times per year, and can be used on any roadway project. GTAs help

offset the cost of traffic related costs such as road construction, maintenance, and traffic.

Local Funds – For projects locally funded or with a local match, the local funds are the responsibility of the funding jurisdiction. Local funds can be raised in several different ways. A few options are listed below:

General Fund – Local funds for street construction and maintenance are obtained primarily through the general property tax levy.
General Obligation Bonds - these funds are issued on a per project basis and are supported through the general tax levy**.**
Special Assessments – Special assessments are charged to property owners for sidewalk installation and street improvements when residential and commercial lands develop. Property owners may also pay a share of the cost for traffic signal or street improvements on streets adjoining their properties.
TIF Districts – A TIF district allows the City to retain property taxes on an industrial development to pay for land acquisition, transportation, and utility expense within that district. The City diverts increased revenues from rising property values to pay for the improvements that helped to increase the properties value. The City retains the incremental increase in tax revenues from the district, until all the infrastructure cost are paid, at which time the tax revenues from the district may be collect by all applicable taxing jurisdictions.

AVAILABLE FEDERAL FUNDING

Funding projections for the long range plan were provided by WisDOT. The programmed expenditures were derived from the projects identified in Tables IV - 27 through IV – 31.

TABLE IV- 32 FEDERAL EXPENDITURES AND AVAILABLE FEDERAL FUNDING 2005-2035

Funding Source	Estimated Available Funds									
Program	2005-2006		2007-2008		2009-2011		2012-2035		Total Available *	
	Fed/State	Local	Fed/State	Local	Fed/State	Local	Fed/State	Local	Fed/State	Local
STP - Urban (URB)	$0	$0	$2,695,000	$675,000	$1,454,256	$363,564	$11,149,296	$2,787,324	$15,298,552	$3,825,888
STH Preservation	$2,984,000	$13,000	$2,984,000	$527,000	$4,476,000	$0	$34,316,000	$0	$44,760,000	$540,000
Majors Program	$0	$0	$0	$0	$1,700,000	$0	$96,523,900	$0	$98,223,900	$0
Bridge Replacement & Rehabilitation (BR)	$0	$0	$1,658,000	$415,000	$2,305,000	$576,000	$1,025,500	$1,025,500	$4,988,500	$2,016,500
Local Road Improvement Program (LRIP)	$165,000	$165,000	$165,000	$165,000	$247,500	$247,500	$1,897,500	$1,897,500	$2,475,000	$2,475,000
CHA	$704,172	$176,043	$704,172	$176,043	$1,056,258	$264,065	$8,097,978	$2,024,495	$10,562,580	$2,640,645
STP - Non Urban (RU- STP)	$0	$0	$1,484,000	$472,250	$1,029,000	$257,200	$0	$0	$2,513,000	$729,450
SAF	$317,172	$79,293	$317,172	$79,293	$475,758	$118,940	$3,647,478	$911,870	$4,757,580	$1,189,395
Local Projects**	$0	$1,800,000	$0	$392,600	$0	$0	$0	$54,119,532	$0	$56,312,132
Total	$4,170,344	$2,233,336	$10,007,344	$2,902,186	$12,743,772	$1,827,268	$156,657,652	$62,766,220	$183,579,112	$69,729,010

Funding Source	Expenditures From Recommended Projects									
Program	2005-2006		2007-2008		2009-2011		2012-2035		Total Programmed	
	Fed/State	Local	Fed/State	Local	Fed/State	Local	Fed/State	Local	Fed/State	Local
STP - Urban (URB)	$0	$0	$2,695,000	$675,000	$251,000	$62,000	$12,352,551	$7,058,473	$15,298,551	$7,795,473
STH Preservation	$2,688,000	$13,000	$1,788,000	$527,000	$8,141,500	$0	$18,820,287	$0	$31,437,787	$540,000
Majors Program	$0	$0	$0	$0	$1,700,000	$0	$96,523,900	$0	$98,223,900	$0
Bridge Replacement & Rehabilitation (BR)	$0	$0	$1,658,000	$415,000	$2,305,000	$576,000	$1,025,500	$1,025,500	$4,988,500	$2,016,500
Local Road Improvement Program (LRIP)	$0	$0	$627,300	$640,700	$153,300	$352,700	$1,694,400	$1,694,400	$2,475,000	$2,687,800
CHA	$704,172	$176,043	$704,172	$176,043	$1,056,258	$264,065	$8,097,978	$2,024,495	$10,562,580	$2,640,645
STP - Non Urban (RU- STP)	$0	$0	$1,484,000	$472,250	$1,029,000	$257,200	$0	$0	$2,513,000	$729,450
SAF	$317,172	$79,293	$317,172	$79,293	$475,758	$118,940	$3,647,478	$911,870	$4,757,580	$1,189,395
Local Projects**	$0	$1,800,000	$0	$392,600	$0	$0	$0	$54,119,532	$0	$56,312,132
Total	$3,709,344	$2,068,336	$9,273,644	$3,377,886	$15,111,816	$1,630,904	$142,162,094	$66,834,269	$170,256,898	$73,911,395

* Does not include GTA, or STH O & M funds. These may be used to cover funding shortfalls.

**Projects have the potential to be funded with GTA funds. These projects include LR preservation projects for the townships, county and cities.

SUMMARY OF LONG-RANGE NEEDS AND FUNDING

Estimating costs and revenues over 30 years is an imprecise process that is heavily influenced by funding availability and need. Therefore, the financial analysis will be revisited in each plan update. The total projected federal/state allocation for each funding program was greater than or equal to the total amount the MPO expects to need. Based on historical activity it, appears that the minimum local match needed for each of the approved federal/state projects is likely to be available (most programs require a 10% - 20% local match).

The funding expected to be available, along with the needs of the MPO are summarized in the table below. Currently the MPO forecasts a yearly surplus of approximately $250,000, or $7.4 million over the 30 years. Should a funding shortfall arise, the MPO will seek to secure additional federal and state funds, and examine the possibility of applying additional fees and taxes.

TABLE IV- 33 ANTICIPATED FUNDING AND NEED

Anticipated Funding ***Over 30 Years***		
Federal and State Funding (project specific) [1]		$183,579,112
General Transportation Aids (GTA - State Funds)		$88,513,620
Paid with GTA First: O & M - Non-Preservation	$109,529,413	
Paid with GTA First: O & M - Local Preservation	+ $56,928,682	
Total Local O & M	*$166,458,095*	
Local O & M (Not paid for by GTA)		$77,944,475
STH O & M (includes STH LR preservation)		$61,560,000
Local Match (excludes local preservation projects)		$26,083,687
Total Funding		***$437,680,894***
Yearly Average		***$14,589,363***
Anticipated Needs ***Over 30 years***		
O & M (Local and STH)		$228,018,095
Urban Surface Transportation Program		$23,094,025
State Trunk Highways		$31,977,787
Major		$98,223,900
Bridge		$7,005,000
Local Road Improvement		$5,162,800
Connecting Highway Aids		$13,203,225
Rural Surface Transportation Program		$3,242,450
Federal Safety Programs		$5,946,975
Local Projects (excluding preservation)		$14,361,209
Total Needs		***$430,235,465***
Yearly Average		***$14,341,182***

[1] Includes the following funding sources: URB, STH, MAJ, BR, LRIP, CHA, RU-STP, & SAF. Excludes GTA & STH O & M b/c they are accounted for in the O & M spending lines.

VII. IMPLEMENTATION

Approval of the LRTP does not constitute a commitment by the MPO or its member jurisdictions to complete the recommended projects. Prior to a projects implementation and funding, it must t be reviewed and approved by the responsible jurisdiction(s). The project recommendations outlined in the Streets & Highways section of the JALRTP will be implemented through each jurisdictions standard project programming procedures. The MPO's TIP, Rock County's Highway Program, the cities Capital Improvement Programs, and the appropriate Public Works Programs will be used to prioritize and document when projects will be constructed. The MPO will continue to apply for federal and state assistance for highway construction whenever program funding is available. Table IV - 34 focuses on the activities preformed by the two largest urbanized areas, the City of Milton and the City of Janesville. Table IV-34 lists implementation and monitoring activities that the MPO and its member jurisdictions will continue to complete, in order to maintain highway-related traffic data, prioritize, and request funding for engineering, acquisition, and construction. The final prioritization and implementation schedule for the recommendations contained in this section of the LRTP will be coordinated with transit, bicycle and pedestrian projects in the Implementation Element. The Implementation Element will illustrate how the recommended highway projects will be incorporated into the planning area's multi-modal network.

TABLE IV- 34 IMPROVEMENT IMPLEMENTATION AND MONITORING PLAN

Activity	Description of Activity	City of Janesville			City of Milton			Comments
		Responsible Departments	Frequency of Activity	Time Horizon of Activity	Responsible Departments	Frequency of Activity	Time Horizon of Activity	
Improvement Programming								
Public Works Programs	Transportation projects for design and construction for the current year.	Engineering/ Public Works	Multiple programs Annually	1 year	Public Works	Multiple programs Annually	1 year	Adopted by City Council.
Transportation Improvement Program (TIP)	Six-year transportation project program based on funding availability and plans.	Planning/MPO	Annually	6 years	Public Works/ MPO / Admin	Annually	6 years	Incorporates Federal, State, and local funds. Adopted by MPO.
Capital Improvement Program (CIP)	Five-year program of public facilities improvements to serve development.	Public Works	Annually	1-5years	All Departments	Every 2 Years	1-5 years	Adopted by City Council.
Improvement Financing								
Local Sources								
- Bonds	Used for public works projects.	Engineering/ Public Works	As needed	Up to 10 or 20 years	Treasure/ Admin Public Works	As needed	Up to 10 or 20 years	Adopted by City Council.
- Special Assessments	Property owners assessed for the cost of public improvements fronting property.	Engineering/ Public Works	As needed	5 years	Treasure/ Admin Public Works	As needed	5 years	May include sidewalks, intersection signals. Adopted by City Council.
-Local Budget	General funds raised through property tax and special fees.	Engineering/ Public Works	Annually	1 year	Treasure/ Admin Public Works	Annually	1 year	Primarily used for reconstruction. Adopted by City Council.
- Tax Increment Financing (TIF)	Used for transportation improvements in a TIF district.	Economic Development	As needed	5 years	Treasure/ Admin Public Works	As needed	5 years	Increment used to retire bond, up to 20 years. Adopted by City Council.
State Sources								
- Local Transportation Aids	Used for maintenance and operations improvements on existing public streets.	Wisconsin DOT/ Public Works	Annually	1 year	Wisconsin DOT/ Public Works	Annually	1 year	Based on miles of street and population.
- State Connecting Highway Aids	Used for imaintenance of Connecting Highways within the planning area.	Wisconsin DOT/ Public Works	Annually	1 year	Wisconsin DOT/ Public Works	Annually	1 year	Based on lane-miles of Connecting Highways.
- Other Sources	Includes state budget, TEA grants, and State TIP.	Varies	As needed	N/A	Varies	As needed	N/A	

TABLE IV- 34 IMPROVEMENT IMPLEMENTATION AND MONITORING PLAN

Activity	Description of Activity	City of Janesville			City of Milton			Comments
		Responsible Departments	Frequency of Activity	Time Horizon of Activity	Responsible Departments	Frequency of Activity	Time Horizon of Activity	
Improvement Financing								
Federal Sources								
- National Highway System	Used for interstate, urban/rural principal capital construction, planning & management activities. NHS routes include I-90, STH 26 & STH 11.	WisDOT/MPO Engineering	Annual distribution	Annual estimate	WisDOT/MPO Admin / Public Works	Annual distribution	Annual estimate	80% Federal/20% local funding (WisDOT)
- Interstate Maintenance	Program for resurfacing, restoring & rehabilitating I-90. Funds may be used for bridges, interchanges & right-of-way acquisition.	WisDOT/MPO Engineering	Annual distribution	Annual estimate	N/A	N/A	N/A	90% Federal/10% state match (WisDOT)
- Local Bridge Improvement Assistance	Bridge assistance for any public road in Wisconsin. Funds may be transferred to NHS or STP.	WisDOT/MPO Engineering	Bi-annual program application	3 years	N/A	N/A	N/A	80% Federal/20% local funding (Responsible Jurisdiction)
- Surface Transportation Program - Urban	Used for roads classified as urban collector or higher. Portion may be transferred to transit projects.	WisDOT/MPO Engineering	Bi-annual program application	3 years	WisDOT/MPO Public Works	Bi-annual program application	3 years	80% Federal/20% local match (Responsible Jurisdiction)
- Surface Transportation Program - Rural	Used on roads classified as rural minor collector or higher.	WisDOT/MPO Rock Co.	Bi-annual program application	3 years	WisDOT/MPO Rock Co.	Bi-annual program application	3 years	80% Federal/20% local match (Rock Co.)
- Surface Transportation Program - Safety	Projects include hazard elimination & rail crossings Used for high-accident locations or intersections excluding interstate routes.	WisDOT/MPO Engineering	Bi-annual program application	3 years	WisDOT/MPO Public Works	Bi-annual program application	3 years	90% Federal/10% local funding.
- Surface Transportation Program - Enhancements	Program used for bicycle/pedestrian facilities, landscaping, transportation-related historic preservation.	WisDOT/MPO Engineering	Annual program	3 years	WisDOT/MPO Public Works	Annual program	3 years	80% Federal/20% local funding.
Right-of-Way Acquisition								
Land Division - Plats and Certified Surveys	Land divisions must be approved in accordance with transportation and neighborhood plans.	Planning/ Engineering	Ongoing	N/A	Admin/ Public Works	Ongoing	N/A	Division must take place within plat approval jurisdiction.
Purchase	Purchase price of property negotiated with land owner.	Planning/ Engineering/ Public Works	As needed	N/A	Admin/ Treasurer	As needed	N/A	Could also include land trade.
Condemnation	Must demonstrate public benefit.	WisDOT	As needed	N/A	WisDOT	As needed	N/A	State often uses this method of ROW.

TABLE IV- 34 IMPROVEMENT IMPLEMENTATION AND MONITORING PLAN

Activity	Description of Activity	City of Janesville			City of Milton			Comments
		Responsible Departments	Frequency of Activity	Time Horizon of Activity	Responsible Departments	Frequency of Activity	Time Horizon of Activity	
Network Monitoring								
Analysis								
- Pavement Program	Inventory of conditions, long range management program.	Engineering	Ongoing	Updated annually for 2-year program	Public Works	Ongoing	Updated annually for 2-year program	PAVER program used for conditions analysis.
- Intersection Analysis	Intersection level-of-service, turning movements, signal timing, etc.	Engineering Planning/ Consultant	As needed	Current conditions	Public Works	As needed	Current conditions	
- Corridor Analysis	Corridor level-of-service, signal progression, V/C ratios, etc.	Engineering Planning/ Consultant	As needed	Current conditions	Public Works	As needed	Current conditions	
- Site Impact Assessment	Site-specific generation rates, traffic flow, parking requirements, etc.	Planning Engineering/ Codes	As needed	Current conditions	Admin. / Consultant/ Public Works	As needed	Current conditions	Site plan review process used to address site impacts.
Data Collection								
- Building Activity	Monitors building activity within community	Planning/ Codes	Monthly	Current conditions	Admin. / Clerk Public Works	Monthly	Current conditions	Information supplied by code administration.
- Traffic Counts	Monitors traffic volumes on arterials, collectors, and selected local streets.	WisDOT/ Engineering/ Planning	3-year counting program conducted by DOT.	Current conditions until 3-year update.	Public Works	3-year counting program conducted by DOT.	Current conditions until 3-year update.	Project-specific counts conducted by Engineering as needed.
Program Monitoring	TIP and CIP reviews status of improvement proposals.	Planning	Annually	1-year	Public Works / Admin	Annually	1-year	
Plans								
Critical Area Plans	Used to guide development in selected areas.	Planning	As needed	Long range	Public Works/ Planning Consultant	As needed / Admin.	Long range	Adopted by Plan Commission.
Neighborhood Plans	Used to guide development; locate streets in undeveloped areas in planning area.	Planning	As needed	Long range	Public Works/ Planning Consultant	As needed / Admin.	Long range	Adopted by Plan Commission.
Safety Study	Used to identify road segments and intersections with an above average crash rate, and plan for improvements.	MPO	As needed	Long range	MPO/ WisDOT	As needed	Long range	MPO

VIII. SUMMARY

The Streets & Highways section of the *2005- 2035 Janesville Area Long Range Transportation Plan* identifies corridors where traffic conditions will need further monitoring and evaluation over the planning period. In general, streets and roads in the planning area operate at high levels of service with isolated congestion during peak periods, at major intersections or near industrial and commercial generators within the urban area boundary. Major roadways that are projected to experience capacity limitations by 2035 are primarily clustered in the downtown area and on the City of Janesville's east side. In the future, in areas where capacity expansion opportunities are limited signal and intersection improvements will be considered to alleviate congestion.

The highway improvements recommended in this plan include a combination of maintenance, intersection reconstruction, road and bridge rehabilitation, and new construction projects, designed to meet the needs of the MPO. The MPO will continue to use established implementation and monitoring activities to target future problem areas, and identify potential land use or transportation policies and projects that could deter future congestion. The recommendations for improving existing facilities, constructing new facilities, and improving conditions to minimize personal and property injury included in this plan reflect the transportation objectives that the MPO has been working to meet over the past ten years and will continue to work on through the year 2035. In summary, the recommendations in the Streets & Highways section maintain the dedication the Janesville Area MPO has toward planning and developing an efficient and effective roadway network.

IX. REFERENCES

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