

STATELINE AREA TRANSPORTATION STUDY

*2035 LONG-RANGE
TRANSPORTATION PLAN*

September 1, 2006 Version
Adopted September 11, 2006

This Long-Range Transportation Plan addresses all modes of publicly-assisted transportation in the StateLine Metropolitan Planning Area.

Federal law requires this Plan to be updated every five years.
This Plan can be updated or amended at any time.

This document is also available on the City of Beloit website in the SLATS webpage: <http://www.ci.beloit.wi.us/> . Please consult the webpage for any changes or amendments to the Plan that may have been made since initial adoption and for notices concerning SLATS meetings and other planning activities. Information about this Plan and other SLATS activities can also be obtained by contacting the SLATS Coordinator in the Beloit City Hall, Public Works Dept., 100 State Street – 606-364-6690.

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CHAPTER ONE - INTRODUCTION

I TRANSPORTATION PLANNING BACKGROUND

It has been over forty years since the Federal Highway Act was passed in 1962. The act inaugurated the transportation planning activity known today as the 3-C planning process which stands for, "comprehensive, cooperative, and continuous". Comprehensive means it has certain planning authority over a variety of modes or components of transportation such as automobiles, bicycles, pedestrian, freight, and transit, as well as highway linkages to railroads, ports, and airports. Cooperative means the units of government in the regional area must work together on joint planning to address the highest priority regional issues and problems. Cooperative also means the planning process must seek to involve citizens and interest groups and take into account not only traditional highway problems, but also environment and quality of life issues. Continuous means the planning process is on-going over a long period of time addressing long-range problems and solutions as well as assigning funding in the short-term to specific projects usually over the next three years.

The 3-C process has been reinforced several times since 1962 but most recently in 2005, with the passage of the "**Safe, Accountable, Flexible, Efficient Transportation Equity Act -- A Legacy for Users**" (SAFETEA-LU). In accordance with Federal law, past and present, a local Metropolitan Planning Organization (MPO) must be established to carry out the 3-C planning process in each "urbanized area" having a population over 50,000 as designated by the US Census Bureau. In 1970, the Census Bureau computed that the area of southern Wisconsin and northern Illinois, in the vicinity of Beloit, met the statistical/geographical criteria to be declared as an "urbanized area". Subsequently, the Stateline Area Transportation Study (SLATS) was created and designated as the MPO for the bi-state, Beloit WI-IL urbanized area. Prior to the Federal Highway Act (1962), early highway planning concentrated on developing a network of all-weather roads to connect the various parts of the nation. As this work was proceeding, both the benefits and problems of serving increasing traffic grew.

The successful development of transportation systems can produce significant benefits for a region. These include expanding the local economy, improving safety for the motoring public, decreasing commute times, and providing better transportation alternatives. These, in turn, can lead to increases in the local government tax base and improve the quality of life. Unfortunately, the planning and development of transportation systems has the potential to create problems and/or undesirable side effects. For example, a new roadway that benefits commerce between two regions may also spur undesirable strip commercial, sprawled, or premature development. New roadways can sometimes displace homes and businesses, encourage unnecessary or inefficient travel practices, discourage the use of more efficient travel modes, and result in increased energy consumption and environmental degradation. Enlarging the transportation infrastructure also increases the community's future maintenance burdens. And, construct-

Map 1-1

SLATS Metropolitan Planning Area

- SLATS Metro Planning Area
- SLATS UA Adptd 02
- Census Urbanized area
- Counties
- Local Roads

Rock Co Townships

- Beloit
- Bradford
- Clinton
- La Prairie
- Newark
- Plymouth
- Rock
- Turtle

Boone Townships

- Caledonia
- Manchester

Winnebago Townships

- Harlem
- Owen
- Rockton
- Roscoe

WISCONSIN

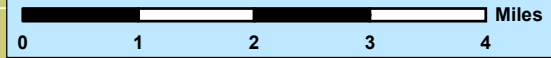
ILLINOIS

State Line Area Transportation Study

2035 PLAN

Incorporated Places

- Beloit
- Janesville
- Machesney Park
- Rockton
- Roscoe
- South Beloit



Petrotte 9/15/05
Map based on Year 2000 Census & data from RATS, SLATS & Janesville MPOs

ing better roads to relieve traffic congestion in some areas, can sometimes just shift traffic congestion to other parts of our communities.

Although federally-mandated, urban transportation planning in the United States is primarily the task of state and local governments. This is appropriate since the highway and transit facilities and services are owned and operated largely by state and local agencies. The role of the federal government in more recent years has been to set national policies, supply technical assistance and training, and conduct research. To implement the national policies, the federal government has provided substantial financial aid to those state and local governments willing to comply with those policies. Over the years, the federal government has increased its requirements in exchange for financial assistance, but recently has also provided some increased flexibility in how the funding can be assigned to highway, transit, pedestrian, bicycle and other transportation projects.

From a planning perspective, the most important requirement has been that transportation projects in urbanized areas of 50,000 or greater in population be based on an urban transportation planning process as describe in the opening paragraph of this Chapter. This requirement was first incorporated into the Federal-Aid Highway Act of 1962.

II THE CREATION OF SLATS

In 1970, the Beloit urbanized area (UA) was designated by the US Bureau of the Census when it was determined that the contiguously developed lands in and around Beloit contained over 50,000 persons. Subsequently, in response to the Federal Highway Act of 1973, the State Line Area Transportation Study was formed and designated by the Governors of Illinois and Wisconsin as an official Metropolitan Planning Organization (MPO). The SLATS MPO was assigned the responsibility for conducting the transportation planning process for the Beloit UA plus those lands surrounding the UA that are forecasted by area planners to become urbanized in the next 20-30 years -- the SLATS Metropolitan Planning Area (MPA or MA).

As of the most recent US Census and local development forecasts, the SLATS MPA now encompasses parts of both Rock County, Wisconsin and Winnebago County, Illinois. Included are the Cities of Beloit and South Beloit; the Village of Rockton; a very small part of the Village of Roscoe; part of the Townships of Rockton and Roscoe in Illinois; and portions of the Towns of Turtle, Beloit, and Rock in Wisconsin. [Note that all of the Village of Roscoe and a larger portion of Roscoe Township were also within the SLATS boundary until the Year 2000 Census when they were transferred to the Rockford urbanized area by the Census Bureau and, subsequently, placed under the planning jurisdiction of the Rockford Area Transportation Study (RATS).]

MAP 1-1 illustrates the boundaries of the SLATS MPA, the Beloit UA and a third important area, the Beloit Adjusted Urbanized Area. The Adjusted Urbanized Area (AUA) is a locally-defined area that smoothes the jagged boundaries of the UA. It is the area that local planners forecast will be developed in the near future (by definition, within the next five years – realistically, within the next 5-10 years). **Chart 1-1** gives the various geographic components numerically.

Chart 1-1 SLATS Component Communities

SLATS by Areas and Populations of Component Communities											Chart 1-1				
Parts of the Communities below within the areas to the right	Urbanized area (UA)					Adjusted Urbanized Area (AUA)					Metropolitan Planning Area (MA)				
	Pop	% of UA	Acres	% of UA	Per per Acre	Pop	% of AUA	Acres	% of AUA	Per per Acre	Pop	% of MA	Acres	% of MA	Per per Acre
Beloit, City	35,708	63%	8,120	45%	4.40	35,775	61%	10,699	30%	3.34	35,775	58%	10,700	16%	3.34
Beloit, Town	5,905	10%	3,132	17%	1.89	6,062	10%	5,421	15%	1.12	7,038	11%	17,349	25%	0.41
Rock, Town		0%		0%							557	1%	2,559	4%	0.22
Rockton, Villg	5,230	9%	1,666	9%	3.14	5,296	9%	2,373	7%	2.23	5,296	9%	2,373	3%	2.23
Rockton Twp	2,512	4%	1,761	10%	1.43	2,803	5%	4,057	11%	0.69	3,329	5%	8,736	13%	0.38
Roscoe, Villg	-	0%	124	1%		-	0%	124	0%	-	3	0%	512	1%	0.01
Roscoe Twp	1,105	2%	710	4%	1.56	1,991	3%	4,115	12%	0.48	2,004	3%	4,651	7%	0.43
S. Beloit, City	5,109	9%	1,848	10%	2.76	5,397	9%	2,621	7%	2.06	5,397	9%	2,621	4%	2.06
Turtle, Town	893	2%	618	3%	1.44	1,416	2%	5,873	17%	0.24	2,444	4%	18,838	28%	0.13
Totals	56,462	100%	17,979	100%	3.14	58,740	100%	35,283	100%	1.66	61,843	100%	68,339	100%	0.90
Square miles & persons / sq.mi.			28.1	2,010				55.1	1,065				106.8	579	
Source: Year 2000 Census, Adjusted UA and MA boundaries by SLATS											Note: Figures reported above may differ slightly from figures in SLATS documents developed prior to this due to some small Census blocks along community boundaries being tabulated differently. The differences are extremely small. Note 2: Populations in the MA represent all of the persons currently in Beloit City, Beloit Town, Rockton Village and Turtle Town; only parts of the other jurisdictions. REVISED: 9/15/05 - rp: Pop by area worksheet.xls				

The information in **MAP 1-1** and **Chart 1-1** illustrates the very reason for the creation and existence of SLATS. The 107 square mile area within the SLATS MA is governed by nine local governments and two States. Counting the Federal government, there are 12 jurisdictions making decisions affecting the transportation system in the Stateline Area. Between the present and the Year 2035 it is possible that this area, now approximately 25% urbanized, will become fully urbanized -- thereby increasing the total population by a factor of 2-4 times and doubling or tripling the overall population density and roadway mileage. Collectively, these 12 jurisdictions will expend millions in public dollars on the transportation system. The wisdom of these expenditures and the resulting effectiveness of the expanded transportation system will depend, to a large degree, on how well the decisions are coordinated among those 12 jurisdictions. The mission of SLATS is to assure that those decisions are coordinated.

Map 1-2

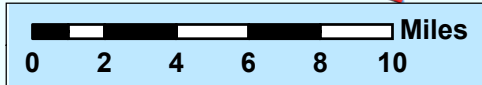
CROSSHATCHED AREAS ARE THE YR 2000 CENSUS-DEFINED "URBANIZED AREAS":
JANESVILLE UA
BELOIT UA
ROCKFORD UA

Janesville MPA

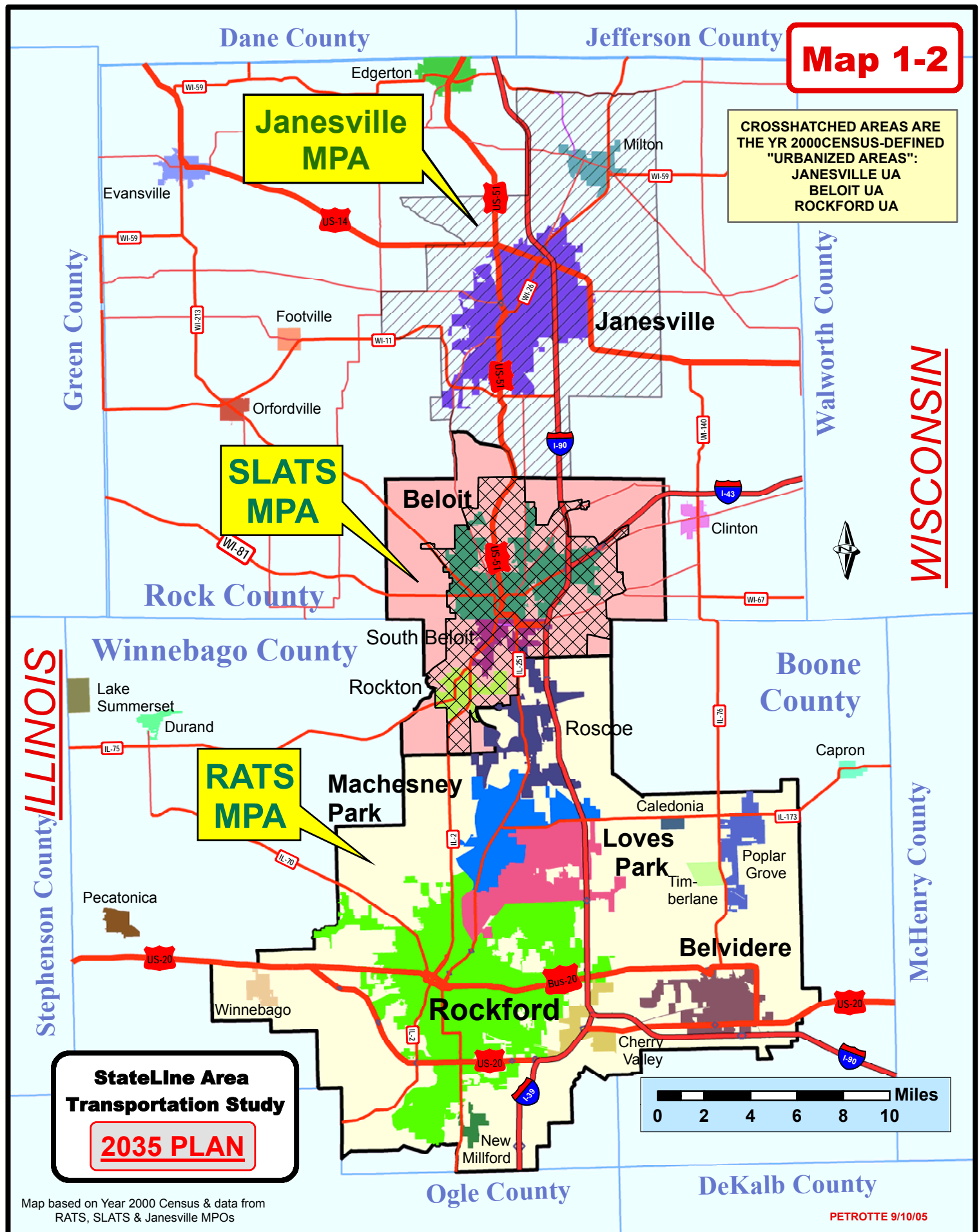
SLATS MPA

RATS MPA

**StateLine Area
Transportation Study
2035 PLAN**



Map based on Year 2000 Census & data from RATS, SLATS & Janesville MPOs



III SLATS, RATS, & THE JANESVILLE MPO

MAP 1-2 illustrates the current SLATS MPA boundaries relative to the two other MPAs and the additional political jurisdictions in the region. The Census-defined "urbanized areas," the cores of each of the MPAs, are illustrated with crosshatches. It is important to note that the SLATS MPA abuts the Janesville MPA to the north and the RATS MPA to the south. More important, although there are still considerable expanses of undeveloped land in the boundary area between the Janesville and SLATS MPAs, the urbanization between SLATS and RATS is already continuous. This is evidenced by the abutting boundaries of the Beloit and Rockford "urbanized areas."

Between the present and the Year 2035, the area will eventually meld into a continuous metropolis paralleling the Rock River and the I-39/90 corridor, ranging from north of Janesville to south of Rockford and east of Belvidere. The transportation decisions will have to be coordinated for all of this area.

Earlier in this decade, as the MPA boundaries were drawn, the possibility of merging these MPAs into a single MPA was contemplated. Although support for such a merger was not strong enough, there was appreciation of the need to coordinate the transportation planning activities of the three entities. Among the factors that thwarted the merger of the MPAs was the desire of each of the entities to maintain a level of autonomy, the complication that two States are involved, and the feeling that ample coordination could be accomplished without actual merger. Before the next formal update of this LRP (5 years), this situation should be seriously re-evaluated to assess whether inter-MPO communication is adequately accomplishing the coordination.

IV THE SLATS ORGANIZATIONAL STRUCTURE AND DECISION MAKING PROCESS

A. Policy & Technical Committees

SLATS policy is determined by a Policy Committee (**Chart 1-2**) (see Intro Illustrations Binder 1) which receives advice from a Technical Committee (**Chart 1-3**) (see Intro Illustrations Binder 1). The Policy Committee is composed of the top officials of the State and local governments (mainly elected officials) within the MPO boundaries. The Technical Committee is composed mainly of appointed professional staff of the member units of government (engineers, planners, and other transportation experts) and others as appointed by the Policy Committee. The Technical Committee reviews and recommends policies, proposals, and documents to the Policy Committee which has final approval authority. The following tables illustrate the SLATS organizational structure and Committee membership.

Chart 1-2 SLATS Policy Committee

SLATS Policy Committee		Chart 1-2
Illinois Members	Wisconsin Members	
Mayor of the City of South Beloit President of the Village of Rockton Chairman of Winnebago County Board District 2 Engineer from IDOT Chairman of Rockton Township	President of the Beloit City Council Chairman of the Town of Turtle Chairman of the Town of Beloit Chairman of the Rock County Board SW Region Director from WisDOT	

Chart 1-3 SLATS Technical Committee

SLATS Technical Committee		Chart 1-3
Illinois Members	Wisconsin Members	
Highway Engineer, Winnebago County Planning Director, Winnebago County Planning Director, City of S. Beloit Public Works Director, Village of Rockton Systems & Planning Manager, Dist 2 IDOT	Public Works Director, City of Beloit Engineering Director, City of Beloit Planning Director, Rock County Public Works Director, Rock County Engineer, Town of Beloit Engineer, Town of Turtle Director, Beloit Transit System Sys. Planning Chief, SW Region WisDOT Planning Manager, Central Office, WisDOT	
Other Members (non-voting)		
RATS MPO Janesville MPO Village Engineer, Village of Roscoe IDOT Metropolitan Planning Federal Highway Administration Federal Transit Administration	<small>Pop by area worksheet.xls</small>	

B. SLATS Offices & Staff

By agreement of the SLATS members, the MPO is provided office facilities and staff by the City of Beloit Engineering Department. A full-time MPO Coordinator is provided and several Engineering Department staff are designated to provide part-time assistance.

The SLATS offices are located within the Beloit Engineering Department on the 3rd Floor of the Beloit City Hall, 100 State Street, Beloit, WI 53511 – Phone: 608-364-6690.

C. SLATS Web Site

The City of Beloit also provides a portion of the City's web site for SLATS purposes. Meeting announcements and important documents are presented on that site on a regular basis.

<http://beloit.govoffice3.com/>

D. SLATS Meetings

To conduct their business, the SLATS Policy and Technical Committees typically meet simultaneously at the same location. (On occasion, for special work sessions, the Technical Committee or appointed subcommittees may meet separately.) The joint meetings are held once a month but may be more or less frequent, depending on workload situations. Most often, these meetings are held on a Monday morning, starting at 10:00 am and continuing until all agenda items are covered. The usual location is the Rotary River Center at 110 Riverside Drive (US Highway 51) in Beloit. For precise information on the next SLATS meeting, persons may contact the SLATS staff anytime between the hours of 8:00 am and 5:00 pm, Monday thru Friday (above).

All SLATS meetings are open to the public and public comment is welcomed on all agenda items. Persons interested in the SLATS Transportation Planning Process may ask to be placed on the SLATS mailing list so that they can be notified in advance of all SLATS meetings, and can receive copies of meeting minutes, documents pending public review, and other plans and documents officially adopted by SLATS. Persons seeking to have a specific topic or issue placed for discussion on a SLATS meeting agenda should contact SLATS staff.

Persons concerned with larger inter-regional transportation issues or issues affecting the State Line area but also stretching southward into the Rockford area or northward into the Janesville area may also contact the staff of the Rockford Area Transportation Study at 815-967-6734 or the staff of the Janesville MPO at 608-755-3095.

V MAJOR WORK PRODUCTS

To fulfill the 3-C (cooperative, comprehensive, and continuing) transportation planning process, the Federal government requires that SLATS produce and maintain four primary official documents. They are:

A. The Long-Range Plan (LRP)

The LRP (this document) sets the overall stage for and outlines all of the needed transportation investments that might be undertaken during the next 20 to 30 years. All projects that will use federal funds and all regionally significant, major projects must be included. It also must address all surface modes of transportation including roadways, public transit, pedestrian and bicycle systems. These should be coordinated with rail, air, and waterway systems (where they exist). The Plan must address the integration of these modes with the goal of optimizing their coordination and efficiency. The Plan must also attempt to equitably consider the transportation needs of all citizens and users, regardless of race, ethnicity, gender, and economic or financial standing.

Although improvement projects need not be prioritized within the LRP, the Plan must be fiscally constrained. It must state what the sources and the uses of funds will be in a "fiscally constrained" responsible manner based on past experience and reasonable ex-

pectations of funds that will be available and needs that should be considered. The LRP can include non-fiscally constrained projects, i.e., projects for which there is no source of funds currently forecasted. Such projects must be identified as "illustrative projects." If funding becomes available, the illustrative project can then be advanced to the non-illustrative list through a plan amendment or through the TIP process (below).

B. The Transportation Improvement Program (TIP)

The TIP is similar to the LRP but has a shorter time-span (3-6 years) and is more specific about the scope and funding of projects included within it. It is also more precise about the priority or implementation schedule of its projects. The TIP is usually prepared every year (at a minimum, every two years). It must include all surface transportation projects in the planning area that will use federal funds. It should also include projects using only local and state funding if they are regionally significant, major proposals.

The TIP lists all projects for the next four years (at a minimum) with emphasis on those to be implemented in the first of the four years. Although not required, a common practice if SLATS is to list projects for the next six years (to the extent possible, for informational purposes.) It thereby prioritizes the use of the federal funds in a multi-jurisdictional cooperative manner using the 3-C process.

Like the Long-Range Plan, the TIP must state what the sources and the uses of the funds will be in a financially constrained manner. The TIP must also be consistent with the LRP. A project cannot be included in the TIP unless that project is also, in some way, encompassed by the LRP. It need not be identical to a project or planned improvement described in the LRP. It may be only part of a larger project or series of projects or improvement plan described and justified in the LRP -- but it cannot be inconsistent with the LRP or in conflict with any other projects or improvement plans approved in the LRP.

Therefore, even though the LRP deals with projects and improvements planned as far out as the next 25-35 years, it is particularly important in the development of the LRP that special care is taken to anticipate, include and justify all projects likely to be constructed in the next 4-6 years. Failure to include such projects in the LRP will prevent them from being listed in the TIP, thereby delaying their implementation until they are amended into the LRP or the LRP is updated.

C. The Unified Work Program (UWP)

The UWP, sometimes called the Unified Planning Work Program (UPWP) outlines the planning work to be done during the coming year. It is prepared annually. It serves to establish consensus on the focus of the planning work and it coordinates the planning efforts of the multiple jurisdictions in the MPA.

The UWP is also the foundation of annual contracts between the MPO and the Wisconsin Department of Transportation (WisDOT) and the Illinois Department of Transportation (IDOT) whereby federal FHWA and FTA planning funds are sub allocated to SLATS for the purpose of funding the planning work (see "Funding the SLATS . . .", below). It

specifies how the 3-C process is going to be carried out during the coming year and must include all federally funded transportation planning activities.

D. The Public Involvement Plan (PIP)

The PIP is another federally mandated document that SLATS must develop and update on a periodic basis. The PIP, sometimes referred to as the Public Involvement Process or the Public Involvement Plan, is a document that describes the SLATS planning process similar to this introductory chapter of the LRP. More important, it also specifies practices, methods, and procedures to involve both the general public and the transportation stakeholders in the planning process. The development of the PIP is a proactive step in the planning process that gives the public and stakeholders a chance to view the approach the MPO will take to involve them and to comment as to whether there should be more or less MPO effort devoted to informing and soliciting comments as the various elements of the process go forth. There is no set schedule for updating the PIP. Updates are prepared on an as needed basis but usually every 2-5 years. The SLATS PIP was last updated in March of 2005 and is available at the SLATS office. Note that new requirements pertaining to public involvement have been put forth by the most recent Federal transportation planning guidance. This is discussed in more detail in Chapter 7.

VI FUNDING THE SLATS PLANNING PROCESS

The SLATS Transportation Planning Process is funded through a combination of local, State and Federal funds as set forth in the UWP (described above) and further specified via contractual agreements between SLATS and WisDOT and IDOT. Over the years of its existence, experience has determined that a minimum of approximately \$140,000 is required annually to conduct the planning process. This amount pays the salary of one full-time MPO director, provides part-time secretarial and technical back-up staff, pays for offices, office equipment, and supplies and occasionally provides for special technical consultant services.

As a federally mandated entity, the bulk of this funding (typically 80%) is provided through annual federal grants secured from the Federal Highway Administration and the Federal Transit Administration. (FHWA, PL, and FTA 5303 are the usual specific sources.) The federal monies, however, are not provided directly to the MPO, but are passed through to the MPO by the States of Wisconsin and Illinois. The State's role is to divide their allotted federal monies among all the MPOs throughout their respective States in amounts reflective of the varying needs in those MPOs. Because a significantly larger share of the population of the SLATS MPO is located on the Wisconsin side, a proportionately larger share of the federal pass-through comes via Wisconsin.

To assure that the State and local governments acknowledge their shares of the planning responsibilities for the MPO, the Federal government requires that the federal funds be matched on an 80/20 basis. That is, for every 80 cents provided by the Federal government, 20 cents in non-federal matching funds must be provided. On the Wisconsin side, Wisconsin typically provides 10 cents of the required local match and asks the local communities to provide the other 10 cents (the City of Beloit, the Towns of Beloit and Turtle, and Rock County). On the Illinois side, the 20 cents is provided by the local

communities (South Beloit, Rockton, and Rockton Township). (Note: As **MAP 1-1** and **Chart 1-1** illustrate, other communities occupy parts of the SLATS territory and benefit from the coordinative efforts of SLATS. As urbanization continues, these communities should be asked to contribute shares to the local match.)

Under special circumstances additional funding is provided. A recent example is the computerized traffic simulation model developed for all of Winnebago and Boone Counties and the SLATS part of Rock County. That consultant-assisted effort was funded with extra funds passed through from IDOT and matched by Winnebago County and some of the other local jurisdictions. A similar modeling effort is now underway for all of Rock County with that effort being funded by Wisconsin.

CHAPTER TWO - GOALS OF THIS LRP

I SIX SLATS VISIONING PROCESS GOALS -- THE PRIMARY GOALS OF THIS PLAN

Between early 2003 and December of 2004, SLATS organized and participated in a Visioning Process designed to develop a comprehensive set of goals and objectives that would become the foundation of the new Stateline Area Long-Range Transportation Plan. A Transportation Visioning Committee was formed from a cross-section of the community's citizens and transportation stakeholders. Included were representatives from local government, local social service agencies, area planning and engineering entities, transportation providers, and the local citizenry. During a series of meetings this Committee contemplated the transportation situation in the Stateline area, the role of SLATS, and the function of the Long-Range Transportation Plan. The Committee debated, eventually agreed upon, and articulated a set of Six Goals, accompanied by multiple objectives, to guide in developing a Long-Range Plan that would serve as a vision for the future development and improvement of the Stateline Area's major transportation systems (A thru F, listed below).

A. Regional Issues and Planning for Growth

The transportation system will tie into the regional economy by promoting, supporting, enhancing and increasing efficiency and accessibility into and out of Beloit and the Stateline Area.

Objectives

1. Participate in transportation and land use planning across the state line.
2. Plan transportation systems to maintain and create access to employment centers and other destinations.
3. Maintain current access and level of service on interstate highway system.
4. Explore transit connections between Rockford, Janesville, Chicago and Milwaukee.
5. Expand bicycle and pedestrian system to Rockford and Janesville.
6. Integrate system users (cyclists, transit users, pedestrians, motorists, freight carriers and enforcement) into transportation planning and design.

B. Spatial and Modal Inter-connectivity

The transportation system will enhance regional multimodal connectivity by improving connections between major routes and destinations for all modes.

Objectives

1. Connect bike paths using adopted bicycle and pedestrian plan. Improve way finding.
2. Separate or improve bicycle and pedestrian facilities with roadway upgrades.
3. Improve transit access and convenience for all users, particularly students and the elderly and disabled.
4. Improve local roadways leading to freeway access points.

C. Community Development

The transportation system will promote community development.

Objectives

1. Maintain and improve existing transportation links to the downtown Beloit central business district.
2. Better connect the downtown Beloit central business district to residential neighborhoods by means other than auto.
3. Expand multi-use trail system along the Rock River.

D. Safety

The safety of all users of all modes will be a priority in the design of the Beloit and State-line Area transportation system.

Objectives

1. Minimize the accident rate in the Stateline Area.
2. Integrate system users (cyclists, transit users, pedestrians, motorists, freight carriers and enforcement) into transportation planning and design.
3. Emphasize safety in regulation and operation of transportation facilities.
4. Emphasize public education about safe transportation behavior.

E. Maintain Existing Infrastructure

The utility of existing systems will be maximized.

Objectives

1. Strive for sufficient budgetary resources for system maintenance.
2. Where possible, utilize existing corridors.
3. Plan for new corridor right-of-way acquisitions as early as possible.
4. Coordinate transportation planning with regional land use plans.

F. Environment

The transportation system will be planned to minimize negative impacts to the environment.

Objectives

1. Plan the transportation system to encourage contiguous development.
2. Plan the transportation system to preserve open space and natural amenities.
3. Encourage quieter vehicle traffic.
4. Regularly evaluate environmental impacts of transportation plans.

II RECOGNITION AND CONCURRENCE WITH LONG STANDING FEDERAL GOALS

In addition to the above Six Goals developed in the Visioning Process, this Plan also recognizes, concurs with and endorses the goals, factors and concerns set forth by the Federal government. For the past several decades the United States Government has invested enormous sums in grants, loans, and subsidies toward the development of a nationwide transportation system for the safety and enrichment of all its citizens. Large portions of these investments have not been for direct construction or implementation by the federal government, but have been passed through to State and local governments. In the interest of assuring that these passed-through funds are spent consistent with national goals and policies, extensive guidance for their use has been set forth by the US Department of Transportation under the authority of the Congress. As previously noted a new Federal transportation bill was recently passed -- called the Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

Recently proposed guidance stemming from SAFETEA-LU stresses that the metropolitan planning process shall be continuous, cooperative, and comprehensive (the traditional "3-C" requirement) and provide for consideration and implementation of projects, strategies, and services that will address the following factors:

Factor 1 -- Economic Vitality

Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

Comment: This factor is consistent with and bolsters Vision Goals A and C. Job creation, job retention, and new housing starts should be encouraged along appropriate major routes. Journeys to work can be made shorter and quicker. The cost of getting goods and services to market can be made cheaper, and the local economy can be made increasingly competitive in the regional, national, and global marketplaces for the benefit of all the citizens of the region.

Factor 2 -- Safety

Increase the safety of the transportation system for all motorized and non-motorized users.

Comment: This factor is consistent with Visioning Goal D.

Factor 3 -- Security

Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users.

Comment: Security of the system can be enhanced during times of global threats. Alternative routes and strategies should be encouraged in anticipation of natural or man-made disasters, crashes, and other disruptive events. Coordination of emergency agency response teams can be created through planning responses to emergencies.

Factor 4 -- Accessibility and Mobility

Increase accessibility and mobility of people and freight.

Comment: This factor is consistent with Visioning Goals A and B. The system should provide access to people including all members of the public who are dependent upon it such as special needs populations, the elderly, and those who are otherwise disadvantaged. The system should also ensure that freight transportation, trade facilitation, and economic development needs are reasonably addressed and integrated into the transportation planning process.

Factor 5 -- Environment and Quality of Life

Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns

Comment: This factor is consistent with Visioning Goal F. Use of alternative methods of transportation should be encouraged such as using public transit, biking, and walking. Proper transportation planning and programming can significantly affect and improve the quality of life of the residents of the region.

Factor 6 -- Integration and Connectivity

Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.

Comment: This factor bolsters Visioning Goal B. Improving connectivity can encourage the creation of jobs, spark redevelopment of depressed areas, and enable people of various income groups to get to shopping, medical, and recreational areas more easily and safely. It should contribute to the overall well-being of people in general and have a positive effect on the economy.

Factor 7 -- Efficient System Management and Operation

Promote efficient system management and operation.

Comment: This factor is consistent with Visioning Goal E. Sometimes the best approach to improving the movement of goods and people isn't to expand the system, but to improve how the current system operates. Looking to improve transportation through more efficient operation of the system has traditionally been called Transportation System Management (TSM). In recent years, significant technological advances stemming from communications advances and computer technology have presented possibilities that can significantly improve the safety and capacity of existing roadways. Collectively referred to Intelligent Transportation System or ITS technology, these advances need to be explored and implemented wherever possible.

Factor 8 -- Preservation of the Existing Transportation System

Emphasize the preservation of the existing transportation system.

Comment: This factor is also consistent with and bolsters Visioning Goal E. In order to achieve this important goal it is necessary to regularly monitor the level of usage and the condition of the road system and properly maintain the system in a timely way to maximize safety and extend the useful life of the road facilities. Proper and timely maintenance of the existing system can significantly extend its useful life and postpone the expensive need for major reconstruction or replacement.

III CONCURRENCE WITH NEW FEDERAL GOALS

In addition to the above Eight Planning Factors, this Plan recognizes the new emphasis of the Federal government emanating from SAFETEA-LU and the newly Proposed Rules pertaining to Statewide and Metropolitan Transportation Planning as published in the Federal Register on June 9, 2006 (pages 33510 thru 33560). Over the next five years of the Plan's duration, SLATS will make efforts to thoroughly address all of these concerns to the extent they are applicable to the Stateline Area, including:

1. **Coordination with the States.** The Stateline Area planning process shall be carried out in coordination with the statewide planning processes of both Illinois and Wisconsin.
2. **Asset Management Principles.** To the extent possible SLATS and the area public transit operators will apply asset management principles and techniques in establishing planning goals, defining TIP priorities and assessing transportation investment decisions, including transportation system safety, operations, preservation, and maintenance, as well as strategies and policies to support homeland security and to safeguard the personal security of all motorized and non-motorized users.

3. **ITS Architecture.** The planning process will be consistent with the development of applicable regional intelligent transportation systems (ITS) architectures, as defined in 23 CFR part 940.
4. **Coordinated Public Transit.** The planning process will be consistent with the development of Coordinated Public Transit-Human Services Transportation Plans as required by 49 U.S.C. 5310, 5316, and 5317.
5. **Strategic Highway Safety Plan.** The planning process shall be consistent with the Strategic Highway Safety Plan, as specified in 23 U.S.C. 148, and the Regional Transit Security Strategy as required by the Department of Homeland Security.
6. **Environmental Mitigation.** The planning process will strive to recognize the need to protect, preserve, and conserve the natural environment early in the process at policy- and/or strategic-levels, not just at project-specific levels. The process will seek to first, avoid adversely affecting environmentally sensitive areas; second, where it is not possible to avoid such areas, minimize the effects of transportation on those areas; and third, mitigate the adverse effects wherever avoidance and minimization is not possible.

VI SLATS PROJECT EVALUATION CRITERIA

Every year in the process of passing the Transportation Improvement Program, SLATS reaffirms its Project Evaluation Criteria. The criteria are used by the Technical Committee to aid in ranking projects for recommendation to the Policy Committee. Although they are applied primarily to roadway projects the Evaluation Criteria are mentioned here to illustrate that the above-discussed long-range planning goals, objectives and planning factors also filter down into the project selection process. Within the next year or two these criteria may need to be updated to better comply with the emphasis of SAFETEA-LU. At present, projects are selected based on:

1. Level of Service which is the ability of existing roadways to safely accommodate traffic by comparing the expected traffic volumes with road capacity for the next 10 years for all the proposed projects.
2. Safety which is based on the number and severity of accidents occurring over the most recent three-year period.
3. Physical Condition of the street/highway is evaluated by noting the type of surface (gravel, seal coat, asphalt, or concrete), the condition of the surface, and the amount of traffic using the roadway currently and as projected in the future.
4. Miscellaneous criteria that may receive consideration include demonstrating the ability to:
 - reduce accidents
 - improve air quality

- encourage alternatives to automobile use by including sidewalks, bike trails, or transit lanes as appropriate during project planning and design
- promote economic development.

VII INTERGOVERNMENTAL COOPERATION ISSUES, OBJECTIVES, AND EFFORTS

MAP 1-1 in Chapter 1 depicted the SLATS Metropolitan Planning Area, the Stateline Area. To reiterate, this map shows the area that was classified as "urbanized" by the Year 2000 Census; the Adjusted Urbanized Area, the area most likely to become urbanized in the near future (5-10 years); and the Metropolitan Planning Area, the area likely to become urbanized in the next 20 to 30 years. In addition to the Stateline Area, **MAP 1-2** shows the abutting Metropolitan Planning Areas of Rockford, to the south, and Janesville, to the north. The likelihood that these three MAs will merge into one continuous metropolis has already been noted. Stated another way, the days when the localities of Belvidere, Rockford, Janesville, Machesney Park, Roscoe, Rockton, and the Beloit existed as distinctly separate identifiable communities and economies may soon be gone. From the standpoint of transportation planning three related considerations are notable from these maps.






- First, as these communities blur more and more, at least to passing observers, into a continuous urbanized region growing and thriving along the Interstate 90 corridor, this merging will place greater traffic on all the north-south roadway arterials serving the region. This LRP endorses efforts to accommodate that growing traffic situation.
- Second, if the judgment of area planners and officials is correct in their view of future growth, the Stateline Area will grow more toward the east in the short term but, eventually, westward in the longer term. Again, this LRP endorses effort to accommodate traffic growth in these directions.
- Third, given the existing connection of Interstate 43 to Milwaukee, it is likely there will be more aggressive development along that facility especially in the area of the interchanges.

Another important map, included in this Chapter as **MAP 2-1**, is the map depicting the area covered by the two most recently completed regional computerized traffic simulation models. More important than showing the limits of these traffic modeling efforts, this map depicts the recognition, starting over nearly a decade ago and continuing, that the Beloit, Rockford, and Belvidere areas were growing together, and that addressing the traffic situations developing in these communities required approaches that rigorously evaluate intercity (between city) traffic as well as intra-city (inside city) traffic on a broader scale, beyond the individual RATS, SLATS, and Janesville MPO boundaries. These models are discussed in greater detail in Chapter 6 of this LRP.

Dane County

Jefferson County

Traffic Simulation Modeling

-  Rock--SLATS Traffic Model
-  RATS--SLATS Traffic Model
-  SLATS MPA
-  RATS MPA
-  Janesville MPA

Map 2-1

StateLine Area Transportation Study

2035 PLAN

Simulation Model Maintained by WisDOT

Walworth Co

Rock County

Green County

WISCONSIN

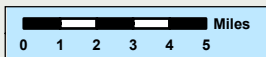
ILLINOIS

Winnebago County

Boone County

Ogle County

DeKalb County



Simulation Model Maintained by RATS

Stephenson County

McHenry County

Together, the above-discussed planning area maps illustrate the need for intergovernmental cooperation both within and among the MPOs of this region, and they give evidence that such cooperation is already occurring. Other evidence of interagency cooperation that can be cited includes the following:

- Recent discussions of extending and expanding public transit services such that seamless or interconnected service would be provided all the way from Belvidere to Janesville.
- Coordinated improvements are being made to and along Interstate 90, including and merging Intelligent Transportation System features with emergency response coordination.
- The potential for commuter rail service between the region and Chicago metropolitan area is being evaluated.
- Discussion of the potential of merging SLATS and the Rockford Area Transportation Study (RATS) was initiated following the Year 2000 Census. It was decided to postpone this item until after the next census in the Year 2010, and in the meantime to continue promoting the close coordination of planning and related services and studies in the spirit of intergovernmental cooperation.

This LRP endorses these and similar combined planning efforts, beyond the boundaries of the SLATS MPA.

CHAPTER THREE - DEMOGRAPHICS

The purpose of this Chapter is to provide an overview of the demographic and socio-economic characteristics of the Stateline Area (the SLATS Metropolitan Planning Area) and its component communities.

I POPULATION PROJECTIONS

The intent of this section is to examine whether the Stateline Area is likely to decline, remain stable, or grow during the planning period. Transportation planning is important in any of these scenarios. If the area were to decline, transportation demand would also decline and it would be wise to determine the impact on proposed transportation improvements. Some improvements could possibly be forestalled or eliminated. Some general maintenance work might be rescheduled. If the area remains stable, SLATS must address whether the existing infrastructure should simply be maintained -- or if the situation is more complicated due to shifts in community geography dictating that some proposed improvements or major maintenance work should be delayed, while others items should be accelerated. If the area is forecasted to grow, we must determine the amounts and directions it will grow and again prioritize improvements accordingly. The community situation may also change in other ways that, in turn, may change the way transportation should be provided. A few examples of such situational changes could be: Rising fuel prices that necessitate changes to public transit or non-motorized modes; ageing populations that may increase the need for public transit and paratransit services; and broader regional changes that could necessitate changing emphasis on interregional transportation facilities.

Charts 3-1A & 3-1B, below, illustrate the relative populations and areas of the composite communities of the SLATS Metropolitan Planning Area (MA). This information was numerically presented in **Chart 1-1** in **Chapter 1**. Earlier in this decade, following the results of the Year 2000 Census, SLATS planners and participants gathered and debated if, when, and where the Beloit urbanized area was likely to grow in the next 20-30 years. The consensus of the participants was that considerable growth would occur in the area between the Urbanized Area (UA) boundary, as defined by the Census, and the MA boundary, as discussed and depicted in **Chapter 1**. Certainly some would also occur due to in-fill, redevelopment and densification within the UA -- but most was likely to occur on the currently vacant lands or farmlands between the UA and MA boundaries. Most of these developable lands are located outside the cities and villages of SLATS and in areas now under the jurisdiction of Rock and Winnebago Counties, the Towns of Beloit, Turtle, and Rock (Wisconsin) and the Townships of Rockton and Roscoe (Illinois). Albeit, much, if not most, of this development will end up in the cities or villages, via future annexations. **Chart 3-1B** illustrates the substantial lands in the towns and townships, most of which is available for urbanization within SLATS.

Chart 3-1A Year 2000 Populations

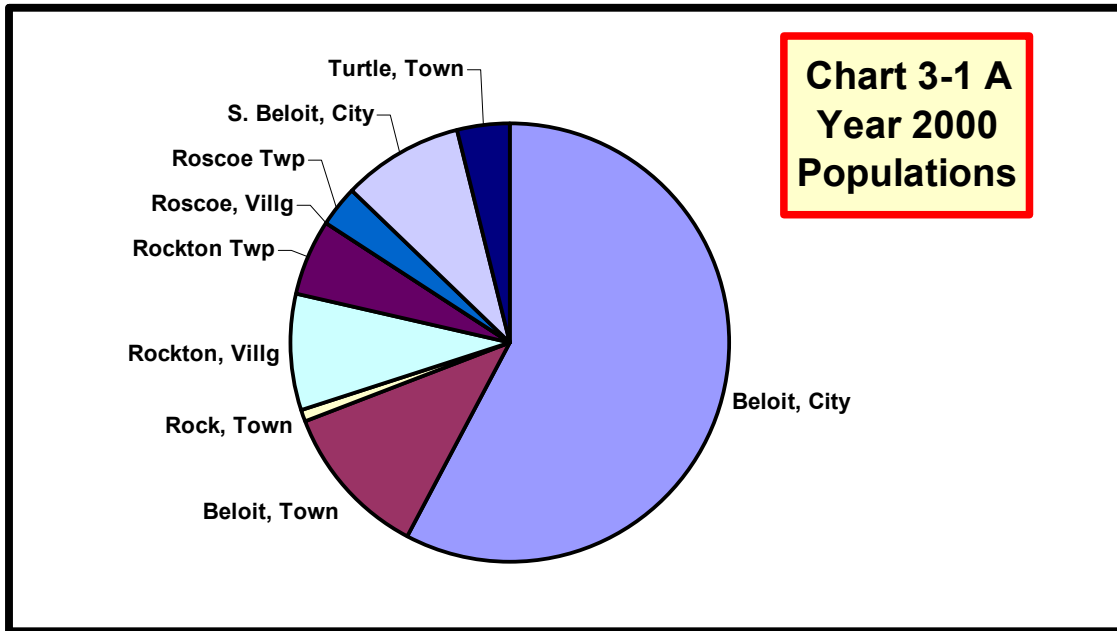
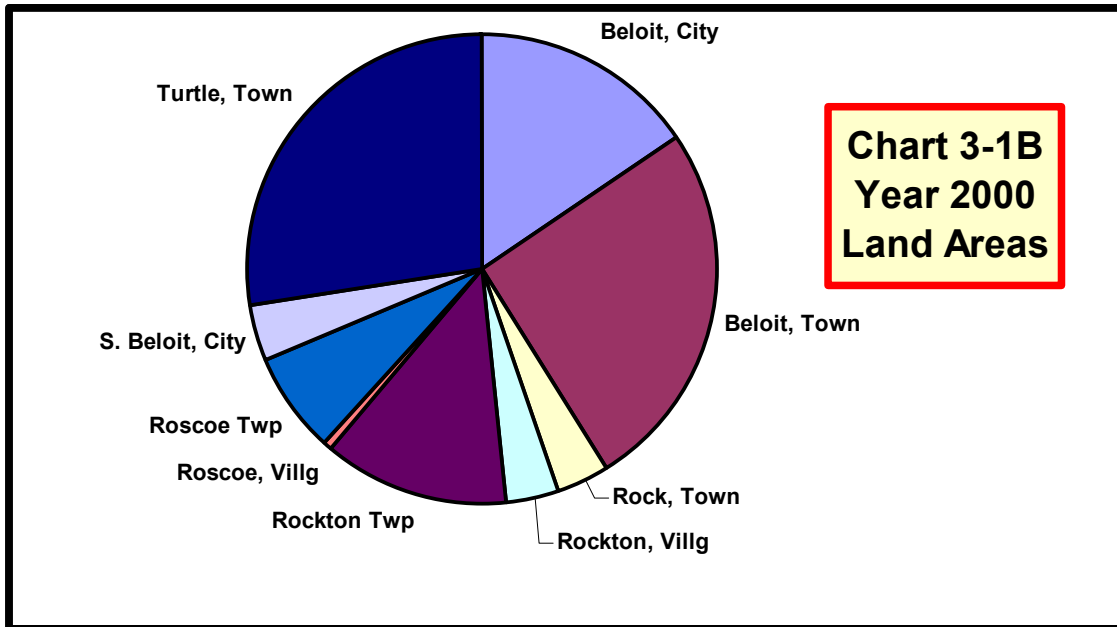


Chart 3-1B Year 2000 Land Areas



The participants who delineated the SLATS MA boundary 2-3 years ago were led to forecast growth in the Stateline Area rather than stagnation or decline long-term, historical population data shows strong growth over the last 40 years.

The top rows of **Chart 3-2** (below) show that, between 1960 and 2000, Rock County grew in population from 114,000 to 152,000 and Winnebago County grew from 209,000 to 278,000. Moreover, in the same period, the smaller communities, all or partially within

the SLATS MA, grew from nearly 59,000 persons to over 69,000 persons. The application of simple trend analysis to this historical data produces a substantial forecast of growth. However, the consensus of local community leaders and members of SLATS is that growth in the Stateline Area is likely to accelerate substantially beyond what past long-term trends might indicate. In recent years, land subdivision activity and construction permit activity in the Stateline Area has been very strong. Such subdivision and construction activity is likely to continue if not accelerate because large amounts of vacant or convertible farmland are available, the local economy in general is healthy and expanding, and the local communities are supportive of growth. Consistent with these observations, population forecasts based on simple regression or trend analysis were rejected by SLATS leaders and adjustments were made that resulted in the forecasts presented in **Chart 3-2**.

Chart 3-2 Census Populations & Projections

Census Populations & Population Projections by Jurisdictions 1960-2035										Chart 3-2	
Year (s)	Beloit	Rockton Twp	Town of Beloit	Village of Roscoe	Village of Rockton	South Beloit	Town of Turtle	All Areas Incl'dg Roscoe	All Areas Excl'dg Roscoe	Rock County	Winnebago County
Persons by Year and Jurisdiction											
1960	32,847	8,179		-	1,833	3,781	3,632	58,667	58,667	113,915	209,765
1970	35,729	8,554		1,070	2,099	3,804	2,532	62,970	61,900	131,970	246,623
1980	35,207	9,163	8,395	1,388	2,313	4,088	2,703	63,244	61,856	139,420	250,884
1990	35,573	10,470	9,182	2,079	2,928	4,072	2,456	64,356	62,277	139,510	252,913
2000	35,775	13,561	7,038	6,244	5,296	5,225	2,444	75,583	69,339	152,307	278,418
2010	39,505	14,392	7,788	9,369	7,575	8,350	2,018	76,073	69,324	160,722	290,799
2020	43,235	16,009	8,538	12,494	9,925	11,475	1,773	79,866	71,496	169,154	305,159
2030	46,965	17,626	9,288	15,619	12,275	14,600	1,527	83,658	73,667	177,586	319,519
2035	48,830	18,435	9,663	17,181	13,450	16,162	1,160	85,555	74,753	181,802	326,699
Change in Persons by Time Period and Jurisdiction											
60-00	2,928	5,382			3,463	1,444	(1,188)	16,916	10,672	38,392	68,653
00-35	13,055	4,874	2,625	10,937	8,154	10,937	(1,284)	9,972	5,414	29,495	48,281
Percent of Change by Time Period and Jurisdiction											
60-70	9%	5%			15%	1%	-30%	7%	6%	16%	18%
70-80	-1%	7%		30%	10%	7%	7%	0%	0%	6%	2%
80-90	1%	14%	9%	50%	27%	0%	-9%	2%	1%	0%	1%
90-00	1%	30%	-23%	200%	81%	28%	0%	17%	11%	9%	10%
00-10	10%	6%	11%	50%	43%	60%	-17%	1%	0%	6%	4%
10-20	9%	11%	10%	33%	31%	37%	-12%	5%	3%	5%	5%
20-30	9%	10%	9%	25%	24%	27%	-14%	5%	3%	5%	5%
30-35	4%	5%	4%	10%	10%	11%	-24%	2%	1%	2%	2%
60-00	9%	66%			189%	38%	-33%	29%	18%	34%	33%
00-35	36%	36%	37%	175%	154%	209%	-53%	13%	8%	19%	17%
Pop and Age b_c.xls	Beloit	Rockton Twp	Town of Beloit	Village of Roscoe	Village of Rockton	South Beloit	Town of Turtle	All Areas Incl'dg Roscoe	All Areas Excl'dg Roscoe	Rock County	Winnebago County

Specifically, for the communities in Illinois the number of new housing permits was used to calculate the current population growth by multiplying the number of permits in each community with the average number of people living in households. In the case of some of the Illinois communities, this yielded a population growth rate of 10% during the period of just one year. However, it was recognized that these communities would not sustain

this high rate indefinitely. Therefore, the high growth rate was used for a few years and then reduced by half for the remaining years. The result is considered reasonably acceptable.

The population numbers shown for the past five decennial censuses show slow growth for Beloit, the SLATS central city. Again however, the City appears to be growing at a higher rate since the 2000 census year (based on annexations and permits issued). Therefore, population figures for Beloit were adjusted upward. A similar adjustment was made for the Town of Beloit. The current populations and population forecasts of the component communities of SLATS are provided in **Chart 3-2**.

The recent and forecasted growth in the Stateline Area is commonly thought to be driven by multiple factors: recent improvements in the local economy and employment picture, competitive housing prices, and increases in commuters to adjacent or nearby urban areas, good schools and a generally healthy and pleasant living environment are just some of the contributors.

Conclusions that can be drawn for the SLATS LRP are as follows.

1. The transportation system should be further developed in the Stateline Area to accommodate population growth, job creation, new investment, and economic development and to avoid increases in congestion or safety problems.
2. Continuing attention needs to be provided toward studying commuter connections between Beloit and Rockford, and between the Rock River Valley area and the North-East Illinois and Chicago area.
3. Continuing attention needs to be paid to the major north-south and east-west connectors linking the area to the Rochelle Inter-Modal Center, and the areas of Madison, Milwaukee, and Chicago and their airports as well the Rockford Airport.

II POPULATION AND AGE DISTRIBUTION

The populations, age distributions, and changes between 1990 and 2000 of the SLATS communities are shown in **Charts 3-3, 3-4, and 3-5**. These illustrations indicate few significance age distribution differences between the area of SLATS, the SLATS communities, the States of Wisconsin and Illinois, or the United States.

Charts 3-3 and 3-4 do, however, demonstrate that population growth rates for the City of Beloit and the Town of Turtle, and to a lesser extent the Town of Beloit, have not kept up with the population growth rates of the States of Wisconsin and Illinois, which themselves have not kept pace with the population growth rate of the United States. On the other hand, the population growth rates of the City of South Beloit and the Village of Rockton have far exceeded the growth rates of the States and the Nation. Nevertheless, the populations of South Beloit and Rockton are fairly small, so it is relatively easy to show a high percentage rate of growth. The same increase in the actual number of people living in Beloit would have yielded a much smaller percentage of increase in the rate of growth. Still, it is widely recognized that significant new population growth is tak-

ing place in suburban (what might be called bedroom) communities on the Illinois side of SLATS. In fact, northern Winnebago County is one of the faster growing areas in Illinois.

Chart 3-3 Population & Age Distribution: Year 1990

Population & Age Distribution: Year 1990						Chart 3-3
Year 1990	Total Pop	Under 25	25-54	55-64	65+	
Beloit	35,573	14,285 40%	13,615 38%	2,907 8%	4,766 13%	
Turtle	2,456	815 33%	1,082 44%	250 10%	309 13%	
Town of Beloit	6,778	2,256 33%	2,803 41%	777 11%	942 14%	
South Beloit	4,072	1,398 34%	1,670 41%	423 10%	581 14%	
Rockton	2,928	989 34%	1,284 44%	264 9%	391 13%	
Subtotal	51,807	19,743 38%	20,454 39%	4,621 9%	6,989 13%	
Wisconsin	4,891,769	1,801,308 37%	2,025,714 41%	413,526 8%	651,221 13%	
Illinois	11,430,602	4,159,316 36%	4,860,056 43%	974,685 9%	1,436,545 13%	
USA	248,709,873	90,342,198 36%	105,977,921 43%	21,147,923 9%	31,241,831 13%	

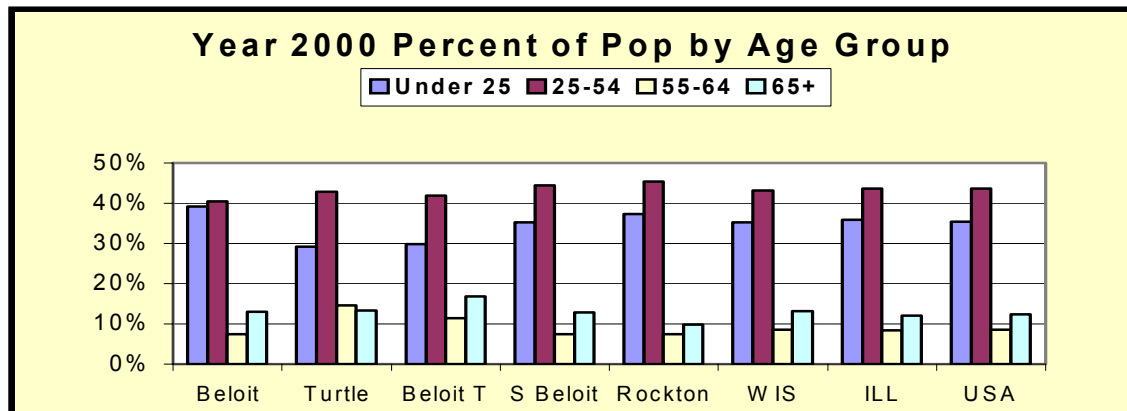
Pop and Age b_c.xls

Chart 3-4 Population & Age Distribution: Year 2000

Population & Age Distribution: Year 2000						Chart 3-4
Year 2000	Total Pop	Under 25	25-54	55-64	65+	
Beloit	35,775	14,008 39%	14,452 40%	2,682 7%	4,633 13%	
Turtle	2,444	713 29%	1,047 43%	357 15%	327 13%	
Town of Beloit	7,038	2,101 30%	2,947 42%	806 11%	1,184 17%	
South Beloit	5,397	1,899 35%	2,401 44%	399 7%	698 13%	
Rockton	5,296	1,976 37%	2,406 45%	394 7%	520 10%	
Subtotal	55,950	20,697 37%	23,253 42%	4,638 8%	7,362 13%	
Wisconsin	5,363,675	1,889,385 35%	2,313,996 43%	457,741 9%	702,553 13%	
Illinois	12,419,293	4,456,349 36%	5,422,286 44%	1,040,633 8%	1,500,025 12%	
USA	281,421,906	99,437,266 35%	122,718,203 44%	24,274,684 9%	34,991,753 12%	

Pop and Age b_c.xls

Chart 3-5 Year 2000 Percent of Pop by Age Group



The following are impacts on the transportation system that can be extrapolated from the analysis.

1. The large numbers of young people and old people, particularly in Beloit, imply a need for transit services and alternative modes for those who don't drive because they are either too young or aged.
2. The increase in the total number of people living in fast growing suburban communities in the Illinois area of SLATS implies a need to examine the safety and capacity of the largely two-lane rural road system serving the area.

Chart 3-5A better illustrates future population changes in the Stateline area by age group that may affect transportation. The data, for Rock County only, is from State of Wisconsin Department of Administration (DOA). It was summarized into the larger age groups used in the previous tables that compare 1990 and 2000 Census data. It shows an eventual stabilization and possible decline in the proportion of the population in the middle age groups, slight growth in the youthful age group (under 25), and substantial growth in the elderly age group (over 65). Because potentially large proportions of the persons in the two extreme age groups (the young and the elderly) are unable to drive or do not have vehicles available, there is likely to be an increase in the need for public or mass transportation. Also, because the youth population is more adaptable to walking, biking, carpooling and general mass transit, changing transportation needs will be more difficult to address for the elderly, who are more fragile, less adaptable, and sometimes without other means of support. If the data is taken at face value, between Years 2000 and 2030, the paratransit needs of the community (service to elderly and disabled persons) will nearly double. Further, although age forecast data was not extracted for Winnebago County, it is unlikely that such data would differ much, considering that County's other similarities with Rock County. And given recent anecdotal evidence of currently unmet paratransit need south of the Stateline (a stream of requests from citizens in Roscoe and Rockton), it seems likely that special or paratransit needs throughout the entire Stateline Area will grow substantially during the time frame of this LRP.

Chart 3-5A Population Projections for Rock Co. by Age

Population Projections for Rock County WI by Age: 2000 - 2030								Chart 3-5A	
Age Group	2000 Census	2005	2010	2015	2020	2025	2030	00-30 Changes	
								%	Persons
0-24	53,476	54,033	53,988	53,864	54,065	55,082	55,830	4.4%	2,354
25-54	66,061	67,010	67,564	67,492	67,403	67,849	69,308	4.9%	3,247
55-64	13,375	15,754	18,436	20,729	21,869	20,955	19,313	44.4%	5,938
65+	19,395	19,894	20,923	23,269	26,311	30,132	33,404	72.2%	14,009
Total	152,307	156,691	160,911	165,354	169,648	174,018	177,855	16.8%	25,548

Age Group	2000	% of Tot	2030	% of Tot	Persons
0-24	53,476	35%	55,830	31%	2,354
25-54	66,061	43%	69,308	39%	3,247
55-64	13,375	9%	19,313	11%	5,938
65+	19,395	13%	33,404	19%	14,009
Total	152,307	100%	177,855	100%	25,548
Young & Elderly Combined	72,871	48%	89,234	50%	16,363
Middle groups Combined	79,436	52%	88,621	50%	9,185
Total	152,307	100%	177,855	100%	25,548

Major Age Group Pop Change

The chart illustrates the projected population changes for four age groups from 2000 to 2030. The 'Middle' group (red squares) shows a steady increase from approximately 78,000 in 2000 to 88,000 in 2030. The 'Young & Elderly' group (black circles) also shows an increase, starting at about 72,000 in 2000 and reaching 89,000 by 2030. The 'Young' group (blue diamonds) remains relatively stable, starting at 53,000 in 2000 and ending at 55,000 in 2030. The 'Elderly' group (green triangles) shows a significant increase, starting at 19,000 in 2000 and rising to 33,000 in 2030.

Source: Wisconsin Dept. of Admin. (www.doa.state.wi.us/)

PopForecast by Cohort.xls

III POPULATION AND ETHNICITY

The tables and graphs on the following page (**Charts 3-6, 3-7 and 3-8**) illustrate the predominant racial and ethnic make-up of SLATS and the changes occurring between 1990 and 2000. The Stateline Area is predominantly White with the percentage of White persons in the Year 2000 falling almost midway between that of Wisconsin (89% White) and Illinois (73% White). Individually, however, the Stateline communities vary considerably. The City of Beloit is only 76% White while the Town of Turtle and the Village of Rockton are 97% White. Interestingly, however, there is an increasing percentage since 1990 in the both the racial minority population and the Hispanic population but not in the Black racial group, particularly in the City of Beloit. A better understanding of the distribution of population groups is possible by looking at Census block data, irrespective of municipal, township or county boundaries. **MAPS 3-1, A thru D**, show the distribution of Whites, Blacks, Persons of Other Races, and Hispanics as per Year 2000 Census data. That the Stateline Area is predominantly White is obvious from **MAP 3-1 A**. Interestingly, however, **MAPS B, C, and D** show very similar distributions of the populations of all the other minority groups, i.e., Blacks, Hispanics and Other Races are largely integrated. More important, a comparison of **MAP A** with **MAPS B, C, and D** shows that there are sizable numbers of Whites in the same areas where there are concentrations of the minorities. Stated in another way, although minorities are not integrated (distributed) throughout all White occupied areas, Whites and minorities are largely integrated in the areas where there are concentrations of minorities.

Chart 3-6 SLATS Racial & Ethnic Population – Year 1990

SLATS Racial & Ethnic Population - Year 1990						Chart 3-6	
Component by Area	Beloit	Turtle Tn	Beloit Tn	S Beloit	Rockton	WIS	ILL
Total population	35,573	2,456	6,778	4,072	2,928	4,891,769	11,430,602
WHITE	29,104	2,398	6,148	3,679	2,878	4,512,523	8,952,978
BLACK	5,575	34	529	223	18	244,539	1,694,273
OTHER RACES	894	24	101	170	32	134,707	783,351
HISPANIC	691	24	92	201	27	93,194	904,446
WHITE	82%	98%	91%	90%	98%	92%	78%
BLACK	16%	1%	8%	5%	1%	5%	15%
OTHER RACES	3%	1%	1%	4%	1%	3%	7%
HISPANIC	2%	1%	1%	5%	1%	2%	8%

Source: US Census

Race and Hispanic Summary.xls

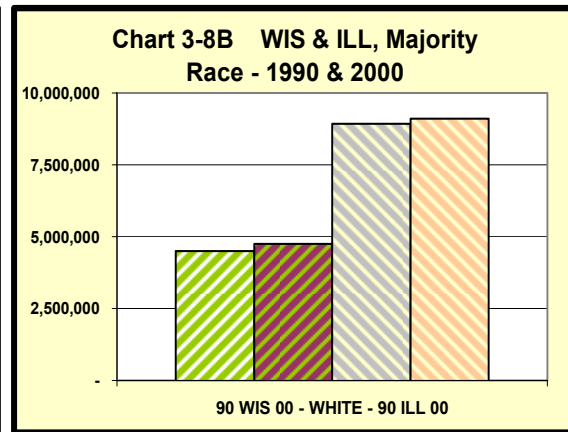
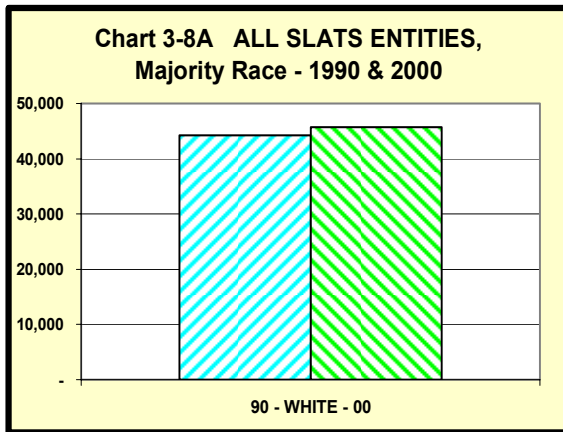
Chart 3-7 Racial & Ethnic Population – Year 2000

SLATS Racial & Ethnic Population - Year 2000						Chart 3-7	
Component by Area	Beloit	Turtle Tn	Beloit Tn	S Beloit	Rockton	WIS	ILL
Total population	35,775	2,444	7,038	5,397	5,296	5,363,675	12,419,293
WHITE	27,034	2,377	6,334	4,812	5,162	4,769,857	9,125,471
BLACK	5,497	36	470	215	37	304,460	1,876,875
OTHER RACES	3,683	37	273	419	142	379,751	1,845,160
HISPANIC	3,257	25	182	366	81	192,921	1,530,262
WHITE	76%	97%	90%	89%	97%	89%	73%
BLACK	15%	1%	7%	4%	1%	6%	15%
OTHER RACES	10%	2%	4%	8%	3%	7%	15%
HISPANIC	9%	1%	3%	7%	2%	4%	12%

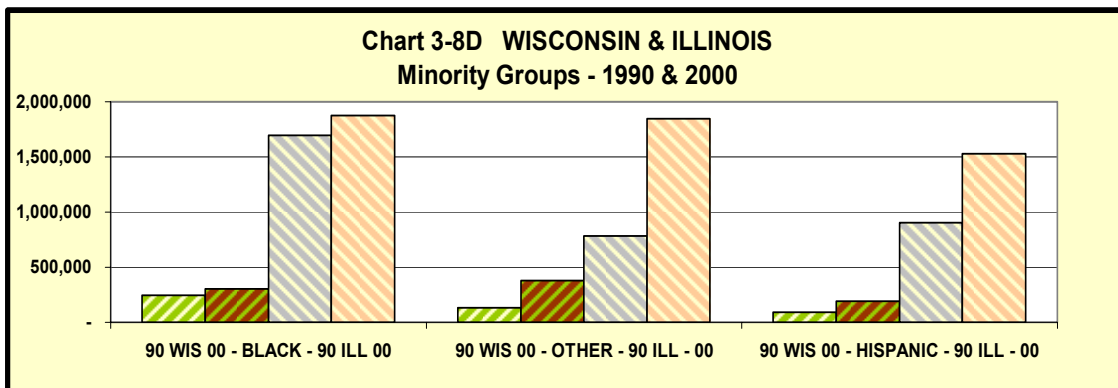
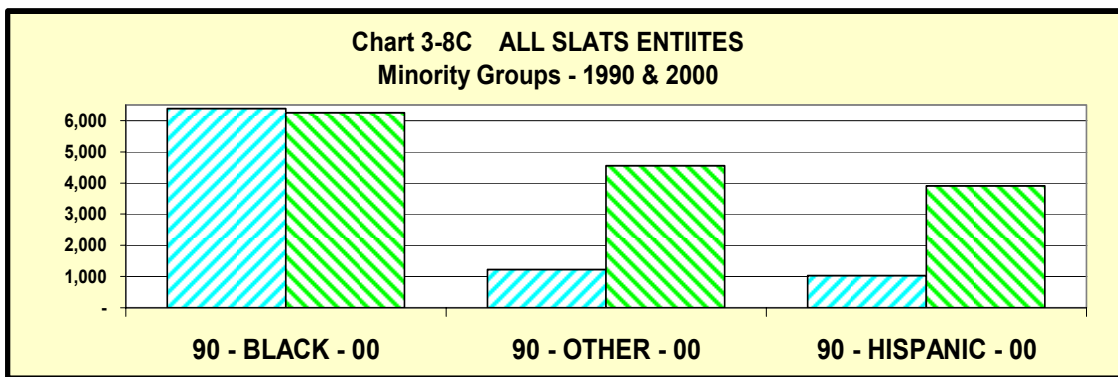
Source: US Census

Race and Hispanic Summary.xls

Charts 3-8 A&B Majority Race Change



Charts 3-8 C&D Minority Group Changes



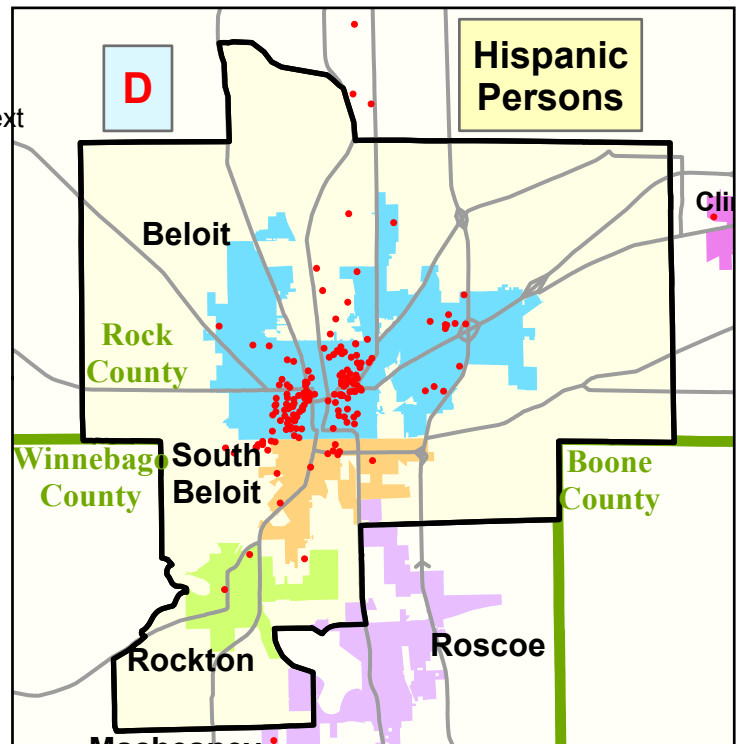
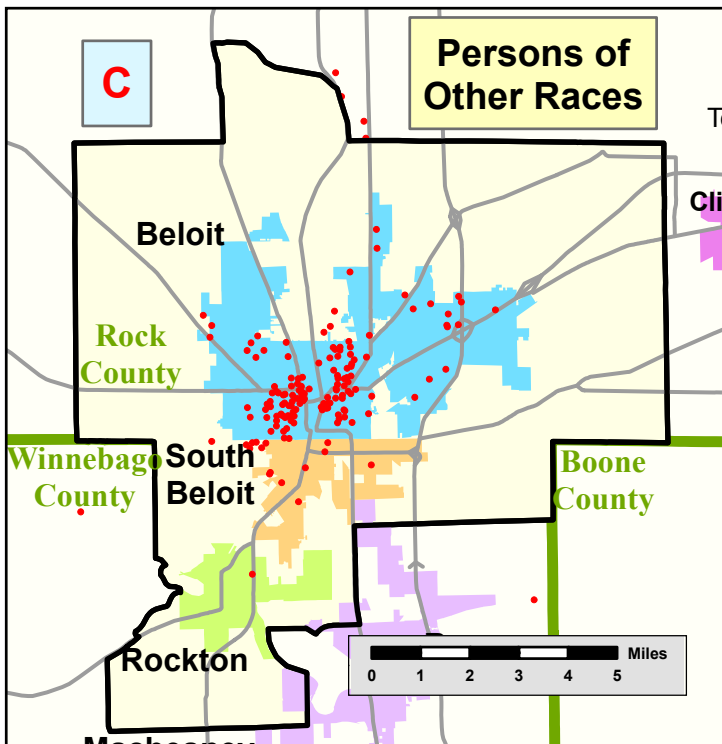
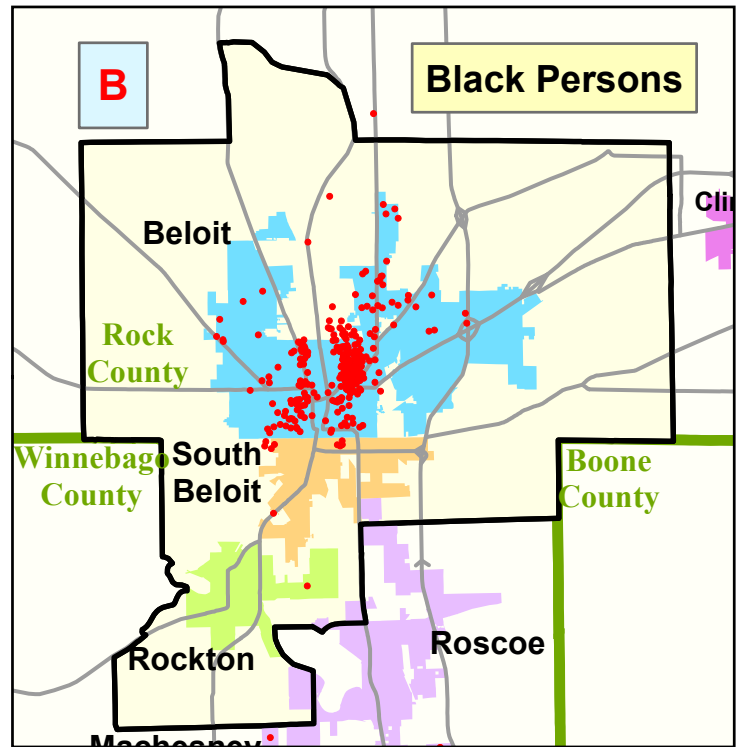
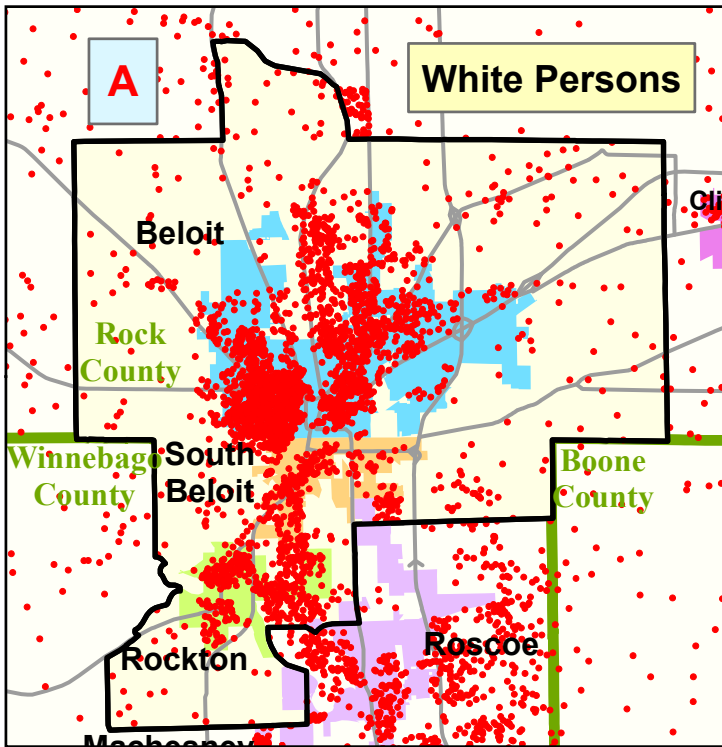
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Maps 3-1A, B, C, D

**Distribution of Persons by Race
or Major Ethnic Group**

1 Dot = 20 Persons



IV INCOME

Displayed on the following pages are tables and bar diagrams (**Charts 3-9 thru 3-12**) depicting income, income changes, and income distributions in the SLATS communities over the most recent decade according to the US Census.

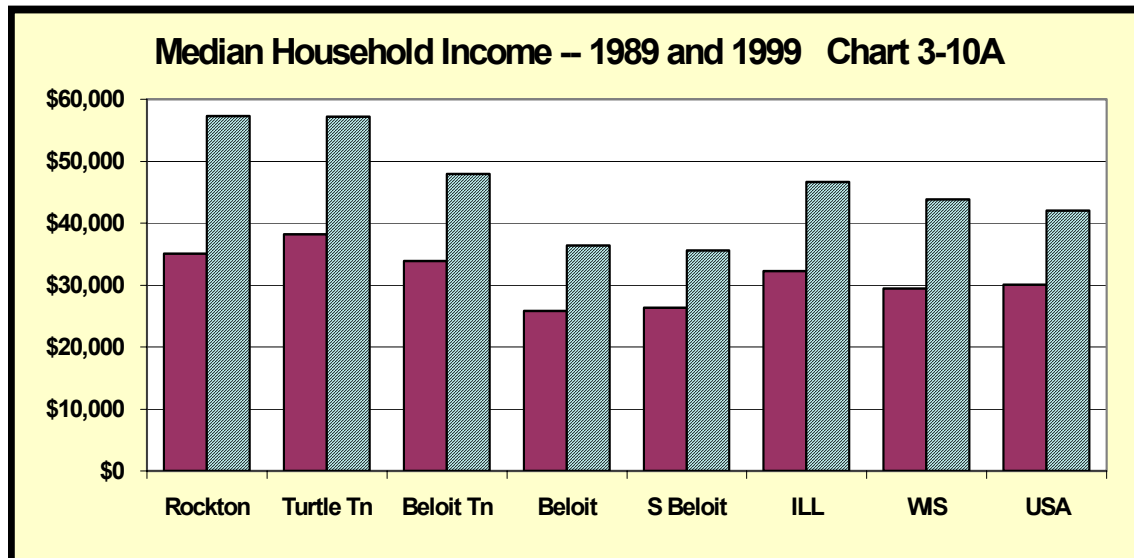
Chart 3-9 Median Household Income

Median Household Income: 1989 and 1999									Chart 3-9
Median HH Income by Area & Year	Village of Rockton	Town of Turtle	Town of Beloit	City of Beloit	City of S. Beloit	State of Illinois	State of Wisconsin	USA	
1989	\$35,078	\$38,203	\$33,824	\$25,859	\$26,331	\$32,252	\$29,442	\$30,056	
1999	\$57,292	\$57,188	\$47,970	\$36,414	\$35,597	\$46,590	\$43,791	\$41,994	
% Increase	39%	33%	29%	29%	26%	31%	33%	28%	

Source: US Census

Incom e.xls

Chart 3-10A Median Household Income graph



These illustrations demonstrate that there is a wide range of incomes among the major communities within the Stateline Area. Two of the communities, Beloit and South Beloit have median incomes slightly lower than the States or the Country as a whole. However, the other three communities have median incomes that are higher than the States or the Nation. The Village of Rockton and the Town of Turtle have median incomes significantly higher, with much larger proportions of their households in the higher income categories. Possibly more important, however, is the fact that all of the communities in the Stateline Area showed growth in their median incomes during the 1990s decade.

Two of them grew more than the State. Four grew more than the nation as a whole. Only South Beloit grew at a slower rate (26%) than the nation (28%).

Chart 3-10B Percent Increase in Median HH Income graph

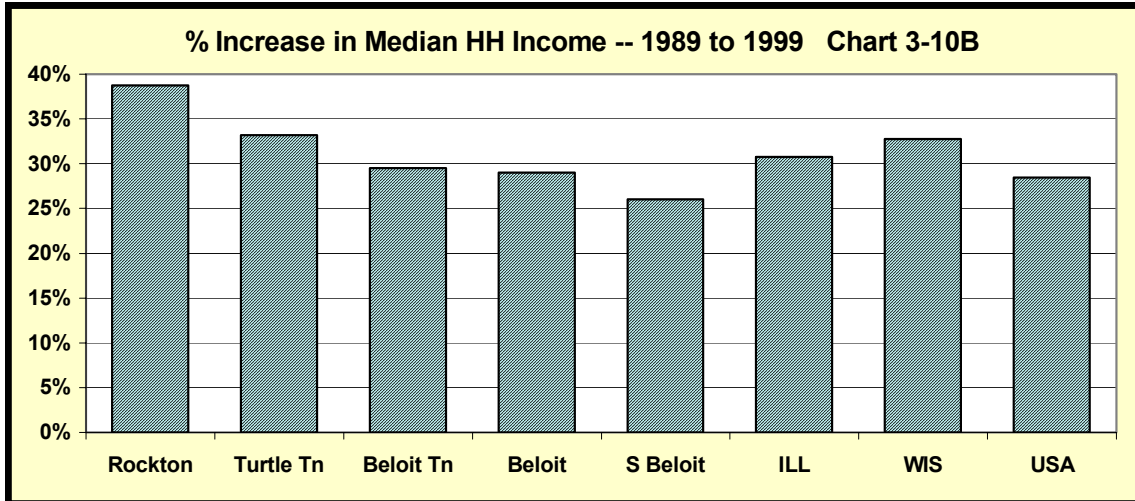


Chart 3-11 Income: 1989 SLATS compared to States & Nation

Income: 1989 -- SLATS Communities compared to States & Nation Chart 3-11								
Area / Category	Sorted by Highest to Lowest Median Household Income \$ -- Source: US Census							
	Town of Turtle	Village of Rockton	Town of Beloit	State of Illinois	USA	State of Wisconsin	City of S. Beloit	City of Beloit
1989								
Households	886	1,223	2,512	4,197,720	91,993,582	1,824,252	1,686	13,380
Under \$25K	28%	37%	37%	38%	42%	42%	48%	48%
\$25-\$50 K	41%	37%	37%	35%	34%	38%	40%	37%
\$50-\$100K	29%	25%	24%	22%	20%	18%	11%	14%
\$100K or more	2%	2%	2%	5%	4%	3%	2%	1%
Median HH Income \$	\$38,203	\$35,078	\$33,824	\$32,252	\$30,056	\$29,442	\$26,331	\$25,859

Chart 3-12 Income: 1999 SLATS compared to States & Nation

Income: 1999 -- SLATS Communities compared to States & Nation Chart 3-12								
Area / Category	Sorted by Highest to Lowest Median Household Income \$ -- Source: US Census							
	Village of Rockto	Town of Turtle	Town of Beloit	State of Illinois	State of Wisconsin	USA	City of Beloit	City of S. Beloit
1999								
Households	1,970	1,004	2,739	4,592,740	2,086,304	105,539,122	13,424	2,193
Under \$25K	11%	16%	23%	25%	26%	29%	33%	32%
\$25-\$50 K	30%	23%	30%	28%	31%	29%	34%	35%
\$50-\$100K	43%	47%	39%	32%	34%	30%	27%	29%
\$100K or more	16%	14%	8%	14%	9%	12%	6%	3%
Median HH Income \$	\$57,292	\$57,188	\$47,970	\$46,590	\$43,791	\$41,994	\$36,414	\$35,597




MAPS 3-2 A thru C better illustrate the distribution of incomes in the Stateline Area. To avoid the debate over what might be considered "poverty level" these maps are based on a simple division of households into three categories: those having annual incomes in the \$20,000 or lower range, those with incomes between \$20,000 and \$100,000, and those with incomes over \$100,000. The data is from the Year 2000 Census and tabu-

lated to the smallest geographic unit available for income data -- block groups. Although smaller geographic units would be desirable to be more definitive, the data seems to indicate that the low-income households are somewhat dispersed rather than concentrated into tight "ghetto-like" pockets. And although not entirely homogenous, it seems, from these maps, that low-, moderate-, and high-income households are intermingled throughout much of the Stateline area. Further, by comparing these income distribution maps with the racial and ethnic distribution maps (**MAPS 3-1 A thru D**), it appears that low-income households are not solely concentrated in minority areas but are also interspersed in the majority "white" areas.

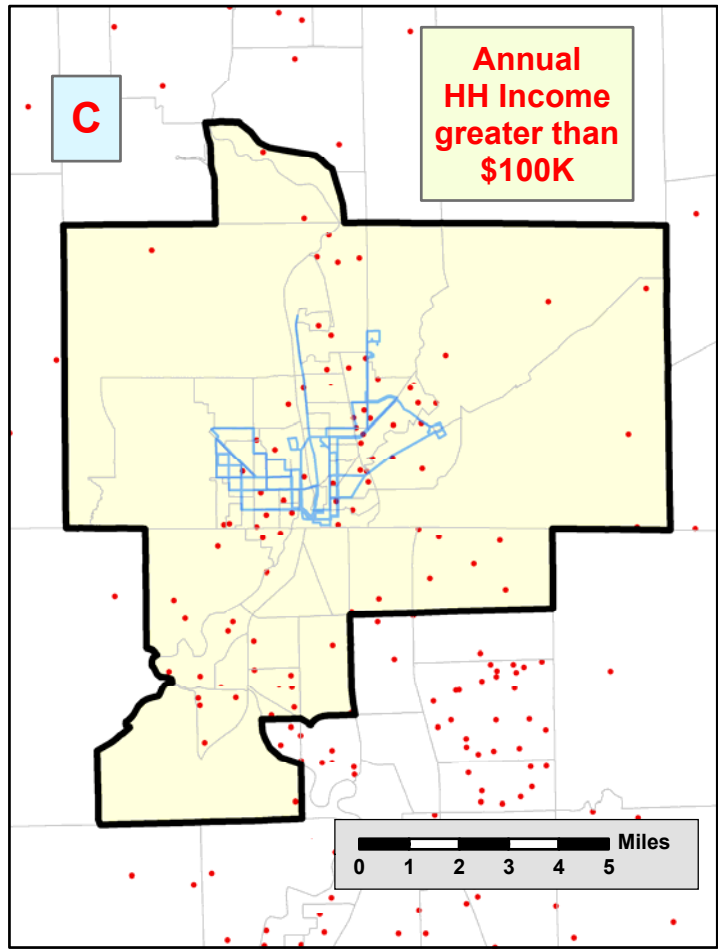
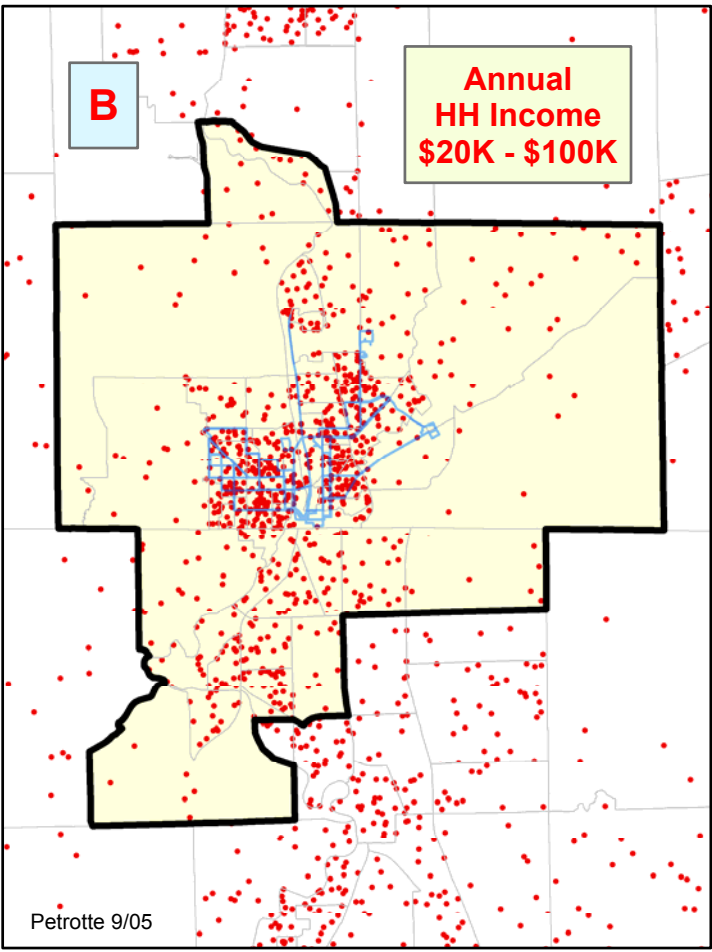
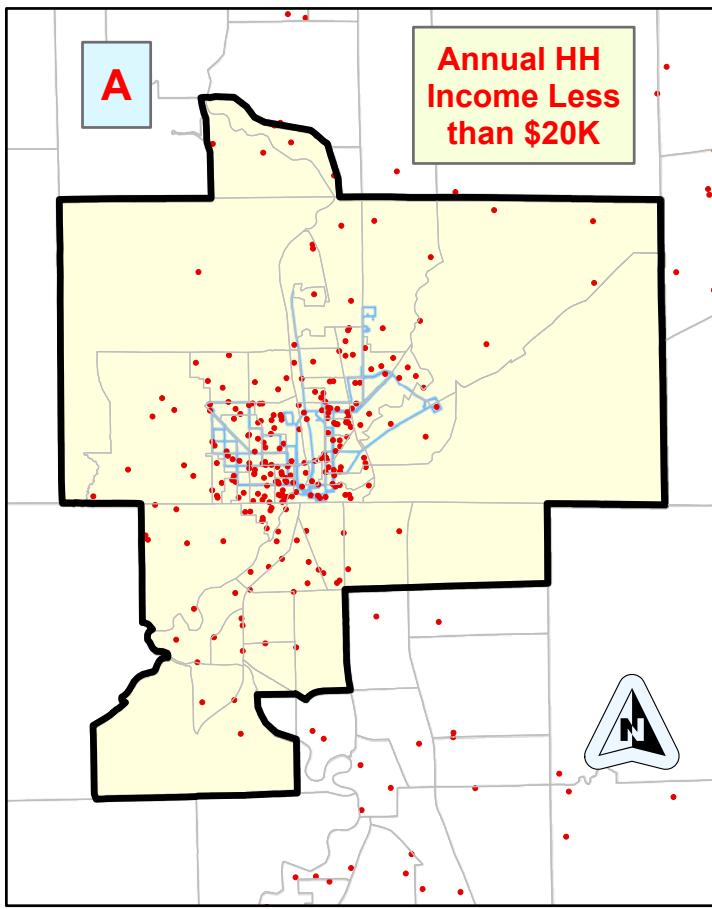
**StateLine Area
Transportation Study**
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**Household
Distribution by
Annual Income
Ranges**

**Maps 3-2
A, B, C**

-  BTS Transit Routes
-  SLATS MPA
-  Census Block Groups

1 Dot = 20 Households



Petrotte 9/05

V EMPLOYMENT

Derived from Census data **Chart 3-13** shows the labor force, employment, and unemployment situation in the main SLATS communities in the Years 1990, 2000 and 2005. The table shows that the actual number of people employed from the various communities held steady between 1990 and 2000 in the largest community of the Stateline Area, Beloit; grew slightly in the Towns of Turtle and Beloit and the City of South Beloit; and grew substantially in the Village of Rockton. All in all, the number of employed persons in these main communities grew by 1,585 or 6.5% in the 1990's decade. This growth, however, did not keep pace with the State of Wisconsin or the Nation as a whole. Employment in those entities grew by 14.6% and 12.1%, respectively -- nearly double the rate in the Stateline Area. Even the State of Illinois grew by a slightly higher rate -- 7.7%. Nevertheless, a 6.5% growth in employment is far from stagnation or decline, and with none of the component entities showing a net decline in employment, the Stateline Area should be regarded as a "growth" community.

Chart 3-13 Employment 1990, 2000 & Current

Employment / Unemployment by Jurisdiction: 1990, 2000 & Current								Chart 3-13	
1990	Persons by Area	Beloit	Turtle T	Beloit T	S Beloit	Rockton	WIS	Ill	USA
	Persons 16 years & over	26,417	1,930	5,290	3,237	2,320	3,732,898	8,796,610	191,829,271
	Civilian labor force	17,375	1,344	3,685	2,148	1,619	2,517,238	5,803,007	123,473,450
	Employed	15,920	1,298	3,505	2,029	1,576	2,386,439	5,417,967	115,681,202
	Unemployed	1,455	46	180	119	43	130,799	385,040	7,792,248
	% Unemp.	8.40%	3.40%	4.90%	5.50%	2.70%	5.20%	6.60%	6.30%
2000	Persons 16 years & over	26,876	2,114	5,523	3,943	3,832	4,157,030	9,530,946	217,168,077
	Civilian labor force	17,449	1,506	3,705	2,669	2,696	2,869,236	6,208,597	137,668,798
	Employed	15,840	1,444	3,450	2,534	2,645	2,734,925	5,833,185	129,721,512
	Unemployed	1,609	62	255	135	51	134,311	375,412	7,947,286
	% Unemp.	9.20%	4.10%	6.90%	5.10%	1.90%	4.70%	6.00%	5.80%
Aug 2005 Est.	Persons by Area	Beloit	Rock County	Winnebago County	WIS	Ill	USA		
	Total labor force	17,596	84,945	146,210	3,058,100	6,507,351	150,469,000		
	Employed	16,382	80,776	136,920	2,927,900	6,139,211	143,142,000		
	Unemployed	1,655	4,169	9,290	130,200	368,140	7,327,000		
	% Unemp.	7.10%	4.90%	6.35%	4.26%	5.66%	4.90%		
% Unemp. a yr ago	7.70%	5.20%	7.20%	4.50%	6.10%	5.40%			

1 1990 and 2000 values from US Census information.

Employment g.xls

2 Current infor from the Ill. Dept. of Employment Securities and the Wis. Dept. of Workforce Development.

Unemployment rates are often considered a measure of the health of an area's economy even though both the accuracy of the statistic and the desirable rate is often debatable. Unemployment rates can vary considerably depending on many factors including the month of the year (because some work is seasonal), the number of persons assumed in the labor force, and others. A very low unemployment rate is good from the standpoint of providing all households with income but can pose difficulties for employers seeking new employees for growth or workforce maintenance. In the Stateline Area, several sources can be consulted for unemployment rates including the State of Illinois Bureau of Employment Securities, the Wisconsin Department of Workforce Development, the US Department of Labor, and the US Bureau of the Census. **Charts 3-14 A thru C** pose another look at employment and unemployment related to the Stateline Area. Obtained from the US Bureau of Labor's web site, **3-14 A thru C** provide an employment picture for all of Winnebago and Rock Counties for each year from 1995 through 2004, along with comparative statistics for Illinois, Wisconsin and the Nation.

Chart 3-14A Recent Employment Data

Recent Employment Data for Rock & Winnebago Counties compared to the States and the Nation													Chart 3-14A					
YEAR	Rock County			Winnebago County			ILLINOIS***			WISCONSIN***			USA***			Rock & Winn.		
	Employed & Unemployed (1,000s)	% Un		Employed & Unemployed (1,000s)	% Un		Employed & Unemployed (1,000)	% Un		Employed & Unemployed (1,000)	% Un		Employed & Unemployed (1,000)	% Un		Employed & Unemployed (1,000)	% Un	
1995	* 76.2	3.2	4.0	* 140.4	5.8	3.9	5,858	321	5.2	2,774	108	3.7	124,900	7,404	5.6	225	9	4.0
1996	* 76.4	3.1	3.9	* 141.1	6.6	4.5	5,907	332	5.3	2,816	105	3.6	126,708	7,236	5.4	227	10	4.3
1997	* 77.8	3.3	4.0	* 143.6	6.7	4.5	5,988	302	4.8	2,856	103	3.5	129,558	6,739	4.9	231	10	4.3
1998	* 76.9	3.2	3.9	* 142.3	6.4	4.3	6,047	284	4.5	2,870	97	3.3	131,463	6,210	4.5	229	10	4.2
1999	* 76.6	3.2	4.0	* 142.7	6.6	4.4	6,143	286	4.5	2,879	91	3.1	133,488	5,880	4.2	229	10	4.3
2000	** 79.4	3.4	4.1	** 139.5	6.7	4.6	6,181	290	4.5	2,891	101	3.4	136,891	5,692	4.0	229	10	4.4
2001	** 79.2	4.6	5.5	** 135.3	8.7	6.0	6,122	351	5.4	2,899	133	4.4	136,933	6,801	4.7	228	13	5.8
2002	** 77.9	5.0	6.1	** 130.5	10.5	7.5	5,961	417	6.5	2,877	161	5.3	136,485	8,378	5.8	224	16	7.0
2003	** 78.3	5.2	6.2	** 128.4	11.6	8.3	5,934	427	6.7	2,897	172	5.6	137,736	8,774	6.0	223	17	7.5
2004	** 79.4	4.7	5.6	** 129.2	10.9	7.8	6,000	396	6.2	2,919	152	4.9	139,252	8,149	5.5	224	16	6.9

Source: US Bureau of Labor <http://data.bls.gov/>

Employment g.xls

** : Reflects 2000-based geography, new model controls, 2000 Census inputs, and methodological changes.

* : Reflects 2000 Census-based geography & model-based controls at the state level
 *** : Reflects new modeling approach and reestimation as of March 2005.

The data in **3-14 A thru C** indicates the following for the last decade, 1995-2004:

1. A fluctuating decline in the number of employed persons in Winnebago County with a recent upturn. Winnebago County also shows that largest range in unemployment rates (going as low as 3.9% in 1995 and as high as 8.3% in 2003) and the highest recorded rate (8.3% in 2003).
2. Rock County, on the other hand, showed a more stable and slightly growing number of employed persons. Unemployment rates in Rock County began slightly higher than Winnebago County (4.0 in 1995) and followed a polynomial trend line similar to all the entities tracked, but generally maintained an unemployment rate lower than Winnebago County and Illinois and only slightly higher than Wisconsin and the Nation.
3. The States of Wisconsin and Illinois have employment numbers that are close to flat, but not declining. Rock County closely parallels the States.

4. As noted, unemployment rates in all the entities show a similar polynomial trend line including a sharp rise since the Year 2000 and a recent downturn 2003 and 2004. This recent downturn appears to be continuing in 2005 (data not depicted in the table).
5. Overall the employment numbers and unemployment rates do not reflect a floundering economy in the Stateline area and generally reflect the situations in their respective States and the Nation.

Chart 3-14B Recent Employment Trends

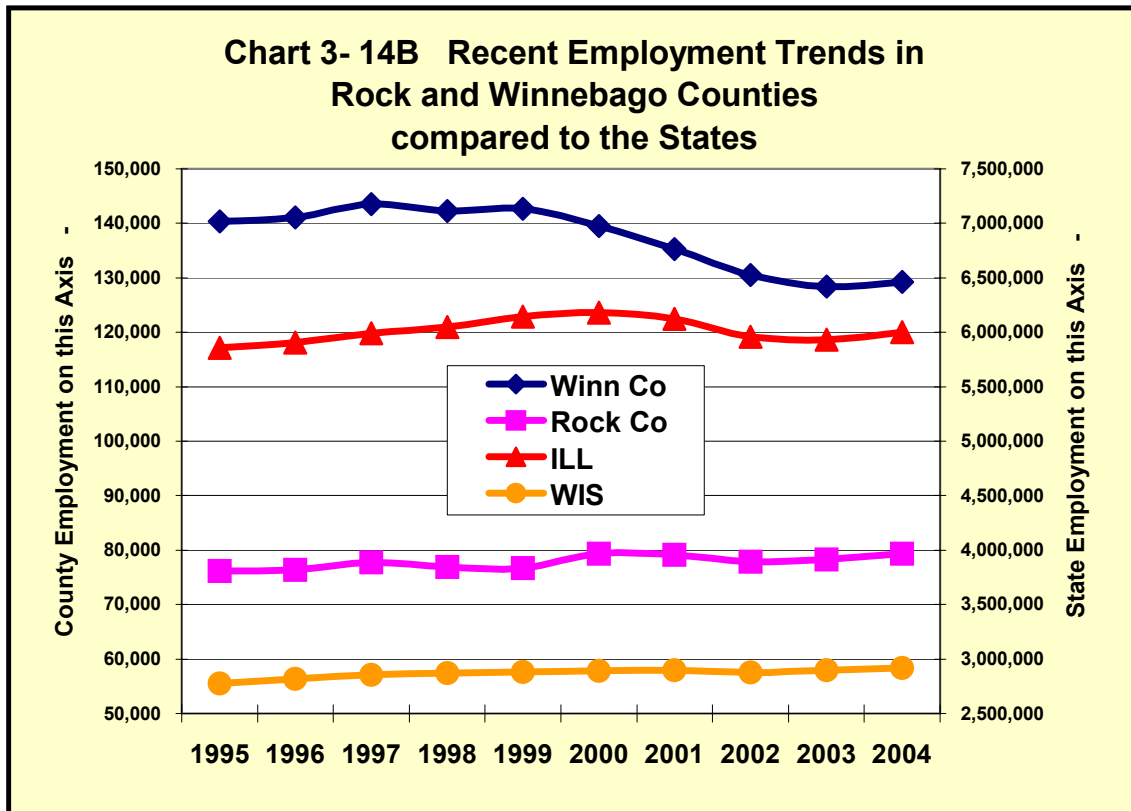
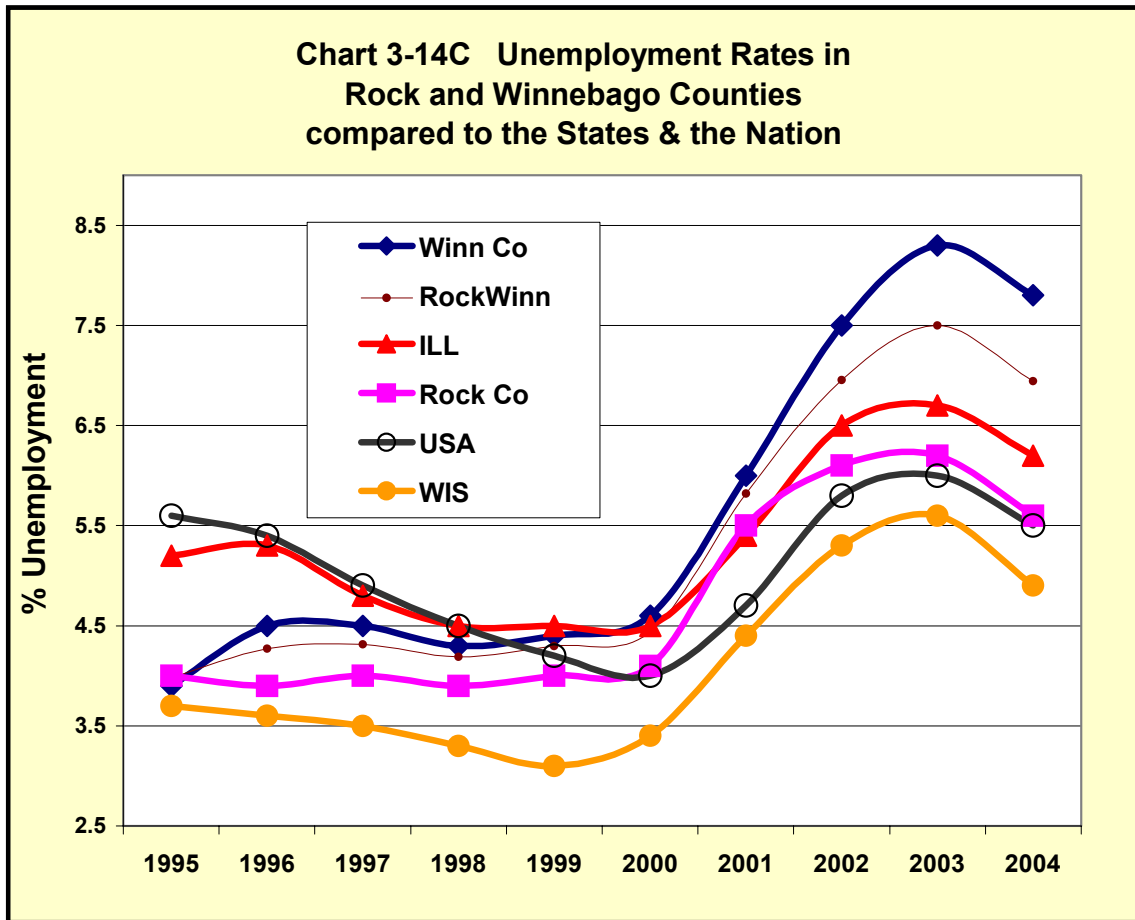


Chart 3-14C Unemployment Rates



VI FUTURE EMPLOYMENT FORECASTS

Employment forecasts were obtained from two sources: the Wisconsin Department of Workforce Development, Office of Economic Advisors (specifically their Web site at <http://www.dwd.state.wi.us/oea/>) and the Illinois Department of Employment Security (specifically at <http://lmi.ides.state.il.us/projections/employproj.htm>). Both sites provided Year 2002 employment estimates and employment projections for Year 2012. This Illinois site provided the data by county and data was extracted for Winnebago County. The smallest area the Wisconsin site provided was for the southwest Wisconsin region (starting at Rock County and extending westward along the bottom tier of counties, west to the Mississippi River). The data is summarized in **Chart 3-15** and illustrated in **Chart 3-16**

Chart 3-15 Occupation Estimates & Projections 2002-2012

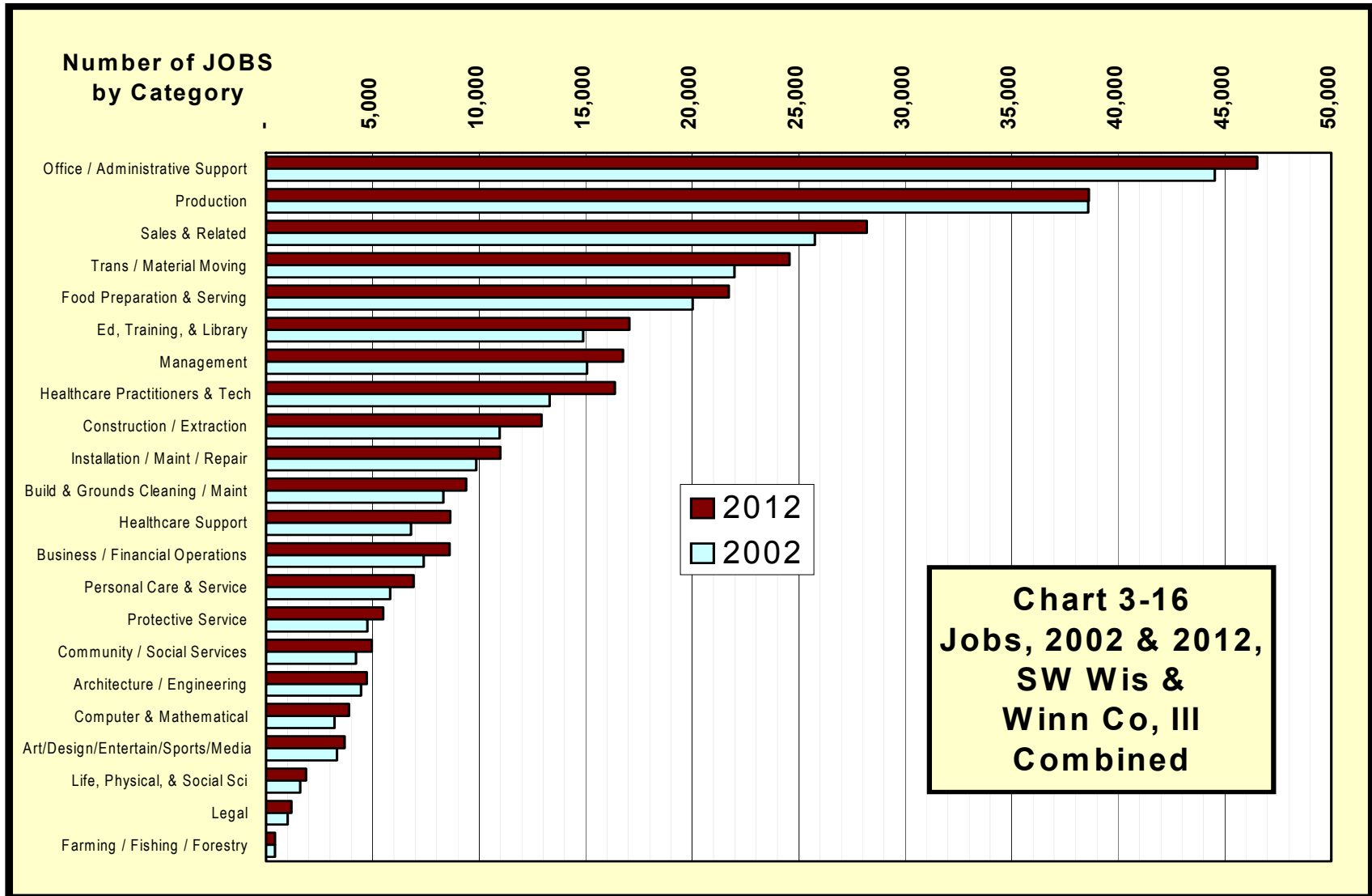
Occupation Estimates & Projections 2002-2012														Chart 3-15					
SOC Code	Occupational Title	Southwest Wisconsin Workforce Development Area				Winnebago Co. IL				SW WI plus Winnebago County IL									
		Employment				Employment				Employment									
		Base 2002	Projected 2012	Chg	% Chg	Base 2002	Projected 2012	Chg	% Chg	Base 2002	Projected 2012	Chg	% Chg						
43-0000	Office / Administrative Support	20,190	17%	22,360	17%	2,170	10.7%	24,341	16%	24,172	15%	(169)	-0.7%	44,531	17%	46,532	16%	2,001	4.5%
51-0000	Production	17,490	15%	17,740	13%	250	1.4%	21,116	14%	20,890	13%	(226)	-1.1%	38,606	14%	38,630	13%	24	0.1%
41-0000	Sales & Related	11,610	10%	13,140	10%	1,530	13.2%	14,161	10%	15,065	9%	904	6.4%	25,771	10%	28,205	10%	2,434	9.4%
53-0000	Trans / Material Moving	10,140	9%	11,740	9%	1,600	15.8%	11,847	8%	12,824	8%	977	8.2%	21,987	8%	24,564	8%	2,577	11.7%
35-0000	Food Preparation & Serving	9,750	8%	10,910	8%	1,160	11.9%	10,261	7%	10,804	7%	543	5.3%	20,011	8%	21,714	7%	1,703	8.5%
25-0000	Ed, Training, & Library	7,230	6%	8,580	6%	1,350	18.7%	7,652	5%	8,473	5%	821	10.7%	14,882	6%	17,053	6%	2,171	14.6%
11-0000	Management	4,400	4%	5,150	4%	750	17.0%	10,674	7%	11,603	7%	929	8.7%	15,074	6%	16,753	6%	1,679	11.1%
29-0000	Healthcare Practitioners & Tech	5,360	5%	6,940	5%	1,580	29.5%	7,942	5%	9,431	6%	1,489	18.7%	13,302	5%	16,371	6%	3,069	23.1%
47-0000	Construction / Extraction	4,830	4%	5,810	4%	980	20.3%	6,132	4%	7,125	4%	993	16.2%	10,962	4%	12,935	4%	1,973	18.0%
49-0000	Installation / Maint / Repair	4,590	4%	5,240	4%	650	14.2%	5,263	4%	5,766	4%	503	9.6%	9,853	4%	11,006	4%	1,153	11.7%
37-0000	Build & Grounds Cleaning / Maint	3,550	3%	4,100	3%	550	15.5%	4,770	3%	5,294	3%	524	11.0%	8,320	3%	9,394	3%	1,074	12.9%
31-0000	Healthcare Support	3,240	3%	4,320	3%	1,080	33.3%	3,555	2%	4,323	3%	768	21.6%	6,795	3%	8,643	3%	1,848	27.2%
13-0000	Business / Financial Operations	2,820	2%	3,470	3%	650	23.0%	4,586	3%	5,140	3%	554	12.1%	7,406	3%	8,610	3%	1,204	16.3%
39-0000	Personal Care & Service	2,670	2%	3,350	2%	680	25.5%	3,158	2%	3,583	2%	425	13.5%	5,828	2%	6,933	2%	1,105	19.0%
33-0000	Protective Service	2,200	2%	2,570	2%	370	16.8%	2,547	2%	2,922	2%	375	14.7%	4,747	2%	5,492	2%	745	15.7%
21-0000	Community / Social Services	1,750	1%	2,110	2%	360	20.6%	2,476	2%	2,866	2%	390	15.8%	4,226	2%	4,976	2%	750	17.7%
17-0000	Architecture / Engineering	1,740	1%	1,910	1%	170	9.8%	2,708	2%	2,808	2%	100	3.7%	4,448	2%	4,718	2%	270	6.1%
15-0000	Computer & Mathematical	1,360	1%	1,800	1%	440	32.4%	1,843	1%	2,090	1%	247	13.4%	3,203	1%	3,890	1%	687	21.4%
27-0000	Art/Design/Entertain/Sports/Media	1,350	1%	1,550	1%	200	14.8%	1,971	1%	2,143	1%	172	8.7%	3,321	1%	3,693	1%	372	11.2%
19-0000	Life, Physical, & Social Sci	870	1%	1,030	1%	160	18.4%	734	0%	829	1%	95	12.9%	1,604	1%	1,859	1%	255	15.9%
23-0000	Legal	390	0%	470	0%	80	20.5%	622	0%	719	0%	97	15.6%	1,012	0%	1,189	0%	177	17.5%
45-0000	Farming / Fishing / Forestry	140	0%	140	0%	-	0.0%	264	0%	263	0%	(1)	-0.4%	404	0%	403	0%	(1)	-0.2%
Total, All Occupations		117,670	100%	134,430	100%	16,760	14.2%	148,623	100%	159,133	100%	10,510	7.1%	266,293	100%	293,563	100%	27,270	10.2%

Source: State of Illinois Bureau of Employment Securities (Website)

9/13/05

WI Dept. of Workforce Development, Office of Economic Advisors, October 2004

Chart 3-16 Jobs, 2002 & 2012



Looking first at the SW Wisconsin data, there were an estimated 117,680 jobs in the six counties in the SW area (Grant, Green, Iowa, Lafayette, Richland, and Rock). By 2012, the area is forecasted to increase its jobs by 14.2% to 134,430 (16,760 new jobs). The largest number of jobs is and will remain in the Office / Administrative Support category (17%), followed closely by the Production Occupations. However, it is forecasted that the former category will grow by over 2,000 jobs by 2012 while the latter will only grow by 250 new jobs. Most job growth will be in the healthcare categories (over 2,500 when practitioners and support jobs are combined). Transportation and Material Moving occupations will also grow by 1,600 jobs, nearly 16%.

The situation in Winnebago County is quite similar to that of the six SW area Wisconsin counties combined. In Winnebago County there were 148,623 occupations in 2002. Growth is not forecasted to be as large as in the Wisconsin counties but will amount to 10,510 new jobs or a 7.1% increase. The largest numbers of jobs are in the same categories: Office and Administrative Support jobs and Production jobs. Again the largest growth categories will be in the healthcare industries.

Looking at SW Wisconsin and Winnebago County combined, over 27,000 new jobs are forecasted between 2002 and 2012 and almost 5,000 of these will be in healthcare. Substantial numbers of new jobs will be created in Office work, Sales, Transportation, Construction, and Food Preparation. Production work jobs are forecasted to grow by less than a tenth of a percent but will continue to comprise over 13% of the area's occupation. As expected, the Farming / Fishing / Forestry occupations will hold stable or decline.

VII WHERE WORKERS COMMUTE

The above discussions have focused on the number of jobs and the number of people residing in the Stateline Area, and the expectations as to whether these numbers will change in the future. These numbers are important for transportation planning but leave much to be desired in terms of predicting future transportation needs. Ideally, transportation planners seek travel origin / destination information to determine the need for new roads and transportation services. Unfortunately, origin/destination information is difficult and expensive to obtain and seldom available at the level of detail desired.

However, it has long been known that transportation is strongly related to places of residence and places of work. Simply stated, people travel primarily from where they live to where they work, and vice-versa. And, although people also travel strictly for non-work related reasons (shopping, recreation and other services), they frequently look to places close to either their homes or their jobs for these other trip purposes.

Lacking more dedicated and precise origin/destination data (no such surveys have been done in the Stateline Area for quite some time), the "worker commute" data gathered as part of the Year 2000 Census can offer some insights. As part of that Census, persons were asked where and how they traveled to work daily. Reporting and analyzing the details of this information is a study in itself, beyond the scope or needs of this LRP. However, some of the information is presented herein for the sake of showing the interaction between the Stateline Area and the larger northern Illinois and southern Wisconsin region. **Chart 3-17**, on the following page shows worker data for Rock and Winnebago Counties relative to other nearby counties. The information is further illustrated in **MAPS 3-3 A thru D**.

The following observations are important.

1. Most obvious from the data noted above, neither Winnebago nor Rock Counties can be considered "bedroom communities," i.e., communities where people live but do not work. The great majority of workers who live in either one of these counties also work in these counties (78% in Rock and 87% in Winnebago).
2. Considerable travel for work does, however, occur between the two counties. Of the workers who reside in Rock County, nearly 5,000 travel to Winnebago County for work. Of those who reside in Winnebago County, over 3,000 travel to Rock County for work.
3. Although small in comparison to the internal work commutes, travel to and from many outlying counties for work is substantial. Most of this appears to be within a 20-30 mile radius, but some is considerably farther with substantial amounts to the Milwaukee and Chicago areas.

Chart 3-17 Workers Commute Summary

Workers Commute Summary												Chart 3-17		
RESIDED in ROCK CO			WORKED in ROCK CO			RESIDED in WINNEBAGO CO			WORKED in WINNEBAGO CO					
Worked in Co below			Resided in Co below			Worked in Co below			Resided in Co below					
County	Wkrs	%	County	Wkrs	%	County	Wkrs	%	County	Wkrs	%			
Rock WI	58,246	78%	Rock WI	58,246	85%	Winnebago IL	115,211	87%	Winnebago IL	115,211	83%			
Dane WI	5,021	6.7%	Winnebago IL	3,158	4.6%	1	Boone IL	4,396	3.3%	Boone IL	5,874	4.2%		
Winnebago IL	4,871	6.5%	Dane WI	2,020	3.0%	2	Rock WI	3,158	2.4%	Ogle IL	4,987	3.6%		
Walworth WI	2,383	3.2%	Green WI	1,308	1.9%	3	McHenry IL	1,815	1.4%	Rock WI	4,871	3.5%		
Jefferson WI	1,262	1.7%	Walworth WI	1,284	1.9%	4	Cook IL	1,784	1.3%	Stephenson IL	2,417	1.7%		
Green WI	594	0.8%	Jefferson WI	734	1.1%	5	Ogle IL	1,458	1.1%	DeKalb IL	779	0.6%		
McHenry IL	514	0.7%	Waukesha WI	133	0.2%	6	Stephenson IL	841	0.6%	McHenry IL	616	0.4%		
Boone IL	414	0.6%	Milwaukee WI	123	0.2%	7	Kane IL	649	0.5%	Cook IL	594	0.4%		
Milwaukee WI	245	0.3%	Boone IL	84	0.1%	8	DeKalb IL	636	0.5%	Lee IL	404	0.3%		
Waukesha WI	203	0.3%	Kane IL	74	0.1%	9	DuPage IL	492	0.4%	Kane IL	252	0.2%		
Cook IL	173	0.2%	Stephenson IL	68	0.1%	10	Dane WI	201	0.2%	Green WI	217	0.2%		
Racine WI	106	0.1%	Racine WI	48	0.1%	11	Walworth WI	183	0.1%	Lake IL	179	0.1%		
Columbia WI	72	0.1%	Sauk WI	41	0.1%	12	Lake IL	172	0.1%	Carroll IL	169	0.1%		
Lake IL	60	0.1%	Richland WI	41	0.1%	13	Milwaukee WI	152	0.1%	Dane WI	158	0.1%		
Dodge WI	43	0.1%	Ogle IL	40	0.1%	14	Lee IL	85	0.1%	Walworth WI	156	0.1%		
Winnebago WI	43	0.1%	Washington WI	36	0.1%	15	Green WI	61	0.0%	Jo Daviess IL	122	0.1%		
Remaining 39 Counties	485	0.6%	Remaining 106 Counties	914	1.3%		Remaining 105 Counties	1,337	1.0%	Remaining 128 Counties	1,486	1.1%		
Total	74,735	100%	Total	68,352	100%		Total	132,631	100%	Total	138,492	100%		

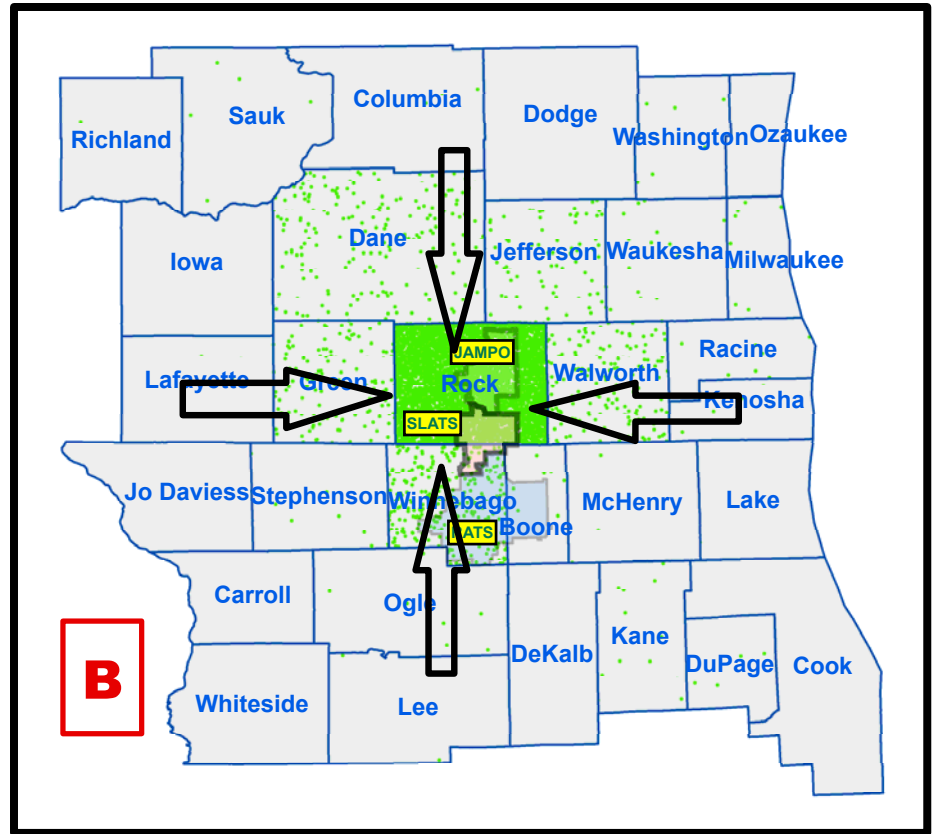
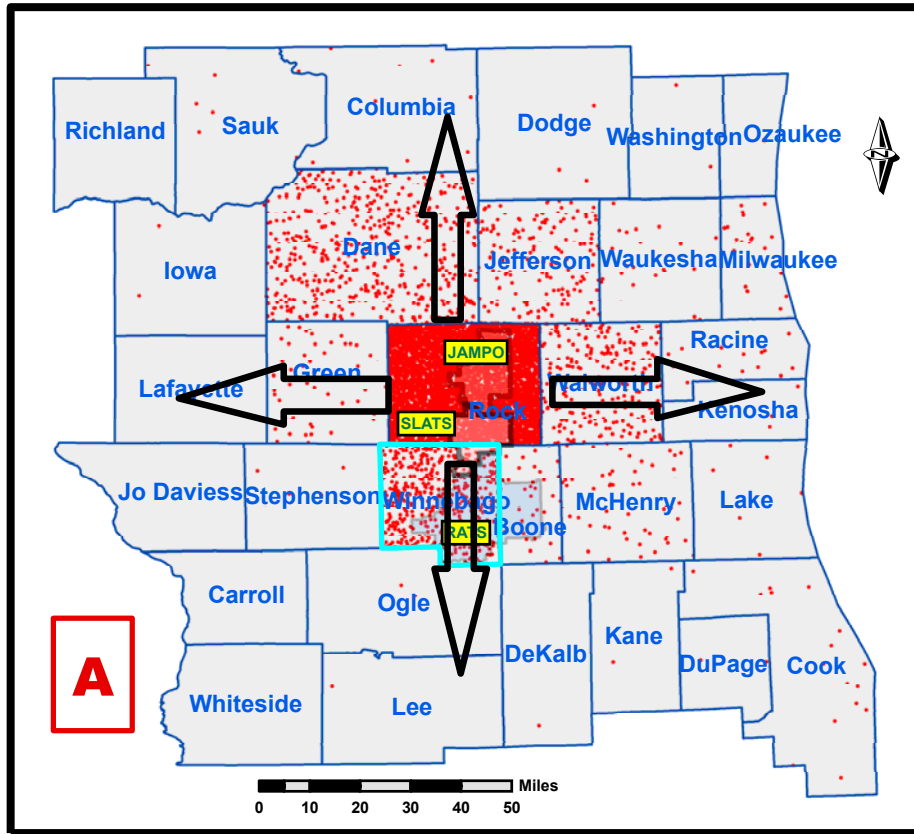
Source: US Census 2000

**Workers Commute
Rock County, WI**

**StateLine Area
Transportation Study**

2035 PLAN

Map 3-3, A & B



**Workers Residing in Rock County
Located by Place of Work
1 Dot = 10 Workers**

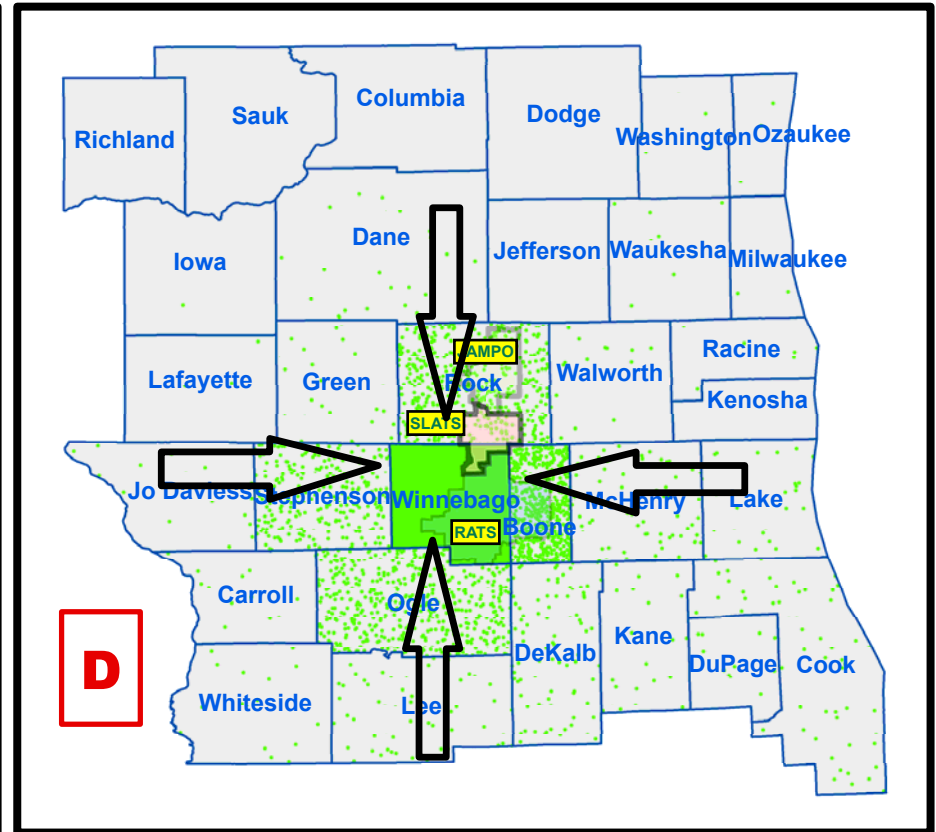
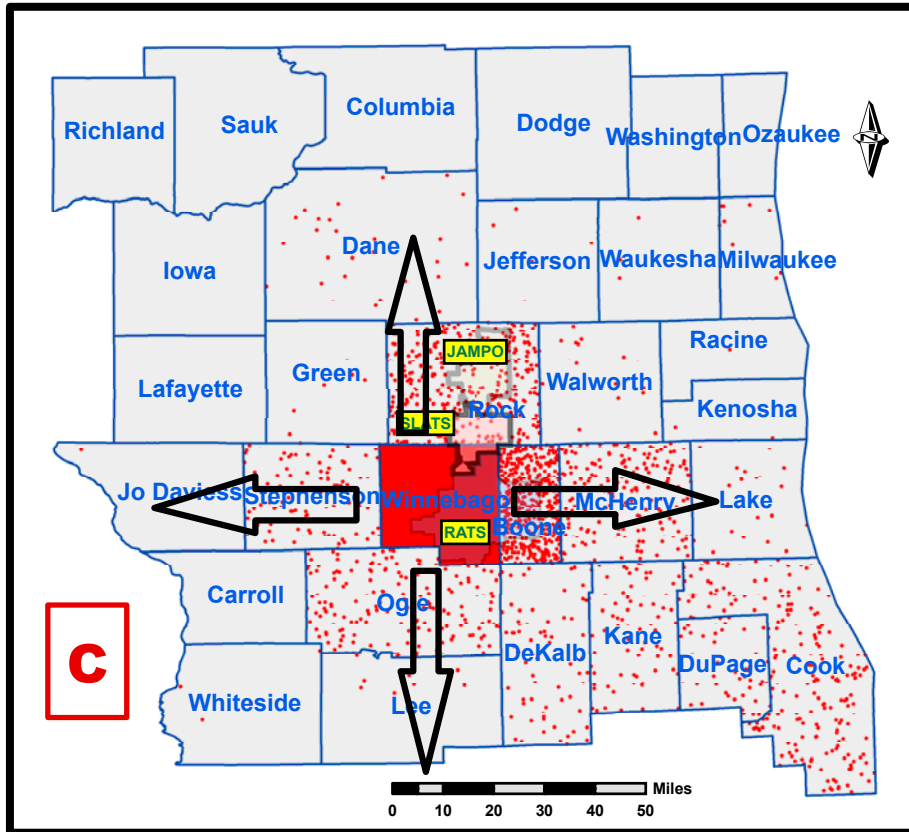
**Workers Working in Rock County
Located by Place of Residence
1 Dot = 10 Workers**

**Workers Commute
Winnebago County, IL**

**StateLine Area
Transportation Study**

2035 PLAN

Maps 3-3, C & D



**Workers Residing in Winnebago County
Located by Place of Work
1 Dot = 10 Workers**

**Workers Working in Winnebago County
Located by Place of Residence
1 Dot = 10 Workers**

VIII HOW WORKERS COMMUTE

In addition to where people travel to work, of interest to transportation planning is specifically how they travel. **Charts 3-18 A thru D** are provided to give some insight into how Stateline Area workers travel to and from their jobs and how their modes of travel have changed in the decade between 1990 and 2000. These charts present "means to work" information from the US Censuses of 1990 and 2000 for Winnebago, Rock, and Boone Counties and a Year 2000 estimate for the Stateline Area. A Year 1990 estimate was not developed for the Stateline Area but it is considered highly likely that trends within the Stateline area parallel that of the three counties combined. The Means of Travel to Work information for the Year 2000 is mapped on **MAPS 3-4 A thru G**.

A review of the above-cited and illustrated data leads to the following observations relevant to SLATS transportation planning.

1. By far, the great majority of workers drive alone to their places of work -- over 80% and increasing in the decade.
2. The next largest group of commuters, travel by carpool. Also, most carpools are (although the data itself is not presented) in small-group carpools (2-3 persons per vehicle). Both the number and percent of carpoolers decreased in the decade.
3. Use of public transportation for work commutes increased slightly in number during the decade but not in the percent of workers traveling (0.8%). Note that this statistic should not be interpreted to imply that public transit service is not needed in the Stateline area. Public transit serves many people outside the workforce.
4. Similar to transit, persons working at home increased in number but decreased slightly in their proportion of the workforce.

Chart 3-18A Means to Work in 1990

Means of Transportation to Work in 1990								Chart 3-18A	
Category & Subcategory	SLATS	County						3 Counties	
		Winn.		Rock		Boone			
Car, truck, or van:									
Drove alone		100,865	81.9%	52,732	79.2%	11,669	77.6%	165,266	80.7%
Carpooled		14,536	11.8%	7,863	11.8%	2,256	15.0%	24,655	12.0%
Subtotal	-	115,401	93.7%	60,595	91.0%	13,925	92.6%	189,921	92.7%
Public transportation:									
Bus or trolley bus		1,122	0.9%	486	0.7%	28	0.2%	1,636	0.8%
Streetcar or trolley		9	0.0%	-	0.0%	-	0.0%	9	0.0%
Subway or elevated		9	0.0%	-	0.0%	-	0.0%	9	0.0%
Railroad		25	0.0%	-	0.0%	14	0.1%	39	0.0%
Ferryboat		-	0.0%	-	0.0%	-	0.0%	-	0.0%
Taxicab		46	0.0%	38	0.1%	12	0.1%	96	0.0%
Subtotal	-	1,211	1.0%	524	0.8%	54	0.4%	1,789	0.9%
Other means									
Motorcycle		130	0.1%	146	0.2%	17	0.1%	293	0.1%
Bicycle		237	0.2%	198	0.3%	19	0.1%	454	0.2%
Walked		2,605	2.1%	2,616	3.9%	365	2.4%	5,586	2.7%
Other means		550	0.4%	338	0.5%	104	0.7%	992	0.5%
Worked at home		3,024	2.5%	2,198	3.3%	556	3.7%	5,778	2.8%
Subtotal	-	6,546	5.3%	5,496	8.3%	1,061	7.1%	13,103	6.4%
Total:	-	123,158	100.0%	66,615	100.0%	15,040	100.0%	204,813	100.0%

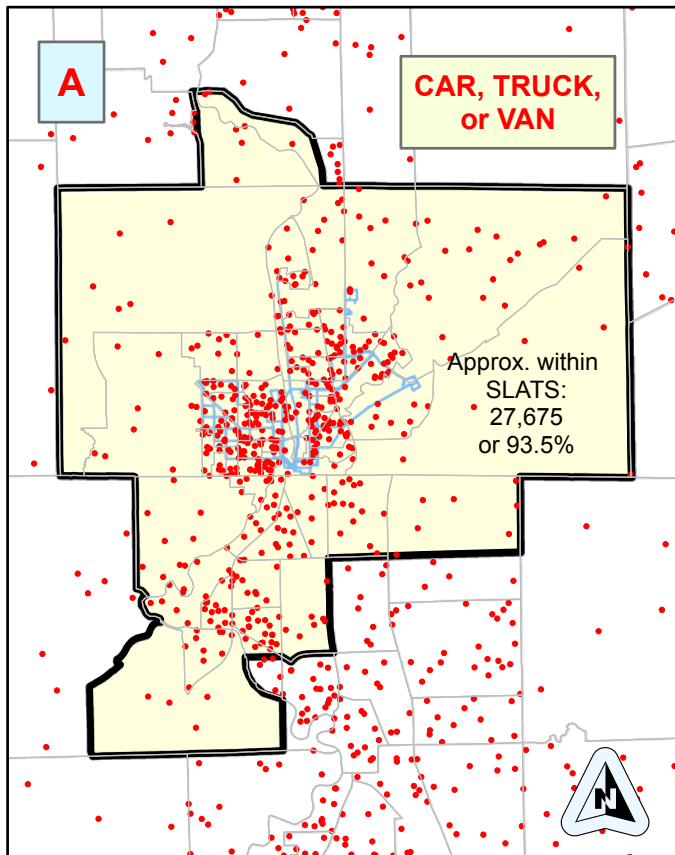
Chart 3-18B Means to Work in 2000

Means of Transportation to Work in 2000								Chart 3-18B		
Category & Subcategory	SLATS	County						3 Counties		
		Winn.		Rock		Boone				
Car, truck, or van:										
Drove alone	24,372	82.3%	110,911	83.6%	62,385	83.1%	15,985	80.9%	189,281	83.2%
Carpooled	3,303	11.2%	14,093	10.6%	7,568	10.1%	2,579	13.1%	24,240	10.7%
Subtotal	27,675	93.5%	125,004	94.2%	69,953	93.2%	18,564	94.0%	213,521	93.9%
Public transportation:										
Bus or trolley bus	200	0.7%	1,277	1.0%	509	0.7%	41	0.2%	1,827	0.8%
Streetcar or trolley	-	0.0%	33	0.0%	-	0.0%	-	0.0%	33	0.0%
Subway or elevated	-	0.0%	18	0.0%	-	0.0%	3	0.0%	21	0.0%
Railroad	9	0.0%	37	0.0%	15	0.0%	39	0.2%	91	0.0%
Ferryboat	-	0.0%	7	0.0%	6	0.0%	-	0.0%	13	0.0%
Taxicab	9	0.0%	24	0.0%	28	0.0%	-	0.0%	52	0.0%
Subtotal	218	0.7%	1,396	1.1%	558	0.7%	83	0.4%	2,037	0.9%
Other means										
Motorcycle	17	0.1%	42	0.0%	26	0.0%	1	0.0%	69	0.0%
Bicycle	23	0.1%	305	0.2%	135	0.2%	24	0.1%	464	0.2%
Walked	969	3.3%	1,801	1.4%	2,018	2.7%	283	1.4%	4,102	1.8%
Other means	138	0.5%	709	0.5%	300	0.4%	141	0.7%	1,150	0.5%
Worked at home	568	1.9%	3,374	2.5%	2,043	2.7%	659	3.3%	6,076	2.7%
Subtotal	1,715	5.8%	6,231	4.7%	4,522	6.0%	1,108	5.6%	11,861	5.2%
Total:	29,608	100.0%	132,631	100.0%	75,033	100.0%	19,755	100.0%	227,419	100.0%

Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data (Workers 16 Yrs of Age & older)

<http://factfinder.census.gov/home/en/datanotes/expsf3.htm>

MeanstoWorkCharts.xls






**StateLine Area
Transportation Study**

2035 PLAN

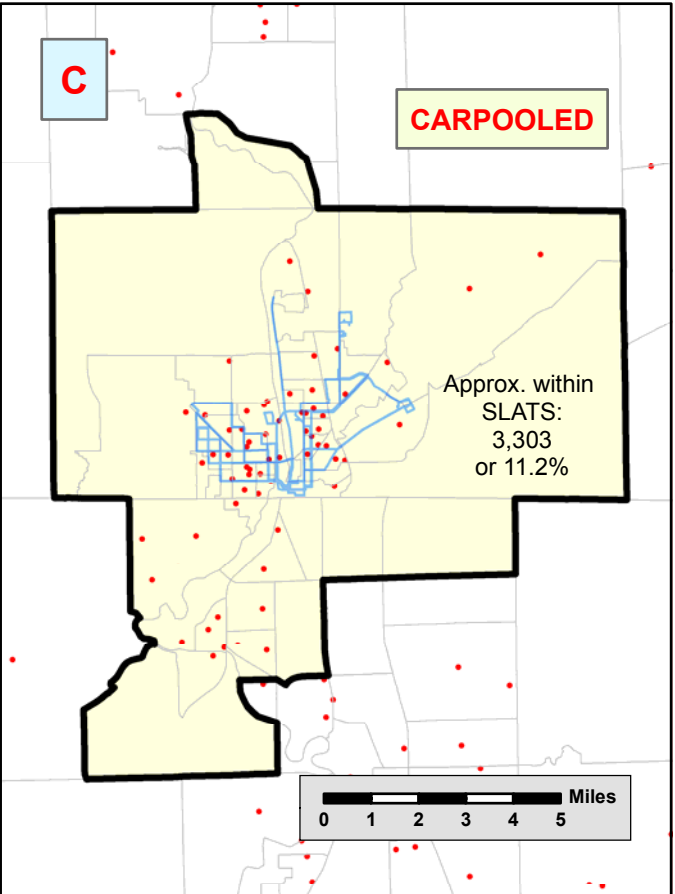
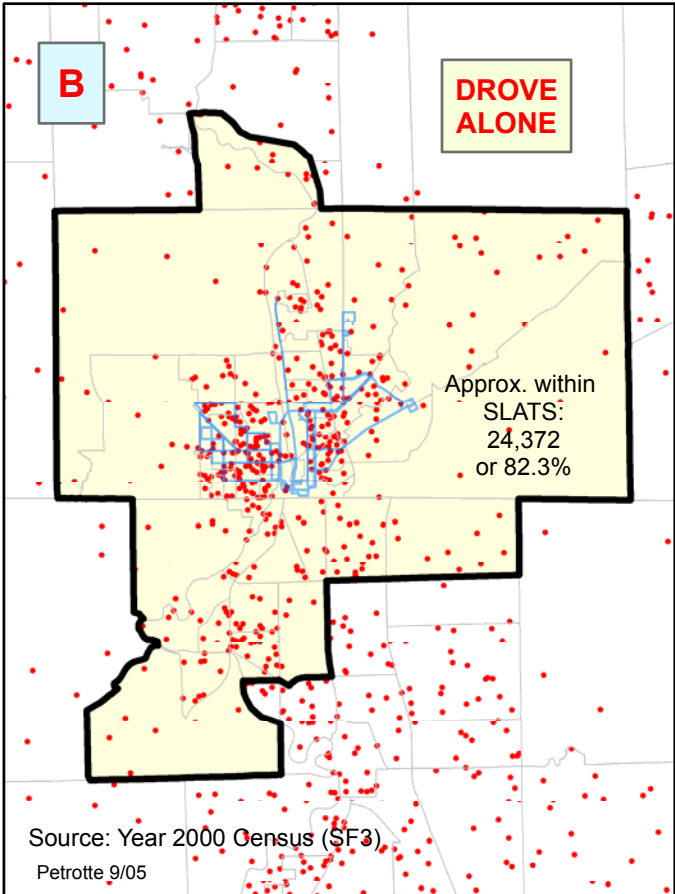
**Means of
Travel to
Work**

**Maps 3-4
A, B, C**

D thru G on following page

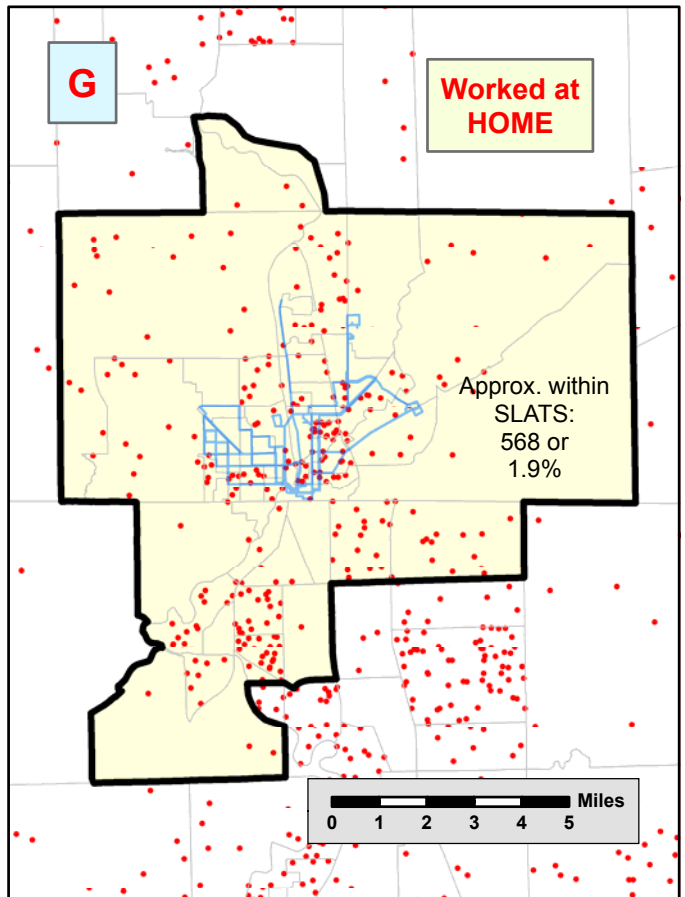
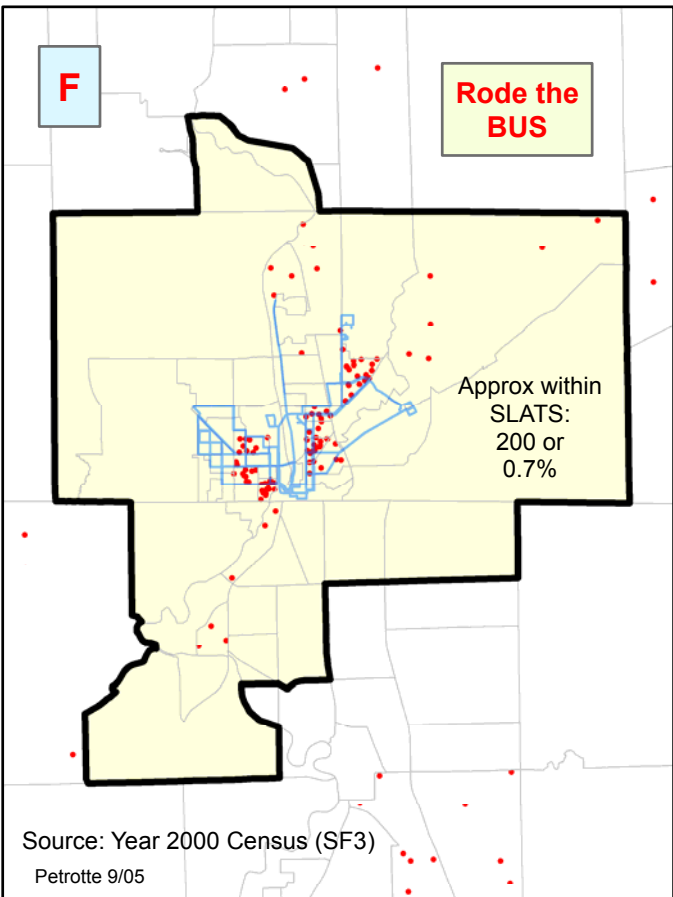
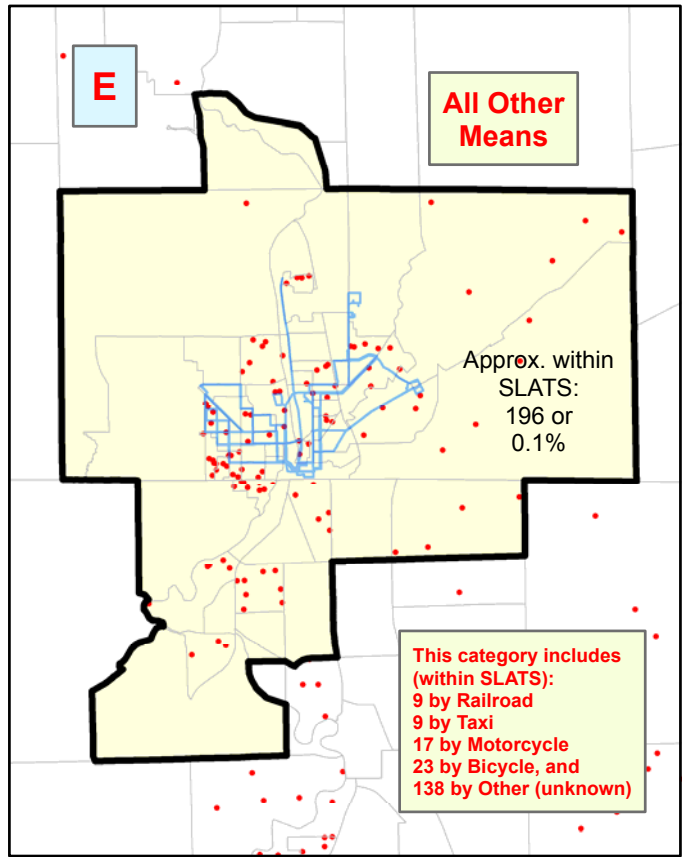
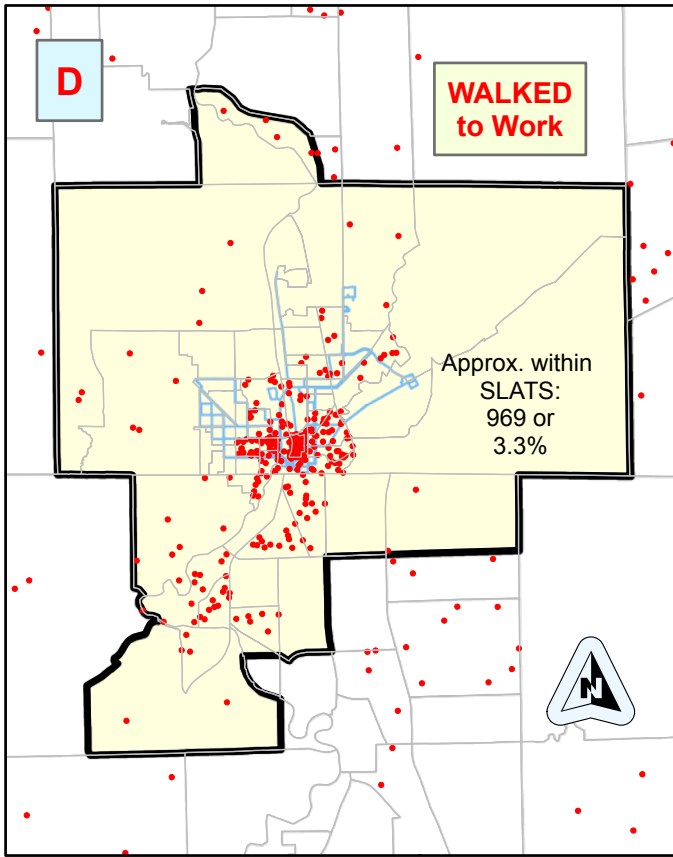
-  BTS Transit Routes
-  SLATS MPA
-  Census Block Groups

1 Dot = 50 Workers (this page)



1 Dot = 2 Workers (this page)

Maps 3-4 D thru G

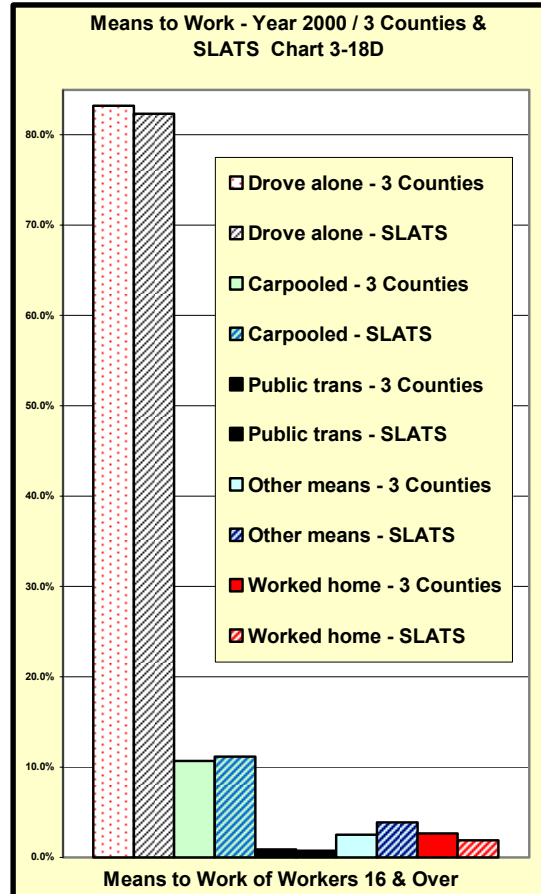


Source: Year 2000 Census (SF3)
Petrotte 9/05

Charts 3-18 C & D Means to Work

Means of Transportation to Work (SLATS Only, Year 2000, Workers Age 16 & Older) Chart 3-18C			
Category & Subcategory	Persons	% of Sub category	% of Total
Car, truck, or van			
Drove alone	24,372	88%	82.3%
Carpooled	3,303	12%	11.2%
Subtotal	27,675	100%	93.5%
Public transportation			
Bus or trolley bus	200	92%	0.7%
Streetcar or trolley	-	0%	0.0%
Subway or elevated	-	0%	0.0%
Railroad	9	4%	0.0%
Ferryboat	-	0%	0.0%
Taxicab	9	4%	0.0%
Subtotal	218	100%	0.7%
Other means			
Motorcycle	17	1%	0.1%
Bicycle	23	1%	0.1%
Walked	969	57%	3.3%
Other means	138	8%	0.5%
Worked at home	568	33%	1.9%
Subtotal	1,715	100%	5.8%
Total:	29,608		

Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data
<http://factfinder.census.gov/home/en/datanotes/expsf3.htm>



MeanstoWorkCharts.xls

IX WORKERS COMMUTE TRAVEL TIMES

Also of interest to transportation planning is the amount of time workers are spending in their commuting trips. **Charts 3-19A and 3-19B** provide data from the 1990 and 2000 US Censuses for the workers commuting in Winnebago, Rock, and Boone Counties. Disturbingly, that data shows substantial increases in the commute times in all of these jurisdictions. The average commute time for all three counties combined in the Year 2000 was 20.5 minutes, a 2.4-minute or 13% increase. The highest increase was in Boone County (5.25 minutes was added to the near 22 minute commute time of 1990) -- a 24% increase. Rock County had the smallest increase (1.58 minutes or 9%). Although the substantial increase in Boone County might be accounted for by a large influx of persons commuting to Chicago and the collar counties, part of the increases there and in the other counties might also be attributable to increases in traffic volumes and congestion on the area's roadways. Data on commute distances was not evaluated, but the willingness of workers to travel greater distances might also be a contributor. **MAP 3-5**, following, shows the distribution of the Average Travel Times by census block group over the three counties. As to be expected, workers residing in the more rural areas

have longer commute times. However, it is likely that the block groups with the largest commute times have pockets of persons who are commuting to the Chicago / Milwaukee regions.

Chart 3-19A Travel Time to Work Summary

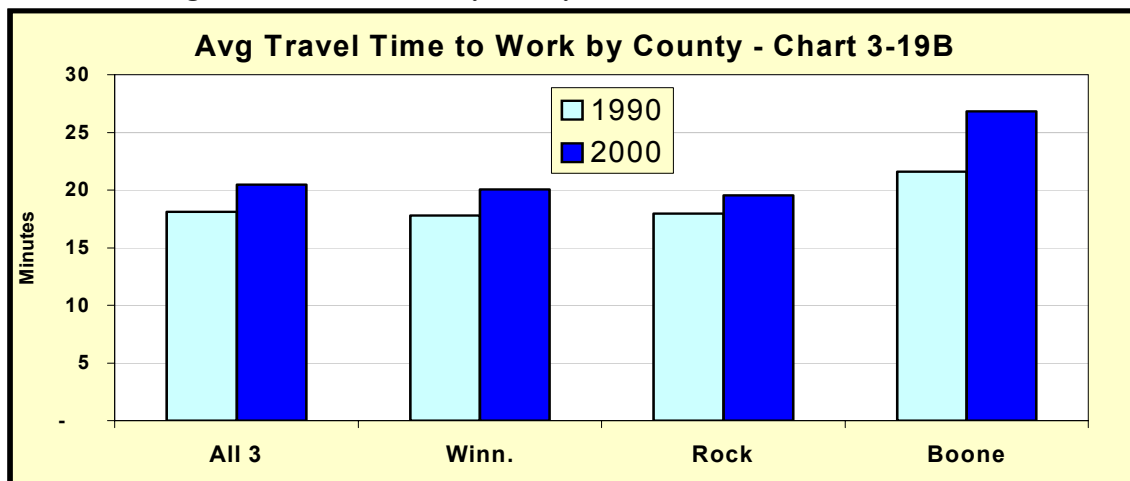
Travel Time to Work Summary		Chart 3-19A			
Statistic for All 3 Counties Combined & Separately		Year 1990 ¹	Year 2000 ¹	Change	
Daily Travel to Work (only)	All workers (Winn., Rock, & Boone)	204,813	227,419	22,606	11%
	Winnebago County	123,158	132,631	9,473	8%
	Rock County	66,615	75,033	8,418	13%
	Boone County	15,040	19,755	4,715	31%
	Workers working at home	5,778	6,076	298	5%
	Winnebago County	3,024	3,374	350	12%
	Rock County	2,198	2,043	(155)	-7%
	Boone County	556	659	103	19%
	Workers traveling to work	199,035	221,343	22,308	11%
	Winnebago County	120,134	129,257	9,123	8%
Rock County	64,417	72,990	8,573	13%	
Boone County	14,484	19,096	4,612	32%	
Daily Travel to Work (only)	Total travel time computed (minutes) ²	3,607,429	4,533,614	926,185	26%
	Winnebago County	2,136,930	2,593,652	456,723	21%
	Rock County	1,157,838	1,427,526	269,688	23%
	Boone County	312,662	512,436	199,774	64%
	Average travel time (minutes) ³	18	20	2	13%
	Winnebago County	18	20	2	13%
	Rock County	18	20	2	9%
Boone County	22	27	5	24%	

¹ Data source is the US Census 1990 & 2000.

² Travel time was computed by multiplying the number of workers in each of 10 reported time categories by the lower limit of the time category. This yields a consistent, conservative (low) estimate of travel time. A similar result can be derived using the Census tables of aggregate travel time.

³ Average travel time was computed by dividing the total travel time by the number of workers reporting travel to work (i.e., persons working at home not included).

Chart 3-19B Avg Travel Time to Work by County

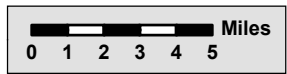
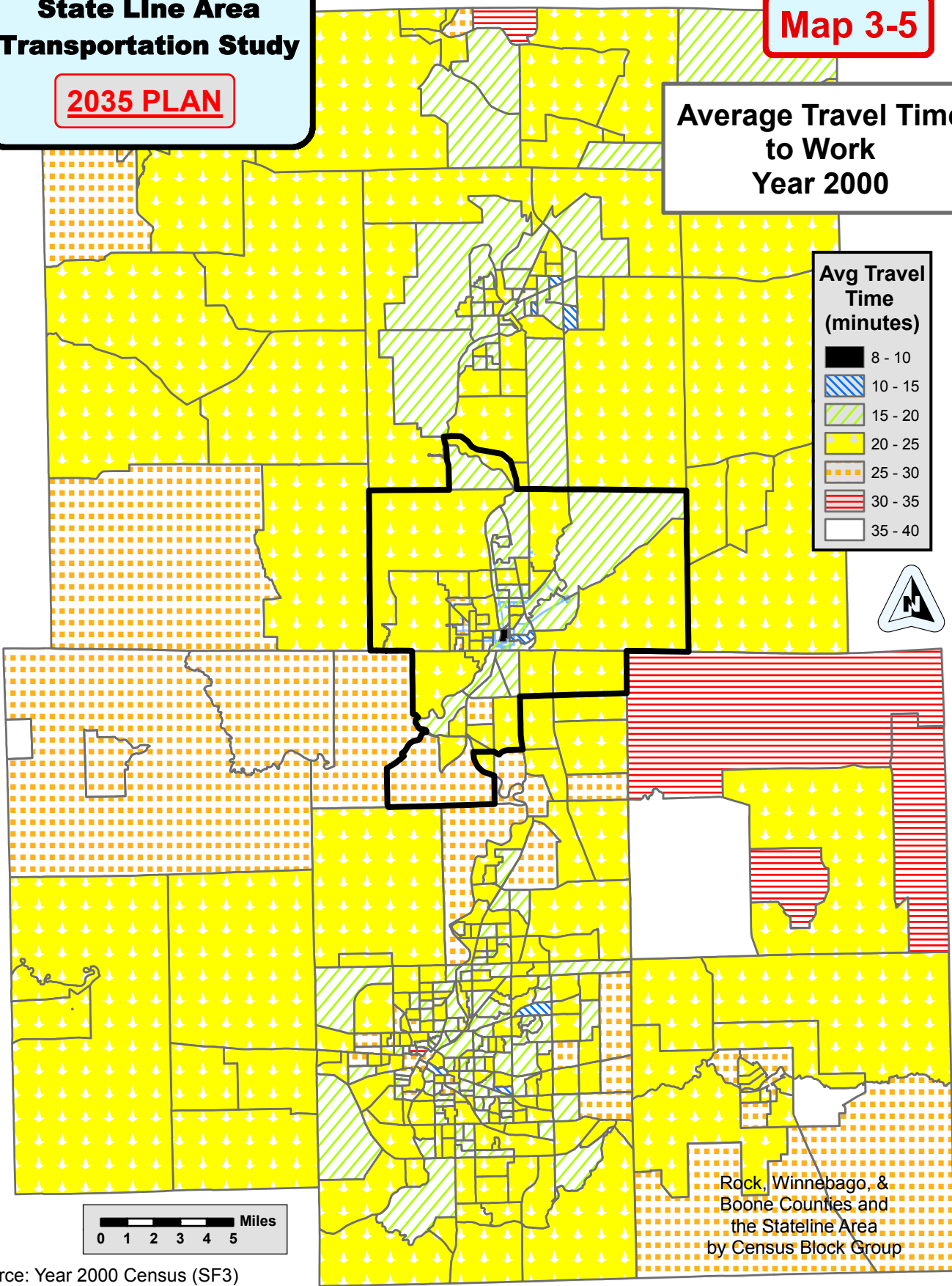
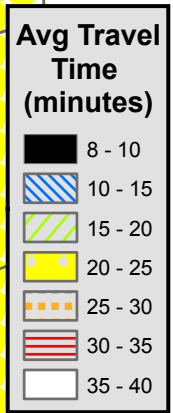


**State Line Area
Transportation Study**

2035 PLAN

Map 3-5

**Average Travel Time
to Work
Year 2000**



Rock, Winnebago, &
Boone Counties and
the Stateline Area
by Census Block Group

Source: Year 2000 Census (SF3)
Petrotte 10/05

X SUMMARY CONCLUSIONS

1. The population, income and other demographic data presented in this Chapter indicates that the Stateline Area is likely to grow steadily. Consequently, the transportation system will need to be further developed to accommodate (and stimulate) this growth and to avoid future congestion problems and potential safety problems.
2. The primary transportation mode in the area is the single-occupancy automobile. Barring major changes the way people think about transportation, this is likely to continue in the future. The primary emphasis of the area will continue to be on its roadways and highways.
3. Regardless of the above, continued and increasing attention will need to be paid to public transportation and other transportation modes. The segments of the area population dependant on these alternative modes will increase for demographic reasons and may also increase due to economic factors related to higher fuel prices and related limitations. The large numbers of young people and old people, particularly in Beloit, imply a need for transit services and alternative modes for those and others who don't drive.
4. There are indications of considerable worker exchange between the Stateline area, the surrounding counties and the Milwaukee and Chicago regions. Transportation connections to these surrounding communities and regions will need to be improved. Continuing attention needs to be provided toward studying commuter connections between Beloit and Rockford, and between the Rock River Valley area and the North-East Illinois and Chicago area. Good connections to the Rochelle Inter-Modal Center (south), and the areas of Madison, Milwaukee, and Chicago and their airports as well the Rockford Airport are also important.
5. The significantly increasing numbers of Hispanic persons in the Stateline area will require special attention. Continuing attention needs to be paid to the Federal Executive Order for Environmental Justice requiring that proportionate positive benefits be derived from transportation investments for the benefit of those who are minorities or low-income. There also must not be disproportionate negative consequences.
6. Related to the above, this brief assessment shows that racial and ethnic minority and/or low-income persons are not homogeneously distributed throughout the Stateline Area. Attention needs to be paid to elements of the transportation system serving these groups and enabling them to get to jobs and educational opportunities.

The conclusions drawn above conform to the priorities and recommendations for the transportation system that were identified by area citizens in the Visioning Process and expressed in the goals and objectives of the previous Chapter.

CHAPTER FOUR - TRANSIT

I MASS TRANSIT SERVICE IN THE STATELINE AREA

Mass transit service is essential in any large, densely populated urbanized area. The purpose of this chapter is to recognize that importance and to set forth goals and policies that will continue and enhance mass transit in the Stateline Area.

Surface mass transit service in the Stateline Area has several forms. Long distance service connecting the Stateline Area with other urban areas and regions is provided by private-for-profit carriers. Currently, this is limited to the bus services provided by **Van Galder** and **Greyhound**. There is no commuter rail service presently available.

Shorter distance, inter- and intra-regional service is provided primarily by publicly supported transit agencies or departments. There are three fixed-route public providers in the region: the **Rockford Mass Transit District**, the **Beloit Transit System**, and the **Janesville Transit System**. The Beloit and Janesville systems provide a seamless inter-connected service, but no such connection is currently available between Beloit and Rockford. Private bus carriers do, however, provide some service linking the three communities.

Paratransit services (curb-to-curb or door-to-door, demand/response services) throughout the region are provided by a combination of public and private providers. These include private taxi and ambulance companies and entities devoted to providing shared rides, some public and some private. Some of these companies or entities will provide both short and long-distance services; others limit their trips to specific areas. The major, shared-ride paratransit providers in the region include the **Rockford Mass Transit District**, the **Boone County Council on Ageing**, the **Rock County Specialized Transit System** and private providers such as **CAREAVAN**, Inc. and **J & S Medical Transport**.

As noted in the previous Chapter, most Stateline travelers rely on the automobile. The use of mass transit is dominated by persons in the lower income brackets or persons in some other way lacking access to the automobile-oriented travel mode. The exceptions to this generalization are multi-modal travelers seeking access to the great airport hubs of the Northern Illinois, Southern Wisconsin area. These are typically persons in all income brackets who do not want the difficulty of driving or parking their cars at the airports -- particularly the busy airports of Chicago.

II REASONS FOR SUPPORTING AND ENHANCING MASS TRANSIT

Publicly supported mass transit exists in Beloit (and throughout most prosperous urbanized areas in the country) because it is generally accepted to be the most cost-effective way of providing a reasonable level of mobility to those persons in the community for whom personal automotive travel is unavailable. Hundreds of people in the Stateline Area cannot use the primary auto-oriented system for a wide variety of reasons:

- Disabilities; mental/cognitive, physical or both
- Age, too young or too old
- Unqualified (lacking skill)
- Disqualified (cannot obtain a drivers license)
- Financially incapable (cannot afford annual costs of \$2,000 to \$4,000 to own and operate an automobile).

Collectively, this discussion will refer to these people as the "auto-free," for short. Some of their situations are temporary; some are permanent. But assuredly, there are always a sizable auto-free people at any given time in the Stateline Area. In addition, there are always people who simply prefer to use public transit as opposed to owning and operating automobiles -- the auto-free, by choice.

Public transit is analogous to police and fire departments. Although most people in the community seldom need these services, nearly every household, at some point in time, occasionally uses the services, and all benefit from the presence of these services. For example, even if a person's home is never burglarized or catches fire, all homeowners benefit from good police and fire departments through crime deterrence, lower insurance rates, and peace of mind. Providing transportation alternatives, especially public transit for the auto-free, also benefits the entire community. Public transit provides the auto-free with access to jobs, schools, commerce, recreation, government, and community involvement. With such access many of the auto-free who would otherwise be welfare recipients or non-workers, become productive contributors to the community. While others, who must rely on the community for support, become considerably less costly to the community because public transportation allows them some level of independence and the ability to take care of themselves to varying degrees. Public transit can make an important difference, even for households with automobiles, by making it unnecessary to purchase automobiles for each and every household member. The overall consensus of urban sociologists, urban planners, transportation planners and government professionals is that public transit is beneficial to communities.

In addition to the above reasoning for supporting the existing mass transit services in the Stateline Area, there are also substantial reasons to consider enhancing and expanding public transit services. It is indisputable that privately owned and operated automobiles are the preferred mode of transportation in the Stateline Area. This auto-oriented system provides a great level of convenience and "freedom" to area travelers. Nevertheless, this LRP recognizes that the convenience and/or freedom has significant costs: costs for the construction, maintenance and expansion of the roadway infrastructure; costs associated with the pollutants and by-products associated with heavy automobile usage; fuel costs; the cost of building and maintaining large areas or structures to park the

growing numbers of automobiles; the drain on household incomes for purchasing, owning, and maintaining automobiles; the costs of managing the growing traffic on the area's roadways; and the costs associated with automobile misuses and mishaps. Many experts argue that these costs could be greatly reduced if communities developed and utilized effective mass transportation systems.

At this time, it is difficult to propose significant across-the-board expansions to the area's mass transportation systems. The current auto-oriented system evolved over the last 100-plus years in the Stateline Area. It is now not just the main means of transportation but also an elaborate and integral part of the area's economy and social fabric. An entire sector of the local economy is built around building, buying, selling, fueling, insuring, and maintaining automobiles. Any hasty shift from automobile use would have devastating impacts on the persons earning their living from this sector. Second, for the past half century, a loose low-density urbanization pattern of land development has been allowed in the Stateline Area. This sprawled development would be expensive to serve with public transit, because of the distances involved, even if large numbers of the residents or workers became committed to ride buses. To make public transit feasible and cost-effective in many parts of the Stateline Area urban in-fill and densification must occur and/or the costs of transportation (primarily fuel) must shift in favor of public transit. Lastly, the relationship of Americans to their automobiles has been described as a "love affair." Driving or riding in an automobile can be an enjoyable experience and for many, is a recreational experience. Asking Stateline Area residents to part with this aspect of their lives would be a very unpopular request.

There are some signs, however, that this may change. First, the costs of owning and operating an automobile have been increasing substantially in recent years. Second, the costs to the environment are becoming more apparent. Third, larger segments of the population may need to be auto-free. If these trends continue, Stateline residents may become more willing to consider mass transit as an alternative -- or at least, as an alternative to obtaining or replacing that second or third car for the family or household. In that regard, this LRP recognizes that area transportation planners should diligently monitor the changing conditions and economies of transportation in the Stateline area and be prepared to consider mass transit expansion should the need and/or opportunity present itself.

III IMPROVING MASS TRANSIT DELIVERY AND EFFICIENCY

Regardless of the above philosophical endorsements of public transit in the Stateline Area, this LRP recognizes two realities:

- The private sector cannot participate in public transit unless there is a clear opportunity to cover expenses and make a profit, and
- Public monies for transit are very limited and given the funds available, it is imperative these funds should be spent as efficiently and effectively as possible.

Further, this LRP recognizes the difficulty in evaluating the efficiency and effectiveness of public transit services and the highly changeable circumstances and economies within

which transit operates. These volatilities make long-range transit planning far more difficult than the long-range planning of roadways. Although this is a 30-year Long-Range Plan (LRP), it will be updated every five years. Therefore, for the most part this LRP will focus on reasonably foreseeable changes anticipated to occur during the five year update period. Highly expensive aspects of transit, commuter rail potential for example, will have to be addressed in the longer time frame.

IV THE BELOIT TRANSIT SYSTEM

A. BTS as it Exists Today

The most extensive transit service in the Stateline Area is provided by the Beloit Transit System (BTS). BTS maintains a fleet of 12 full-sized buses, approximately six of which are in service at base period times and nine at peak times. These buses provide over a million annual passenger miles, nearly 300,000 annual vehicle revenue miles, and nearly 20,000 annual vehicle revenue hours of service within the roughly 16 square mile service area encompassing the City of Beloit and vicinity.

BTS buses operate over four primary fixed routes that traverse most of the more densely populated parts of the Beloit area and also provide access to the major employment and service areas of the community (see **MAP 4-1**). Weekday service extends through a 12-hour day. The Saturday service has a 7.5-hour day. See **Chart 4-1** below. These routes transverse residential areas on both the east and west sides of Beloit and also provide service to McNeel Junior High, Aldrich Junior High, and Memorial High School. One extra school tripper route operates with one run in the morning and one in the evening, providing extra service to Aldrich Middle School. It operates only when school is in session but is open to the general public.

Chart 4-1 BTS Regular Service Schedule

Beloit Transit System Regular Route Service Schedule				Chart 4-1
Route #	Weekday		Saturday	
	Time Span	Headway	Time Span	Headway
1	6:00 am to 5:55 pm	30 min	9:00 am to 4:25 pm	30 min
2	6:00 am to 5:55 pm	30 min	9:30 am to 4:50 pm	1 hr
3	6:00 am to 6:00 pm	30 min	9:00 am to 4:25 pm	30 min
4	6:00 am to 5:55 pm	30 min	9:30 am to 4:55 pm	30 min
Aldrich Tripper	7:05 am to 7:50 am	1 trip	Operates only on school days	
	3:30 pm to 4:10 pm	1 trip		

The BTS has an annual operating budget of roughly \$1.6 million annually. With slight variations from year-to-year, the service is funded as follows: 30% State of Wisconsin, 27% local, 28% Federal, 12% fares, and 3% other sources. Although the relatively small fare box proportion of the BTS operating budget is perplexing to many casual observers, such a return is characteristic of nearly all small transit systems across the United States

where automobile ownership and use is within the means of most of the population. In fact, the public and private investment in the automobile mode of transportation is so intense in the US, that even the very largest and most heavily used public transit systems are not self-supporting.

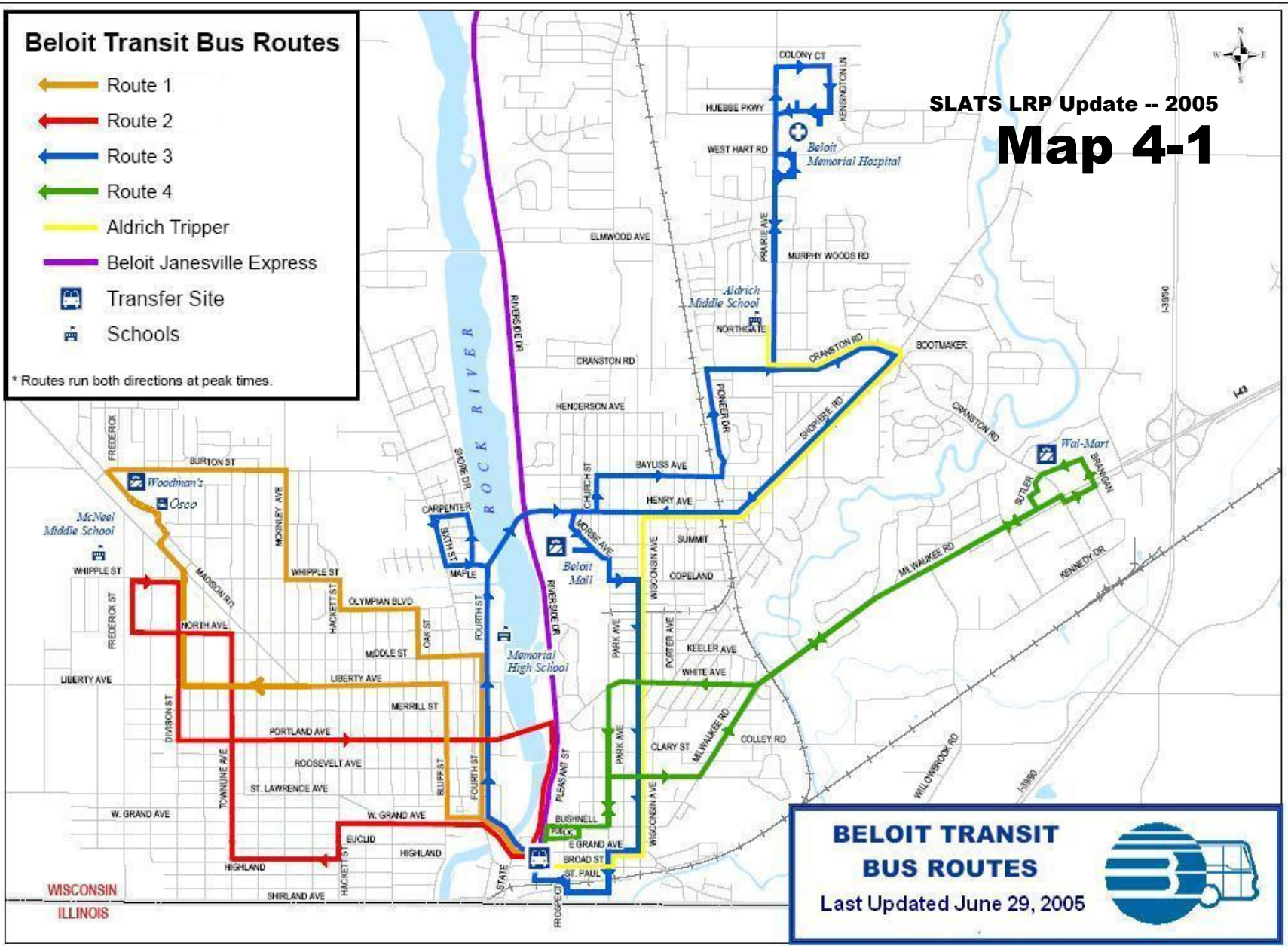
Beloit Transit Bus Routes

-  Route 1
-  Route 2
-  Route 3
-  Route 4
-  Aldrich Tripper
-  Beloit Janesville Express
-  Transfer Site
-  Schools

* Routes run both directions at peak times.

SLATS LRP Update -- 2005

Map 4-1



B E L O I T - J A N E S V I L L E E X P R E S S

MONDAY - FRIDAY, 6 AM - 6:15 PM



The Janesville Transit System and the Beloit Transit system jointly operate service between the two cities year round Monday through Friday, except holidays. The route runs between the Beloit Transfer Center, through the JTS Downtown Transfer Center and extends to Highway 14 north of Janesville. Stops are made at all locations along the route, as well as at the Rock County Job Center, UW-Rock County, Blackhawk Technical College (BTC), Rock Valley Community Programs (RVCP), the Rock County Institutions, Kandu Industries (select trips) and Arrow Park. The route also connects with both Beloit Transit and JTS local routes.

All Beloit-Janesville Express trips are wheelchair accessible

SLATS LRP Update - 2005

Map 4-2



CASH FARE

Beloit-Janesville one way.....\$2.00
 Beloit or Janesville to BTC one way.....\$1.30
From anywhere in either system to the college only.
Senior Citizens and Persons with Disabilities may ride for one half the applicable cash fare.
Proper ID required.

PASSES

Beloit-Janesville 10 one way rides.....\$19.00
Beloit-Janesville 10 one way rides for seniors and persons with disabilities....\$9.50
Proper ID required
To Blackhawk Tech 10 one way rides...\$12.00
From anywhere in either system to the college only.

PASSES AVAILABLE AT:

Janesville Pick 'n' Save, Sentry East & West, Logli Supermarket, JTS Office, JTS Transfer Center (6-10 pm, M-F), Beloit Mall Automated Pass Dispenser, Treasury Dept.-Beloit City Hall, Clerk/Treasurer's Office-Janesville Municipal Building, BTC Student Services Office, and UW-Rock County Student Services Office.

BELOIT - JANESVILLE

LOCATION	AM	AM	AM	AM	AM	AM	AM	PM	PM	PM	PM	PM	PM	PM	LOCATION
L Leave Beloit Transfer Center	6:00	7:00	8:00	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	5:00	Leave Beloit Transfer Center	
K Hwy. 51 & Inman Pkwy.	6:10	7:10	8:10	9:10	10:10	11:10	12:10	1:10	2:10	3:10	4:10	5:10	5:10	Hwy. 51 & Inman Pkwy.	
J Blackhawk Tech	6:15	7:15	8:15	9:15	10:15	11:15	12:15	1:15	2:15	3:15	4:15	5:15	5:15	Blackhawk Tech	
I Rock Valley Comm. Program	6:17	7:17	*	9:17	10:17	11:17	12:17	1:17	2:17	3:17	4:17	5:17	5:17	Rock Valley Comm. Program	
H Conde & Adel (Kandu)			8:25											Conde & Adel (Kandu)	
G Kellogg & Center (Job Ctr.)	6:25	7:25	8:30	9:25	10:25	11:25	12:25	1:25	2:25	3:25	4:25	5:25	5:25	Kellogg & Center (Job Ctr.)	
F UW Rock Co.	6:30	7:30	8:35	9:30	10:30	11:30	12:30	1:30	2:30	3:30	4:30	5:30	5:30	UW Rock Co.	
E State & Center	6:35	7:35	8:40	9:35	10:35	11:35	12:35	1:35	2:35	3:35	4:35	5:35	5:35	State & Center	
D Arr. Janesville Transfer Center	6:40	7:40	8:45	9:40	10:40	11:40	12:40	1:40	2:40	3:40	4:40	5:40	5:40	Arr. Janesville Transfer Center	

COUNTY INSTITUTIONS

D Lv. Janesville Transfer Center	6:45	7:45	8:45	9:45	10:45	11:45	12:45	1:45	2:45	3:45	4:45	5:45	5:45	Lv. Janesville Transfer Center
A Rock Co. Complex	6:55	7:55	8:55	9:55	10:55	11:55	12:55	1:55	2:55	3:55	4:55	5:55	5:55	Rock Co. Complex
B Wal-Mart	7:00	8:00	9:00	10:00	11:00	12:00	1:00	**	**	4:00	5:00	6:00	6:00	Wal-Mart
C Blackbridge & Alden	7:05	8:05	9:05	10:05	11:05	12:05	1:05	2:05	3:05	4:05	5:05	6:05	6:05	Blackbridge & Alden
D Arr. Janesville Transfer Center	7:13	8:13	9:13	10:13	11:13	12:13	1:13	2:13	3:13	4:13	5:13	6:13	6:13	Arr. Janesville Transfer Center

JANESVILLE - BELOIT

D Lv. Janesville Transfer Center	6:15	7:15	8:15	9:15	10:15	11:15	12:15	1:15	2:15	3:15	4:15	5:15	5:15	Lv. Janesville Transfer Center
E State & Center	6:20	7:20	8:20	9:20	10:20	11:20	12:20	1:20	2:20	3:20	4:20	5:20	5:20	State & Center
F UW Rock Co.	6:25	7:25	8:30	9:25	10:25	11:25	12:25	1:25	2:25	3:25	4:25	5:25	5:25	UW Rock Co.
G Kellogg & Center (Job Ctr.)	6:30	7:30	8:35	9:30	10:30	11:30	12:30	1:30	2:30	3:30	4:30	5:30	5:30	Kellogg & Center (Job Ctr.)
H Conde & Adel (Kandu)									2:35					Conde & Adel (Kandu)
I Rock Valley Comm. Program	6:38	7:38	8:38	9:38	10:38	11:38	12:38	1:38	*	3:38	4:38	5:38	5:38	Rock Valley Comm. Program
J Blackhawk Tech	6:40	7:40	8:45	9:40	10:40	11:40	12:40	1:40	2:45	3:40	4:40	5:40	5:40	Blackhawk Tech
K Hwy. 51 & Inman Pkwy.	6:45	7:45	8:45	9:45	10:45	11:45	12:45	1:45	2:45	3:45	4:45	5:45	5:45	Hwy. 51 & Inman Pkwy.
L Arrive Beloit Transfer Center	6:50	7:50	8:50	9:50	10:50	11:50	12:50	1:50	2:55	3:50	4:50	5:50	5:50	Arrive Beloit Transfer Center

* No service to Rock Valley Community Program on the 8:00 AM trip to Janesville and the 2:15 PM trip to Beloit. ** No service Wal-Mart at 2:00 PM and 3:00 PM.

B. Other Special Services of the BTS

In conjunction with the Janesville Transit System (JTS), the Beloit Transit System offers a valuable service to people of the Staseline and Janesville areas -- a special route that runs continuously during regular operating hours between Janesville and Beloit. **MAP 4-2** (above) shows the route, schedule and fare information for this relatively new service. The route operates Monday through Friday between 6:00 am and 6:00 pm. Buses operate in both directions with one bus starting from Beloit at 6:00 am and another bus starting from Janesville at 6:15 am. The travel time between the Beloit Transfer Center and the Janesville Transfer Center is approximately 40 minutes and the buses operate on one-hour headways. This popular service is being considered as a model for a similar express service between Beloit and Rockford. The Beloit-Janesville connector is generally considered to be a very successful activity.

C. Transit Development Plan (TDP) for the BTS Final Report, July 2004

This LRP endorses the practice of the BTS to periodically, comprehensively evaluate its transit services. Such evaluations can be done in different ways -- via private consultants, peer transit agencies, the MPO, by other City departments or area governments, or internally, by the transit agency itself, if staff-time permits. Most important is that it be done periodically and rigorously. Most recently, BTS engaged the services of a private consultant to conduct such an analysis in the name of a "Transit Development Plan."

The Beloit Transit Development Plan (TDP), Final Report dated July 2004 is cited as an important supporting document for this LRP. It is included as part of the Long-Range Plan by reference, but is not adopted in its entirety. A small portion of the recommendations were not acceptable to the City of Beloit (to be further clarified as the TDP is presented below).

In June of 2004, the results of the TDP were presented to the Beloit community and SLATS officials, area transit patrons, and the general public. The developers of the TDP had been charged with these objectives:

- Update the 5-year plan for the Beloit Transit System
- Address general regional issues facing the system
- Evaluate the routes and schedules and propose changes where appropriate
- Evaluate and develop a plan for short-term capital needs
- Examine the concept of seamless service with the Janesville Area to the north and the Rockford Area to the south
- Explore service expansion options, alternate governing approaches, and financing opportunities.

The consultant's first approach toward the above objectives was to evaluate area demographics in the interest of determining the potential transit needs of the community. Comparing 1990 and 2000 Census data, the consultant observed the following:

1. The Beloit area's population has been stable with only a slight increase since 1990.
2. A small increase in the 45-64 year age group offsets the decreases in the other age groups and reflects an Ageing trend in the area.
3. The White and Black population groups have decreased both proportionately and in absolute numbers, while the Hispanic population has increased by over nine percent (9%) in the last 10 years.
4. Sixty-seven percent (67%) of the area households have annual income of less than \$50,000.
5. Ten percent (10%) of the households have no automobiles and another forty percent (40%) have only one automobile. These statistics have changed little since 1990.
6. Although the above statistics show a propensity to use or, at least, need public transit, only one percent (1%) of all Beloit work trips are made on public transit. By far, more people walk and carpool to work than ride on public transit. The great majority, nearly eighty percent (80%) drive alone.

Given the above and other information, the TDP consultant identified five "market opportunities." This LRP concurs that to increase ridership and better serve the community, the BTS should aim to better serve:

- The growing Hispanic population
- Work trips in Beloit
- Work trips in Illinois
- The student populations of both the Beloit School District and Beloit College
- Discretionary evening travel needs of the community.

D. TDP Goals for Beloit Transit

The consultant listed nine service design goals and this LRP concurs with these goals:

1. Provide 30 minute headways wherever possible.
2. Avoid operating cost increases.
3. Maintain service to its existing travel markets.
4. Provide more direct service to key, desirable destinations.
5. Reduce ineffective route deviations.

6. Improve service to middle schools, high schools, and the College.
7. Make the system (route structure and schedules) easier to understand.
8. Provide experimental evening service on two routes, east and west of the River.
9. Offer subscription service to industries.

E. TDP Route Structure Proposals and Recommendations

In pursuit of the above goals, the consultant developed and presented three new route structure scenarios.

Scenario One would stick closely with the current system but would eliminate some of the circuitous routing, integrate school trippers with the normal routes, provide subscription service to area industries, and improve service to Beloit College.

Scenario Two would restructure the BTS route system around a new transportation center/transfer site. The site would be relocated to downtown Beloit (Pleasant, Broad, and St. Paul streets). The new route structure would also provide better service to Beloit College.

Scenario Three, independent of or in conjunction with the above two, would be to develop a new regional route that would connect the BTS with the Rockford Mass Transit District (RMTD). This would involve a new transfer site and a cost-sharing plan for the communities served.

In the end, the consultant's TDP recommended a combination of Scenarios Two and Three: the new transfer center with corresponding route changes, better service to the schools, connections to Illinois, and early morning subscription service to industry. The consultants also recommended the addition of evening service on two routes, one on each side of the Rock River.

The consultant estimated that the changes in service would increase the total hours of service by roughly five percent (5%), including the evening service, but not including the expanded service into Illinois or the capital costs for the transfer facilities. The consultant suggested that the increased operating costs could be offset by offset revenues from student passes and potential untapped advertising income. BTS might also reduce mid-day and/or Saturday service to offset some costs. In the long-term, costs could be offset by increasing the BTS market share of work trips. A long-term goal of capturing ten percent (10%) of the area work trips was proposed.

Capital investments considered necessary and proposed by the consultant included the new transportation/transfer center, addition of extra buses to accommodate the new routes, and the installation of a traffic signal preemption system on selected roadways that would give priority to buses and aid bus schedule adherence.

F. Other TDP-derived Recommendations for the BTS

The Transit Development Plan made several other recommendations for the Beloit Transit System, some to better market the system and others to improve its operation.

1. Make the BTS website more accessible.
2. Make the system map more widely available (the School District, the Colleges, and Chamber of Commerce should be asked to contribute).
3. Provide more education on the use of the BTS.
4. Provide more information in Spanish to accommodate the growing Hispanic Community.
5. Offer tax-free incentives through local employers (Pre-Tax Commuter Choice).
6. Stagger middle school start times to flatten peak period passenger loads.
7. Simplify bus stop signs.
8. Optimize stop locations.
9. Establish traffic signal priority for buses.
10. Consider interlining bus routes.
11. Retain a qualified ad agency to place ads on buses, and use the proceeds to support marketing initiatives.

G. TDP Regional Organization Options and Recommendations

In response to the request to consider new regional organizational options for the BTS, the consultant proposed three options.

- **Option 1** was a "status quo" option that would build upon the voluntary cooperation of the BTS the Janesville Transit System (JTS), and the Rockford Mass Transit District (RMTD). Intergovernmental agreements would be used to define service parameters and funding responsibilities.
- **Option 2** would involve the formation of two county-wide mass transit districts; one for Rock County and one for Winnebago County. Again, service parameters and funding responsibilities would be established through intergovernmental agreements, in this case, a Bi State compact. Each district would have taxing power.
- **Option 3** would involve the creation of a Bi State Regional Transportation Authority. This super transit agency would be responsible for all public transit ser-

vices in Rock and Winnebago Counties and could also include Walworth County in Wisconsin and Boone County in Illinois. Such an agency could be set up to provide for both transit planning and transit service delivery or could be restricted to only the transit planning and coordination function.

In the end, the consultant recommended that all three of the options be employed in a staged or phased plan that would gradually merge from the simple status quo agreements of Option 1, gradually phasing to Option 2, and eventually culminating in the Regional Transportation Authority of Option 3.

To fund the regional authority the consultant looked at both property tax and sales tax alternatives but recommend the sales tax because it was the least complicated. This was a very aggressive set of recommendations on the part of the consultant.

H. LRP Recommendations in General

Generally, this LRP endorses the conclusions and recommendations of the TDP as restated in the previous three paragraphs, but only to the extent that further analyses by BTS staff and further public scrutiny confirms their practicality and feasibility. Exceptions are noted below.

I. LRP Route Structure Recommendations

The BTS service described previously and displayed on **MAP 4-1** was put into effect over the last year for the expressed purpose of addressing many of the TDP recommendations. The new fixed route structure and schedule was successfully implemented as illustrated on **MAP 4-1** and **Chart 4-1**. The BTS staff is now closely monitoring ridership and public reactions to determine the effectiveness of the new system. The highly successful Beloit Janesville Express was continued with little route structure or revisions. Complementary paratransit service continues to be available on all the regular routes via an annual contract with Rock County Specialized Transit for those with a qualifying disability.

In 2005, BTS implemented a trial phase of Early Morning Subscription Service (5:00 am to 6:00 pm) to pick up workers before the normal BTS hours. Ridership on that service experiment was good and the expansion is now part of the regular schedule.

BTS staff strongly considered limited Evening Service and even planned to commence a trial on June 1, 2005. That trial has been postponed for budgetary reasons but may be considered in the future.

BTS has also recently implemented several other minor route and schedule structure revisions. It is anticipated that during the 30 year life of the LRP, and even the five-year span of this LRP update, there will be numerous other revisions and changes at the BTS.

J. LRP Transfer Center Recommendations

Potential Transfer Center sites for the BTS system were identified because they were:

- In or adjacent to existing and planned activity centers that attract transit trips and include employment, retail, government, health and social services,
- Central to the Transit System,
- In a pleasant environment where services were easy to use and transferring is a comfortable experience, and
- In a high quality pedestrian environment for easy connections from the center to the activity sites, thus minimizing the need to transfer.

It was determined that the Transfer Center would be designed to accommodate all BTS buses, a taxi stand, intercity bus service, and a ticket agency. Consideration is also being given to incorporating convenience services, such as a food pantry, laundry and dry cleaners, and a day care center. The day care center could be a critical element in the center for serving the needs of transit dependent families. These services will be valuable to BTS patrons, and could also support the operating cost of the center through rents. Another highly desirable component is attractively landscaped and paved pathways that will connect the Transfer Center to downtown activities and to Beloit College. Location and development of the Transit Center is proceeding in a timely and expeditious manner.

K. This LRP and Service Connections to Rockford

As previously mentioned, a successful service has been developed between Beloit and Janesville. This service also provides an important and well-used connection for Beloit residents to Blackhawk Technical College. Considerable effort is being spent exploring a similar type of connecting service to Rockford with an emphasis on providing transit service to the residents of South Beloit, Rockton, and Roscoe. Paratransit service would also be provided in conformance with federal regulations. A federal high-priority Congressional appropriation "earmark" is available to fund the purchases of the vehicles that would provide this paratransit service.

To assist in analyzing the costs and benefits of the Rockford connection, a grant was received through the IDOT "Illinois Tomorrow Program" for the preparation of the "Roscoe-Rockton Transit Feasibility Study". The Final Report dated December 2003 is included by reference, but not formally adopted as part of the SLATS LRP. The Study concluded there was a need for transit services for people traveling between Rockford and Beloit and also for the people living in the communities in North Central Winnebago County. It was further concluded that state and federal funds would likely be available to help pay for the cost of the service. A number of alternative short-term and long-term recommendations as well as next steps were recommended.

Since the study was prepared there have been several working sessions to further help identify the services that would be provided as well as the estimated costs. The primary participants in these working sessions have been the:

- Beloit Transit System
- Rockford Mass Transit District
- Rockford Area Transportation Study
- Stateline Area Transportation Study
- The consultant who prepared the feasibility study
- Representatives or citizens from the communities of Roscoe, Rockton, and South Beloit.

Over a series of meetings and discussions, the above participants first concentrated on assessing what type of fixed route service might be best for the area and determining what the costs of that service might be. After several laborious discussions, it was determined that if fixed route service were to be provided, it would need the following basic characteristics to have a chance of being successful. Such service would:

1. Provide weekday service during the primary daylight hours and operate a minimum of 10 hours per day.
2. Have headways (on a given bus route, the time interval between buses passing any given point on that route) of no more than one hour.
3. Include Saturday service with similar headways (but abbreviated hours would be tolerable -- 8 hours per day instead of 10).
4. The route structure would have to extend all the way between the main transfer centers of RMTD (in downtown Rockford) and of BTS (in downtown Beloit). Extending only to the existing RMTD route termini in the Machesney Park area would not be adequate because those termini provide access to most places in Rockford by circuitous and time-consuming routings.
5. The routing would provide stops in Machesney Park, downtown Roscoe, Rockton and South Beloit and at the Wal-Mart on Rockton Road.

The methods of providing such service were discussed. A scenario of establishing a new public transit district in northeast Winnebago County was discussed but initially dismissed because of the complexities of establishing such a district and the likelihood that such an initiative would be politically unpopular. Both RMTD and BTS looked at various scenarios of providing this service. Ideally, RMTD and BTS would co-provide the service with both entities extending bus runs along the proposed routing, thereby facilitating simultaneous service start times at the RMTD and BTS main transfer facilities and enabling travel both north and south without unusually early start times from one end of the service or the other. However, extending BTS service miles across the State line is an obvious obstacle. The simpler solution would be for RMTD to service the entire route. Regardless of what method of implementation is selected, the cost of service, as defined by the points above, will be similar. In that regard, the estimated cost of providing fixed-route bus service, as described above (not including required complimentary

paratransit services), was estimated at approximately \$670,000 annually. **Chart 4-2**, next page, provides a possible scenario as to how these costs could be funded if RMTD provided the service.

Chart 4-2 Estimated Bus Service Cost, Beloit to Rockford

Estimated Cost to extend <u>Bus Service</u> from Beloit and Rockford including 10% added for Paratransit Service ^{See all notes !}			Chart 4-2		
Cost Item		\$ Amount Annually	% of Total	30-Year (\$ millions)	
Total cost		734,250	100%	22.03	
FTA 5307 funds		134,000	18%	4.02	
Illinois Downstate Operating Assistance Program		403,838	55%	12.12	
Farebox		73,425	10%	2.20	
Local Share needed.		122,988	17%	3.69	
Possible Local Share divvied by route mileage in that community ³		% of Local	\$ Amount Annually	% of Total	30-Year (\$ millions)
South Beloit		19%	23,784	3%	0.71
Rockton		25%	30,978	4%	0.93
Roscoe		32%	39,672	5%	1.19
Machesney Park		13%	16,544	2%	0.50
Rockford		10%	12,009	2%	0.36
Total local		100%	122,988	17%	3.69
¹ Costs for fixed-route service based on \$667,500 estimate provided by RMTD in the Fall of 2005. Additional 10% added by SLATS staff for required complimentary demand-response services for persons within 3/4 miles of bus routes who cannot access or ride the fixed-route buses -- this may not be sufficient if paratransit service is extended to a broader area or service hours are maximized.					
² See Plan text for service characteristic assumptions.					
³ Local cost will be higher by jurisdiction if all jurisdictions do not participate.					
⁴ Jurisdictions may wish to explore providing paratransit services without fixed-route service.					
⁵ NO FUNDING IS ASSURED. These estimates contingent on best possible budgetary, political, and community support conditions.					BELOIT-RKFD CONNECTION COSTS.XLS

The above numbers are preliminary and could change considerably if the routings are changed, fuel costs continue to rise, and other factors. They are presented only to give readers some idea of the general magnitude of providing service. Items not included that could reduce costs are other revenue sources (farebox, advertising, contributions, Federal subsidies, etc.). Not included that will increase cost is the cost for required complimentary demand-response service for persons with disabilities.

Although the probable maximum cost to provide fixed-route bus service can be fairly accurately computed without regard for ridership (ridership and farebox revenues will only reduce the costs to the funding communities), the probable costs of complimentary demand-response services are far more difficult to estimate. The need, the costs, and the most desirable means of providing adequate service to persons with disabilities is cur-

rently being discussed and evaluated. This matter is unlikely to be determined before this LRP is adopted. However, this LRP recognizes that fixed-route service cannot be established without complimentary service for persons with disabilities. It is further recognized that paratransit or demand-response service may be a more appropriate option in itself, and fixed-route service might be best delayed until the demand is more prominent.

L. Funding Service Connections to Rockford

Regardless of whether fixed-route, demand-response, paratransit or a combination of transit services are provided in the northeast Winnebago County, the following discussion of funding may be of use to persons seeking an understanding if this issue.

The following funding is available to jurisdictions in the Illinois portion of SLATS and can be used to help implement the connection between Beloit/BTS and Rockford/RMTD and/or service confined to the area.

1. A one-time congressional "high priority" Section 5309 appropriation of \$242,945 has been designated for communities in Northern Winnebago County. With the 20% required local match, this brings the total potentially available to \$303,682. The most likely use of these funds would be for wheelchair-accessible, paratransit vehicles for services in Rockton, South Beloit, and Roscoe. These vehicles could be used by themselves, or could be used for the required "complimentary" service for persons unable to use the proposed fixed-route service.
2. Currently there is an annual federal appropriation of approximately \$134,000 in federal section 5307 funding potentially available as a pass-through from the State of Illinois to South Beloit. For a short time, many years ago, South Beloit operated a small public transit service and became a "designated recipient" for these funds. When South Beloit dismantled the service the "designated recipient" status was not removed and the funding remained potentially available. However, such appropriations have a 3-year time limit on their use (i.e., they must be officially applied for and approved as part of an active grant or they lapse). Currently, there are three years of these funds accumulated and available through IDOT for an approximate total of \$400,000. In recent years these funds have gone unused and lapsed to IDOT. IDOT typically reallocates them to other areas in the State with active transit systems and that is exactly what IDOT has been doing ever since South Beloit stopped applying for them. These funds can be used for either capital or operating purposes and consideration should be given to methods for using these resources to provide service for the people in North-Central Winnebago County.
3. There is an annual State of Illinois appropriation of approximately \$44,000 in "Downstate Operating Assistance Program" (DOAP) funds. South Beloit is again designated, this time by State statute, as the recipient. Most of these funds are used annually by South Beloit to provide a demand-response service for medical trips. Within limits and certain conditions, DOAP funds can be used to fund up to 55% of the annual operating expenses for public transit services.

4. Funding via the Illinois Downstate Operating Assistance Program is potentially expandable to the northeast Winnebago County area in two ways. The simpler of the two would be the expansion of the Rockford Mass Transit District, an already designated recipient. An RMTD expansion into the area would, in turn, make any service they provide in the area eligible for the standard DOAP subsidy of 55% of the operating expenses (as in **Chart 4-2**). More complicated would be the creation of a new transit district covering all or most of northeast Winnebago County and the subsequent Illinois designation of that district as an eligible recipient.
5. Lastly, the local jurisdictions of South Beloit and Rockton already make small annual appropriations for limited contractual paratransit services in their jurisdictions. It is conceivable that these amounts could be combined with additional contributions from the other jurisdictions in the area (Roscoe, Roscoe Township, and Rockton Township) and, together, used to better leverage some of the State and Federal monies mentioned above.

M. This LRP and Regional Organizational Options and Recommendations

This LRP endorses the Option 1 approach to regional service. The response from community leaders was not favorable with respect to the more elaborate Options 2 and 3. Option 1 builds upon the voluntary cooperation and intergovernmental agreement of the BTS and the Janesville Transit System (JTS) that resulted in the Beloit-Janesville Express. A similar intergovernmental agreement could be used to define service parameters and funding responsibilities between the BTS, the Rockford Mass Transit District (RMTD), South Beloit, Rockton and Roscoe; thereby facilitating a bus route through those communities and connecting the RMTD and the BTS.

Further consideration of the more elaborate options is not, however, out of the question and can be revisited in four years when the next TDP update is prepared or at any time when the intergovernmental cooperation arrangements of Option 1 appear to be inadequate to meet the demands for regional public transit services.

N. BTS Long-Range Expenses and Funding Forecasts

For the purpose of this LRP, BTS and SLATS staff developed long range forecasts of the operating and capital funding needs of the BTS system and compared those needs with forecasts of possible revenues (Federal, State, and local grants or subsidies, fare-box revenues and other funding sources).

Looking first at the revenue side, the sources were lumped into four categories: Federal 5307 funds, Federal 5309 funds, State subsidies, and Local subsidies and other local sources. The State of Wisconsin provided some estimates of the Federal and State sources bases on amounts issued in FY 2005 and previous years. These estimates differed only slightly from the amounts specified in the FY 2006 TIP. A combination of these sources was used for this LRP.

For FY 2006, the Federal Transit Administration (FTA) appropriated \$504,030 in 5307 fund to BTS. For that same year, BTS estimated they would qualify for \$492,000 in State

subsidy and have available an additional \$615,000 in local revenues. Although the mix of these amounts may vary slightly from year-to-year, the total of the three is considered a reasonable basis for long-range forecasts. Projected through Year 2035, they total to roughly \$48.3 million or an average amount of \$1.611 million per year. See **Chart 4-3**.

Chart 4-3 BTS Operating Forecast

BTS OPERATING Revenue & Expense Forecast (2005\$)				Chart 4-3
2006 thru 2035		30-Yr Totals	%	Avg Annual
Revenues	Federal 5307	15,120,900	31%	\$ 504,030
	State	14,760,000	31%	\$ 492,000
	Local	18,450,000	38%	\$ 615,000
	Total	48,330,900	100%	\$ 1,611,030
Expenses	Wages & Fringe benefits	33,543,780	73%	\$ 1,118,126
	Non-Labor	12,365,520	27%	\$ 412,184
	Paratransit Services	230,700	1%	\$ 7,690
	Total	46,140,000	100%	\$ 1,538,000
Funding Surplus applied to Capital in Chart 4-4		2,190,900		\$ 73,030

30 year Exp Rev SUMMARY 1-24-06 no inflation balanced.xls

BTS operating expenses, forecasted for the FY 2006 TIP, are also listed in **Chart 4-3** broken down by wages and benefits, non-labor expenses, and costs for paratransit services. These amounts were also projected through Year 2035 and total to roughly \$46.1 million. Total revenues minus total operating expenses leaves a positive balance of roughly \$2.2 million (or an average surplus of \$73,030 per year), all of which is excess Federal 5307 funds that can be applied to either service increase needs or capital equipment needs.

With regard to capital equipment, there are presently three funding sources available: the excess 5307 funds not used for operating (above), Federal 5309 funds

passed thru from Wisconsin, and the 20% matching funds typically provided for transit capital improvements by Wisconsin. For FY 2006, these sources and amounts are listed in the Avg Annual column of **Chart 4-4A**. Using these numbers as a basis for forecast, from FY 2006 thru FY 2035 they total to slightly over \$13 million (not including an additional \$2.3 million in discretionary funds requested specifically for the new BTS downtown transfer center).

Chart 4-4A BTS Capital Revenues Forecast

BTS CAPITAL Revenues Forecast -- FY05\$				Chart 4-4A
2006 thru 2035		30-Yr Totals	%	Avg Annual
Revenues	Federal 5307	2,190,900	17%	\$ 73,030
	Federal 5309	8,247,110	63%	\$ 274,904
	Total Federal	10,438,010	80%	\$ 347,934
	State / Local	2,609,503	20%	\$ 86,983
	Total	13,047,513	100%	\$ 434,917

30 year Exp Rev SUMMARY 1-24-06 no inflation balanced.xls

Forecasting capital expenses for BTS was a more difficult task. For the previous half decade BTS capital needs were somewhat neglected due to an attitude of some City of Beloit officials that transit services should be phased out or reduced. Presently, the City of Beloit stands strongly in favor of transit. But the previous attitude lost ground in facility and equipment maintenance or replacement that must

be regained if BTS is to operate at peak efficiency.

For this LRP, BTS staff prepared an extensive list of capital needs that they felt were essential to optimally maintaining and operating the system. Such equipment would provide for the most cost-effective operation, the safest possible conditions, convenience for the transit patrons, and a measure of attractiveness that would attract new ridership. See the **BTS Optimal Capital Plan -- Chart 4-4B Part 1**.

Unfortunately, when the costs of these items were fully computed, they exceeded the forecasted revenues by slightly over \$3.8 million or 23%.

Because this LRP must be financially constrained (forecasted projects cannot exceed forecasted revenues) some cuts were necessary. The result is a capital improvement plan that is considered the **Minimum Viable Capital Plan** to maintain transit service in the Beloit area. See **Chart 4-4B Part 2**.

Chart 4-4B BTS Capital Expense Alternates

Chart 4-4B		Part 1: BTS EXPENSES Optimal Capital Plan			Part 2: BTS EXPENSES Min. Viable Capital Plan		
Category		30-yr Totals	%	Avg Annual	30-yr Totals	%	Avg Annual
Expenses	Fleet Replacment & add spares	11,315,000	67%	\$ 377,167	8,365,000	64%	\$ 278,833
	Transfer Center design & build	1,510,000	9%	\$ 50,333	1,510,000	12%	\$ 50,333
	Transit Garage Maint / Refurb	1,832,170	11%	\$ 61,072	1,388,170	11%	\$ 46,272
	Maint & Office Equipment Replacement	667,700	4%	\$ 22,257	598,343	5%	\$ 19,945
	Transit Security	100,000	1%	\$ 3,333	75,000	1%	\$ 2,500
	Bus Stop Shelters	686,000	4%	\$ 22,867	476,000	4%	\$ 15,867
	Transfer Center Maintenance	395,000	2%	\$ 13,167	395,000	3%	\$ 13,167
	Transit Developmnt Planning	360,000	2%	\$ 12,000	240,000	2%	\$ 8,000
	Total	16,865,870	100%	\$ 562,196	13,047,513	100%	\$ 434,917
Funding Surpluses & (Deficits)		(3,818,358)	-23%	\$ (127,279)	(0)	0%	\$ (0)

The cuts made to arrive at the **BTS Minimum Viable Capital Plan** over the period of this LRP where as follows:

1. The 12-year replacement cycle for full-sized fixed route buses was extended to a 14-15-year cycle. This reduces the total buses to be purchased in the 35 year planning period from 36 buses to 26 buses. Although this saves a sizable amount of capital funds, it may result in increases in maintenance costs due to

- the corrosive conditions of the winter months in the Beloit area and the added wear on other vehicle components.
2. The shuttle bus was put on a replacement cycle of 9 years instead of 5-7 years.
 3. The maintenance truck replacement cycle was extended to 11 years.
 4. The roof replacement cycle at the maintenance center was extended from 20 years to 25 years.
 5. The replacement cycle for the garage doors was extended from 3 years to 5 years.
 6. Replacement of the bus washer was put off by three years and its replacement cycle extended from 22 years to 25 years.
 7. The forecasted annual expense for computer equipment and shop equipment was reduced by 25%.
 8. Replacement of transit security equipment was put on a 10 year cycle instead of 8 years.
 9. Major bus stop / bus stop shelter improvements were put on a 12 year cycle instead of a 10 year cycle.
 10. The replacement of shop equipment was reduced by 3.25%.
 11. The schedule for updating the Transit Development Plan was extended from a 5-year cycle to and 8-year cycle.

Regrettably, the above cuts will likely result in some increases in operating costs, decreases in service quality, and/or decreases in service reliability. Operating on such tight equipment budgets leaves little room to correct for unforeseeable breakdowns or mishaps. In addition, operating under a **BTS Minimum Viable Capital Plan** for transit dictates that expansions to BTS service will be unlikely during the planning period. This contradicts previous discussions in this Chapter regarding the value of public transit and the growing needs of transit dependent / auto-free persons in the Stateline area. Therefore, this LRP encourages that efforts be made to secure additional funding for public transit in the Stateline area to meet, at a minimum, the growing population of elderly persons and the needs of all low-income persons in the Stateline area. It is important that both of these groups have access to the services of the community and that the latter group has access to the jobs in the expanding commercial and industrial developments expected during the planning period.

O. Illustrative Projects for BTS

The Federal requirement specifying that this LRP must be "financially constrained" does not prohibit the inclusion of projects for which funding is not readily available. Such projects can be included but must be referred to specifically as "Illustrative Projects." To

that extent, this LRP recognizes the following "Illustrative Projects" for BTS during the planning period. Funding for these projects should be pursued.

1. Reinstating the cuts made to the **Optimal Capital Plan** described above. Although BTS can operate safely and effectively under the **Minimum Viable Plan**, in the long-run, BTS can save maintenance costs, provide better service and be better able to attract increased ridership if the capital assets of the system are more aggressively maintained or replaced.
2. Expanding paratransit services to meet the growing populations of elderly and other persons unable to use fixed-route transit.
3. Expanding fixed route services to cover the new developments of the community, particularly commercial and industrial areas where services and jobs become available as well as residential developments where there are large numbers of transit dependant persons.
4. Establishing a convenient seamless connection with transit services south of the Stateline, including, if possible, RMTD.

Note that the **Minimum Viable Capital Plan** for BTS anticipates that extra funding will be made available for the planning and development of the BTS downtown transfer facility. If such funding is not readily available, this project is then to be regarded as an Illustrative Project.

No attempt is made in this LRP to quantify the costs of expanding BTS services, paratransit or fixed-route. First priority of this LRP with regard to BTS is to emphasize the need to shore-up (maintain and/or replace) existing equipment and facilities so that the current service levels of BTS can be continued. During the next five years and especially as part of the next Transit Development Plan, extra efforts should be devoted to forecasting future growth in transit needs and services.

V ROCK COUNTY PUBLIC TRANSIT SERVICES

A. Rock County Specialized Transit

A division of the Rock County Council on Ageing located in Janesville offers special paratransit services throughout Rock County Wisconsin. The service is designed for use by elderly persons or persons with a disability that make it impractical or impossible to use regular fixed-route public transit services. To be eligible for these specialized transit services, an individual must be at least 55 years of age or be disabled. The Council operates a fleet of five vans that are equipped to handle wheelchairs. These vehicles have been acquired through categorized State and Federal funding programs.

The service is curb-to-curb, meaning the passenger must be able to ambulate to the van independently, or have an aide assist them. Vans are scheduled on a "shared ride" basis. This means that several passengers may be transported at one time to facilitate provision of service to as many passengers as possible. The service is by scheduled

appointments. To be assured of a ride, persons must call by 3:00 pm the day before the ride is needed. Return trips can be scheduled at the same time or the client can call again after finishing their business. The cost of the ride is at least \$4 per round-trip. Depending on the distance of the trip, a maximum of \$10 per round-trip may be charged.

The service is available Monday through Friday in areas outside the service boundaries of the Beloit Transit System and the Janesville Transit System. Inside the BTS and JTS boundaries, the service is available anytime BTS or JTS fixed-route buses are in service as part of the "complementary paratransit" services that must be provided in accordance with the American's With Disabilities (ADA) Act. Additional information can be obtained or rides can be scheduled by calling 608-364-2870.

B. Volunteer Driver Rides Program

The Rock County Council on Ageing also sponsors a Volunteer Driver Escort Program for the purpose of providing county residents with transportation to destinations outside of Rock County. Boundaries for this transportation service are to Madison, Milwaukee, Monroe, or Rockford, Illinois. The service is only for medical appointments. It is provided by volunteer drivers who offer their time and personal vehicles free of charge, although donations are suggested at average vehicle operating costs (36.5 cents per mile). The trips can be scheduled by calling the Specialized Transit office during normal business hours at least 48 hours before the time of the trip.

This LRP endorses the continuation of the services provided by Rock County. SLATS acknowledges, however, that it has not had time to conduct a thorough evaluation of either the paratransit needs/demands in Rock County or the efficiency/effectiveness of the services provided. A statement was recorded at a recent meeting of planners and officials at a meeting in Janesville indicating that Rock County could use twice the vehicles it now has in service. Further investigation is recommended to determine the veracity of that statement.

No detailed financial forecasts were prepared as part of this LRP for the Rock County transit services. However, it is assumed that Rock County will continue, at a minimum, to maintain the level of paratransit service to the Stateline Area that it now provides. It is further assumed that the funding sources existing at the present time will continue in the future. Note that **Chart 4-2** shows that BTS will continue funding its portion for paratransit services.

VI PRIVATE MASS TRANSPORTATION PROVIDERS IN THE STATELINE AREA

A. CAREAVAN, Inc.

CAREAVAN, Inc is a private transportation company that offers transportation services similar to that offered by the Rock County Council on Ageing, but with some important differences. Like Rock County, CAREAVAN is a shared-ride, advanced reservation transportation service. However, instead of just curb-to-curb service, CAREAVAN offers

door-to-door service with driver assistance whenever needed. As a private provider, CAREAVAN services can be solicited for any trip purpose including work, educational, medical, or recreational trips.

CAREAVAN also has a much wider service area than Rock County including Rockford, Beloit, Janesville, and their neighboring communities. Extended services are provided into other parts of Winnebago and Rock Counties, and into Boone and Walworth Counties. CAREAVAN provides service regularly, Monday through Saturday, from 5:15 am to 9:15 pm, with Sunday service available upon request. Additional information on the services of CAREAVAN can be obtained at their Web site at www.careavan.com or by calling 815-633-8461.

As a private carrier, CAREAVAN's services are provided on a cost plus basis, but Medicaid-assisted transportation is available to qualifying clients. The base rate for a one-way fare is \$24.50 with additional fees for companions or escorts (\$8.00), vehicles with a wheelchair lift (\$5.00), and wheelchairs (\$5.00). Inter-city trips may cost more.

B. J & S Medical Transport

J & S Medical Transport operates a fleet of 6 vehicles and offers service similar to CARAVAN. A fixed fee of \$27 per trip is provided with an extra mileage charge for longer distance trips. J&S is relatively new to the Stateline area but has been providing service for over five years. Based in Beloit, J&S meets all of the State of Wisconsin's standards and requirements for private providers of transportation to the public.

C. Van Galder Bus Company

Headquartered in Janesville, the Van Galder Bus Company has been providing inter-city bus services in the Southern Wisconsin, Northern Illinois region for several decades. Van Galder offers a variety of bus services including express services to major airports; inter-city transport between Madison, Janesville, Rockford and Chicago; tour bus services; and charter bus services. On a daily basis, Van Galder provides 13 trips to O'Hare Airport, 12 trips to Madison, six trips to Midway, and four trips to downtown Chicago from Beloit. Van Galder's airport service plays a vital role in the Stateline Area's industrial, commercial, and recreational opportunities.

D. Greyhound Bus

The nation-wide services of the Greyhound Bus Company are also available to Stateline Area residents. With a regular stop in South Beloit, Greyhound provides Stateline travelers with one daily trip north to Madison, east to Milwaukee, south to Rockford, and east to Chicago (there are four stops in Chicago allowing access to the downtown, Amtrak, and the Chicago airports). From those locations travelers can connect with other Greyhound buses and bus systems that travel throughout North American and with airlines that travel to locations throughout the world.

E. Other Private Transportation Providers in the Stateline Area

Other private entities that provide some form of transportation service in the Stateline area include:

1. Laidlaw Education Services located in Beloit; providing school bus and charter bus services.
2. Laidlaw Transit Inc. located in Rockton; also providing school bus and charter bus services.
3. Yellow Cab of Beloit; providing taxi service.
4. Call-Me-A-Cab, Inc. located in Beloit; also providing taxi service.
5. Road Runner located in South Beloit; providing paratransit services.

F. Private Providers and this LRP

Publicly or privately provided, safe, efficient, and effective transportation is essential to the economic vitality of any region and the quality of life within that region. The role of government is paramount, particularly in roadway planning, because nearly all roads are publicly owned and maintained. With transit planning, however, the above descriptions demonstrate that private providers play an important role in the Stateline Area. Private providers in the Stateline Area are the mainstay of inter-regional transportation for persons without access to automobiles. One private provider plays a unique role for those people needing special transportation -- door to door paratransit service. Another private provider is a key link for the Stateline community with the major national and international air transportation services of Chicago.

This LRP recognizes and supports the current roles of the private sector and supports further efforts of the private sector to meet the needs of those people in the Stateline Area without access to the automobile-oriented transportation system. To that extent, government should not preempt, dissuade, or impair the private sector from pursuing and accomplishing whatever aspects of transportation that can be efficiently and effectively accomplished by that sector unless it is demonstrated that the public sector can accomplish the tasks in a more efficient or effective manner and to the benefit of the community as a whole. Therefore, this LRP supports and endorses:

1. The continuation and enhancement of a climate conducive to private sector involvement in transportation services to the Stateline area.
2. Involvement of private transportation providers in the transportation decision-making process regarding future inter-region and inter-city transportation improvements and decisions.
3. The consideration of user-side subsidies provided as support directly to the rider, as opposed to public supply-side subsidies provided through public transit, in the exploration of transportation options or alternatives.

4. Consideration of the location of private carrier hubs, and/or links to, as part of the determination of the location of public carrier hubs or transfer centers.
5. The concept of public / private partnerships as alternatives for comparative evaluation.

Stated in another way, the services provided by the private transportation providers are recognized as valuable contributions to the Stateline area. These providers are regarded as stakeholders in the community and should be given reasonable opportunity to participate in the decision-making process. Care should be taken in future decision-making not to undermine their vitality. Free enterprise competition should be encouraged, not prevented. However, local and State governments also have the obligation to protect the public and assure the public is served safely. This entails monitoring the operations of the providers and the quality of their equipment.

VII COMMUTER RAIL CONNECTIONS TO OTHER REGIONS

At the present time there are no passenger rail connections from the Stateline Area, the Janesville Area, or the Rockford Area to any of the other major metropolitan areas in any direction. The last passenger rail service to Rockford, the Blackhawk Train (connecting Chicago, Rockford, and Galena) was discontinued in the early 1980s. The closest Amtrak train stations in Wisconsin are located in Columbus, and Milwaukee. In Illinois, there are train stations in Chicago and Mendota. These are accessible by car with travel times from 45 minutes to two hours. Direct connections to Amtrak can also be made in the Stateline Area via agreements between Amtrak and the Van Galder and Greyhound bus companies. At bus stations/stops in South Beloit, Janesville and two stations in Madison persons can purchase Amtrak tickets and board buses that take them directly to Amtrak trains. The closest commuter rail service into the Chicago Metropolitan Area is the Metra station located in Harvard, Illinois which is approximately 30 minutes from Beloit by car. Other Metra or Chicago Transit Authority stations can be accessed by driving or bussing further into the Chicago region.

The establishment of commuter rail linking the Rockford/Beloit/Janesville area with the Chicago Metropolitan Area has been the subject of a number of feasibility studies in the last 15 years. Separate feasibility studies were led by Rock County, Wisconsin and the Rockford Area Transportation Study to examine, respectively, a northern connection to Janesville, and a more southern route to Belvidere and Rockford. The Rockford study was managed though a group called the Northern Illinois Commuter Rail Initiative (NICRI). Both studies determined that the establishment of a commuter rail service was likely feasible and follow-up work was recommended. Both studies are included by reference as part of this LRP.

With the passage of the latest Federal transportation bill, a sizable amount of additional funding has been earmarked to engage in the next stage of planning/analysis for the Rockford/Belvidere route proposal. Called an "alternatives analysis," this study will examine the cost and feasibility of the proposed rail service in more detail and will compare it with the costs of alternatives such as expanding highways, setting up express bus service or bus-rapid transit, as well as other possible rail alignments. Closer to the Stateline

Area, \$200,000 in Federal funds and \$50,000 in WisDOT funds have been earmarked to study the feasibility of extending the Metra commuter rail of the Chicago region. The study will consider an extension from the Metra station in Harvard, Illinois into the south-central Wisconsin area with possible stations in Beloit or Janesville. This work is scheduled to commence and be completed in 2006.

Although, SLATS staff was not particularly involved in the previous studies, this LRP recommends that SLATS staff be involved in the future activities of the Northern Illinois Commuter Rail Initiative including the Rockford/Belvidere alternatives analysis. The southern parts of the SLATS Metro Area are within 15 minutes driving distance to the proposed rail extension and its closest access stations. SLATS could be asked to endorse the proposal. Regardless, if implementing the proposal becomes likely, it would be in the best interest of the SLATS area to investigate and support surface transportation improvements and/or mass transit alternatives that would facilitate fast and easy access to the rail service. A method for providing a direct connection from the Stateline Area to the proposed commuter rail extension could also be explored in an appropriate and timely manner.

VIII PUBLIC TRANSIT & HUMAN SERVICES TRANSPORTATION

A. Background

A new requirement stemming from SAFETEA-LU is the development of a **Coordinated Public Transit Human Services Transportation Plan**. Essentially, the new law requires that public transit agencies and human service providers work closely together and develop a plan that will assure that public monies, especially certain Federal subsidies or grants, spent on transportation are coordinated. The goal is to coordinate the transportation services of a multitude of public agencies and programs, reduce duplicative efforts, and thereby maximize the transportation opportunities while holding costs to reasonable levels.

To a large extent, planning and coordinative efforts of this nature have been ongoing in the Stateline Area for some time. This is evidenced by the above discussions of the roles of the various public and private transportation providers in the area. Examples of existing coordination include:

1. Instead of providing paratransit services independently, both the Beloit and Janesville Public Transit Systems contract with Rock County Specialized Transportation for their needed and required paratransit services. By employing a single, county-wide provider service dispatching is coordinated, shared-ride possibilities or maximized, and duplicative paratransit efforts are minimized.
2. The jointly provided Beloit-Janesville Express Bus Route demonstrates significant recent and successful coordination efforts.
3. The recent series of meetings involving parties from Beloit, South Beloit, Rockton, Roscoe, the Beloit Transit System, and the Rockford Mass Transit District regarding the development of public fixed-route and paratransit services south of

the Stateline shows similar coordination. This effort demonstrates the willingness and commitment of Stateline Area communities to work together toward cost-effective, comprehensive and efficient public transportation across State lines – as opposed to independent, duplicative and possibly less efficient efforts.

4. A large portion of the Stateline Area's non-emergency medical trips are provided by two private entities in Rock County – CAREAVAN and J&S Medical Transport. Because there are only two such agencies – as opposed to situations in much larger urbanized areas – duplicative efforts are inherently minimized.

Further facilitating the coordination of public and human services transportation in the Stateline Area, the State of Wisconsin and the two area MPOs (SLATS and Janesville MPO) recently initiated a discussion and brainstorming effort among virtually all of the entities in Rock County that provide public transportation or some form of human services with a transportation component.

Over 110 persons were invited to the meeting. Within Rock County, invitations were sent to 30 county officials, 20 town governments, all the Cities and major hospitals, approximately 13 private transportation providers, the county's two public transit agencies, the major State agencies, and seven special agencies that provide some type of human service or represent such agencies.

The meeting was facilitated by the Human Service Transportation Coordination section of WisDOT with special assistance from a consultant currently on contract as an expert in the transportation coordination field. The meeting was initially attended by over 30 of the invitees, including most of the key public and private agencies providing transportation in all or parts of Rock County. Because the meeting was an all-day session, many people could not stay through the entire meeting. However, a core group stayed for the entire session.

The consensus of the core group was that human services transportation is already well-coordinated in the County but there may be aspects that can be improved. Because all stakeholders could not remain for the entire session, all concerns and possibilities for improvement may not have been heard. It was concluded that:

1. A formal **Transportation Coordination Committee** would be formed with extra efforts devoted to making sure that all stakeholders would be represented.
2. Once formed, this group would hold regular meetings to discuss the human services transportation situation and to seek opportunities to improve such transportation.
3. The Committee will be initially facilitated by the **Rock County Council on Aging**, with assistance from the staff from the MPOs, as needed.

B. Initial Human Services Transportation Plan

It is acknowledged that the development of a Human Services Transportation Plan is not a requirement of MPOs. Such plans may be completed by MPOs, if agreed upon with the public transit agencies and the human services agencies. In that light, this LRP applauds the Stateline Area's efforts in Human Services Transportation Coordination, to date, and sets forth the following as the initial **Coordinated Public Transit Human Services Transportation Plan for the Stateline Area (the HST Plan)** – said plan to be modified by the Transportation Coordination Committee as that Committee determines appropriate, pending the Committee's formal establishment and subsequent efforts in the near future.

1. It is recognized that better coordination of human services transportation efforts is a goal of this LRP.
2. The Transportation Coordination Committee (TCC) will be the lead entity for furthering the above goal.
3. The TCC will meet on a regular basis, at least annually -- but initially, more often for the purpose of formalizing and embellishing this first **HST Plan**.
4. Because the Stateline Area encompasses lands beyond Rock County, it is recommended that the TCC expand its membership to include the entities of South Beloit, Rockton and Roscoe. Because of the need to sometime transport persons to and from the Rockford area, it is also recommended that representatives from the Rockford MPO and the Rockford Mass Transit District be invited to TCC meetings.
5. The TCC and SLATS staff will research and keep abreast of human services transportation efforts and requirements at the State and Federal level and will endeavor to abide by new requirements and guidelines in a timely manner.
6. Efforts to establish coordinated and comprehensive public transit and paratransit services south of the Stateline, linking the communities of South Beloit, Rockton, and Roscoe with the communities of the Rockford area and the Beloit area, will continue with high priority.
7. A goal of developing a more complete **HST Plan** within the next 2-3 years is recommended.
8. This initial HST Plan will be presented to the TCC at their next meeting for their consideration. It may be accepted, modified, or replaced at their discretion.

CHAPTER 5 - BIKE & PEDESTRIAN FACILITIES

On February 2, 2004, following a thorough public review process, the "**Stateline Area Bike and Pedestrian System Plan**" (BPSP) was adopted by SLATS. There is no need to update the BPSP at this time. Its newness and comprehensiveness lends to its incorporation into this LRP with only a few minor changes that were recently recommended by the SLATS Technical Committee. It is reproduced in this Chapter in summary form, along with those few minor changes, as an integral part of this Long-Range Plan. The full BPSP may be obtained by contacting SLATS staff.

The purpose of the BPSP was multifold:

1. The BPSP sought and developed a realistic strategy to move the units of government forward in, designing and implementing a safe, convenient, and comprehensive bicycle and pedestrian circulation network in the Stateline Area.
2. The BPSP developed a system of pedestrian and bicycle linkages based on connecting and accessing important destinations, including schools, parks, libraries, public buildings, community facilities, and shopping and employment districts. These are the logical termini of the BPSP network internal to the Stateline Area.
3. The BPSP proposed facility design standards to support the integration of the bicycle and pedestrian facilities into future land use and community development decisions. A goal of the BPSP is to encourage people to ride bicycles or walk, rather than rely solely on motor vehicles for day-to-day trips.
4. The BPSP proposed elements to integrate the Stateline area system with bicycle and pedestrian facilities outside the Stateline Planning Area. Connectivity with bicycle and pedestrian systems abutting the Stateline Area is important both to facilitate long-distance pedestrian or bicycle trips (usually recreational uses) and to accommodate the increasing travel needs in the peripheral parts of the urbanized areas as adjacent urbanized areas merge together. These are the logical connections external to the Stateline area.
5. The BPSP proposed bicycle and pedestrian facility design standards that serve all age groups, bicycling ability levels, pedestrians, and persons with disabilities and special transportation needs. To accomplish this objective the BPSP and this LRP recommends the use of American Association of State Highway and Transportation Officials (AASHTO) and Americans with Disabilities Act (ADA) design standards. (It should be noted that in Wisconsin, the Wisconsin Bicycle Design Handbook supersedes AASHTO design standards.)

I EXISTING BIKE AND PEDESTRIAN FACILITIES

An important part of the BPSP was its examination and analysis of the Stateline Area to determine

- The adequacy of existing bike and pedestrian facilities.
- The adequacy of existing roadways and public right-of-ways to accommodate bike and pedestrian movements.
- The roadways that pedestrians and bicyclists should avoid for safety reasons.

With regard to the last point, this LRP recognizes and emphasizes the complexity of making determinations regarding the compatibility and safety of transportation linkages for pedestrian and bicycle usage. Persons who walk or ride bicycles are even more varied in their abilities to travel than persons licensed to drive automobiles. Everyone, from the young and fragile to the old and frail, walks or rides bicycles. With little doubt, some bicyclists could (and do) travel along congested or high speed arterials with competence and minimal risk. Others, however, are in significant danger on sidewalks on local streets. Further, for the non-motorized traveler, any given trip may pose a myriad of travel challenges far exceeding that of the average motorized vehicle operator. From origin A to destination B, a pedestrian / bicyclist may experience everything from a dedicated pathway with little conflicting traffic to a highly traveled automobile roadway, with no shoulder and very unsympathetic, high-speed, motorized competitors (not to mention chuck holes, dogs, sewer grates, loose gravel, and oil slicks, and inclement weather, to name a few).

The above complexities aside, the BPSP developed two important "existing situation" documents for the State Line area:

- An inventory and map of the existing bike and pedestrian facilities. See **MAP 5**.
- An assessment of the existing streets and roadways throughout the State Line area for their compatibility with bicycle travel. See **MAP 5-2**.

Caution is advised in utilizing these maps. Particularly with regard to the Bicycle Compatibility map, the inclusion of this map in this LRP is not meant to imply that the roadways designated as compatible for bicycles are perfectly safe for bike travel. Nor is this map necessarily meant to encourage bike travel on these roadways for all bike users and under all conditions. Individual bike riders (and the parents of child bikers) must make their own assessments based upon their own skills as bike riders and other conditions at the actual time of riding (i.e., weather, traffic volumes, roadway condition, and other factors).

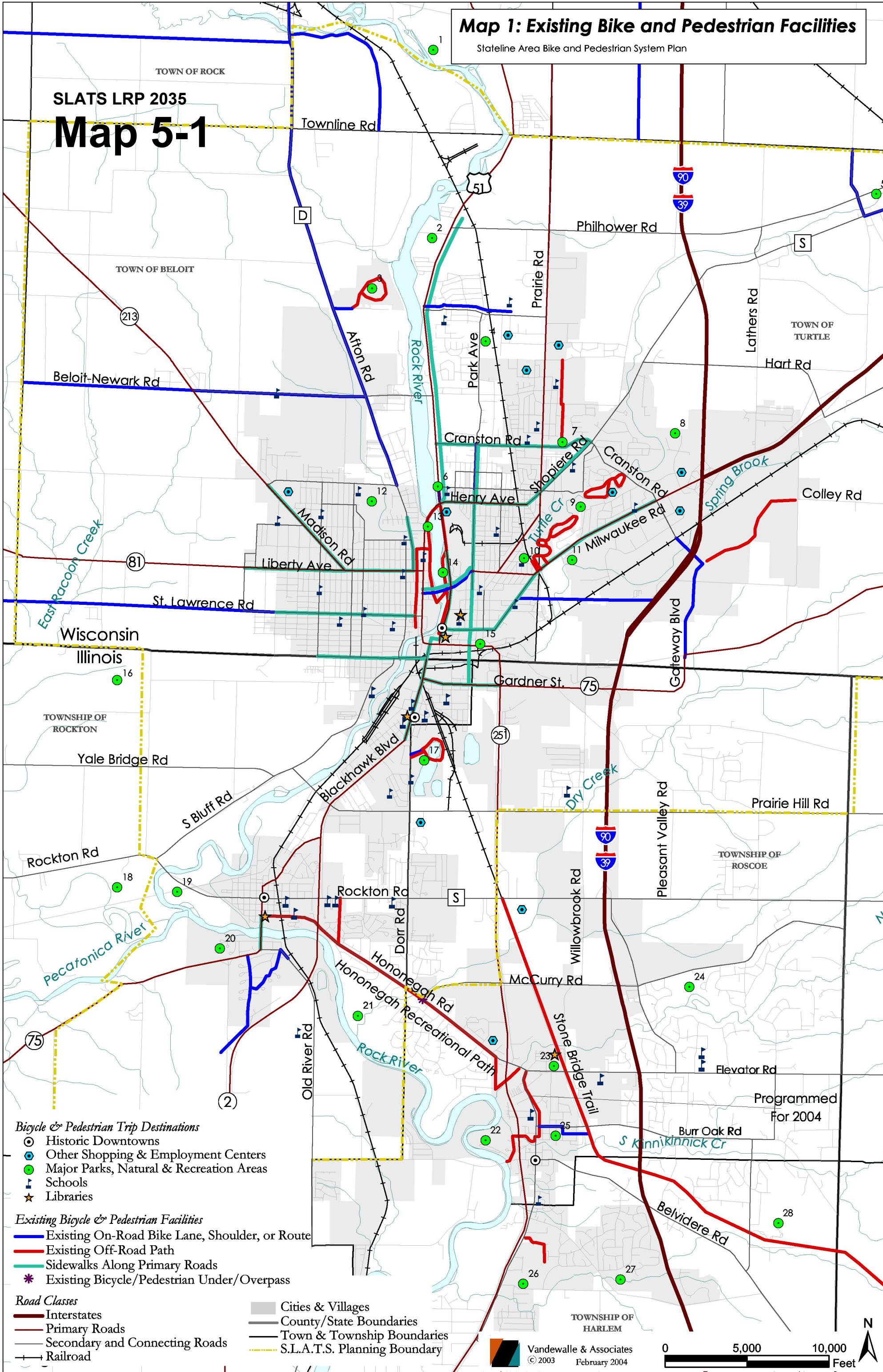
An important concept presented and endorsed through the BPSP is the connection of bike and pedestrian facilities in the Stateline area with similar facilities in the surrounding regions. Such connectivity adds significant recreational value to the bikeway system and is beneficial to the tourism aspects of the area's economy. It is not uncommon for bike enthusiasts to travel 50-100 miles in any given outing. By linking the trails in the SLATS region with the trails in adjacent regions, such recreational opportunities are greatly enhanced. **MAP 5-3** illustrates the regional connections concept.

Map 1: Existing Bike and Pedestrian Facilities

Stateline Area Bike and Pedestrian System Plan

SLATS LRP 2035

Map 5-1



Bicycle & Pedestrian Trip Destinations

- ⊙ Historic Downtowns
- ⊙ Other Shopping & Employment Centers
- Major Parks, Natural & Recreation Areas
- ▤ Schools
- ★ Libraries

Existing Bicycle & Pedestrian Facilities

- Existing On-Road Bike Lane, Shoulder, or Route
- Existing Off-Road Path
- Sidewalks Along Primary Roads
- * Existing Bicycle/Pedestrian Under/Overpass

Road Classes

- Interstates
- Primary Roads
- Secondary and Connecting Roads
- Railroad

- Cities & Villages
- County/State Boundaries
- Town & Township Boundaries
- S.L.A.T.S. Planning Boundary

Vandewalle & Associates
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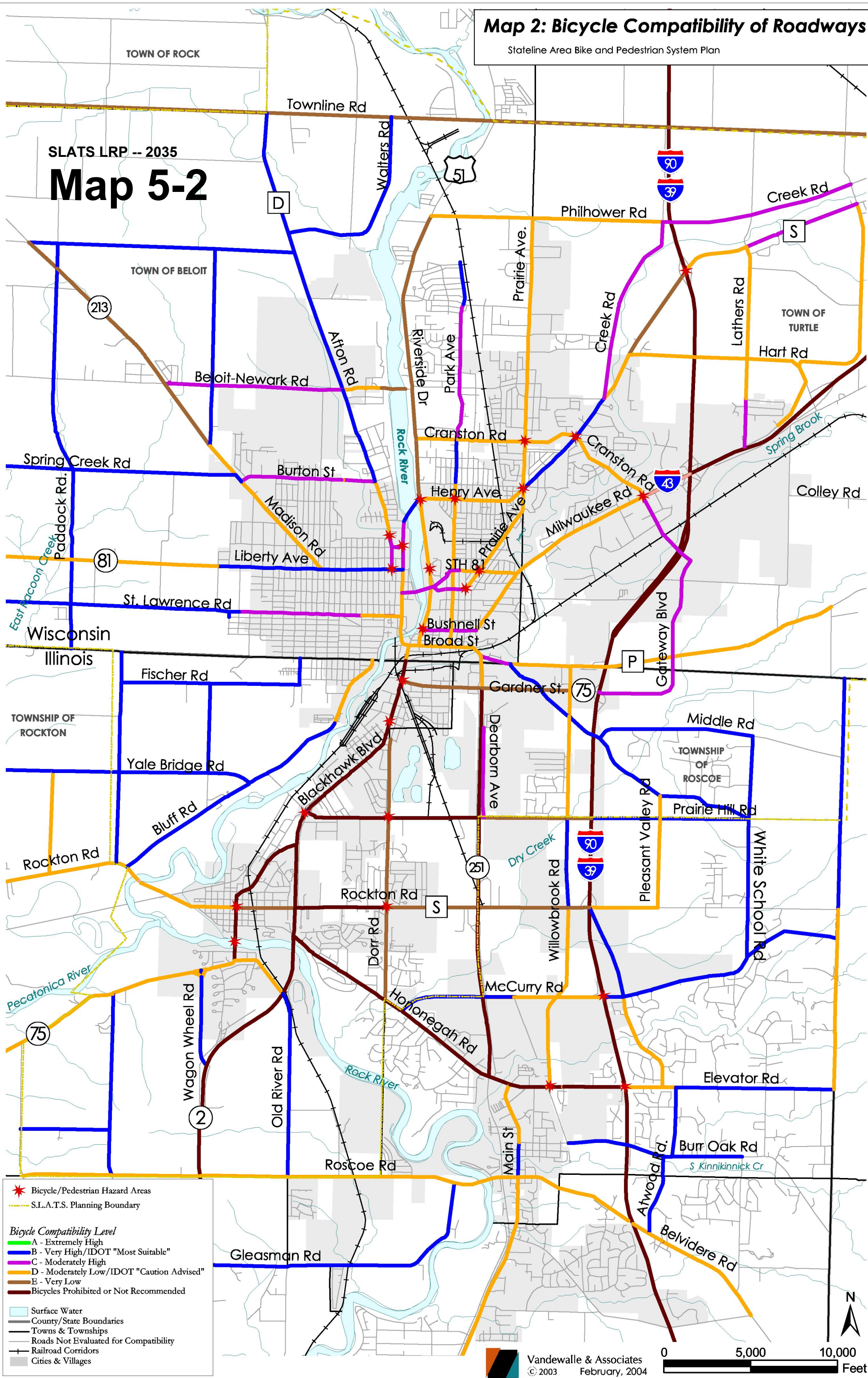


Map 2: Bicycle Compatibility of Roadways

Stalene Area Bike and Pedestrian System Plan

SLATS LRP -- 2035

Map 5-2

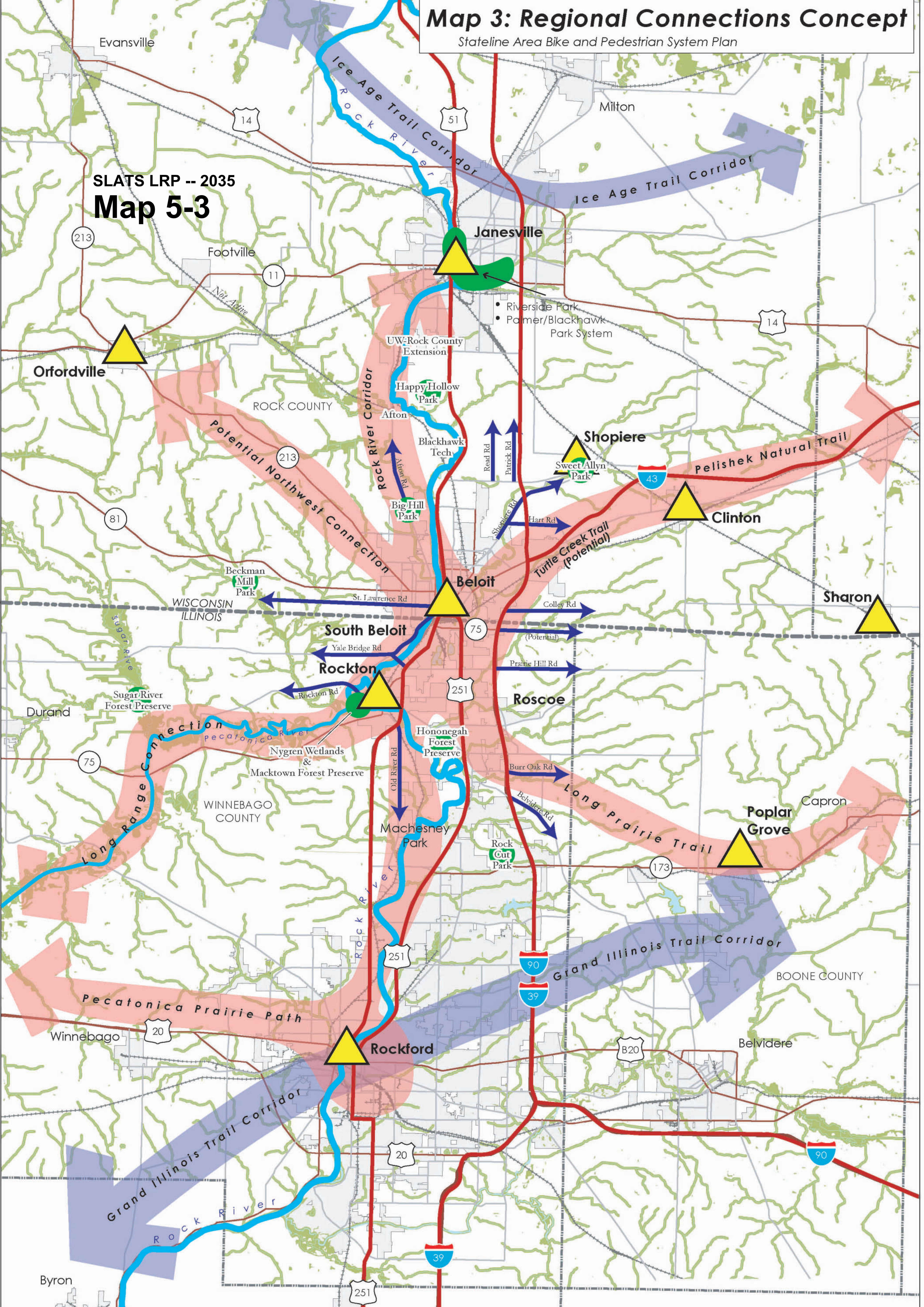


Map 3: Regional Connections Concept

Stateline Area Bike and Pedestrian System Plan

SLATS LRP -- 2035

Map 5-3



Legend	
	Rural Access Routes
	Major Regional Desire Lines
	Major Parks
	Destinations
	Major Highway Barriers

February 2004



II PUBLIC PARTICIPATION

Public outreach efforts were extensive in the development of the BPSP. The conclusions drawn from this effort included an overall feeling of public support for the bike and pedestrian planning effort. This effort included two open house meetings, two children's focus groups (one in Beloit and one in South Beloit), a focus group for bicycle enthusiasts, and six meetings with local governments. A clear priority favoring off-street bike paths was demonstrated and priority was stressed for the construction of a "backbone" route stretching along the Rock River and beyond, connecting the area north to south (see "Recommendations," below).

III GOALS & OBJECTIVES

Public participation sessions and local government group meetings provided the direction for developing the, "Goals, Objectives and Policies". Specifically, the BPSP reached a consensus on five major goals for the Stateline area to strive toward in the future, with each of these goals accompanied by several shorter-term objectives to aid in achieving the goals. Those goals and objectives, along with a few clarifications and minor corrections, are presented here:

Goal 1: Reduce Motor Vehicle Dependency and Assure Access to Biking and Walking Routes for All Who Choose or Require Them.

Objectives

1. Plan for pedestrian and bike connections between major generators and destinations of bike trips (such as residential neighborhoods and schools).
2. Incorporate bicycle and pedestrian facilities in new development projects, redevelopment projects, the reconstruction of existing roads, and the construction of new roads.
3. Focus particularly on enabling children to walk or bike to school.

Goal 2: Encourage Community and Neighborhood Planning That Supports Walking and Cycling.

Objectives

1. Encourage Stateline Area communities to be selective about development proposals, denying them if they do not have the appropriate bike and pedestrian facilities as promoted in this LRP.
2. Design and update comprehensive plans, park and open space plans, and zoning and subdivision ordinances to facilitate bicycling and pedestrian access.
3. Refer to this Bike and Pedestrian System Plan in review of development proposals (e.g. add it to a development review checklist), making sure that recommendations are included in developer's plans.

4. Connect new neighborhoods (subdivisions) to provide a variety of safe and efficient transportation options for bikers and walkers.
5. Provide mixed-use development opportunities so that people may live, work, shop and play in the same general area.

Goal 3: Integrate the Stateline Area Bike and Pedestrian System with Other Regional Systems.

Objectives

1. Link the bike and pedestrian system with environmental corridor protection, community planning, and road improvement processes.
2. Consider connections with regional and state recreational places and routes bicycle and pedestrian facilities in the Stateline Area.
3. Continue to work with all Stateline communities, Rock and Winnebago Counties, the Winnebago Forest Preserve, and the States of Wisconsin and Illinois on future bicycle and pedestrian facilities planning.
4. Work to integrate the bicycle and pedestrian facility system with public transit.

Goal 4: Follow Approved Standards to Create a Safe, Convenient and Efficient Bicycle and Pedestrian System.

Objectives

1. Consider the safety of pedestrians and bicyclists above the convenience of motorists in an effort to reduce bicycle and pedestrian accidents crashes.
2. Design all new construction and reconstruction to meet American Association of Highway and Transportation Officials (AASHTO) and Americans with Disabilities Act (ADA) guidelines, and in Wisconsin, the Wisconsin Bicycle Design Handbook guidelines (phrase in italics added).
3. Provide on-street facilities for cyclists, wherever possible, including bike lanes on arterial streets and routes on low-traffic streets.
4. Plan for and provide appropriate levels of facility maintenance.
5. Provide facilities for safe traffic interaction at intersections.

Goal 5: Develop and Implement an Education and Public Awareness Program.

Objectives

1. Develop and implement a youth education program for schools.
2. Provide a map of the bikeway system and update it as new facilities are provided. Included with this should be a mapping of "Safe Routes to School."
3. Educate the general public on needs and improvements for the system.
4. Integrate environmental awareness into the information provided in signs and exhibits along the trail system.

The BPSP also developed an extensive list of policies or strategies for future land use design and development management. These policies and strategies will aid in implementing or achieving the above Goals and Objectives, as follows:

Policy 1: Community Design, Zoning, and Land Use

Strategies

1. The Stateline MPO should refer to this LRP when making transportation and land use plans and policies.
2. The Stateline MPO should make this LRP available to all communities and counties, state agencies, and non-profit agencies operating in the Stateline Area.
3. Individual Stateline communities should officially adopt the BPSP as a component of local comprehensive plans, and refer to it when making transportation, land use, and park and recreational decisions.
4. Each Stateline community should officially map major bicycle and pedestrian facility rights-of-way where possible, well in advance of development of these facilities.
5. Stateline communities should adopt zoning and subdivision standards and street design and construction standards that meet the special needs of pedestrians and bicyclists, including the following (suggested ordinance language is included in Appendix D of the BPSP):
 - a. Bike racks in all new commercial and multi-family residential developments;
 - b. Sidewalks on all new streets (see also Policy 2.);
 - c. Street connectivity standards within new subdivisions, designed to get pedestrians and cyclists safely from the street and sidewalks to the entrances of commercial, industrial, institutional, and multiple family residential projects;
 - d. Block lengths no greater than 800 feet;
 - e. Mid-block connections on existing long blocks, to make bike and pedestrian connections more convenient;
 - f. Bike lanes, routes, or paths in new developments to connect new development to existing bike lanes, routes, or paths;
 - g. Bike-safe sewer grates, railroad crossings, and other infrastructure;
 - h. Demand-actuated traffic signals that respond to bicycles;
 - i. Neck downs and other traffic calming modifications on busy streets with high bicycle and/or pedestrian traffic.
6. Consider lowering the minimum requirements for the number of parking spots required for new developments as a way to promote biking, walking, mass transit, and better access to new developments for these types of users.
7. Make improvements to better accommodate bicyclists and pedestrians a part of all new or upgraded road projects, except for the Interstate.
8. Promote mixed-use developments to reduce the number of automobile trips needed through techniques such as planned unit developments, transit-oriented developments, and traditional neighborhood design zoning and economic development approaches.
9. Design neighborhoods to provide for multiple, safe, direct bike and pedestrian connections in all directions.

10. Link major activity centers such as schools, libraries, parks, employment centers, and shopping areas in the Stateline and surrounding area through bicycle and pedestrian facilities.
11. Provide shortcuts to bicyclists and pedestrians wherever possible, through continuing paths from dead-end roads or across railroad tracks and other barriers.
12. Provide restrooms, drinking fountains, information kiosks, supply shops, way finding signage, and similar facilities along bicycle and pedestrian routes.
13. Plan for new destinations and activity centers in locations that are accessible or are made accessible to pedestrian and bicycle travel.
14. Seek to develop multi-use trails and footpaths on abandoned railroads, along streams and rivers and other environmental corridors that are pleasant to use and provide logical travel corridors.
15. Adopt access control regulations for highways and arterial streets to reduce the number of access drives, making on-street bicycle lanes safer by reducing potential bicycle/motor vehicle conflict points.

Policy 2: Bicycle and Pedestrian Facilities

Strategies

1. On-street bicycle routes, lanes, and paved shoulders are preferred in the following locations:
 - a. Streets that have rights-of-way wide enough to provide for adequate separation between bicycles and moving and parked motor vehicles. Streets that have pavement and/or ride-worthy shoulders wide enough to provide for adequate separation between bicycles and moving and/or parked vehicles.
 - b. Streets having speed limits of no more than 35 miles per hour. Other streets with narrower situations (than the point above) but having low traffic volumes, low traffic speeds, good visibility, minimal traffic conflict points, and/or other mitigating or overriding factors that make on-street bike travel reasonably safe or safer than other alternatives.
2. Whenever reasonably possible, incorporate bike lanes, paved shoulders, or wider curb lanes when arterial and high volume collector streets are reconstructed or newly constructed. Consider re-striping lanes to allow wider curb lanes as part of any new overlay or improvement project.
3. Discourage off-street bike paths along major streets where there is a high number of turning movements and side friction (e.g. multiple driveway access points).
4. Remove all obsolete and damaged bike route signs. Re-post bike route signs where recommended (see the Recommendations section).
5. Sidewalks with a minimum width of five feet are recommended in the following locations:
 - a. Commercial and Industrial streets: Both sides of new and existing streets.
 - b. Residential streets (arterial): Both sides of new and existing streets.
 - c. Residential streets (collector): Both sides of new streets, at least one side on existing streets.
 - d. Residential streets (local): Both sides of new streets and when adjacent to multiple family housing, at least one side on existing streets.
 - e. Residential streets (rural): 4-foot paved shoulder along both sides.

6. Provide signed and marked crosswalks in school zones, at signalized intersections, 4-way stops, and at midblock locations where there is a need to accommodate crossings. Consider advance crosswalk warning beacons and audible crossing signals where additional warning is deemed necessary.
7. Use specially-surfaced, colored, and/or raised crosswalks in high-traffic areas.
8. Consider restricting "right turn on red" at intersections where significant pedestrian/bicycle vehicle conflict exists.
9. Off-street bicycle and pedestrian facilities should be considered in situations where it would be unsafe to locate such facilities on the street and where off-street facilities are also considered safe.
10. Provide connections between and within residential areas and major destinations with off-street bicycle and pedestrian facilities.
11. Design bridges and street underpasses with on-ramps and off-ramps at right angle turns whenever possible to safely accommodate bicycles and pedestrians on intersecting streets.
12. Provide way-finding signage throughout the Stateline Area in order to direct bicyclists and pedestrians to activity centers and destinations.
13. Maintain and upgrade bicycle and pedestrian facilities in the Stateline Area. Basic maintenance and upgrades of existing sidewalks and bicycle trails/lanes should be included in the capital improvement programs or annual budgets of the jurisdiction. Work with community groups, neighborhood and homeowner's associations to assist in maintenance.
14. Limit motorized vehicle access to bicycle and pedestrian facilities to those vehicles necessary to provide access for persons with disabilities or impaired mobility. This policy does not apply to trails where snowmobiles are allowed during the winter months.
15. Allow snowmobiles on aggregate surfaced trails in the Stateline Area only where the community has planned to ensure that they will not present a hazard or conflict with other traffic (for example, cross-country skiers or hikers).

Policy 3: Education and Encouragement

Strategies

1. The Stateline Area communities should work with Rock and Winnebago Counties, area schools, and non-profit groups to facilitate an education and public awareness program. The program should include educating pedestrians, bicyclists and motorists about the law and providing residents, employees, and visitors with a user-friendly map of the bicycle pedestrian system and destinations.
2. Encourage events during Bike-to-Work Week (the third week in May) in Stateline Area jurisdictions.
3. Work with employers to promote alternatives to driving, like carpooling, subsidized transit programs, and facilities for bicyclists, such as bike racks and shower/locker facilities.
4. Distribute the bicycle/pedestrian system user map, and update this map as needed to reflect new routes or safety information.
5. Develop and implement a "Safe Routes to School Program", working with each school district.

6. Send teachers, police officers, and park personnel to safe cycling workshops. Enlist an Effective Cycling instructor to teach at least one course at Beloit College on safe cycling skills.
7. Work with Beloit Transit to expand the bikes on buses program.
8. Work with local media outlets to promote and increase awareness about bicycle and pedestrian safety and rights.
9. Expand the bicycle police program, and work to make the enforcement of bicycle traffic laws a higher priority within all law enforcement agencies.

V FURTHER COMMENTS ON THE BPSP GOALS, OBJECTIVES AND POLICES

Of particular interest is the policy orientation of the BPSP that emphasizes a three-prong approach to identifying recommendations.

1. The first policy approach is to recommend bike and pedestrian friendly community design and land use planning.
2. The second policy emphasizes safety consideration in prioritizing and designing facilities.
3. The third policy again relates to the emphasis on safety by encouraging safety education, training, and awareness for both adults and youth.

This approach is consistent with and complimentary to the overall goals stated in Chapter 2 of this LRP.

Additionally worth mention about the non-motorized system of sidewalks and pathways existing and planned for the Statewide Area are unique benefits that they present in comparison to other transportation modes.

1. Walking and bicycling are non-polluting to the environment. There are no toxic emissions.
2. After the initial outlay for facility design and construction, and a modest investment in good shoes or a decent bicycle, there are virtually no operational costs to the user.
3. For many, if not most users there are impressive, exercise-related health benefits. The cardiovascular benefits of walking and bicycling have been proven by many scientific studies. Walking is also one of the safest methods of exercise. Bicycling can be nearly as safe when persons take reasonable precautions, recognize their abilities, and match their abilities commensurate with riding situations.
4. Finally, in many instances, walking or bicycling can even save travel time. This is especially true when all parts of the trip time (preparing and starting the vehicle, driving, parking, and walking from the parking lot) are added together.

All of these potential benefits can be enhanced with an improved system of pathways and walkways.

VI PLANNED BICYCLE / PEDESTRIAN FACILITY RECOMMENDATIONS

The BPSP addresses the concerns of all user types, ranging in age, ability, and reasons to use the system. The Plan provides recommended routes and facilities connecting key regional and local destination points identified during the public participation process. It recommends connections of various bike and pedestrian facilities, both existing and recommended. One of the primary concerns of the public was a lack of a continuous north-south facility through the area. The Dorr Road corridor was identified as a primary "missing link" that would connect residential areas to recreational areas, and the southern portion of the Stateline Area with the northern portion. Another publicly expressed idea was the desire for a "Rock River" route that would provide a link to the north, potentially connecting with the Janesville area. To address these concerns, the "backbone" path system was developed.

The BPSP developed three detailed maps of Planned Bicycle / Pedestrian Facilities consistent with the above stated concepts, goals, objectives, policies and publicly expressed concerns. These maps are re-displayed in this LRP as **MAPS 5-4a, 5-4b, and 5-4c**. The BPSP also developed a detailed list of specific projects leading toward the implementation of the Planned Facilities. The recommendations / projects are grouped by facility type:

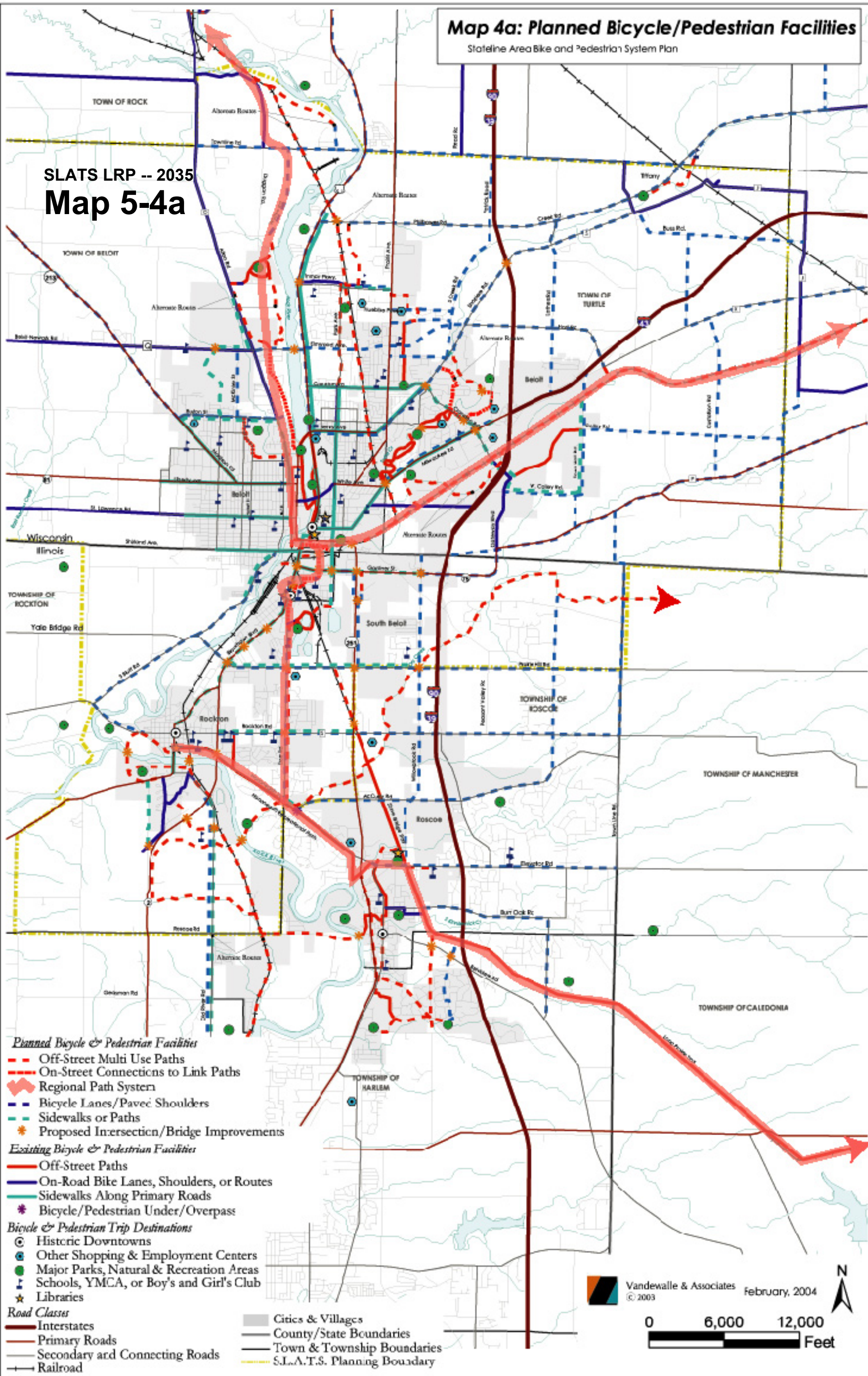
1. On-street bicycling facilities
2. Off-street multi-use path system improvements
3. Intersection improvements
4. Sidewalks, paths, and walkways
5. Overpasses and underpasses.

The BPSP makes short- and long-term recommendations and phases its recommendations into three priority categories, all as funding permits. The first priority improvements are recommended for implementation within 1-5 years; second priority, 5-15 years; and third priority, 15 years and beyond. **MAP 5-5** shows the locations of the first and second priority recommended improvements. Further, because of their importance, the first priority projects are listed in **Charts 5-1 through 5-5** of this LRP. The second and third priority projects can be obtained from the BPSP itself (Appendix B).

Map 4a: Planned Bicycle/Pedestrian Facilities

Stalene Area Bike and Pedestrian System Plan

SLATS LRP -- 2035
Map 5-4a



- Planned Bicycle & Pedestrian Facilities**
- - - Off-Street Multi Use Paths
 - - - On-Street Connections to Link Paths
 - Regional Path System
 - - - Bicycle Lanes/Paved Shoulders
 - - - Sidewalks or Paths
 - ★ Proposed Intersection/Bridge Improvements
- Existing Bicycle & Pedestrian Facilities**
- Off-Street Paths
 - On-Road Bike Lanes, Shoulders, or Routes
 - Sidewalks Along Primary Roads
 - ★ Bicycle/Pedestrian Under/Overpass
- Bicycle & Pedestrian Trip Destinations**
- Ⓞ Historic Downtowns
 - Ⓞ Other Shopping & Employment Centers
 - Ⓞ Major Parks, Natural & Recreation Areas
 - Ⓞ Schools, YMCA, or Boy's and Girl's Club
 - ★ Libraries
- Road Classes**
- Interstates
 - Primary Roads
 - Secondary and Connecting Roads
 - Railroad

- Cities & Villages
- County/State Boundaries
- Town & Township Boundaries
- S.L.A.T.S. Planning Boundary

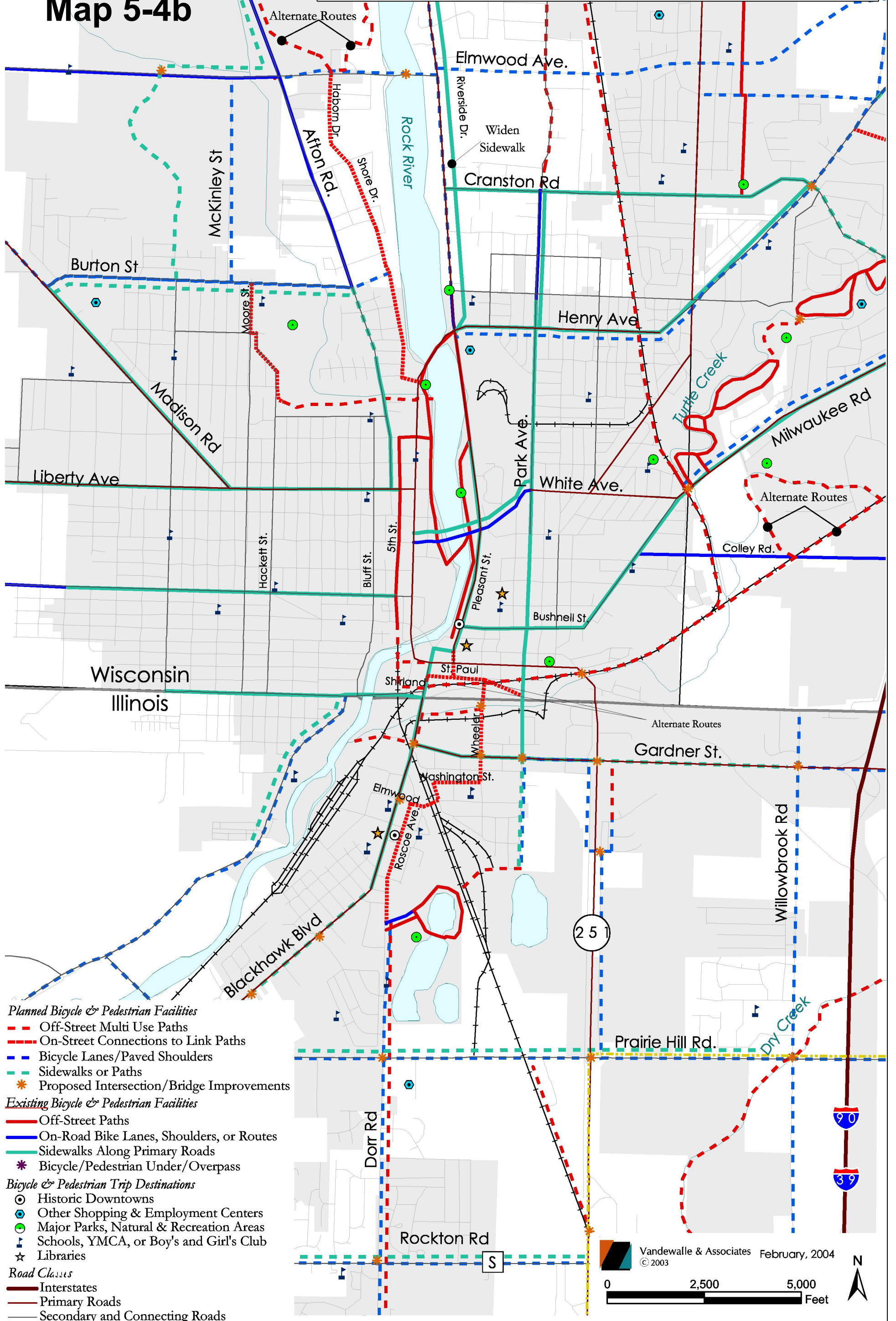
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0 6,000 12,000 Feet

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Map 4b: Planned Bicycle/Pedestrian Facilities - Central Area

Statenline Area Bike and Pedestrian System Plan

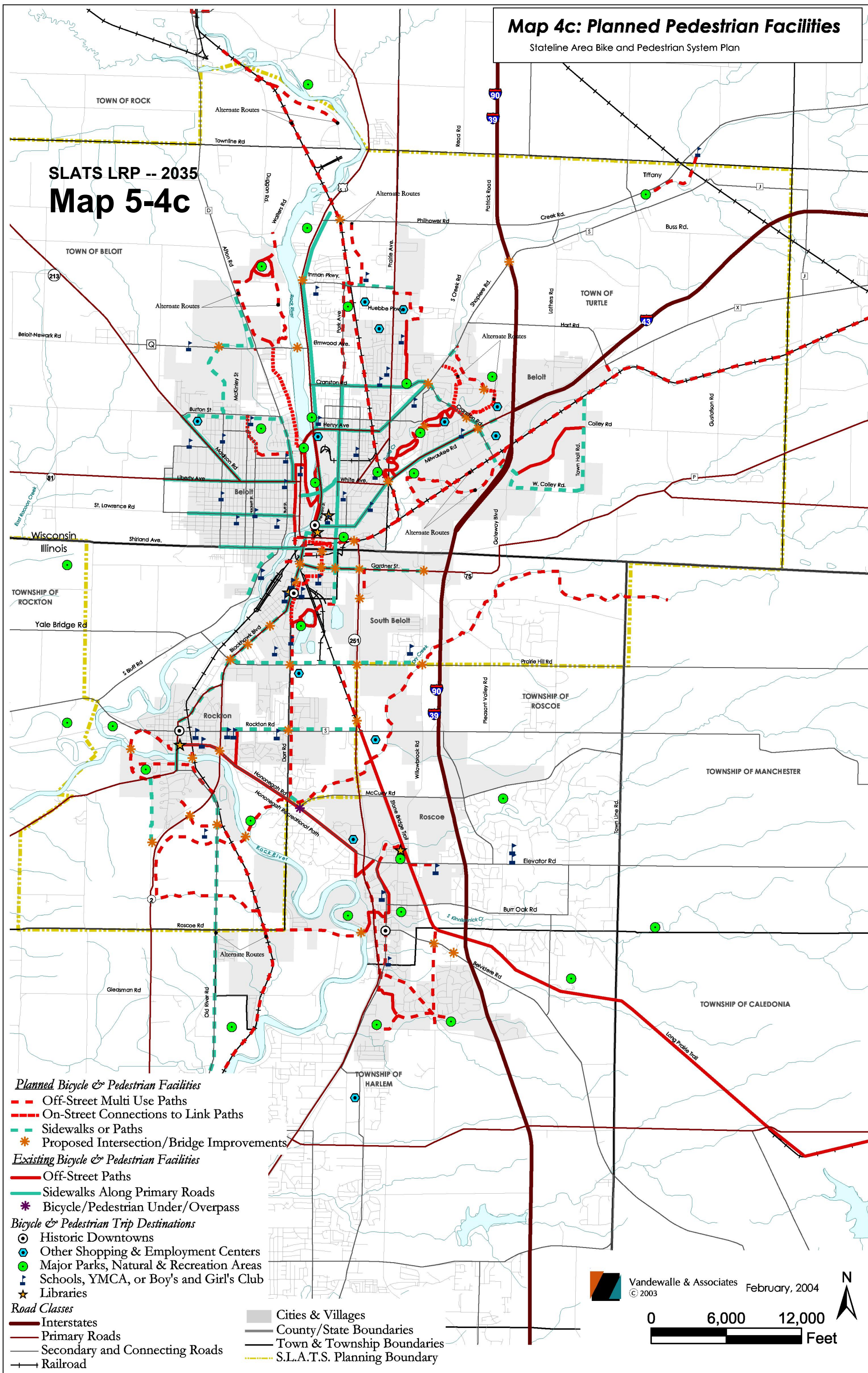


- Planned Bicycle & Pedestrian Facilities**
- - - Off-Street Multi Use Paths
 - - - On-Street Connections to Link Paths
 - - - Bicycle Lanes/Paved Shoulders
 - - - Sidewalks or Paths
 - * Proposed Intersection/Bridge Improvements
- Existing Bicycle & Pedestrian Facilities**
- - - Off-Street Paths
 - - - On-Road Bike Lanes, Shoulders, or Routes
 - - - Sidewalks Along Primary Roads
 - * Bicycle/Pedestrian Under/Overpass
- Bicycle & Pedestrian Trip Destinations**
- ⊙ Historic Downtowns
 - ⊙ Other Shopping & Employment Centers
 - Major Parks, Natural & Recreation Areas
 - ⚡ Schools, YMCA, or Boy's and Girl's Club
 - ★ Libraries
- Road Classes**
- Interstates
 - Primary Roads
 - Secondary and Connecting Roads
 - Railroad

Map 4c: Planned Pedestrian Facilities

Stateline Area Bike and Pedestrian System Plan

SLATS LRP -- 2035 Map 5-4c



Planned Bicycle & Pedestrian Facilities

- - - Off-Street Multi Use Paths
- - - On-Street Connections to Link Paths
- - - Sidewalks or Paths
- * Proposed Intersection/Bridge Improvements

Existing Bicycle & Pedestrian Facilities

- Off-Street Paths
- Sidewalks Along Primary Roads
- * Bicycle/Pedestrian Under/Overpass

Bicycle & Pedestrian Trip Destinations

- ⊙ Historic Downtowns
- ⊙ Other Shopping & Employment Centers
- Major Parks, Natural & Recreation Areas
- ⬇ Schools, YMCA, or Boy's and Girl's Club
- ★ Libraries

Road Classes

- Interstates
- Primary Roads
- Secondary and Connecting Roads
- Railroad

- Cities & Villages
- County/State Boundaries
- Town & Township Boundaries
- - - S.L.A.T.S. Planning Boundary

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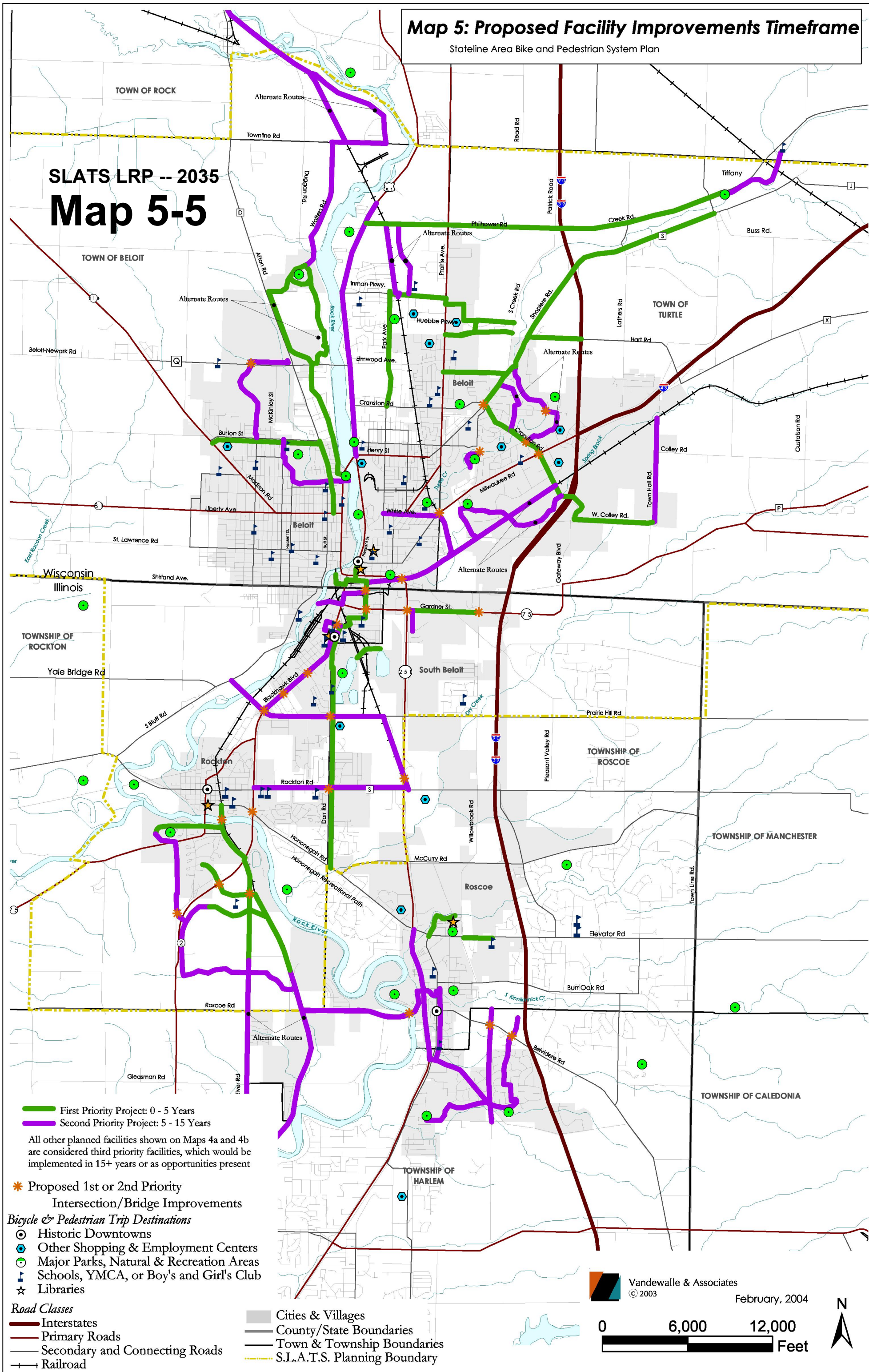


Map 5: Proposed Facility Improvements Timeframe

Stateline Area Bike and Pedestrian System Plan

SLATS LRP -- 2035

Map 5-5



- First Priority Project: 0 - 5 Years
- Second Priority Project: 5 - 15 Years

All other planned facilities shown on Maps 4a and 4b are considered third priority facilities, which would be implemented in 15+ years or as opportunities present

- * Proposed 1st or 2nd Priority Intersection/Bridge Improvements

Bicycle & Pedestrian Trip Destinations

- Historic Downtowns
- Other Shopping & Employment Centers
- Major Parks, Natural & Recreation Areas
- + Schools, YMCA, or Boy's and Girl's Club
- ★ Libraries

Road Classes

- Interstates
- Primary Roads
- Secondary and Connecting Roads
- Railroad

- Cities & Villages
- County/State Boundaries
- Town & Township Boundaries
- S.L.A.T.S. Planning Boundary

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Chart 5-1 1st Priority On-Street Bicycling Facilities

On-Street Bicycling Facilities		1st Priority Recommended Projects	Chart 5-1
Street/Proj Name (listed alphabetically)	Reach	Improvement	Est. Cost (2003 \$)
Dorr Rd	Hononegah Rd to Smith Ln	Add paved shoulder & mark as bike lane.	\$195,000
Eastern Av	Washington St to Lathrop Terr	Sign as bike route as part of South Beloit connector.	\$450
Elmwood Av	Lathrop Terr to Roscoe Av	Sign as bike route as part of South Beloit connector.	\$450
Hart Rd	Shopiere Rd to Interstate	Add paved shoulder & mark as bike lane.	\$49,000
Huebbe Parkway	Prairie Av and Creek Rd	Mark bike lane, or mark as bike route; Will provide link to path running north-south through Park Meadow North subdivision, & may aid in effort to control traffic to safe neighborhood speeds.	\$2,050
Inman Parkway	Turner School to Prairie Av	Stripe bike lane to connect to school.	\$6,100
Lathrop Terr	Eastern Av to Elmwood Av	Sign as bike route as part of South Beloit connector.	\$450
Murphy Woods Rd	Prairie Av to Creek Rd	Mark bike lane, or mark as bike route; Will provide link to path running north-south through Park Meadow North subdivision, & may aid in effort to control traffic to safe neighborhood speeds.	\$1,850
Old River Rd	State Highway 2 to Liddle Rd	Add paved shoulder & mark as bike lane.	\$80,000
Philhower Rd/Creek Rd	Riverside Dr to Shopiere	Pave shoulders & mark as bike lane as part of road expansion.	\$6,200
Riverside Dr/USH 51	Henry St to RR corridor just past Philhower Rd	Stripe bike lane; re-stripe auto travel lanes if necessary.	\$7,250
Roscoe Av	Elmwood Av to Smith Ln	Sign as bike route as part of South Beloit connector.	\$2,250
Shopiere Rd	Cranston to CTH J east of Shopiere	Pave shoulder & mark as bike lane.	\$302,000
St. Paul Av	State St to Wheeler Av	Sign as bike route as alternative to path along RR.	\$900
Washington St	Wheeler Av to Eastern Av	Sign as bike route as part of South Beloit connector.	\$1,300
West Colley Rd	Gateway Blvd. to Town Hall Rd.	Pave shoulder as part of Gateway neighborhood development.	\$14,000
West Hart Rd	Prairie Av to Creek Rd	Mark bike lane, or mark as bike route; Will provide link to path running north-south through Park Meadow North subdivision, & may aid in effort to control traffic to safe neighborhood speeds.	\$1,950
West Rock River Route (Shore Dr/Harbor Dr)	Maple Av to Beloit/Newark Rd	Sign as bike route with possible off-road path segment from Millar to Kelsey Rd (see off-road bicycling recommendations)	\$200,000 (if off-road path option included)
Wheeler Av	St. Paul St & Washington St, over Wheeler bridge	Sign as bike route as part of South Beloit connector; see also "Wheeler Bridge" in overpass/underpass recommendations.	\$900
TOTAL			\$872,100

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Chart 5-2 1st Priority Off-Street Bicycling Facilities

Off-Street Bicycling Facilities		1st Priority Recommended Projects	Chart 5-2
Street/Proj Name (listed alphabetically)	Reach	Improvement	Est. Cost (2003 \$)
Afton Rd path options	Beloit-Newark Rd and Big Hill Park	Paved off-street path in one of two alignments (see map 4a)	\$100,800
Stone Bridge Trail north extension	Rockton Rd and Prairie Hill Rd	Aggregate off-street path	\$125,000
Big Hill Park Trail, Beloit	Through Big Hill Park north to Walters Rd	Off-street path connector; paved or aggregate	\$168,000
Dorr Rd	Hononegah Rd and Smith Ln in South Beloit (Boys and Girls Club)	Paved off-street path	\$373,800
Kin-Stone Trail	Elevator Rd and Stone Bridge Trail, Roscoe	Aggregate off-street path	\$300,000
North Beloit Off-Rd path	Prairie Ave. and existing path extending from Telfer Park	Paved off-street path	\$212,000
Park Av, Town of Beloit	Cranston Rd to Inman Parkway	Paved off-street path	\$120,000
Philhower Rd.	River Rd to Creek Rd.	Off-street path	\$215,000
Players Park Trail	Roscoe Players Park and Porter Park in Roscoe	Paved off-street path (reduce to \$112,000 if aggregate)	\$285,000
Rockton Trail, RR corridor	Main St and Rock River; Rock River and Liddle Rd.	Paved off-street path; cost reduced if trail instead along Old River Rd	\$250,000
Rockton Trail, RR to Macktown	RR and Macktown Settlement, south of river	Paved off-street path	\$308,000
Rockton Trail, north of new middle school	Williamson Parkway and Old River Rd	Paved off-street path	\$190,000
Rockton Trail, south of new middle school	Old River Rd and near State Highway 2	Paved off-street path	\$297,000
Roscoe School Trail	Elevator Rd from Stone Bridge Trail to Roscoe Middle School	Paved off-street path	\$300,000
Shirland Av connector	End of 5th St Path to State St (East Side Path)	Off-street path connector	\$44,000
South Beloit City Park connector	City park, crossing RR tracks east to Caswell St.	Off-street path connector	\$117,000
TOTAL			\$3,405,600

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Chart 5-3 1st Priority Intersection Improvements

Intersection Improvements		1st Priority Recommended Projects		Chart 5-3
Intersection	Existing Control	Bike Pedestrian Improvements		Est. Cost (2003 \$)
		Existing	Proposed	
Belvidere Rd & Sagewood Path	None	None	Add striped crosswalks & pedestrian crossing signs	\$700
Cranston Rd & Entrance to Morgan Square/Wal-Mart	None	None	Add striped crosswalks & pedestrian crossing signs	\$1,700
Cranston Rd & Shopiere Rd	Signal	None	Add striped crosswalks & pedestrian crossing signs	\$1,500
Dorr Rd & Prairie Hill Rd.	4-way stop	None	Add striped crosswalks; Secondary priority, pedestrian actuated signals	\$1,100
Dorr Rd & Rockton Rd	4-way stop	None	Add striped crosswalks; Secondary priority, pedestrian actuated signals	\$1,100
Gardner Av & Wheeler Av	None	None	Add striped crosswalks, pedestrian crossing signage	\$1,700
Gardner Av & Hwy 251	Signal	None	Add striped crosswalks, pedestrian crossing signs, & pedestrian actuated signals	\$168,000
Milwaukee Rd & Cranston Rd	Signal	None	Add striped crosswalks, pedestrian crossing signage, bike lane or path striping (if applicable), and pedestrian actuated signals	\$168,000
Proposed bike path & Old River Rd, Rockton	None	None	Add striped crosswalks, pedestrian crossing signage	\$1,700
Stone Bridge Trail—Rockton Rd Crossing	None	None	Add striped crosswalk, median break, pedestrian crossing signage	\$3,300
TOTAL				\$348,800

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Chart 5-4 1st Priority Sidewalks & Pathways

Sidewalks & Pathways		1st Priority Recommended Projects		Chart 5-4
Street	Reach	Existing	Proposed Improvements	Est. Cost
				(2003 \$)
Afton Rd	Burton St. and Liberty Av	Discontinuous	Add sidewalks along both sides where missing	\$90,000
Burton St.	Madison Rd to Afton Rd	Discontinuous	Add sidewalks along both sides where missing	\$360,000
Cranston Rd	Shopiere Rd to I-39 bridge	None	Add sidewalk or path on both sides	\$350,000
Gardner Av	State Hghw 251 & Willowbrook Rd	None	Add sidewalk on both sides	\$270,000
Old River Rd	State Hghw 2 to Liddle Rd	None	Add sidewalks along both sides	\$130,000
Prairie Hill Rd	Dorr Rd & State Hghw 251	None	Add sidewalks along both sides	\$302,000
TOTAL				\$1,502,000

BkPedImprmnts.xls

Chart 5-5 1st Priority Over/Under pass & Other Facilities

Over/Under-passes & Other Facilities		Chart 5-5
1st Priority Recommended Projects		
Name	Proposed Bike / Pedestrian Improvement	Est. Cost (2003 \$)
RR bridge, Rockton	Add bike/pedestrian facility bridge; cost substantially less if built onto existing RR bridge	\$490,000
Wheeler Bridge	Restore bridge to carry pedestrian & bike traffic	\$134,000
TOTAL		\$624,000

BkPedImprmnts.xls

VII SUMMARY COST AND REVENUE ESTIMATES

Cost estimates are provided for the first priority recommendations, the highest priority group, and are summarized in **Chart 5-6** below. As illustrated, the total cost to implement the recommended first priority improvements is \$6,752,500.

Chart 5-6 Cost Est. Summary for 1st Priority Projects

Cost Estimate Summary for 1 st Priority Bike & Pedestrian Projects		Chart 5-6
Category	Total	Source
On-Street Bicycling Facilities	\$ 872,100	Chart 5-1
Off-Street Bicycling Facilities	\$ 3,405,600	Chart 5-2
Intersection Improvements	\$ 348,800	Chart 5-3
Sidewalks & Pathways	\$ 1,502,000	Chart 5-4
Over/Under-passes & Other Facilities	\$ 624,000	Chart 5-5
Total	\$ 6,752,500	
Note that the costs for some projects recommended in the BPSP were not included in the BPSP but were estimated as part of this LRP update.		
Estimated Average Annual funding available for Bike & Pedestrian Projects	\$ 418,000	Chart 5-7
Estimated time to implement 1st Priority Projects	17 Years	

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To estimate the funding that might be available to implement the first priority recommended improvements, SLATS staff reviewed the bike / pedestrian projects that were funded over the last six years and tallied the funding by revenue source (1999 through 2004). This information is summarized in **Chart 5-7**. All these funds are non-duplicative; i.e., they are not double counted as some were shown in multiple fiscal years. As can be seen, several funding sources have been available -- the largest being the Federal Enhancement funds allocated to the State of Wisconsin and passed through to the SLATS area. Local and State funding amounts, however, have also been significant. Because there is no reason to assume otherwise, this LRP assumes that there will continue to be similar amounts of funding dedicated to bike and pedestrian needs over the period of this LRP.

Therefore, based on the last six years, this LRP assumes there will be an average of approximately \$584,000 available annually. Further, dividing the total estimated cost of the first priority recommendations (**Chart 5-6**) by the annual funding estimate, it is estimated that it will take approximately 17 years to complete the first priority projects. This, of course, is a longer time span than was sought for by the BPSP but is most likely the best implementation scenario that can reasonably be achieved.

Funding estimates for the Second and Third Priority recommended projects were not prepared as part of the BPSP. However, given the above funding availability estimate, there could be nearly \$11 million available during the last 18 years if the Plan time frame for implementation of all or part of those projects. This LRP will be updated again in five years. During that time, SLATS will be able to get a better grasp on the community support for the BPSP and the level of continued funding commitment for bike and pedestrian improvements that is likely to come forth from the local, State and Federal governments. At that time, the remaining recommended projects will be reevaluated and, as appropriate their costs estimated and compared with updated funding forecasts. Therefore, given the level of information available at this time, the bike and pedestrian element of this LRP is regarded as "fiscally constrained" in accordance with Federal guidelines.

Chart 5-7 Bike/Ped & Other Enhancement Project, Yr 02-06

SLATS Bike / Pedestrian & Other Enhancement Projects, FY 2002 thru 2006										Chart 5-7		
Entity	Yr	Extent	Type	EorP	Phase	Federal		State		Local		Total \$
						\$Amt	Src	\$Amt	Src	\$Amt	Src	
ILL	Rockton	06	Rec Path over Rock River	B&P	E	PE	120,000	STP-EN	30,000	IDOT	VR	\$ 150,000
WIS	COB	03	Riverwalk Bike Path	B&P	E	Const	104,000	STP-EN	0		26,000 COB	\$ 130,000
WIS	COB	03	Riverwalk Bike Path	B&P	E	PE	24,000	STP-EN	0		6,000 COB	\$ 30,000
WIS	COB	03	Riverwalk Bike Path on CNWW, Shirland to Grand	B&P	E	PE	32,000	STP-EN	0		8,000 COB	\$ 40,000
WIS	COB	03	Riverwalk Bike Path, Grand to Middle	B&P	E	Const	192,000	STP-EN	0		53,000 COB	\$ 245,000
WIS	COB	03	Shopiere/Cran B&P, Prairie to Milwaukee	B&P	E	PE	65,000	STP-U	0		16,000 COB	\$ 81,000
WIS	COB	03	Turtle /Lenn B&P	B&P	E	PE	76,000	STP-D	0		18,000 COB	\$ 94,000
WIS	COB	03	Turtle /Lenn B&P	B&P	E	ROW	24,000	STP-D	0		6,000 COB	\$ 30,000
WIS	COB	04	Riverwalk Bike Path on CNWW, Shirland to Grand	B&P	E	Const	512,000	STP-EN	0		128,000 COB	\$ 640,000
WIS	COB	06	Lenigan Bike Trail	B&P	E	PE	56,000	STP-EN	0		14,000 COB	\$ 70,000
WIS	COB	06	Riverfront Billboard Removal		Special	PE	240,000	STP-EN	0		60,000 COB	\$ 300,000
WIS	COB	06	Riverwalk Bike Path from Portland to BMHS	B&P	E	Const	125,000	STP-EN	0		31,000 COB	\$ 156,000
WIS	COB	06	Turtle Creek Bike Trail	B&P	E	PE	56,000	STP-EN	0		14,000 COB	\$ 70,000
WIS	T Beloit	05	Cranston/Inman Bike Path	B&P	E	PE	43,000	STP-EN	0		11,000 TB	\$ 54,000
5-Year Totals							\$ 1,669,000		\$ 30,000		\$ 391,000	\$ 2,090,000
Average Annual							\$ 333,800		\$ 6,000		\$ 78,200	\$ 418,000

Source: SLATS FY 2002 thru 2004 TIPs

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CHAPTER SIX - THE PLAN FOR ROADWAYS IN THE STATELINE AREA

I INTRODUCTION

Of all the Chapters in this Plan, this Chapter on Roadways is likely the most important. In Chapter 3, we learned that more than 82% of all persons traveling to work in the Stateline Area did so by driving alone in their automobiles. Another 11.2 % commuted by carpool, and nearly another 1% rode buses, motorcycles or bicycles. In total, nearly 95% of all persons traveling to work in the area were dependent on the system of roadways in the Stateline Area to access their places of work. Undoubtedly, similar numbers relied upon the roadway system as their primary means of access to shopping, recreation, health-related, emergency, and governmental services. The industry and commerce of the region is equally dependent on the area's system of roadways. According to data cited in the recent Long-Range Transportation Plan of the Rockford Area, more than 73% of the freight (by value) and 78% of the freight (by weight) is carried by trucks in Northern Illinois. Within the next decade, the Federal Highway Administration estimates that highway freight tonnage across the country is likely to grow to 80% of the total tonnage.

Moreover, in spite of all the emphasis put forth previously in this Plan to encourage the use of transportation means that place less demand on roadways and are potentially less polluting or more healthful (i.e., buses, trains, and non-motorized), it is highly improbable that the demands on the area's roadway system will decrease in the coming 2-3 decades (the term of this Plan).

Two factors are likely to continue the Stateline Area's reliance on the auto/truck mode: legacy and convenience. Presently, the use of autos and trucks is entrenched in the area's economy and lifestyle. Over the last 50 years, the Stateline Area has extensively expanded its transportation infrastructure to accommodate and co-mingle with a practice of low density land development. Hundreds of miles of roadways have been constructed or improved, costing billions of dollars. This auto/truck system provides a level of convenience and efficiency in the now-sprawled Stateline community that is almost impossible to supplant with other transportation modes. These factors are further bolstered by the "affection" Stateline persons have for their automobiles. People across the country, and no less in the Stateline Area, prefer automobiles just for the fun of driving. Only steeply rising fuel costs are likely to precipitate a change in the dominance of this transportation mode. Even then, some argue, technological changes in engines and fuel will continue the auto/truck reliance. Therefore, this LRP accepts that maintaining and improving the roadway system will remain paramount in the transportation priorities of the Stateline Area between now and the time this LRP is again updated (five years) and, possibly, during the entire term of this Plan (20-30 years). With that situation in mind,

achieving the visions and goals expressed in Chapter 2 fall mostly within the realm of the situations, policies, principles, and objectives set forth in this Chapter on Roadways.

II ROADWAY CLASSIFICATION AND RELATED ISSUES

An accepted structure for understanding, organizing, setting priorities and assigning responsibilities for the various parts of any roadway system is commonly referred to as the Functional Classification System of Roadways (hereafter, the Functional System, for short). The Functional System is similar to the blood circulatory systems of animals. Just as capillaries and small veins provide direct access to cells in the body, local roads or neighborhood streets provide access to small parcels of land. As arteries and larger veins distribute and collect blood to or from the small vessels, so do some roads distribute and collect traffic from the smaller roads and function more as transport mechanisms. These are called "collector roads." Further, even larger roadways collect or distribute traffic from the collectors. These are called "arterial roads." In other words, the Functional System is based on the principle that roads serve different purposes and should, therefore, be laid out and designed to different standards depending on their function. For example, if a road's only purpose is to provide access to one piece of property once a day, it does not need to be designed to the same standards as a road that will provide access to hundreds of pieces of property multiple times a day . . . or a million pieces of property millions of times a day.

The Functional System used in this LRP is a simplified version of the systems used by the Illinois Department of Transportation (IDOT), the Wisconsin Department of Transportation (WisDOT), and the Federal Highway Administration (FHWA). There are five main classes:

1. **Local Streets.** Traffic originates from the places people live or the places they work. This traffic actually starts from a driveway or parking lot (also a road) but the first public road encountered is a "local or neighborhood" street. These local streets provide direct access to the homes, businesses and industries that abut them. The design of these roadways is governed by the number of properties having access to them and the frequency and weight of the vehicles. Local streets are not designed to carry traffic that does not originate from or is destined to properties that have direct access to them. From the standpoint of the movement of normal traffic, local streets could be designed with single lanes or very narrow double lanes. For emergency purposes, most local streets are designed wider, to allow movement of fire trucks in adverse situations. Local streets need not be connective, that is, allow direct movement to other neighborhoods. But again, for emergency purposes, they often are linked with other local streets. And while this improves safety issues, it creates opportunities for thru-traffic – travel not originating from or destined to the local street's neighborhood.
2. **Collectors.** These roadways have two purposes: (1) collect traffic from the local streets, allow that traffic to proceed at a faster speed, and transmit that traffic to other roads for further travel or to another local street and a destination; or (2) accept traffic from arterial roadways (below) and disburse that traffic to local streets. Some direct access to properties is allowed on collectors and the dis-

inction between a collector and a local street is blurred. This is more frequent in older or "less-planned" neighborhoods where the "collector" designation may have simply evolved by virtue of the fact that heavy traffic gravitates to them for a variety of "unplanned" reasons. Such roads may be called Minor Collectors, Local Collectors, or "Default" Collectors (discussed more under "Existing Roadway Design Standards," below). These subclasses of collectors are not always differentiated (e.g., Wisconsin's Functional System).

3. **Minor Arterials.** This third class of roadway is similar to a Collector but it provides for high-speed and/or high-volume traffic. They are typically used more for longer trips than Collectors and shorter trips than the roadways below. They are typically built and maintained under local jurisdiction rather than State/Federal. Minor arterials often form boundaries between recognized "neighborhoods." All arterials are usually given movement preference over lower-level streets (i.e., crossing traffic will yield or stop, or is grade-separated). Depending on projected traffic volumes and traffic conflicts, direct access from properties may be constrained on Minor Arterials or directed to points where traffic conditions are safer.
4. **Principal Arterials.** These roadways are designed to convey traffic for long distances within the region or to and from adjacent or nearby regions. They are designed to safely allow higher speed traffic (sometimes up to 55 mph or higher). Most intersections with other roadways have traffic signals or other sophisticated controls. They are often part of statewide or nationwide networks.
5. **Interstates or Freeways.** This is the highest class in the system. Interstates are designed for high-speed and high volume traffic. As the name implies they are designed for long-distance travel and are typically part of the Interstate System or the National Highway System which provides for high speed access to all major regions of the nation. Access to these roadways is strictly controlled and limited too specially designed interchanges (intersections with other roadways that are grade-separated with bridges over the intersections, and the roads connected only with special ramps for acceleration and deceleration). These roads are designed with numerous features to improve the safety of high-speed travel. Interstates in the Stateline Area are I-39/90, and I-43.

Charts 6-1 and 6-2, below summarize the main aspects of the above-described simplified system of roadways. Note that there is overlap in many of the classes. The system is not precise. Also note that Functional Systems are sometimes further divided into Rural Functional Systems and Urban Functional Systems because roadway design standards are often more elaborate in highly developed or developing urban areas than in rural areas. This LRP recognizes that many roads within the SLATS Metro Area may currently be designed to rural standards – but, as the area develops and matures most such roads will be redesigned and reconstructed to urban standards, as will most, if not all, new roadways.

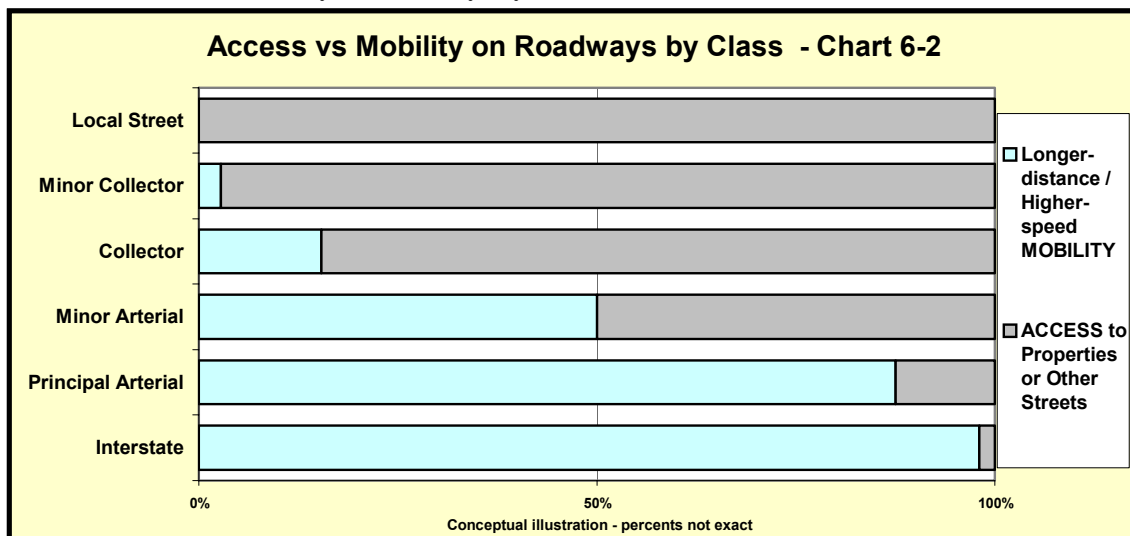
Chart 6-1 Functional Classification Design Considerations

Functional Classification System -- Design Considerations						
Design Consideration	Roadway Functional Class					
	Local Street	Minor Collector	Collector	Minor Arterial	Principal Arterial	Interstate
Signal spacing (miles)	NA	0.25	0.25	0.5	0.5 -- 1	NA
Speed limit (miles per hour)	15-25	20-30	25-30	30-35	35-55	55-65
Parking	Generally permitted	Controlled	Controlled	Limited	Prohibited	Prohibited
Spacing (miles), approximate	< 0.5	0.5	0.5	0.5 to 1	> 1	NA
Continuity	Discontinuous	Semi-continuous	Semi-continuous	Semi-continuous	Continuous	Continuous
Mobility	Low	Medium-Low	Medium	High	High	Very high
Access	Very direct (all properties that abut have access)	Direct (many properties have access)	Direct (some driveway access)	Semi-controlled	Controlled to semi-controlled	By controlled interchange or ramp only
Intersection grade separation	Almost never	Almost never	Seldom	Sometimes	Frequently	Always
Vehicles per Day (1,000s)	<1	1-3	1-5	5-25	15-35	25-100 plus
Examples	Residential streets	Fischer, Butterfly, Manchester	Milwaukee, Prairie Hill, Door	Elevator, Park, Shopiere, Blackhawk	WI-81, WI-213, IL-2, IL-51, IL-75,	1-90, 1-39, 1-43

Source: 1995-2020 SLATS LRP, with modifications

Func Class chart.xls

Chart 6-2 Access vs Mobility on Roadways by Class



MAP 6-1 illustrates how the roadways in the Stateline Area are classified by function. The system in **MAP 6-1** is slightly more elaborate than the simplified system described above. However, the principles or basic concepts of dividing roadways into different classes depending on their intended or predominate trip purpose or usage remains the same.

The Functional System of roadways is important for two more aspects not yet discussed. First, perhaps obvious from the above descriptions, the different classes of roadway are designed and constructed to greatly different standards, depending on their intended use. Second, the Functionally Classified System is useful in defining responsibilities for construction and maintenance. These two intertwined aspects will be discussed in the following sections.

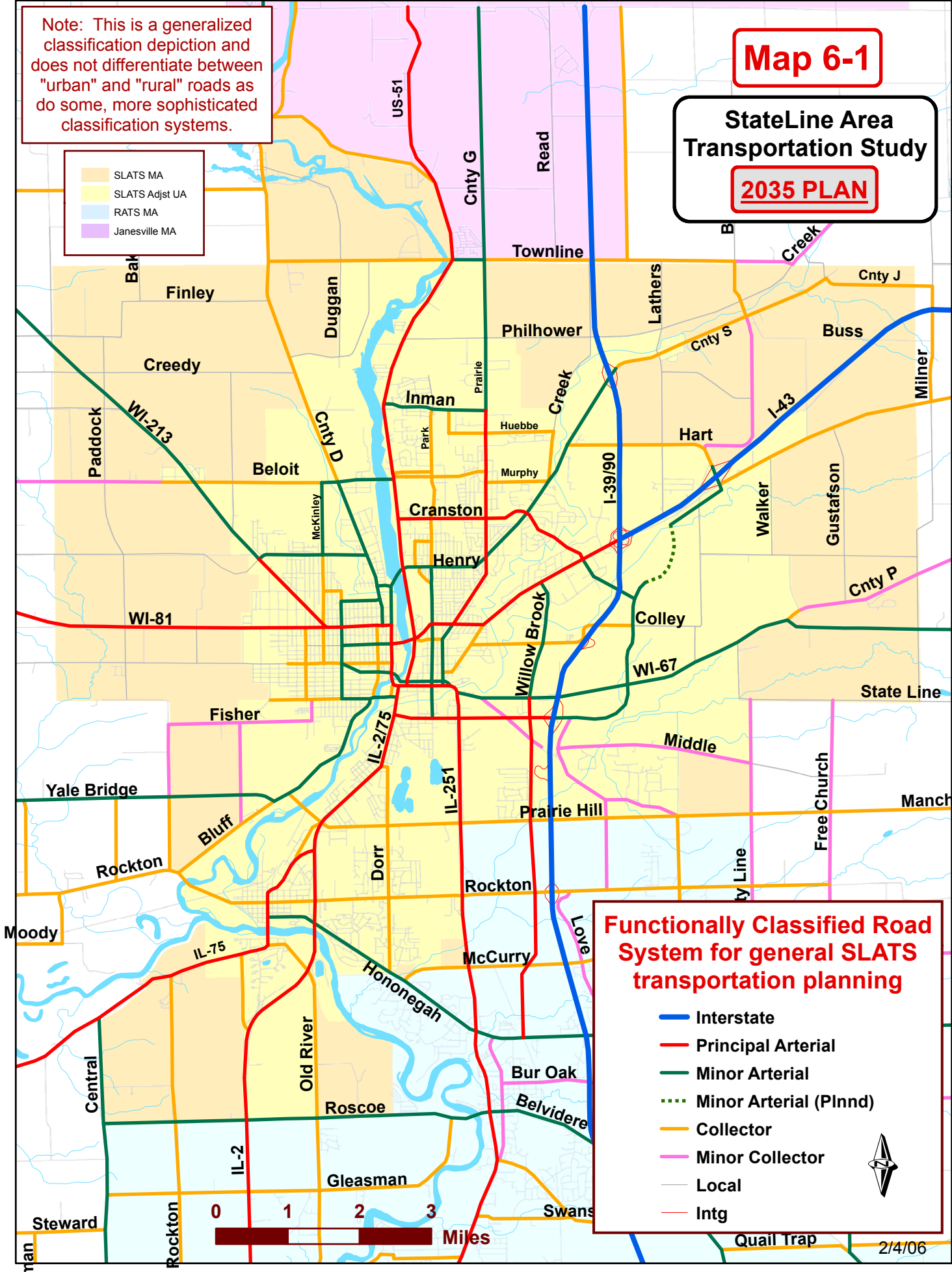
Note: This is a generalized classification depiction and does not differentiate between "urban" and "rural" roads as do some, more sophisticated classification systems.

- SLATS MA
- SLATS Adjst UA
- RATS MA
- Janesville MA

Map 6-1

StateLine Area Transportation Study

2035 PLAN



Functionally Classified Road System for general SLATS transportation planning

- Interstate
- Principal Arterial
- Minor Arterial
- - - Minor Arterial (Plnnd)
- Collector
- Minor Collector
- Local
- Intg



III EXISTING ROADWAY DESIGN STANDARDS

Roadway design standards can be grouped into several major categories including roadway spacing, right-of-way (ROW) and road width standards, and road construction standards related primarily to the ability of the road to bear heavy loads and the road's intended lifespan.

A. Spacing

This LRP follows traditional system design standards for arterial (principal or minor) spacing and recommends that arterials be established at roughly one-mile intervals. Collector roadways are also traditionally spaced at one-mile intervals, i.e., roughly « mile from and equidistant between each arterial. These two standards must, however, be flexibly applied. Physical features, property lines, cultural features, historically-created conditions, development complications, and atypical traffic generation situations sometimes make it necessary to deviate from these rules.

Local streets are spaced to provide access to all existing lots, or lots which may be created through the subdivision process. In some areas that were developed many years ago, collector streets were not defined or were poorly defined or spaced. In these areas, streets that were originally local streets are sometimes functioning as collectors (or even arterials). Where such streets have good connectivity with the overall system and/or have abutting land uses that tolerate or benefit from the heavier traffic, these streets are designated as collectors (or arterials) in the LRP. They have become collectors or arterials by "default" rather than design.

B. ROW & Pavement Standards

Roadway ROW differs from street pavement width. Roadway ROW includes: the pavement area itself; the area for curbs, gutters, drainage ditches, and/or shoulders; the area necessary for sidewalks or pathways; areas necessary for water mains, sanitary sewers, and utility easements; areas necessary for landscaping and similar public amenities; areas necessary to provide for the safe separation between traffic and abutting land uses; areas necessary for vehicle refuge during traffic mishaps; and last but not least, areas considered necessary for future street or other public infrastructure enlargements. ROW standards for roadways differ considerably depending on the existing and future function of the roadway.

Pavement width, on the other hand, is the road itself and is based on the size necessary to accommodate moving vehicles of varying widths, moving at varying speeds, in the same or opposing directions, under varying conditions of peak traffic, weather and other factors. Pavement width may also have to account for parking of vehicles, emergency vehicles, turning situations, on-street bicycle lanes, and the need for emergency shoulders.

Standards for ROW and pavement widths for the various road classes are based on local subdivisions regulations, local street design codes, and applicable State and Federal standards. In most cases, local and collector streets in the Stateline area are built on 60-70 feet of ROW with 25-35 feet of actual pavement. Arterial roadways are considerably wider, depending on expected traffic volumes, design traffic speeds, access accommodations, possible future pavement expansion needs, and other factors.

C. Construction and Lifespan design Standards

Roadway construction and design standards are the subject of countless textbooks, university courses, and trade journals. Research on this topic is extensive, perspectives on how roads should be constructed in order to reduce both total construction and maintenance costs are equally extensive, and construction techniques and materials are constantly improving. On one hand, given enough initial effort and investment, roads can be constructed that could last centuries. The matter, however, is not that simple. There are limited resources for constructing and improving roads and other infrastructure elements. Compromises must always be made between what can be "built to last" and what has to be built today to meet the needs of today.

The communities of SLATS generally follow national standards for roadway design and construction. Roadways are designed according to the type of usage, the amount of traffic, and the predominant weight of the loads anticipated. Roadways are also designed to varying standards depending on soil, drainage and other physical conditions as well as differing governmental requirements. A special sub classification of roadways, "Truck Routes," has been created (see **MAP 6-2**) and these roads, when built or improved, are constructed to even more exacting standards designed to withstand the burden of frequent heavy loads.

A design consideration that should be looked at, especially when designing expensive infrastructures, is life-cycle costing. Life cycle costing is the process of identifying and quantifying all costs associated with a structure over its useful life. An examination of life cycle costs can have two benefits. First, when evaluating proposed new structures, it provides a more complete estimate of the total costs and thereby allows more valid comparisons of alternatives. A project which is inexpensive to build but is expensive to maintain or has a short life span may be less cost-effective than a project that is more expensive to build but less expensive to maintain or has a longer life span. Second, life cycle costing can be a useful aid for forecasting and programming future funding needs for the repair and general maintenance. Either way, funding resources can be better conserved.

Map 6-2

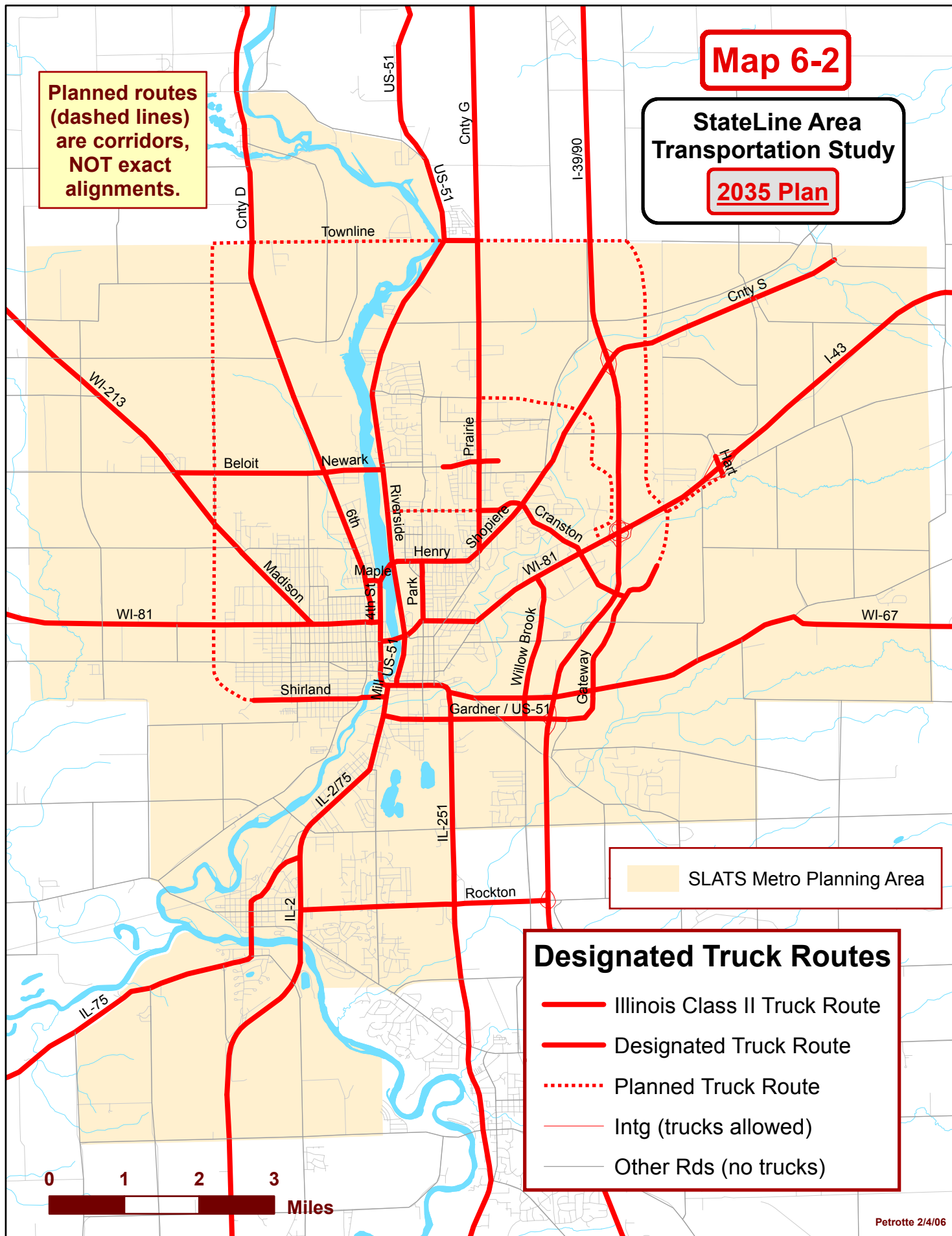
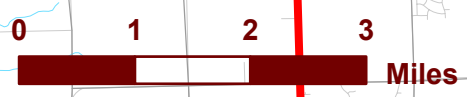
StateLine Area Transportation Study 2035 Plan

Planned routes (dashed lines) are corridors, NOT exact alignments.

SLATS Metro Planning Area

Designated Truck Routes

- Illinois Class II Truck Route
- Designated Truck Route
- Planned Truck Route
- Intg (trucks allowed)
- Other Rds (no trucks)



IV EXISTING ROADWAY CONSTRUCTION AND MAINTENANCE RESPONSIBILITIES

Nearly all major roadways of modern times are built and/or maintained by public agencies via public tax dollars. However, the agencies responsible and the source of the tax dollars vary by the class or purpose of the roadway. Interstate highways are primarily sponsored and maintained largely with Federal tax dollars that are passed through to the States and commingled with varying amounts of State tax dollars. However, because the Federal government does not have an entity that actually constructs, maintains, or operates highways; those roles and responsibilities are placed within the jurisdiction of the States. For example, I-39/90, which was primarily funded with Federal funds, is under the jurisdiction of Wisconsin, north of the IL/WI state line, and Illinois, south of that line. Likewise, the construction and maintenance of most Principal Arterials is the responsibility of the State governments (sometimes with sizable amounts of Federal funding assistance), while the Minor Arterials are typically the responsibility of the local governments (counties, municipalities, and townships). Collectors and Local Roads are almost always the responsibility of the local governments. **Chart 6-3** summarizes the roadway responsibilities.

Chart 6-3 Roadway Responsibilities

Roadway Funding, Construction, & Maintenance Responsibilities								Chart 6-3
Design Consideration	Roadway Functional Class							
	Private Drive or Street	Local Street	Minor Collector	Collector	Minor Arterial	Principal Arterial	Interstate	
Initial Funding	PD	PD	PD	PD, L	L or S	F or S, L	Primarily F	
Initial Construction	PD	PD	PD	PD, L	L or S	S, L	S	
Ownership jurisdiction	PD	L	L	L	L or S	S, L	S	
Operational jurisdiction	PD	L, S	L, S	L, S	L or S	S, L	Primarily S	
Long-term maintenance funding	PD	L	L	L	L or S	F, S, L	Primarily F	
Long-term maintenance work	PD	L	L	L	L or S	S, L	S	
Major reconstruction	PD	L	L	L, S	L or S	F or S, L	Primarily F	
Design Standard Responsibilities	PD & L	L	L	L	L & S	S & F	F & S	
Abbreviations & notes:				PD = Property owner or developer L = Local governments (cities, counties, towns & S = State governments F = Federal government				
First entity listed usually has the primary responsibility								
"&" sign refers to a more or less, joint responsibility								
"or" means responsibility varies by location								

Func Class chart.xls

An important distinction is notable, however, with regard to new Collectors and Local Roads. The initial construction of most new roads in these lower classes is the responsibility of private land owners or land developers as part of the land subdivision / development process. After they are constructed (to agreed upon standards), these new Locals and Collectors are turned over (dedicated) to local governments for long-term maintenance. Although most new higher classed roads (arterials) are both built and maintained by government or some government-empowered entity (e.g., a Tollway Authority), the initial construction costs of some aspects of the higher classed roads are sometimes charged or partially charged to private developers. Developers may be required to pay for the added turn lanes, signals, extra lanes, frontage roads and other improvements to arterials. This is especially true where the added improvement is necessitated by traffic generated by the new development or the new development will significantly benefit from the roadway improvement. These situations often involve intense negotiation between the governmental entity and the developer. Sometimes, governments will pay for all or part of the extra improvements for the sake of enticing the development and its benefits to the community.

Because Collectors are deemed a developer responsibility, spacing and locating these new roads is sometimes a problem. This is because they are often located on the section or half-section lines (Public Land Survey) which may also be the developer's property line. The first developer along this line is apt to argue against full responsibility for such Collectors, since the property owner on the other side of the line will also benefit from its construction. Two related problems of developer-constructed Collectors are street continuity and street name consistency. Because lands are chosen for development somewhat randomly, Collectors may be discontinuous for long periods of time. When long lengths are finally completed, there may be multiple street names and numerous jogs or offsets.

Another recurring problem with developer-constructed Collectors is that developers often argue for access for all lots located along the Collectors. This is logical because the sale of lots is the means by which the developer funds the construction of the street. Sometimes this argument can be accepted if the number of access points is minimal (e.g., large multifamily complexes where the access is limited to one or two points per tens of actual residents, or small shopping centers with consolidated access points). But, when local governments acquiesce to this demand in extreme situations (small lots, each with access), the Collector becomes more of a local street. This works for a short time before the Collector is fully completed and connected with other segments constructed as part of subsequent developments. Then, residents living along these Collectors complain that the placid character of their neighborhood has been destroyed by the new volumes of fast-moving traffic. That problem can be partially corrected by lowering speed limits to Local Street levels and installing traffic calming measures -- but such solutions defeat the purpose of the Collector as roadway that is intended to collect and/or distribute traffic from/to several Local Streets.

V RECOMMENDATIONS ON GENERAL ROADWAY DESIGN, CONSTRUCTION, AND MAINTENANCE

This LRP encourages the following with regard to roadway design and construction standards and construction and maintenance responsibilities:

1. The principles set forth in this section are skeletal. The units of governments within the Stateline Area and the abutting Metropolitan Areas are encouraged to collaborate in the near future to thoroughly evaluate their roadway construction standards and their policies and rules determining who is responsible for roadway improvements made in conjunction with new land subdivisions and developments. To the extent possible (without stifling variety, creativity and experimentation), these efforts should result in standards and policies that are consistent and non-conflicting from jurisdiction to jurisdiction. Such collaborations can provide developers with consistent and fair foundations for determining their responsibilities and costs.
2. Overall, the roadway spacing standards in use are considered adequate. Flexibility in these standards is necessary because of variable situations and legacy conditions.
3. When making improvements to "default" collectors or arterials, they should be designed to accommodate the heavier traffic to the extent possible while, at the same time, designed to minimize adverse impacts to adjacent properties.
4. This LRP recognizes that the communities of the Stateline Area have well-established standards for roadway and ROW width, and roadway design and construction standards, as well as procedures for reviewing and modifying these standards. This LRP does not recommend significant changes to these standards or procedures. However, this LRP recommends the following:
 - a. All local communities should periodically review their standards.
 - b. To the extent practical, the standards of the local communities should be consistent and compatible from community to community and with State and Federal standards.
 - c. Standards should be increased where appropriate but communities should consider that increasing ROW and pavement width is not always in a community's best interest. Every square foot of pavement constructed detracts from the natural environment, increases storm water runoff, alters the microclimate in urban areas, increases land development costs, and is pavement that has to be maintained in the future at taxpayer's expense. In some cases, decreasing pavement and ROW standards may be more appropriate.
5. The design and construction of new Local Roads and Collectors should continue to be predominantly the responsibility of the land owners and developers. How-

ever, special attention should be devoted to the layout and design of Collectors in order to avoid or mitigate the problems with developer-constructed Collectors described above. It often makes more sense for government to fund and construct some Collectors -- in particular, those that are expected to carry high volumes of traffic. As a government-sponsored road, the layout can be better coordinated with the overall road system, access can be better controlled, and the road can be built to higher standards. Unfortunately, local government budgets are often tight, and funding may not be available to meet developer timing considerations. In these instances there is a tendency to allow the developer to construct the collector at lesser standards. This can be acceptable under some circumstances but should be avoided unless the developer is willing to concede additional ROW for future expansion needs and, more important, make design adjustments that will minimize future traffic conflicts (e.g., extra building setbacks, consolidated driveways, reverse frontages, etc.). It is also very important that prospective property owners along these potential high-volume Collectors be fully informed of the likelihood of future traffic increases. Failure to inform property buyers that the street abutting the property will soon carry high volumes of traffic is no different from failing to inform them that there is a utility easement through part of the property or that part of the property is subject to flooding or some other hazard. Developers and Realtors should be mandated to disclose such information.

6. All new local roads and collectors should be constructed in accordance with design standards as set forth by the area local governments and consistent with commonly accepted State and national engineering and design standards. Local governments in the Stateline area should work together to develop a consistent set of design standards. Local governments should only accept maintenance responsibilities for roads so constructed.
7. Arterial and interstate roadways are considered the responsibility of government. However, the costs of extra access ramps, turn lanes, signals, and extra carrying capacity caused by nearby development should be borne by the developer unless there is obvious substantial benefit to the community as a whole.
8. Regardless of roadway functional class and/or design and construction responsibility, all new or reconstructed roadways in the Stateline Area should be designed with consideration of and accommodation of travelers who travel by pedestrian, bicycle, and public transit modes. New roadways and reconstructed roadways (and related structures) should not pose obstacles to travel by the other modes and should, to the greatest extent possible, provide accommodations that allow safe and efficient travel by those other modes.

VI TRUCK ROUTES

As mentioned above, the Stateline Area has an extensive subsystem of roadways designated for heavy truck traffic. The Stateline community seeks to confine heavy trucks to certain routes for three purposes:

1. To withstand the weight of heavy trucks, roadways (and bridges) must be expensively designed and constructed. It is simply not financially feasible to design all roadways to these standards.
2. For a variety of environmental and safety reasons, it is undesirable to allow trucks free movement throughout the community. Albeit, heavy trucks or vehicles must, at some time, use nearly every street or road within the Stateline Area. Examples are buses, school buses, garbage trucks, moving vans, fire trucks, and agricultural vehicles. However, it is prudent to limit the longer-distance, through movements of heavy vehicles to a limited number of roadways.
3. Many Stateline roadways simply cannot safely accommodate large or heavy weight vehicles. Short turning radii, low overpasses, steep grades, narrow widths, overhanging trees and a variety of other factors make large vehicle passage impossible or unsafe.

MAP 6-2 (page back, 3 pages) illustrates the currently designated truck routes in the Stateline Area, as well as a number of proposed new truck routes. Note, this map was created for general planning purposes and is insufficient for the actual regulation of truck traffic. The map defines those roadways where additional planning and design work must be included when the designated roadways are constructed or reconstructed and where additional funding will be devoted. The map is also important because accelerated truck freight growth in the Stateline Area is highly likely. The following factors contribute to this likelihood.

1. According to a recent report, in the year 2002 trucks carried 74.3% of the value of freight shipped in the Nation and 67.2 % of the weight. Nationwide between 1993 and 2002 the total freight tonnage increased by 22% to nearly 8 billion tons. In urbanized areas such as those of SLATS, RATS and the Janesville MPA, the percentages of freight shipped by truck are likely to be even higher. Truck tonnage was reported at slightly less than 606 million tons in 1998 in Wisconsin; Illinois was reported at more than 1.4 billion tons. The same FHWA source estimated that by 2020 the Wisconsin tonnage would increase to 961 million tons and the Illinois truck tonnage would increase to nearly 2.5 billion tons; 58% and 76% increases, respectively.
2. The I-39/90 and I-43 corridors are already major corridors for truck traffic. Traffic is likely to increase on these major regional connections.
3. The growth of air cargo traffic at the Northwest Chicago land International Airport at Rockford (RFD) and the growth of the intermodal rail/truck facilities at Ro-

- chelle, Illinois (Global III) and the nearby Center Point intermodal development will increase truck traffic in the Stateline Area.
4. The continued marketing and development of industrial properties along the Interstate arterials in the Stateline Area will increase truck traffic within as well as through the Stateline Area.

VII ROADWAY AND ROADWAY NETWORK SIZING & TRAFFIC SIMULATION MODELING

The most important and difficult design consideration not yet discussed is that roadways must be properly sized to cost-effectively convey vehicular traffic. The key word here is "cost-effective." To be cost-effective the roadway should be sized to accommodate no more and no less than the traffic that will use it. Sizing a roadway or roadway system to accommodate a known volume of traffic is relatively easy, and traffic engineers have become very good at it.

Roadway capacity is determined by the overall design of the roadway, particularly its geometrics (lane numbers, widths, turn radii, and related features) and the way the road is designed to deal with conflicting traffic and the roads it intersects. Roadways can be designed to handle traffic at any volume and speed. Intersections can similarly be designed to handle enormous volumes of traffic at high speeds.

Determining the correct roadway capacity is important for many reasons. Over-designed roadways waste road construction dollars, consume land, increase storm water runoff, encourage unnecessary travel, take tax dollars from other needs, create unnecessary barriers to non-motorized travel, disrupt the cohesiveness of neighborhoods, and sometimes stimulate land development in inappropriate places. Under-designed roadways result in traffic congestion, increases in environmental pollution, threats to the safety of motorists, hindrances to economic development, unnecessary fuel consumption, increased maintenance costs for vehicles, lost time, inconvenience and annoyance.

The obvious primary factor in properly sizing roadways (new or improvements) is traffic forecasting. Traffic forecasting can be done in a number of ways but the tool most often used in long-range transportation planning is the "computerized traffic simulation model." Most such models in use today are based on the assumption that most travel within urbanized areas is for two purposes: the trip from home to work, and the return trip, from work to home. Although there are certainly many other trip purposes within urbanized areas, experimentation with models based on the home/work trips has proven that such models, when carefully developed, can reasonably predict future traffic on the major roadways in the road network. The way these models work is quite logical and is mathematically valid. Their inherent potential flaw is that the predictions they make are based on forecasts of future land uses, another task fraught with uncertainty and often cursed with the wishful thinking of community planners and officials.

Traffic models are not actual scaled-down physical models of cars and truck moving on miniature highways. They are mathematic replications of traffic that are distributed on a

computer-generated map of the major road network of the area. The traffic simulation model starts with traffic counts on the existing roadway network and compares the relationship of those counts to the dwelling units and jobs that exist throughout the community. A series of simulation equations is created relating those three pieces of data to small geographical parts of the study area and its road network. The equations are calculated and adjusted until the number of existing dwelling units and jobs produce computations of traffic on the roadway system that are nearly equal to the actual traffic counts. The model is then said to be calibrated – that is, it is an accurate image of real conditions. To predict future traffic, forecasted dwelling units and jobs are fed into the model and the model generates new, forecasted trips. Those trips are then distributed on the existing or proposed roadway network. Based on the characteristics of the roadway network, the model can then show which links in the network will convey the traffic efficiently and which road segments will experience congested conditions. The characteristics of existing road segments can then be adjusted (lanes added or intersections improved), or new segments can be added, and the model rerun to determine if and where the traffic conditions will change.

Even though traffic simulation models have been in use for decades and modern computers have greatly enhanced their ease of use, such models are still difficult and expensive to develop. Their development, use, and interpretation are best left to traffic engineers and planners who have had special training and who are devoted to the task. More important, as pointed out above, the traffic predicted by these models is based on forecasts of location of dwelling units and jobs. If those forecasts are flawed, then the forecasted traffic will be equally flawed. Sometimes, sophisticated "land use forecast models" have been developed and employed to make such forecasts. However such methods, although useful, are themselves expensive, difficult to develop, and can be criticized for their circular logic. One of the main determining factors governing where new dwelling units and jobs will be located is the area's road network. The other three main factors are the availability of public sewer, public water and vacant, usable land. Quite often, one of these is used to forecast the need for the others. In small metro areas such as the Stateline Area, the best way to determine where new dwelling units and jobs are to be located is through the collective reasoning of a knowledgeable group of area planners, officials, and land developers. Such a group can start with statistical data documenting recent trends in dwelling unit and job growth. Those trends are melded with other, difficult to quantify, but important knowledge: where vacant land is being marketed for development, what types and densities of dwelling units consumers are seeking; what efforts are afoot promoting commercial and industrial development, and the likelihood that some properties will be developed sooner or later than others.

It is important to note that, once established, the traffic modeling process offers one great benefit: relatively easy scenario testing where all of the inputs can be adjusted and the effects on roadway traffic calculated. For example, if land development situations change and new large tracts of land are proposed for residential or job-generating development, those changes can be plugged in, and the model rerun. If new roadway improvement alternates are proposed, those links can be added, with or without other links and the model rerun. Such scenario testing would be very difficult using less sophisticated methods of traffic estimating.

VIII SLATS TRAFFIC MODELS

Two traffic simulation models have been developed for the Stateline Area in recent years. These efforts were mentioned in Chapter 2 of this LRP as recent examples of intergovernmental cooperation and planning between the Stateline Area and the abutting planning areas to the north and south. Both models are considered useful for the planning process for the sake of comparison and error checking. From the discussion above, is apparent that traffic simulation modeling is a complicated process where data input errors or misjudgments can easily be made. Although both models use the same basic forecasted inputs of DUs and jobs, the models differ somewhat in the road links that were included. More important, although the models both produce similar traffic forecasts and network distributions, there are some subtle differences that need to be addressed as area planners and traffic engineers make decisions on future improvements. The Stateline Area is fortunate to have this technical redundancy.

The first model was initiated in the late 1990s and completed in 2004 under the oversight of a Steering Committee composed of both RATS and SLATS members with technical assistance by a team of engineering and planning consultants including the Bucher, Willis & Ratliff Corporation; the TMODEL Corporation; Arc Design Resources Inc.; and staff from both RATS and SLATS. The work culminated in a series of detailed technical documents titled as the "Boone County and Winnebago County Transportation Planning Study." To avoid confusion, the effort will be further referred to in this LRP as the RATS Model. The effort was funded by a grant from IDOT with matching funds provided from several local jurisdictions.

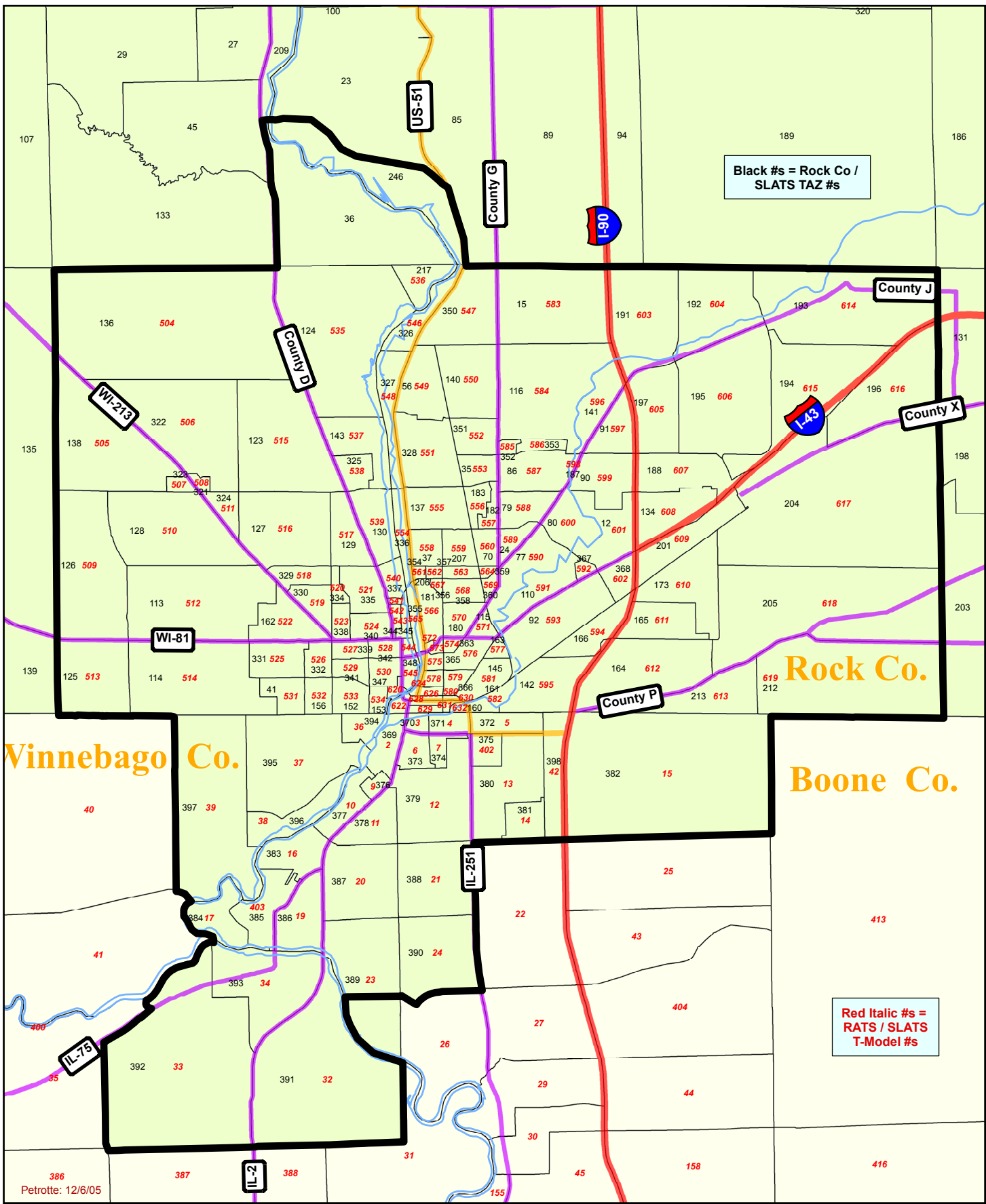
The second model was more recently initiated by Rock County and WisDOT. Technical assistance for this model was provided by the consultant, HNTB and by WisDOT staff. Direction was provided by a Steering Committee consisting of planners and engineers from the Stateline Area. This model will be referred to in the LRP as the SLATS Model. This effort was funded by WisDOT with matching funds from Rock County. The results of this model are just now being released. Both of these models included the entire Stateline Area. The former included all of Winnebago and Boone Counties in Illinois plus the SLATS planning area in Rock County Wisconsin. The latter included all of Rock County plus the SLATS planning area in Winnebago County.

As noted above, dwelling unit (DU) and job forecasts are the basis for the traffic volume and distribution forecasts of these models. The DU and job forecasts used in the RATS Model were developed by a team of planners and engineers representing all of the major jurisdiction in Winnebago and Boone Counties and the jurisdictions in SLATS. The dwelling unit forecasts were based on Year 2000 Census data and building permit/demolition data from the various jurisdictions. The job forecasts were based on employment data from the Illinois Department of Employment Securities and the Wisconsin Department of Workforce Development. The forecasts were distributed amongst the various sub areas (Traffic Analysis Zones or TAZs - See **MAP 6-3**) of the study based on the participants' knowledge of development trends. **MAPS 6-4 a-d** illustrate the RATS Model forecasts and for the Stateline Area portion of that study. The RATS Model DU and job forecasts extend only to the Year 2025. For the SLATS Model, the RATS forecasts were simply extended by a constant 6% increase over all TAZs within SLATS.

Note that these forecasts do not show a great deal of new development or redevelopment in the central cores of Beloit and the other municipalities. This may or may not be a flaw. Certainly it would be beneficial for those communities to direct as much growth or redevelopment into those core areas as possible. **MAPS 6-5 and 6-6** illustrate the SLATS Model forecasted DU & job growth.

MAP 6-3
SLATS / RATS
Traffic Analysis Zones

StateLine Area
Transportation Study
2035 PLAN

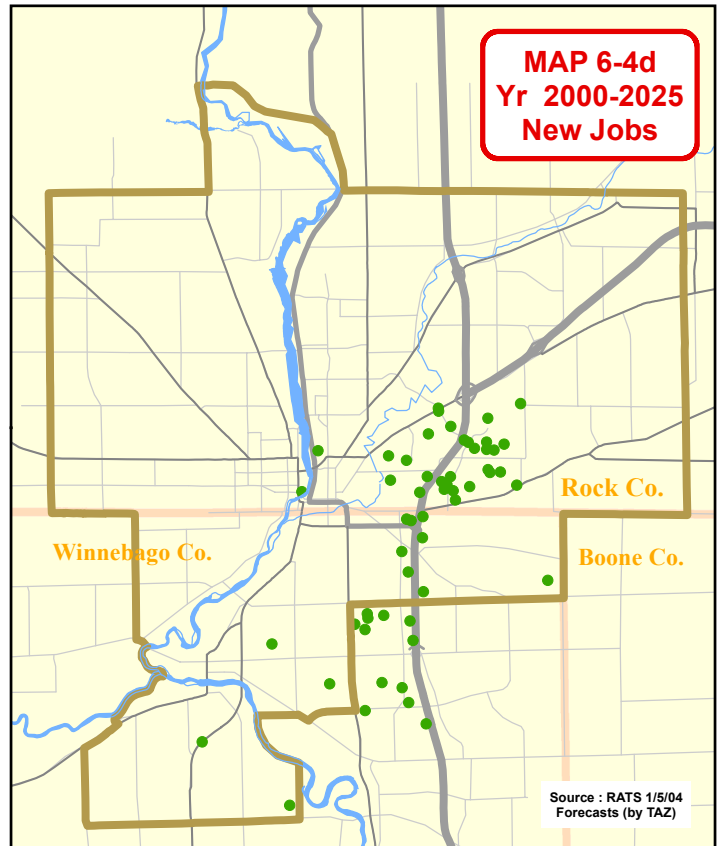
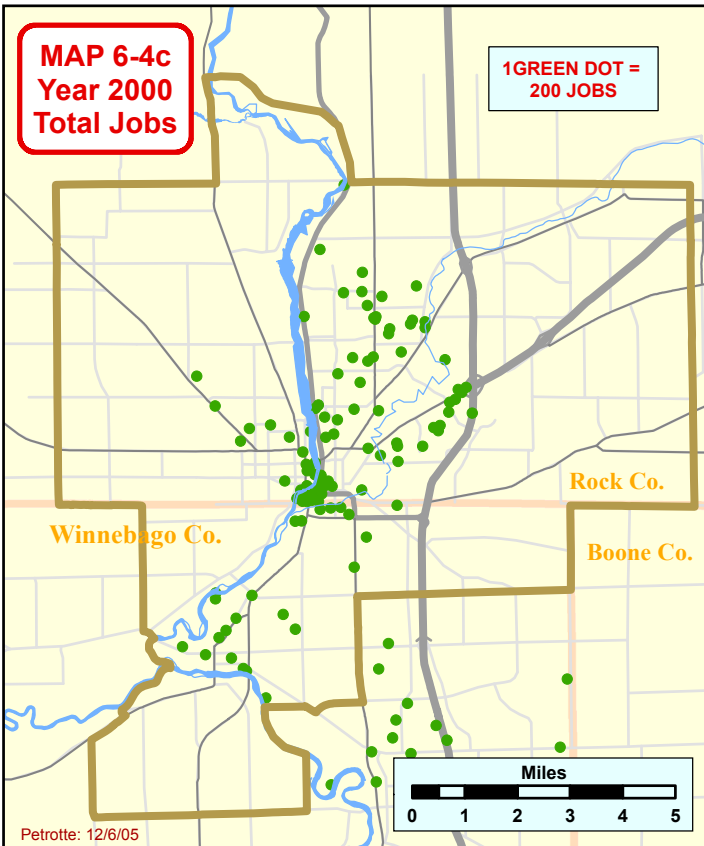
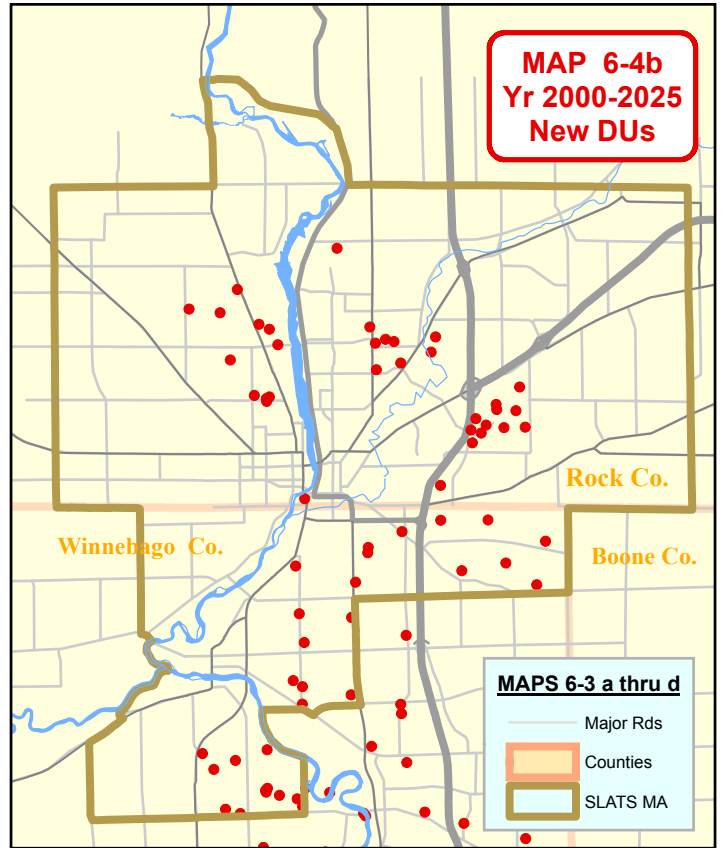
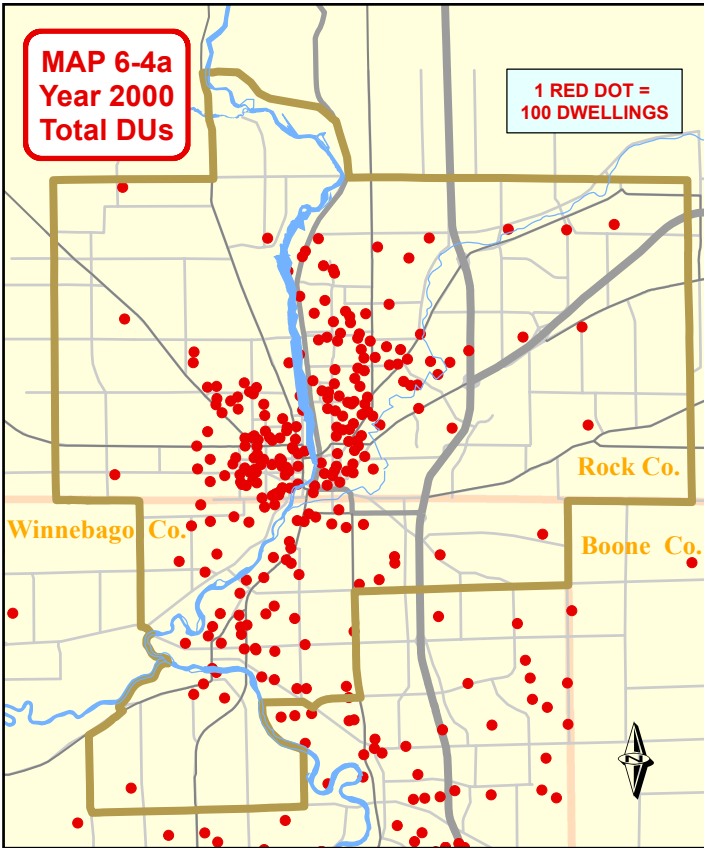


The forecasted growth on these maps is to Year 2025 only. Forecasts prepared as part of the RATS MODEL development.

RATS MODEL

StateLine Area Transportation Study

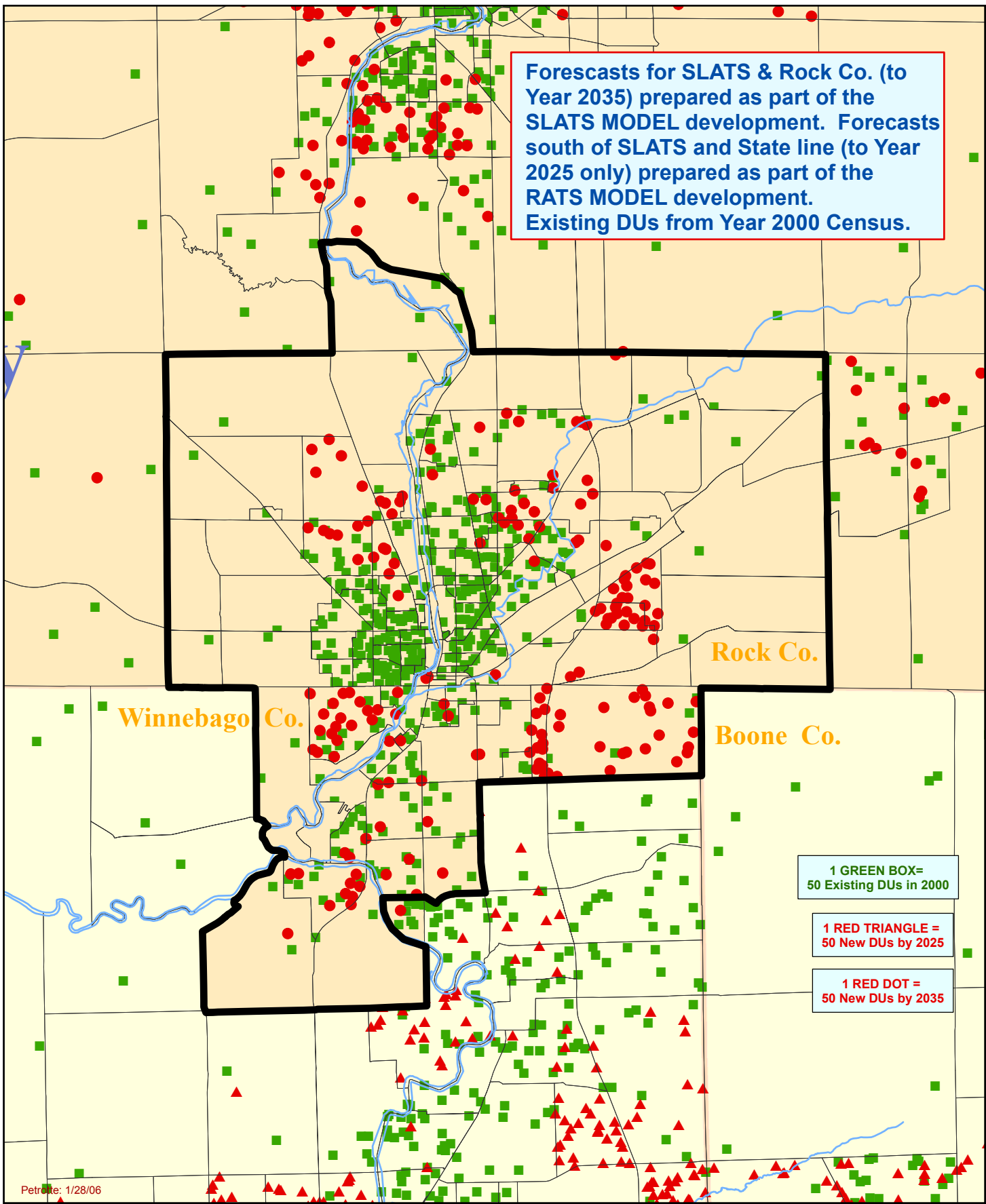
2035 PLAN



MAP 6-5
Existing & Forecasted
Dwelling Units

StateLine Area
Transportation Study
2035 PLAN

Forecasts for SLATS & Rock Co. (to Year 2035) prepared as part of the SLATS MODEL development. Forecasts south of SLATS and State line (to Year 2025 only) prepared as part of the RATS MODEL development. Existing DUs from Year 2000 Census.



1 GREEN BOX =
50 Existing DUs in 2000

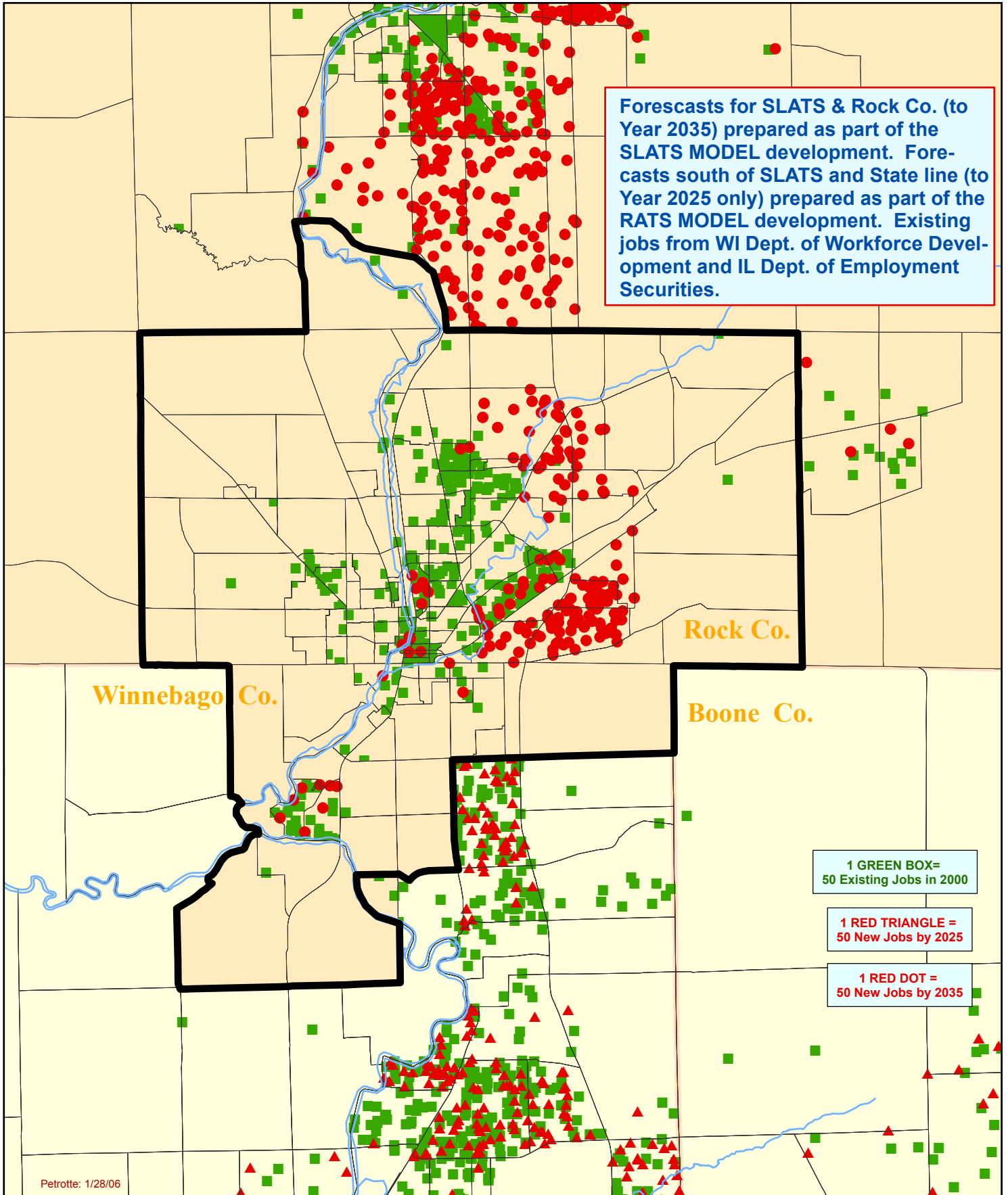
1 RED TRIANGLE =
50 New DUs by 2025

1 RED DOT =
50 New DUs by 2035

MAP 6-6
Existing & Forecasted
Jobs

StateLine Area
Transportation Study

2035 PLAN



IX EVALUATING THE LEVEL OF SERVICE AND MANAGING CONGESTION

As discussed above, traffic simulation models are useful tools for determining the appropriate size of roadways. One way using models to determine appropriate roadway size is in conjunction with the Level of Service (LOS) concept. The LOS concept can be applied to either road segments or to road intersections. With road segments, the concept compares and rates the densities of vehicles traveling on the segments (on average or at given time points). With road intersections, the concept compares and rates the time delays of vehicles traveling through the intersections.

This LRP uses the LOS concept applied to segments of Interstates, Arterials and Collectors (mainly high-volume) as a means of evaluating the appropriate size of those roadways. (The LOS concept can be used to evaluate residential streets and low volume collectors but with different criteria that are almost the exact opposite of the criteria for high-volume roadways. This will be addressed in a subsequent section of this LRP.) For Interstates, Arterials and high-volume Collectors, the concept is defined and illustrated in **Chart 6-4**. The six Levels of Service in the **Chart** show a progressive range of traffic conditions on roadway segments ranging from complete unobstructed free flows to full bumper-to-bumper, stop-and-go traffic congestion. In fact, instead of referring to the concept as Level of Service, it could be simply reversed and referred to as a Level of Congestion (LOC). A high LOS would be a low LOC and vice-versa.

Whichever way the concept is looked at, via a traffic simulation model, the subjective definitions of **Chart 6-4** can be quantified. Then, data and maps can be generated that show the existing and forecasted LOS, or relative congestion conditions, on the various modeled road segments. Using the RATS and SLATS traffic models, such maps have been developed for the Stateline Area. **MAPS 6-7 a thru d** are simplified versions of data and maps that were generated by the RATS Model. **MAPS 6-8a and b** are simplified versions of maps more recently generated by the SLATS Model.

A Conditions of free unobstructed traffic flow with no delays, and traffic signal phases are sufficient to clear all approaching vehicles.

B Conditions of stable flow with very little delay, and a few signal phases are unable to clear all approaching vehicles.

C Stable condition, movements somewhat restricted due to higher volumes, but not objectionable to motorists.



D Movements are more restricted, queues and delays may occur during short peaks, but lower demands occur often enough to permit clearing, preventing excessive backups.



E Represents operations at lower operating speeds with volumes at or near capacity. Flow is unstable, and there may be momentary stoppages.



F Forced flow conditions where demand volumes exceeding capacity. Speeds are reduced significantly and stoppages may occur for short or long periods of time due to traffic congestion.



Level of Service



RATS MODEL

Map 6-7a

StateLine Area Transportation Study

2035 PLAN

Actual model runs depict traffic for both directions on bi-directional roads. This simplified map depicts only the worst-case LOS and does not specify the traffic movement direction.

SLATS MA

2000 Traffic on Existing Network

0 1 2 3 Miles

0.5 Miles

Level of Service



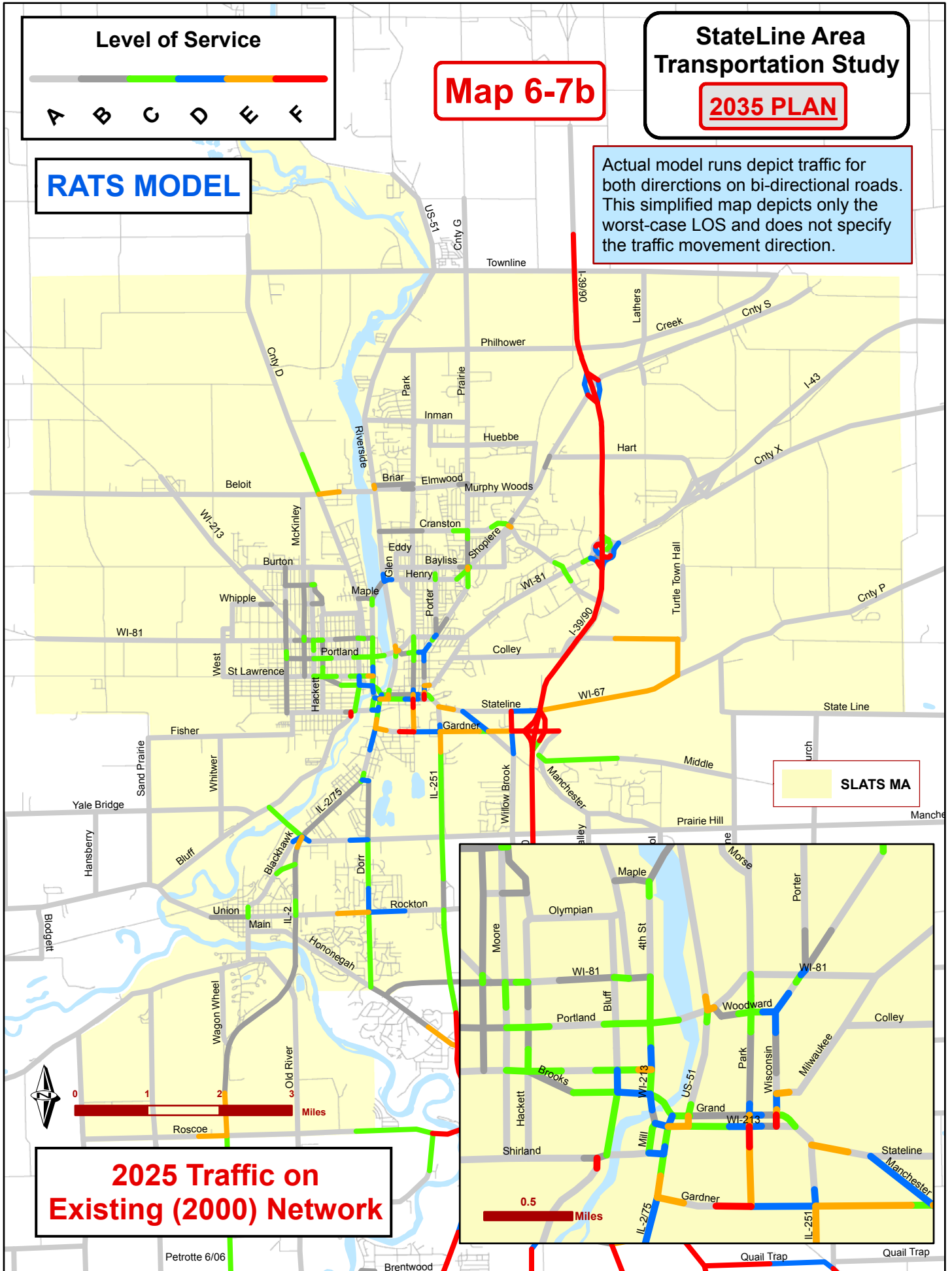
RATS MODEL

Map 6-7b

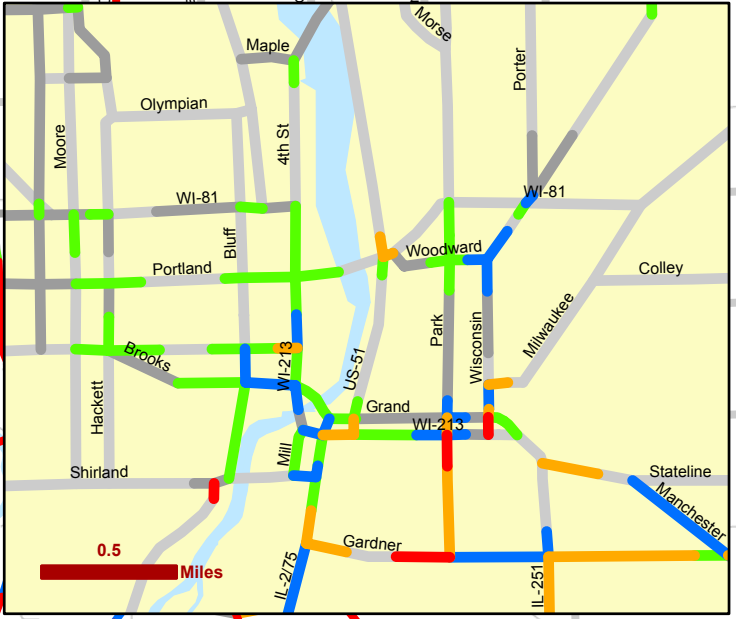
StateLine Area Transportation Study

2035 PLAN

Actual model runs depict traffic for both directions on bi-directional roads. This simplified map depicts only the worst-case LOS and does not specify the traffic movement direction.



2025 Traffic on Existing (2000) Network



Level of Service



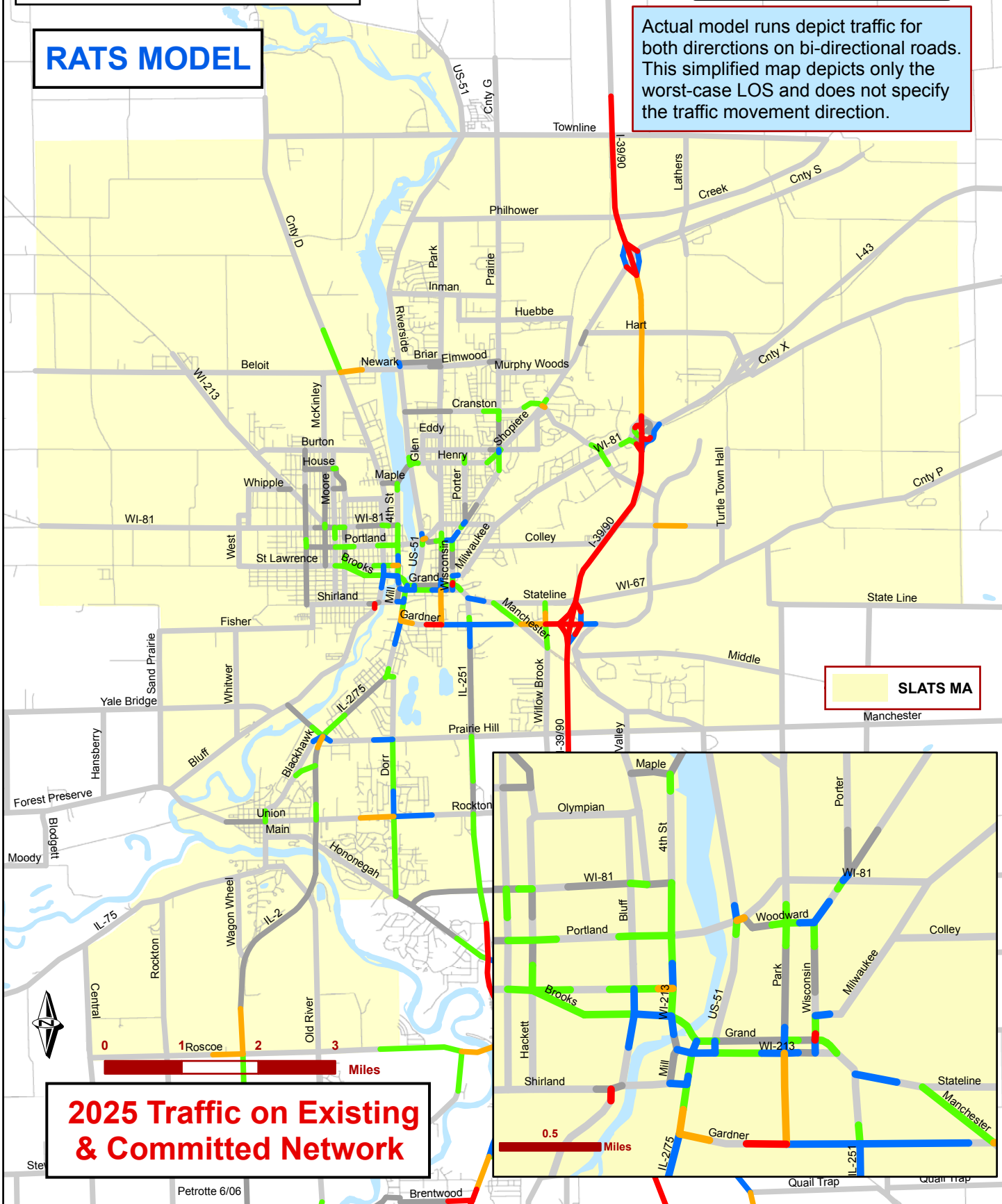
RATS MODEL

Map 6-7c

StateLine Area Transportation Study

2035 PLAN

Actual model runs depict traffic for both directions on bi-directional roads. This simplified map depicts only the worst-case LOS and does not specify the traffic movement direction.



SLATS MA



2025 Traffic on Existing & Committed Network



Petrotte 6/06

Brentwood

Quail Trap

Quail Trap

Level of Service



A

B

C

D

E

F

RATS MODEL

Map 6-7d

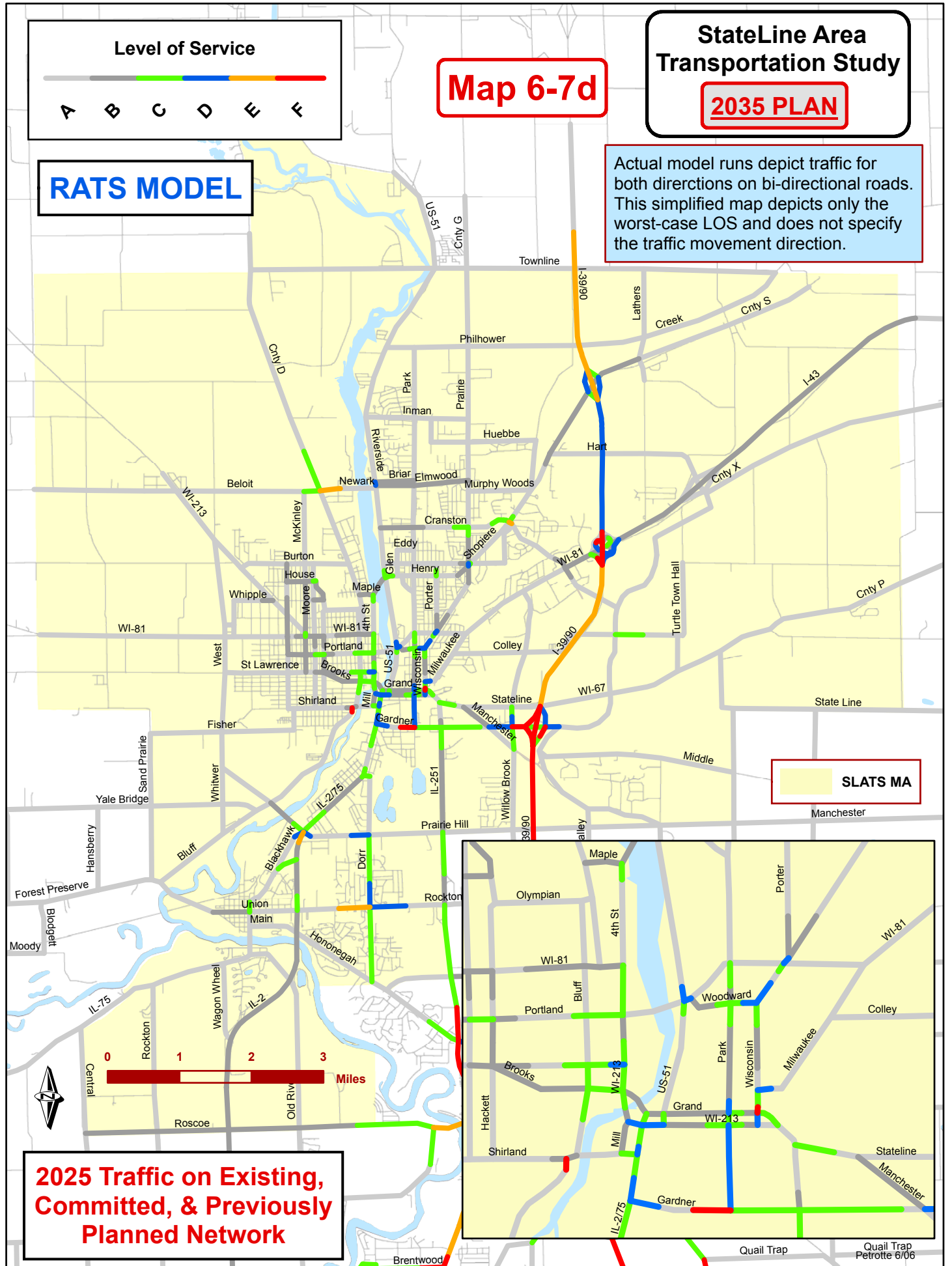
StateLine Area Transportation Study

2035 PLAN

Actual model runs depict traffic for both directions on bi-directional roads. This simplified map depicts only the worst-case LOS and does not specify the traffic movement direction.

SLATS MA

2025 Traffic on Existing, Committed, & Previously Planned Network



Level of Service



SLATS MODEL

Map 6-8a

**StateLine Area
Transportation Study**

2035 PLAN

Actual model runs depict traffic for both directions on bi-directional roads. This simplified map depicts only the worst-case LOS and does not specify the traffic movement direction.

COMMITTED

- Gateway Blvd
- Shirland Av Recn
- Willow Brook Rd

**2035 Traffic on the
COMMITTED Network**



SLATS MA



Map 6-8b

StateLine Area Transportation Study **2035 PLAN**

Level of Service

AB C D E F

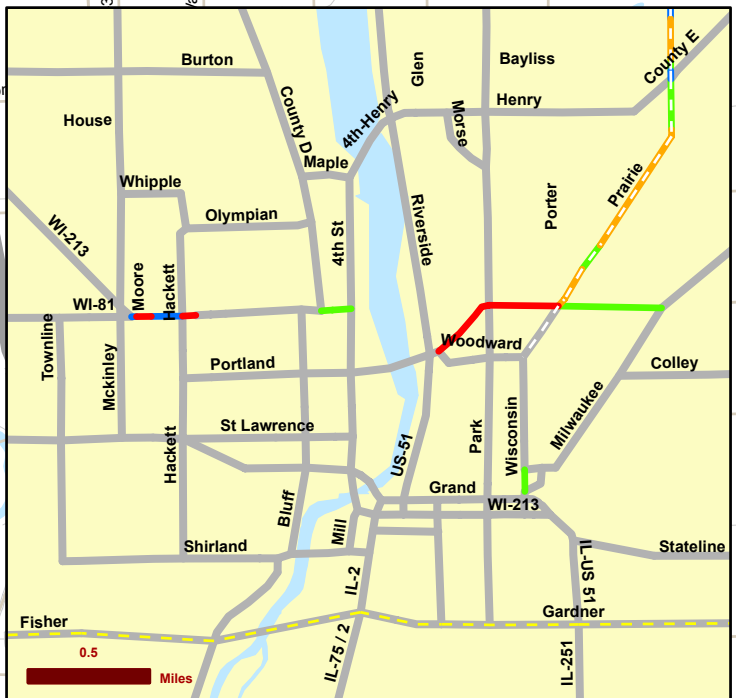
SLATS MODEL

Actual model runs depict traffic for both directions on bi-directional roads. This simplified map depicts only the worst-case LOS and does not specify the traffic movement direction.

CONSIDERED IMPROVEMENTS

- 6-lane I90/39
- Inman Extension
- Lathers Extension
- - Nye Fisher Imprvmt
- - Nye Townline Connect
- - Prairie Imprvmt

SLATS MA



2035 Traffic - COMMITTED & CONSIDERED Network



Before discussing the LOS maps in detail a number of other general aspects need to be elaborated.

1. **ADT vs. Peak Hour.** Obviously, roadways are not used at constant rates at all times. Most, in fact, are only fully utilized at certain times of the day. Moreover, in small urban areas such as the Stateline Area, episodes of severe traffic congestion typically occur only for brief periods when people are traveling to and from work or for special occasions. Generally, traffic engineers and planners try to consider these peaks, but as will be discussed later, it is not cost-effective or possible to accommodate all such traffic anomalies. Most often, traffic engineering approaches this conundrum by attempting some balance between average traffic conditions, peak traffic conditions, and emergency traffic conditions. Traffic simulation models reflect this problem in many ways but fall into two broad categories -- "peak hour models" that focus more on worst case situations, and "average daily traffic" (ADT) models that obviously focus on average conditions. Both the RATS and SLATS models are peak hour models but their results can be adjusted to look at average conditions (in most cases the peak hour traffic can be magnified by a factor of 10 to get ADT).
2. **Level of model detail.** At the present time, it is not common practice to include all roads in a traffic simulation model. Such a level of detail is usually cost-prohibitive. However, when interpreting and comparing the results of the RATS Model with the results of the SLATS Model, it is noteworthy that the former included several additional roadways. This difference could explain some of the differing results.
3. **Planned Roads included.** Both modeling efforts attempted to evaluate the effect of "Planned" improvements. Although similar, the planned improvements are not identical. Note that the initial model-runs depicted in **MAPS 6-7d and 6-8b** show several proposed improvements being added simultaneously. This is not the best way to evaluate improvement proposals and additional SLATS model-runs have been done more recently to better determine the effect of each proposed improvement. These results of these runs will be discussed later in this LRP.
4. **Time frame.** As already noted, the RATS Model looked at traffic forecasts to 2025 while the SLATS Model effort looked further, to 2035. While this difference may seem important, its significance is lessened by the fact that the TAZ structure remained the same and all TAZ forecasts were adjusted upward by the same amount. Therefore, this difference should mainly affect situations where the added traffic generated exceeds the threshold capacities of specific roads. For example, a 4-lane roadway with a large amount of unused capacity in 2025 might show no decrease in LOS due to the 2035 traffic increases. Only those road segments that were very near capacity in 2025 might be affected.
5. **Simplification.** Finally it must be noted that the LOS maps (**6-7a-d, and 6-8a and b**) have been simplified for presentation purposes. Specifically, both the RATS and SLATS Models generated traffic forecasts for all lanes of traffic. **MAPS 6-7 thru 6-8**, however, illustrate only the worst-case situations on the

various road segments. In other words, roadways depicted with LOS F may have all lanes functioning at LOS F or only a single lane in that state of congestion. This occurs frequently. The simplification is reasonable for general planning purposes.

X EXISTING & INITIALLY EVALUATED LOS CONDITIONS IN THE STATE-LINE AREA

A. Existing Conditions

Existing conditions in the Stateline Area can best be evaluated by inspecting the model-run depicted on **MAP 6-7a**. The map shows conditions in the SLATS area roughly around the Year 2000 on the road network that existed at that time. The most significant occurrence of low LOS is on the I-39/90 Interstate where LOS levels range from C to F. This raises particular concern for two reasons: (1) the high levels of traffic danger associated with the high speeds and volumes of traffic on this roadway, and (2) the importance of this roadway to the local economy as well as the region and the nation as a whole. Other areas of low LOS are generally confined to short roadway segments in the vicinity of busy intersections.

B. Future Conditions on the Existing Network

Potential future conditions in the Stateline Area on the largely existing road network can be evaluated by comparing **MAPS 6-7b, 6-7c, and 6-8a**. **MAP 6-7b** shows 2025 traffic on the road network that existed roughly around the Year 2000 and appears to predict the worst-case scenario. In this scenario, I-39/90 drops to LOS F throughout the entire Stateline Area. Other sizable segments of Beloit-area roads show drops to LOS E, but still most LOS F segments appear to be confined to short lengths near busy intersections. As noted above, these maps are simplified illustrations. Closer inspection of the actual model-generated maps would reveal that most of the problems are on the lane segments where traffic is traveling toward the intersections. The legs moving away from the intersections are, of course, less congested.

MAP 6-7c (still depicting 2025 traffic) shows the effect of the addition of Gateway Blvd. (east of I-39/90) and the resulting decreases in traffic on nearby routes. Some decrease in traffic is shown on I-39/90 but it is uncertain if this model-run actually included any improvements to the Interstate itself.

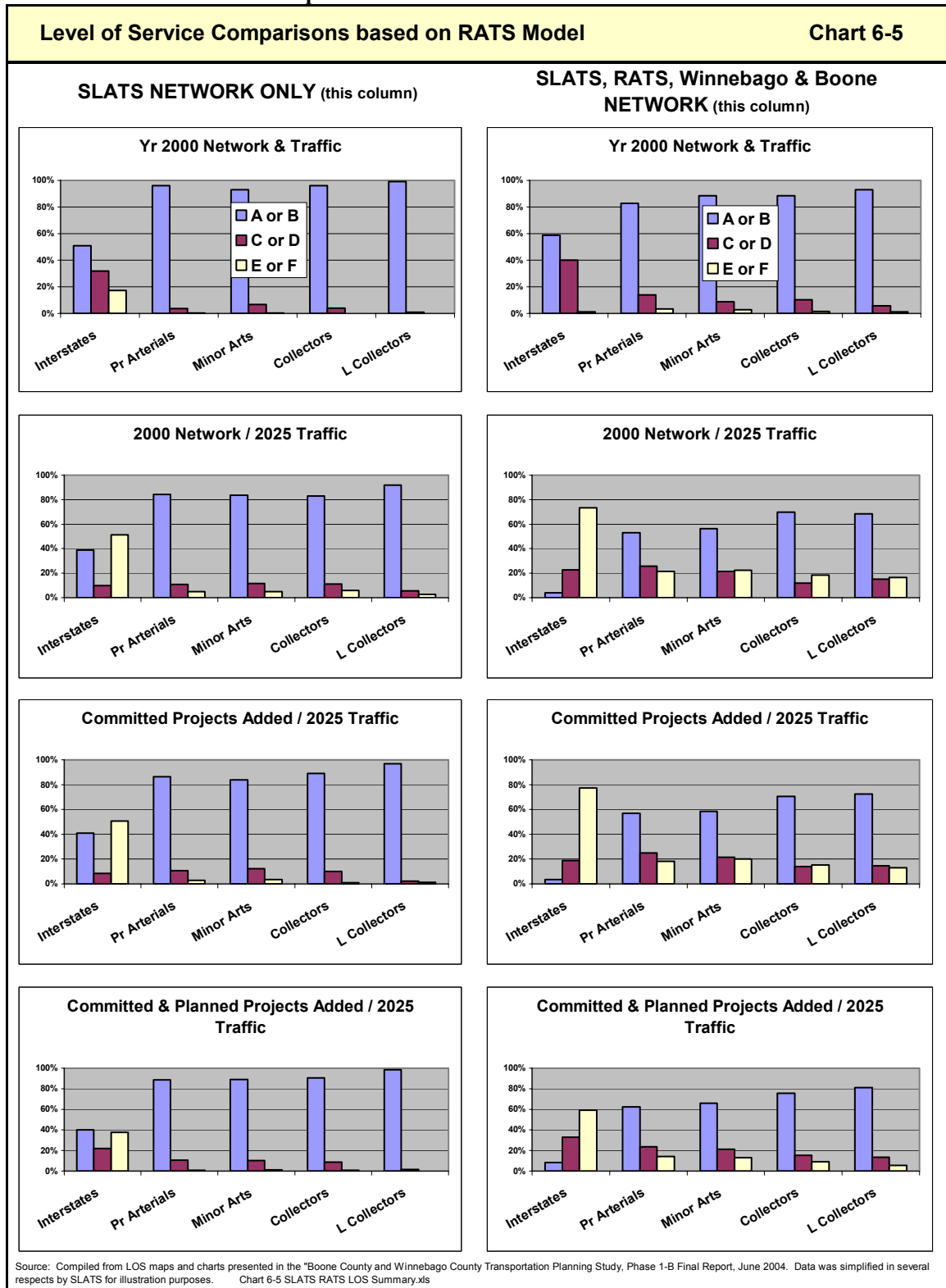
MAP 6-8a, developed from the SLATS Model, depicts the situation resulting from 2035 traffic applied to the Stateline Area network but with slightly more (committed) improvements. Here the Gateway Blvd. improvement is fully extended and Willow Brook Road has been extended north all the way to Milwaukee Rd. Overall, the LOS situation depicted by the initial SLATS model-runs appears to be better than the situation depicted by the RATS model-runs. One of the most significant differences between the two sets of model-runs is at White Avenue between Prairie and Riverside. The SLATS Model shows this segment at LOS F while the RATS model shows the segment at LOS A. A closer look at the actual road network configuration in this area leads to the conclusion

that the RATS Model network in this area was oversimplified and thereby mis-routed considerable traffic onto Woodward. These differences serve to illustrate that traffic modeling, although a good tool for general planning, is not an exact science and must be supplemented with other traffic estimation methods and sound engineering judgment before decisions are made.

MAPS 6-7d and 6-8b illustrate LOS condition scenarios with even more improvements added. The most extensive improvement proposals are depicted on **MAP 6-8b**, and they are listed and noted on the map. The improvements show obvious benefits but still leave many short segments with LOS C thru F. Most significant, even with six lanes (one lane added in each direction), I-39/90 still is LOS D and LOS E. As mentioned, 6-8b looks at these improvements collectively. They have also been modeled individually, for the sake of determining their individual effects.

Overall, the LOS provided by roadways in the Stateline Area is quite impressive. Generally, it appears that travel times seldom exceed 15-20 minutes, even when traveling from the extreme compass points. **Chart 6-5** compares the LOS of the SLATS roadway network with the LOS of the entire area modeled by the RATS Model (all of Winnebago and Boone Counties as well as the part of SLATS in Wisconsin). Regardless of the roadway functional class, the percent of roadways in the Stateline Area having LOS A or B is nearly always greater than the percent of roadways in the larger region. Further, regardless of the improvements Committed or "Planned," the Stateline Area continues with better Levels of Service than the greater region as a whole.

Chart 6-5 Level of Service Comparisons based on RATS Model



XI DEFINING LOS GOALS AND CONGESTION TOLERANCE GOALS

Regardless of how good the roadway system is in the Stateline Area, several questions remain. Is the service good enough or do Stateline residents and businesses desire better levels of service and less congestion? Is the forecasted level of service satisfactory? Ultimately, how much effort and funding should be devoted to improving the situation in the Stateline Area? This LRP can only make educated guesses at answers to these questions. Following are some considerations that should be taken into account in making those guesses.

First, as discussed previously, if construction and maintenance costs and the other adverse effects of roadways were irrelevant, all roadways might be designed and constructed to LOS A or B. It is proposed by this LRP, however, that such a goal might not be in the best interest of the community. Doubtless, the "motoring" public would prefer to have all roads and intersections designed and built to LOS A. However, such facilities would be extremely expensive to build and maintain, making the "taxpaying" public very unhappy, and would wastefully consume vast amounts of land and natural resources. Furthermore, designing all roadways to provide LOS A or B would not be cost-effective.

Determining the design capacity of a roadway is analogous to the design capacity of a sewer pipe. It would obviously be wasteful to build a sewer system with 3 foot diameter pipes when a 1 foot pipe would be sufficient to carry the sewage. To be cost-effective, roadway design capacity should match the traffic that is most likely to be conveyed, most of the time. Admittedly, this analogy is not perfect. Determining both the amount of traffic likely to travel on a road and the situation when the road is considered "full" is more complicated than determining a proper sewer pipe size. Or is it? For example, an undersized sewer pipe is certainly less expensive than a sewer pipe sized to carry maximum expected flows. But, what are the ramifications of not having the capacity to carry maximum expected flows? Most respondents to this question, we suspect, would say that sewage backups or the temporary shutdowns of the sewage system are intolerable. On the other hand, roadways are far more expensive than sewer systems. With roadways, the questions expand to "how much capacity is enough, how much capacity are citizens willing to pay for, and how much congestion is tolerable?" The deciding questions then become, "how much traffic congestion is tolerable and how much is the public willing to pay for zero traffic congestion?" These are difficult questions to answer. The concept of LOS is one way to address these questions -- but not the only consideration.

Before moving to another consideration in determining the "ideal" size of roadways, another, less obvious aspect must be presented. Specifically, an undesirable, ramification of designing a roadway system to LOS A is that such a roadway system would encourage unnecessary travel. Without getting into debate over what travel is necessary vs. unnecessary, suffice to say here that it is accepted that motor vehicles and roadways consume energy and land and produce environmental pollution. It is also obvious that, to some degree, roadway congestion discourages and limits travel and encourages choices involving the use of alternates: other less congested routes, alternate travel times, alternate travel modes, consolidation of trip purposes including carpooling, and the elimination of unnecessary travel, especially at peak congestion times. Designing a

roadway system to LOS A would negate this natural regulatory tendency. Further, going back to the sewer system analogy, if all sewer systems, including the sewage processing plants, were designed to process maximum amounts of sewage or the full range of pollutants there would be no incentive for waste producers to limit their quantity of waste or the hazardous nature of the waste components.

Because of the above problems with LOS A, designing and building a roadway system to function mostly at LOS E or F is not without advocates. Such a system would discourage automobile and truck travel, minimize land consumption and roadway construction expense, and encourage the use of other transportation modes. Some say the use of rail and water for freight is 4-7 times more efficient than trucks. The benefits of walking and biking were discussed in a previous chapter. Shifting to non-automobile modes could reduce air and water pollution. Lessening the use of automobiles could result in more compact communities and greater integration of different types of land uses. Public transit could be cost-effectively increased if mainstream travelers became transit patrons. And there are countless other cost effective options for improving the overall capacity and operating efficiency of a roadway or roadway system that would not be explored if roadways were rigorously over-designed from the beginning.

On the other hand, while a LOS of E or F might consume less land, guarantee full use of road infrastructure and cost less in some respects, road congestion and gridlock have other costs -- costs in safety, increased pollution, detriments to industry and commerce, loss of time, and general inconvenience. And generally, past experience has shown that the Stateline Area is both willing and committed to paying for Levels of Service on its roadways that are above LOS E or F. However, exactly what LOS above E or F is tolerable and/or achievable is still debatable.

With the exception of a few roadways, complaints about roadway congestion are not frequent in the Stateline Area. In fact, many people in the Stateline Area seem to be willing to tolerate more congestion as evidenced by objections against some major roadway projects designed to relieve congestion: the Beloit Bypass and the Perryville / Willow Brook Road Connection are two examples. Perhaps another reason for the lack of complaints regarding congestion is the Stateline Area's proximity to the Chicago/Milwaukee megalopolis. Most people in the Stateline Area have had opportunity to travel to that and other areas where the general traffic conditions make Stateline traffic seem light in comparison.

XII SAFETY CONSIDERATIONS

In addition to LOS, Chapter 2, Section VI of this LRP identified SAFETY as a major factor in selecting transportation projects -- specifically, "the number and severity of accidents occurring over the most recent three-year period." This section of the LRP will look at accidents (incidents, crashes, injuries, and fatalities) (hereafter, traffic incidents) as a major consideration in determining where Stateline Area roadway improvement dollars should be spent in the time frame of this plan. From the onset however, it must be pointed out that this will only be a cursory look. The time available for this analysis was limited, as were that data sources consulted. This brief analysis looked only at totals for

incidents, injuries and fatalities. There are numerous other statistics available, the analysis of which will give a much better picture of the situation.

The following three data collections were reviewed and summarized.

- Data from the City of Beloit
- Data from the Winnebago Highway Department
- Data from the Motor Carrier Information System of the US DOT.

Please note when reviewing the maps and information presented below that the data was not adjusted to consider the total traffic traveling on the various roadway segments. For example, if two segments show the same number of incidents but one segment has daily traffic of 50,000 vehicles per day while the other has had only 5,000 vehicles per day, the latter location would likely be the more dangerous location.

A. Beloit Incidents

Beloit incidents, occurring between January 2000 thru March 2004, were reviewed and summarized in three illustrations: **MAP 6-9** and **Charts 6-6 and 6-7a thru c**. The most apparent traffic incident situation shown on **MAP 6-9** is along I-39/90. The actual data depicted in **Chart 6-6** supports this observation in that there were 154 incidents along various segments of I-39/90 in the Stateline Area; 76 of which resulted in injuries and two of which resulted in fatalities. Other serious traffic incident situations occur along segments of Henry Avenue, especially near Park Avenue and Riverside Drive; in the vicinity of the Cranston Road and Prairie Avenue intersection; and along Milwaukee Road near Cranston and Branigan. **Chart 6-6** also shows that nearly 50% of the incidents in the Beloit area occur on only 14% of the road segments, including more than 50% of the injuries and fatalities. This skewed distribution is further illustrated by **Charts 6-7a-c**.

B. SLATS south of the Stateline

MAP 6-10 and **Chart 6-8** illustrate traffic incident data south of the State line. This data, extracted from a Winnebago County Highway Department database, includes roadways both within and in the vicinity of the SLATS MA boundary, but does not include all incidents within the municipal or village boundaries of South Beloit and Rockton. The data shows a severe incident situation along Hononegah Road and serious situations along Roscoe Road, IL-251, and Prairie Hill Road. Willow Brook, Yale Bridge and Dorr Roads also show high levels of incidents.

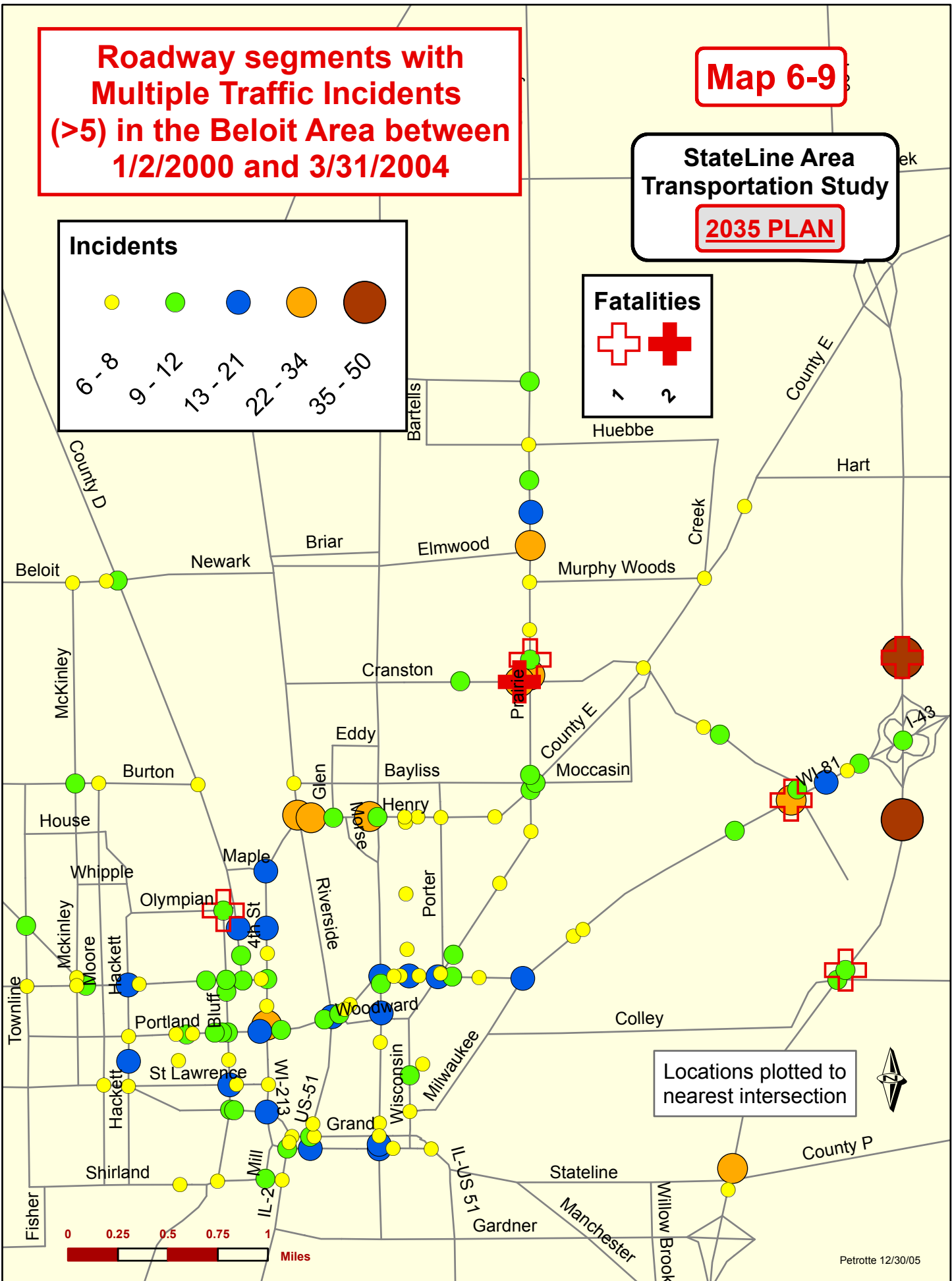
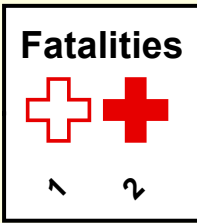
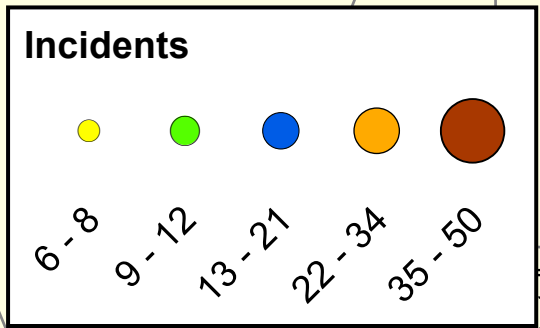
C. Incidents involving trucks or buses

Data from the Motor Carrier Management Information System (MCMIS) of the US Dept. of Transportation was obtained to better view the incident situation with respect to trucks and buses. The information summary obtained was not site-specific enough for mapping but generally reflects the information obtained from the previously mentioned sources. By far, I-39/90 showed the greatest number of truck or bus incidents, injuries and fatalities. The information is illustrated in **Charts 6-9a thru c**.

Roadway segments with Multiple Traffic Incidents (>5) in the Beloit Area between 1/2/2000 and 3/31/2004

Map 6-9

StateLine Area Transportation Study
2035 PLAN



Locations plotted to nearest intersection

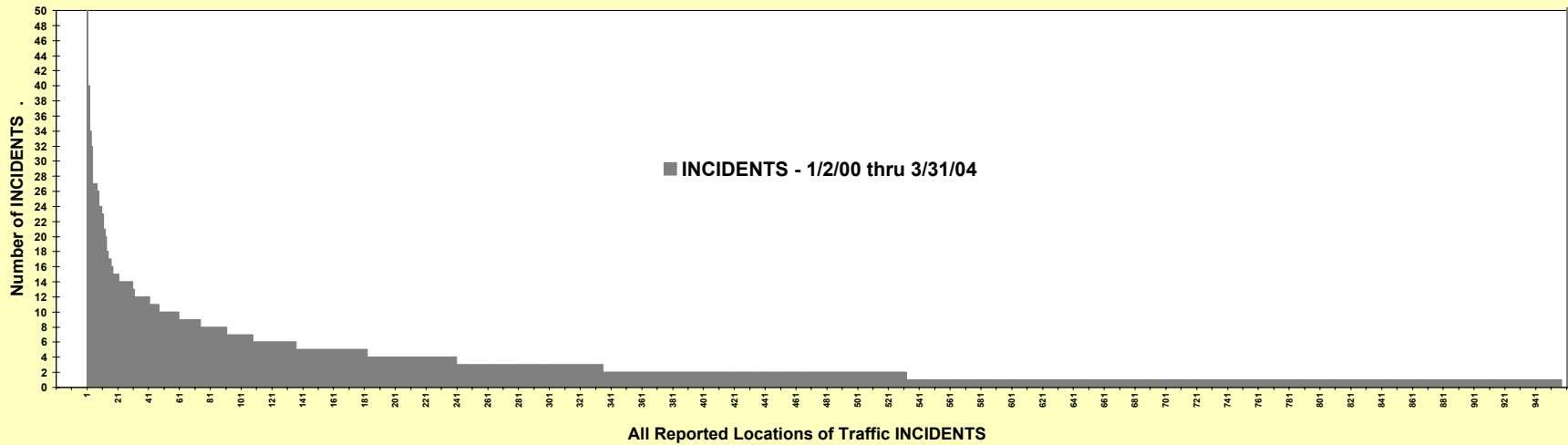
Beloit Area Traffic Incidents, Injuries & Fatalities

Chart 6-6

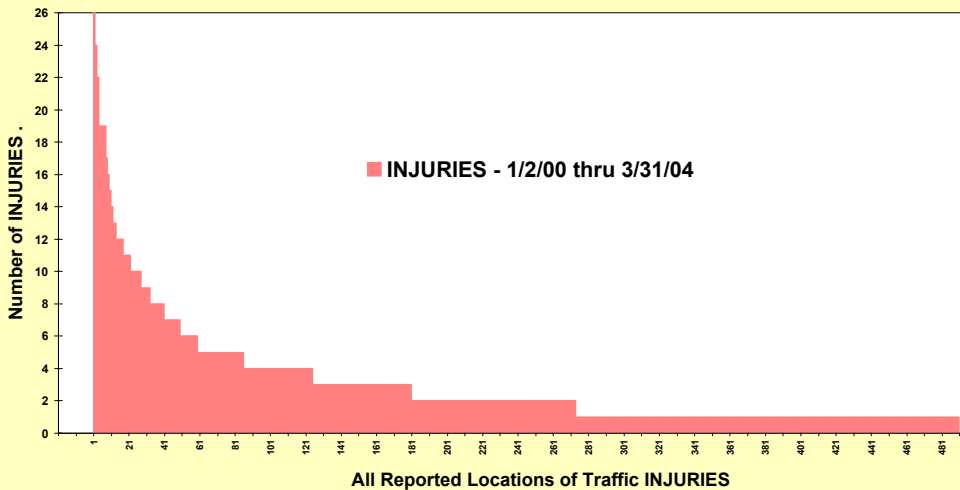
Rank by # of Incidents	Location	Incidents	Injuries	Fatalities	Rank by # of Incidents	Location	Incidents	Injuries	Fatalities
20	4TH ST near GRAND AVE	15	10	0	22	PARK AVE near BROAD ST	14	12	0
34	4TH ST near LIBERTY AVE	12	8	0	90	PARK AVE near CLARY ST	8	0	0
23	4TH ST near MAPLE AVE	14	10	0	105	PARK AVE near GRAND AVE	7	1	0
109	4TH ST near MERRILL AVE	6	9	0	64	PARK AVE near HENRY AVE	9	6	0
86	4TH ST near MIDDLE ST	8	3	0	43	PARK AVE near WHITE AVE	11	10	0
28	4TH ST near NORTH ST	14	5	0	12	PARK AVE near WOODWARD AVE	21	13	0
11	4TH ST near PORTLAND AVE	23	11	0	52	PLEASANT ST near GRAND AVE	10	6	0
129	4TH ST near SAINT LAWRENCE	6	2	0	117	PLEASANT ST near PUBLIC AVE	6	3	0
50	6TH ST near MIDDLE ST	10	10	0	21	PLEASANT ST near WHITE AVE	15	4	0
31	6TH ST near NORTH ST	13	8	0	32	PORTLAND AVE near 3RD ST	12	12	0
65	6TH ST near OLYMPIAN BLVD	9	6	1	16	PORTLAND AVE near 4TH ST	17	7	0
136	8TH ST near PORTLAND AVE	6	0	0	35	PORTLAND AVE near 8TH ST	12	7	0
101	8TH ST near ROOSEVELT AVE	7	3	0	41	PORTLAND AVE near BLUFF ST	12	2	0
58	AFTON RD near NEWARK RD	10	2	0	123	PORTLAND AVE near ELM ST	6	2	0
36	BLUFF ST near GRAND AVE	12	6	0	71	PORTLAND AVE near VINE ST	9	3	0
42	BLUFF ST near MERRILL AVE	11	12	0	83	PRAIRIE AVE near ARROWHEAD DR	8	3	0
40	BLUFF ST near PORTLAND AVE	12	4	0	57	PRAIRIE AVE near BAYLISS AVE	10	2	0
85	BLUFF ST near ROOSEVELT AVE	8	3	0	93	PRAIRIE AVE near COPELAND AVE	7	6	0
26	BLUFF ST near SAINT LAWRENCE	14	7	0	4	PRAIRIE AVE near CRANSTON RD	32	24	0
119	BROAD ST near GRAND AVE	6	3	0	9	PRAIRIE AVE near ELMWOOD AVE	24	19	0
118	BROAD ST near HARRISON AVE	6	3	0	66	PRAIRIE AVE near HART RD	9	5	0
30	BROAD ST near PARK AVE	14	4	0	80	PRAIRIE AVE near HUEBBE PKY	8	4	0
24	BROAD ST near PLEASANT ST	14	9	0	48	PRAIRIE AVE near INMAN PKY	10	16	0
56	BROAD ST near STATE ST	10	4	0	39	PRAIRIE AVE near KEELER AVE	12	4	0
103	BURTON ST near 6TH ST	7	2	0	46	PRAIRIE AVE near MASON DR	11	3	1
128	BURTON ST near MOORE ST	6	2	0	100	PRAIRIE AVE near MURPHY WOODS RD	7	3	0
134	CENTRAL AVE near EMERSON ST	6	1	0	14	PRAIRIE AVE near POST RD	18	10	0
127	CRANSTON RD near COBBLESTONE LN	6	2	0	114	PRAIRIE AVE near ROBIN RD	6	4	0
74	CRANSTON RD near COLLINGSWOOD	9	1	0	38	PRAIRIE AVE near SHOPIERE RD	12	4	0
47	CRANSTON RD near MILWAUKEE RD	11	2	0	132	PRAIRIE AVE near WHITE AVE	6	1	0
51	CRANSTON RD near PIONEER DR	10	8	0	95	RIVERSIDE DR near BAYLISS AVE	7	5	0
7	CRANSTON RD near PRAIRIE AVE	27	17	2	3	RIVERSIDE DR near HENRY AVE	34	22	0
68	GRAND AVE near BLUFF ST	9	5	0	73	RIVERSIDE DR near WHITE AVE	9	1	0
115	GRAND AVE near PARK AVE	6	4	0	76	SAINT LAWRENCE near BLUFF ST	8	10	0
77	GRAND AVE near PLEASANT ST	8	9	0	92	SAINT LAWRENCE near MOORE ST	7	9	0
126	HACKETT ST near PORTLAND AVE	6	2	0	116	SHIRLAND AVE near 8TH ST	6	3	0
13	HACKETT ST near ROOSEVELT AVE	20	8	0	122	SHIRLAND AVE near BLUFF ST	6	2	0
82	HACKETT ST near SAINT LAWRENCE	8	4	0	70	SHIRLAND AVE near MILL ST	9	3	0
133	HARRISON AVE near WHITE AVE	6	1	0	78	SHOPIERE RD near CRANSTON RD	8	7	0
88	HENRY AVE near CHAPMAN AVE	8	2	0	104	SHOPIERE RD near CREEK RD	7	1	0
98	HENRY AVE near DEWEY AVE	7	5	0	45	SHOPIERE RD near PRAIRIE AVE	11	4	0
60	HENRY AVE near GLEN AVE	10	1	0	121	SHOPIERE RD near RACHEL TER	6	2	0
6	HENRY AVE near PARK AVE	27	19	0	135	STATE ST near BROAD ST	6	0	0
110	HENRY AVE near PORTER AVE	6	7	0	79	STATE ST near GRAND AVE	8	4	0
5	HENRY AVE near RIVERSIDE DR	27	19	0	120	STATE ST near SHIRLAND AVE	6	2	0
97	HENRY AVE near WISCONSIN AVE	7	5	0	69	WHITE AVE near CENTRAL AVE	9	4	0
2	I-39/90 nb near 43	40	11	0	131	WHITE AVE near DEWEY AVE	6	1	0
44	I-39/90 nb near COLLEY RD	11	5	1	111	WHITE AVE near EATON AVE	6	5	0
10	I-39/90 nb near Hw P	24	15	0	94	WHITE AVE near HARRISON AVE	7	5	0
1	I-39/90 sb near 43	50	26	1	19	WHITE AVE near PARK AVE	15	14	0
37	I-39/90 sb near COLLEY RD	12	5	0	55	WHITE AVE near PLEASANT ST	10	5	0
75	I-39/90 sb near Hw P	8	12	0	29	WHITE AVE near PRAIRIE AVE	14	4	0
72	I-39/90 xx near 43	9	2	0	130	WHITE AVE near RIVERSIDE DR	6	1	0
25	I-43 xx near I-39/90	14	7	0	17	WHITE AVE near WISCONSIN AVE	16	8	0
91	LIBERTY AVE near 11TH ST	8	0	0	99	WHITE AVE near WOODWARD AVE	7	4	0
107	LIBERTY AVE near 4TH ST	7	1	0	113	WISCONSIN AVE near BUSHNELL ST	6	4	0
49	LIBERTY AVE near 6TH ST	10	11	0	54	WISCONSIN AVE near EMERSON ST	10	5	0
53	LIBERTY AVE near BLUFF ST	10	6	0	89	WISCONSIN AVE near HENRY AVE	8	1	0
15	LIBERTY AVE near HACKETT ST	17	8	0	112	WISCONSIN AVE near KEELER AVE	6	4	0
67	LIBERTY AVE near MADISON RD	9	5	0	108	WISCONSIN AVE near RANDALL ST	7	0	0
125	LIBERTY AVE near MC KINLEY AVE	6	2	0	136	Road segments with more than 5 incidents (above)	1,507	806	7
59	LIBERTY AVE near OAK ST	10	1	0	14%		49%	55%	54%
81	LIBERTY AVE near TOWNLINE AVE	8	4	0	821	Road segments with 1-5 incidents (not listed)	1,566	671	6
87	MADISON RD near MC KINLEY AVE	8	2	0	86%		51%	45%	46%
61	MADISON RD near TOWNLINE AVE	9	9	0	957	All Road segments with Traffic Incidents	3,073	1,477	13
63	MCKINLEY near BURTON ST	9	7	0	100%		100%	100%	100%
18	MILWAUKEE RD near BRANIGAN RD	15	19	0	XX	Highlighted incident numbers reflect the higher number of incidents.			
8	MILWAUKEE RD near CRANSTON RD	26	8	1	XX	Highlighted injuries reflect a combination of incidents, injuries, fatalities that indicate the most serious conditions in the area (I+5F = 25 or more).			
106	MILWAUKEE RD near FORD ST	7	1	0	XX				
62	MILWAUKEE RD near FREEMAN PKY	9	7	0					
33	MILWAUKEE RD near LEE LN	12	11	0					
124	MILWAUKEE RD near LEESON PARK RD	6	2	0					
27	MILWAUKEE RD near WHITE AVE	14	5	0					
102	MILWAUKEE RD near WILLOWBROOK RD	7	2	0					
84	NEWARK RD near AFTON RD	8	3	0					
96	NEWARK RD near MC KINLEY AVE	7	5	0					

Source: City of Beloit accident reports between 1/2/2000 and 3/31/2004. Beloit 2000 - March 2004.xls

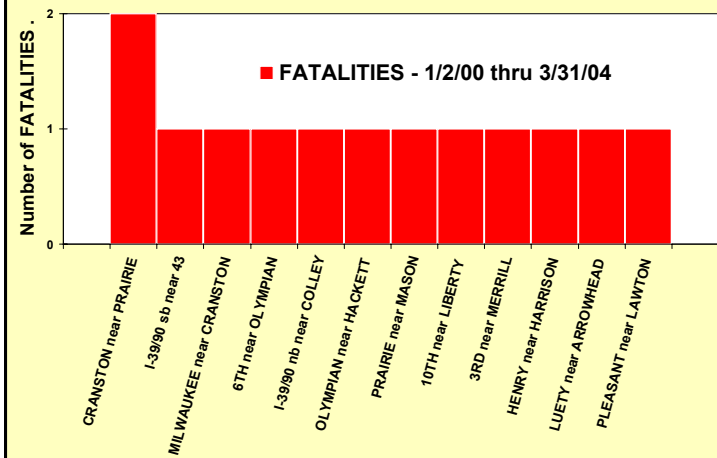
Beloit Area Traffic INCIDENTS by Location - Chart 6-7a



Beloit Area Traffic INJURIES by Location - Chart 6-7b



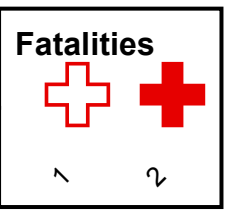
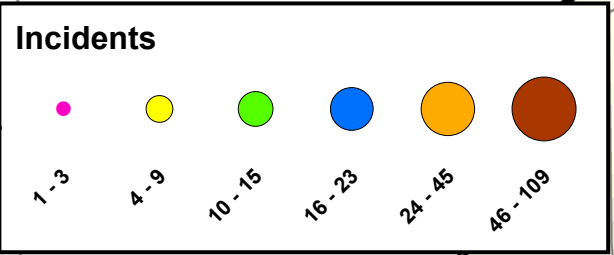
Beloit Area Traffic FATALITIES by Location Chart 6-7c



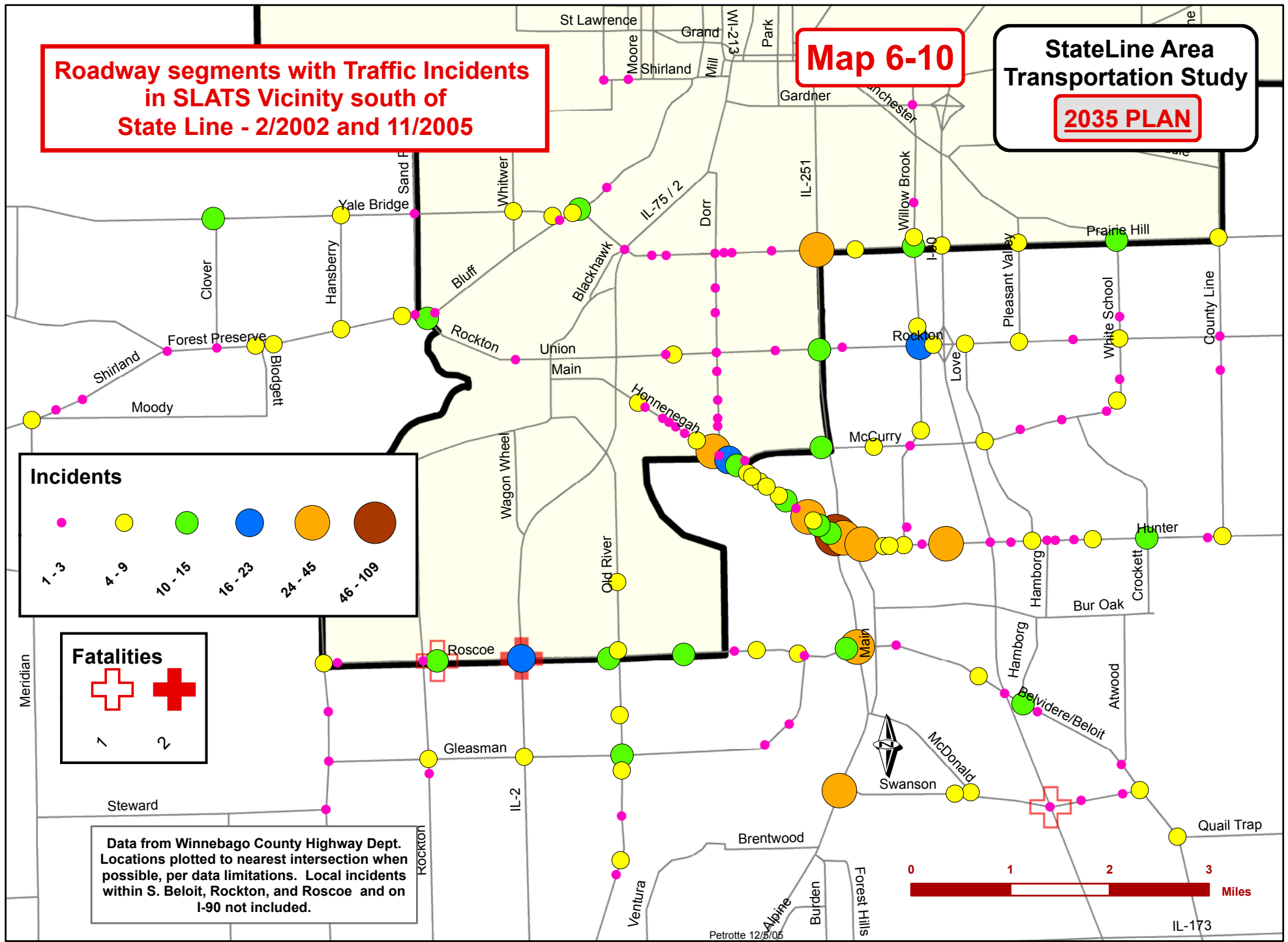
**Roadway segments with Traffic Incidents
in SLATS Vicinity south of
State Line - 2/2002 and 11/2005**

Map 6-10

**StateLine Area
Transportation Study
2035 PLAN**



Data from Winnebago County Highway Dept. Locations plotted to nearest intersection when possible, per data limitations. Local incidents within S. Beloit, Rockton, and Roscoe and on I-90 not included.



SLATS Vicinity in ILL, Traffic Incidents, Injuries & Fatalities

Chart 6-8

Rank by # of Incidents	HWY NAME near Road Name	Incidents	Injuries	Fatal	Rank by # of Incidents	HWY NAME near Road Name	Incidents	Injuries	Fatal
73	BELVIDERE near Applegate	4	1		109	OWEN CENTER near Favor	2	1	
91	BELVIDERE near Atwood Road	3			63	OWEN CENTER near Gleasman	5	1	
77	BELVIDERE near Brown Road	4			118	OWEN CENTER near Roscoe Rd	2		
132	BELVIDERE near Country Knolls Drive	1			13	OWEN CENTER near Steward	15	8	
85	BELVIDERE near Geneva Road	3	1		71	PRAIRIE HILL near Blackhawk	4	2	
27	BELVIDERE near Hamborg Road	11	1		145	PRAIRIE HILL near Bluff	1		
57	BELVIDERE near I-90	5	2		146	PRAIRIE HILL near County Line	1		
84	BELVIDERE near Swanson Road	3	2		8	PRAIRIE HILL near Dorr	29	2	
52	BLUFF near Prairie Hill	5	3		25	PRAIRIE HILL near Dorr and IL-251	11	3	
133	BLUFF near Rockton Rd	1			26	PRAIRIE HILL near Fulmar	11	2	
92	BLUFF near unknown	3			31	PRAIRIE HILL near I-90	9	1	
134	BLUFF near Yale Bridge	1			81	PRAIRIE HILL near IL-251	4		
3	BRIDGE near Main Street	40	2		82	PRAIRIE HILL near Manchester White School	4		
135	DORR near Fairfax Road	1			102	PRAIRIE HILL near Mockingbird	3		
93	DORR near Hononegah Road	3			101	PRAIRIE HILL near Pleasant Valley	3		
136	DORR near Kensington Way	1			120	PRAIRIE HILL near Ravine	2		
137	DORR near Krotz Drive	1			119	PRAIRIE HILL near unknown	2		
111	DORR near Prairie Hill Road	2			130	PRAIRIE HILL near Willow Brook	1	1	
86	DORR near Sandhurst Drive	3	1		148	ROCKTON near Gleasman	1		
138	DORR near Sunrise Drive	1			149	ROCKTON near Roscoe Rd	1		
139	DORR near Witte Drive unknown	1			147	ROCKTON RD near Amy Lane	1		
39	ELEVATOR near Clayton	8			46	ROCKTON RD near Annulet	7	1	
112	ELEVATOR near Corrigan	2			22	ROCKTON RD near Bluff	12	2	
70	ELEVATOR near County Line	4	2		110	ROCKTON RD near Clover	2	1	
113	ELEVATOR near Court Dale unknown	2			121	ROCKTON RD near County Line	2		
16	ELEVATOR near Croquette	15	1		122	ROCKTON RD near Dorr	2		
106	ELEVATOR near Hamborg	2	1		150	ROCKTON RD near Dorr and IL-251	1		
94	ELEVATOR near I-90	3			10	ROCKTON RD near Eunice	23	6	
2	ELEVATOR near IL-251	45	2		17	ROCKTON RD near Forest Preserve	14	3	
125	ELEVATOR near Joncey	1	1		32	ROCKTON RD near Hansberry	8	3	
53	ELEVATOR near Love	5	2		36	ROCKTON RD near I-90	8	1	
6	ELEVATOR near Main	29	6		44	ROCKTON RD near IL-251	7	2	
65	ELEVATOR near Moorewoods	5			47	ROCKTON RD near Love	7	1	
140	ELEVATOR near Pint	1			48	ROCKTON RD near Metric	6	3	
5	ELEVATOR near Second St	31	3		54	ROCKTON RD near Pinecroft	5	2	
34	ELEVATOR near South Gate	8	1		64	ROCKTON RD near Pleasant Valley	5	1	
74	ELEVATOR near unknown	4	1		76	ROCKTON RD near Sand Prairie	4	1	
95	ELEVATOR near Willow Brook	3			83	ROCKTON RD near West	4		
28	GLEASMAN near Brenda Dr	10	4		127	ROCKTON RD near White School	1	1	
58	GLEASMAN near Main Street	5	1		151	ROCKTON RD near Willow Brook	1		
141	GLEASMAN near Old River	1			152	ROSCOE RD near Chickory Ridge	1		
59	GLEASMAN near Rockton Av	5	1		11	ROSCOE RD near Gleasman	20	10	2
107	GLEASMAN near Roscoe Road	2	1		33	ROSCOE RD near IL-2	8	3	
114	GLEASMAN near unknown	2			15	ROSCOE RD near IL-251	15	3	1
142	HONONEGAH near Abe	1			18	ROSCOE RD near Meadowsweet	14	2	
7	HONONEGAH near Baneberry	29	2		19	ROSCOE RD near Old River	13	3	
42	HONONEGAH near Beecher	7	2		105	ROSCOE RD near Owen Center	2	2	
66	HONONEGAH near Cedar Brook	5	0		153	ROSCOE RD near Rockton	1		
23	HONONEGAH near Checkerberry	12	1		9	ROSCOE RD near unknown	28	5	
75	HONONEGAH near Doris	4	1		20	SAND PRAIRIE near Rockton Rd	13	3	
4	HONONEGAH near Dorr	34	8		29	SAND PRAIRIE near Yale Bridge	10	3	
96	HONONEGAH near Duncan	3			37	SHIRLAND near Forest Preserve	8	1	
143	HONONEGAH near Echo	1			45	SHIRLAND near Mary Lynne	7	2	
1	HONONEGAH near Edgemere	109	8		49	SHIRLAND near McKinley	6	2	
24	HONONEGAH near Frances Blue Spruce	12			51	SHIRLAND near Meridian	6		
60	HONONEGAH near IL-251	5	1		55	SHIRLAND near Moody	5	2	
97	HONONEGAH near John	3			56	SHIRLAND near Townline	5	2	
21	HONONEGAH near McCurry	13	1		61	SWANSON near Belvidere	5	1	
30	HONONEGAH near Rock Rose	10	1		69	SWANSON near I-90	4	3	
40	HONONEGAH near Straw	8			72	SWANSON near IL-251	4	2	
12	HONONEGAH near Tresemer	19	1		89	SWANSON near McDonald	3	1	
78	HONONEGAH near unknown	4			90	SWANSON near Mitchell	3	1	1
115	HONONEGAH near unknown east	2			88	SWANSON near Sheringham	3	1	
144	HONONEGAH near unknown west	1			104	WHITE SCHOOL near McCurry	3		
35	HONONEGAH near Valley Forge	8	1		103	WHITE SCHOOL near Rockton Rd	3		
67	HONONEGAH near Wagon	5			123	WILLOW BROOK near Elevator	2		
87	McCURRY near Chamwood	3	1		124	WILLOW BROOK near Gardner	2		
116	McCURRY near County Line	2			131	WILLOW BROOK near Kutzke	1	1	
98	McCURRY near Hononegah	3			128	WILLOW BROOK near McCurry	1	1	
14	McCURRY near IL-251	15	4		129	WILLOW BROOK near Prairie Hill	1	1	
41	McCURRY near Love	8			157	WILLOW BROOK near Rockton Rd	1		
99	McCURRY near N Gate	3			154	YALE BRIDGE near Clover Road	1		
50	McCURRY near Tanager	6	1		155	YALE BRIDGE near Hansberry Road	1		
79	McCURRY near unknown	4			158	YALE BRIDGE near South Bluff Road	1		
100	McCURRY near White School	3			156	YALE BRIDGE near Witwer	1		
117	McCURRY near Willow Brook	2			158	Totals	665	83	0
38	OLD RIVER near Bears Paw	8	1		XX	Highlighted incident numbers reflect the higher number of incidents.			
43	OLD RIVER near Deanna	7	2		XX				
62	OLD RIVER near Gleasman	5	1		XX	Highlighted injuries reflect a combination of incidents, injuries, fatalities that indicate the most serious conditions in the area (I+H+5F = 25 or more).			
68	OLD RIVER near Hutchins Park	4	4						
80	OLD RIVER near Liddle	4							
108	OLD RIVER near Roscoe Rd	2	1						
126	OLD RIVER near unknown	1	1						

Source: Winnebago Co. Highway Dept. accident reports between 2/2002 and 11/2005. WinnCoAccidents2.xls

Total Truck or Bus Traffic INCIDENTS

Chart 6-9a

Stateline Area -- Year 2000 to 2004

OnRd	All	Beloit	Roscoe Twp	Turtle	Rock	S Beloit	Rockton Twp	Newark	Shirland Twp
I-90/39	102	36	38	26		2			
Milwaukee Rd	6	6							
Prairie Ave	6	6							
I-43	5	1		4					
Parking Lot	5	3		1	1				
Riverside Dr	5	5							
Henry Ave	4	4							
US-51	4				4				
Cranston Rd	3	3							
IL-2	3						3		
IL-251	3		2			1			
IL-75	3					3			
Liberty Ave	3	3							
4th St	2	2							
Gardner St	2					2			
Hwy D	2				2				
Hwy G	2			1	1				
Park Ave	2	2							
White Ave	2	2							
6th St	1	1							
8th St	1	1							
Afton	1	1							
Avalon Rd	1				1				
Beloit Ave	1				1				
Blackhawk Blvd	1					1			
Bluff St	1	1							
Division St	1	1							
Eau Claire Rd	1				1				
Freeman Pkwy	1	1							
Geneva Ct	1		1						
House St	1	1							
Hwy S	1			1					
Lee Ln	1	1							
Madison	1	1							
McCurry Rd	1		1						
Newark Rd	1	1							
Oak	1	1							
Pleasant St	1	1							
Prairie Hill	1						1		
Rockton Rd	1		1						
S Butterfly Rd	1			1					
Shirland Ave	1	1							
Shopiere Rd	1	1							
Swanson Rd	1		1						
W Grand	1	1							
W Townline Rd	1				1				
WI-11	1				1				
WI-81	1							1	
Willowbrook	1					1			
Wisconsin Ave	1	1							
Yale Bridge	1								1
Data Source:	196	89	44	34	13	10	4	1	1

Total Truck or Bus Traffic INJURIES									
Stateline Area -- Year 2000 to 2004									
OnRd	All	Beloit	Roscoe Twp	Turtle	Rock	S Beloit	Rockton Twp	Newark	Shirland Twp
I-90/39	42	19	11	12					
Henry Ave	10	10							
Riverside Dr	8	8							
US-51	5				5				
Milwaukee Rd	4	4							
Prairie Ave	4	4							
Prairie Hill	4						4		
Cranston Rd	3	3							
IL-2	3						3		
Liberty Ave	3	3							
Parking Lot	3	3							
House St	2	2							
Hwy D	2				2				
Shirland Ave	2	2							
4th St	1	1							
Division St	1	1							
Freeman Pkwy	1	1							
I-43	1	1							
IL-251	1					1			
IL-75	1					1			
Oak	1	1							
Park Ave	1	1							
Rockton Rd	1		1						
W Townline Rd	1				1				
White Ave	1	1							
WI-11	1				1				
Wisconsin Ave	1	1							
Data Source:	108	66	12	12	9	2	7		

Motor Carrier Management Information System (US DOT) 2000 - 2004 data snapshot from 9/24/04

MCMISdata.xls

Total Truck or Bus Traffic FATALITIES									
Stateline Area -- Year 2000 to 2004									
OnRd	All	Beloit	Roscoe Twp	Turtle	Rock	S Beloit	Rockton Twp	Newark	Shirland Twp
I-90/39	2	1		1					
Hwy D	1				1				
IL-2	1						1		
IL-75	1					1			
McCurry Rd	1		1						
Milwaukee Rd	1	1							
WI-81	1							1	
Data Source:	8	2	1	1	1	1	1	1	

Motor Carrier Management Information System (US DOT) 2000 - 2004 data snapshot from 9/24/04

MCMISdata.xls

XIII RECOMMENDATIONS WITH RESPECT TO ROADWAY LOS AND SAFETY

Regardless of the small number of complaints regarding congestion in the Stateline Area, it is a responsibility of this LRP to consider congestion, both now and in the future, and to set standards or goals regarding congestion and LOS. Further, regardless of the small number of traffic fatalities in the Stateline Area, this LRP recognizes that even one traffic fatality is one too many and every effort should be made to prevent serious traffic incidents. It is commonly accepted that traffic safety and traffic congestion are closely related. Congested highways place motorists in risky situations where reaction times are shortened and escape options from perilous situations are reduced. Intersections with long traffic delays lead motorists to take dangerous chances for the sake of reducing travel time. While all roadways cannot be sized to provide LOS A or B, every effort should be made to remedy roadway situations that have been shown to be prone to high levels of serious traffic incidents. To that end, this LRP recommends the following regarding LOS and traffic safety.

A. Plan for LOS C and D

Ideally, most high-level roads, collectors and arterials, will operate between LOS C and D. Under this scenario, the roadways are being heavily used but are congested only briefly at peak usage times. This condition makes maximum use of the publicly-funded infrastructure but at the same time, minimizes inconveniences to the motoring public.

The extreme Levels of Service (A and B, E and F), although not desirable, must sometimes be accepted or tolerated. Neighborhood streets are seldom congested and most always have LOS A (a different LOS concept for residential streets is discussed in a subsequent section of this LRP). Traffic is very light on these streets but certain widths are necessary to accommodate emergency vehicles. Further as new collector and arterial roads are constructed these roads may function for lengthy periods, sometimes years, at LOS A. This condition is acceptable to accommodate future traffic forecasts that will not materialize until nearby land development takes place or roadway connections are made that make the new road fully functional. It may be necessary to design and maintain some key road segments at LOS A or B. Such key roadway segments include bridges or links where there are no reasonable alternatives in times of emergency. Similarly, LOS E or F must sometimes be tolerated. Funding may not be immediately available to correct some deficiencies. Moreover, some situations cannot be corrected at reasonable costs and the congestion will act as a deterrent to additional traffic or a way of sending the traffic to alternate less congested or underused routings.

B. Consider Other Factors, Especially Safety

As noted, LOS is not the only factor to be considered when planning and prioritizing roadway improvements. Other factors must be taken into consideration. These factors involve many aspects of the community that are not easy to quantify or mutually optimize. Some of these factors have been addressed in previous Chapters of this LRP.

The one factor that should be paramount as roadway improvements are prioritized is traffic safety.

C. Conduct Further Study of Incident Data

Overall, the traffic incident situation on I-39/90 supports the LOS information from the RATS and SLATS models and, together, indicates that improvements to that Interstate are sorely needed. Data was not available for I-39/90 south of the State line, but given the situation on the Wisconsin side, it is likely there are incident problems there as well. Plans are underway to widen this Interstate to 6-lanes both north and south of the State line. Whether this alone will be enough to curb the accident levels is not known. The types and causes of the accidents were not studied as part of this LRP effort. It is suspected, however, that most of these accidents occurred in the vicinity of the interchanges where traffic is engaged in merging or lane-changing maneuvers. Undoubtedly the State of Wisconsin and the Illinois Toll Highway Authority have carefully analyzed the accident data in conjunction with their improvement designs. If not, this LRP encourages those entities to do so and to make extra efforts to embellish their improvement designs in ways that will make the Interstate safer.

In Beloit, the incident levels along Prairie, Henry, and Milwaukee near I-39/90 appear among the most serious. However, there are also high levels along White, Portland, and others that also deserve attention. South of the State line, the Hononegah / Elevator Road situation appears the most serious but Roscoe Road, IL-251, and Prairie Hill Road also have significant problems. Most of these problems appear to be in the vicinity of intersections. The responsible road management jurisdictions in the Stateline area should focus their attention on further analysis of the traffic incident situations in the area. This analysis will lead to knowledge that will enable more effective decisions regarding where and what kinds of improvements should be given priority.

D. Focus on Intersections & Consider Roundabouts

In as much as the majority of traffic incidents and stretches of poor LOS appear to occur in the vicinity of major intersections, it is likely that the majority of improvements will be for intersection improvements rather than full-scaled roadway expansions or lengthy lane additions or widenings. One intersection alternative that is not yet used in the Stateline Area but quite effectively used in other areas of the country is the roundabout.

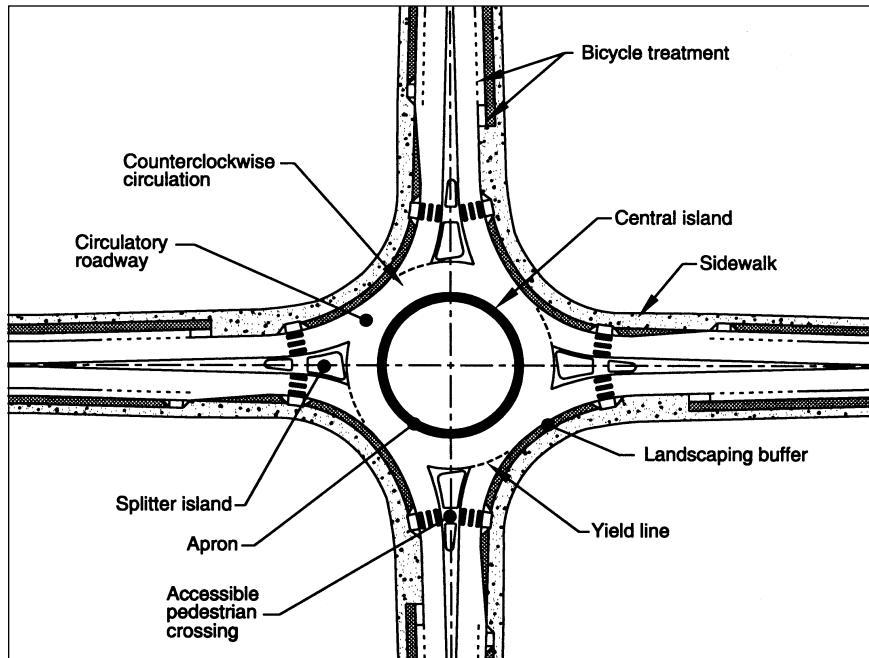
A recent report from the FHWA indicates that experiences in the US show reductions in crashes after building roundabouts of about 37% for all crashes and 51% for injury crashes. Success with roundabouts is similar or even greater in other parts of the world (Australia, France, Germany, Netherlands, and the United Kingdom) where there is more experience with such facilities.

Roundabouts are similar to traffic circles or rotaries but are more structured. As opposed to traffic circles, roads entering roundabouts must always yield to circulating traffic, pedestrian access is allowed only across the legs of the roundabout beyond the vehicle yield line, and all circulation within the roundabout is in the same direction, counter-

clockwise. These and other design factors make roundabouts much safer than traffic circles or rotaries.

Chart 6-10 illustrates and describes the key features of roundabouts. Single-lane roundabouts can be designed to handle 10-20,000 veh/day at with speeds up to 20 mph. Double-lane roundabouts can handle even more traffic. While initially expensive to build, roundabouts are often cheaper than signalized intersections and are far less expensive to maintain. The center circles of roundabouts can create aesthetic focal points, whereas regular intersections are almost impossible to beautify. Roundabouts have no essential equipment that can fail and function even during power outages. Finally, roundabouts allow traffic to keep moving as opposed to frustrating, energy-wasting, polluting, stop-and-go or signalized intersections. This LRP recommends that the Stateline Area communities look seriously at roundabouts when designing future intersections and correcting problem situations at existing intersections, large and small.

Exhibit 1-1. Drawing of key roundabout features.



Splitter islands have multiple roles. They:

- Separate entering and exiting traffic
- Deflect and slow entering traffic
- Provide a pedestrian refuge

Exhibit 1-2. Description of key roundabout features.

Feature	Description
Central island	The <i>central island</i> is the raised area in the center of a roundabout around which traffic circulates.
Splitter island	A <i>splitter island</i> is a raised or painted area on an approach used to separate entering from exiting traffic, deflect and slow entering traffic, and provide storage space for pedestrians crossing the road in two stages.
Circulatory roadway	The <i>circulatory roadway</i> is the curved path used by vehicles to travel in a counterclockwise fashion around the central island
Apron	If required on smaller roundabouts to accommodate the wheel tracking of large vehicles, an <i>apron</i> is the mountable portion of the central island adjacent to the circulatory roadway.
Yield line	A <i>yield line</i> is a pavement marking used to mark the point of entry from an approach into the circulatory roadway and is generally marked along the inscribed circle. Entering vehicles must yield to any circulating traffic coming from the left before crossing this line into the circulatory roadway.
Accessible pedestrian crossings	<i>Accessible pedestrian crossings</i> should be provided at all roundabouts. The crossing location is set back from the yield line, and the splitter island is cut to allow pedestrians, wheelchairs, strollers, and bicycles to pass through.
Bicycle treatments	<i>Bicycle treatments</i> at roundabouts provide bicyclists the option of traveling through the roundabout either as a vehicle or as a pedestrian, depending on the bicyclist's level of comfort.
Landscaping buffer	<i>Landscaping buffers</i> are provided at most roundabouts to separate vehicular and pedestrian traffic and to encourage pedestrians to cross only at the designated crossing locations. Landscaping buffers can also significantly improve the aesthetics of the intersection.

XIV SECURITY OF THE ROADWAY SYSTEM

In recent years the security of our roadway systems has become a concern. The disruption of traffic movement on our main roadways could have a crippling effect of the ability of our region to manage emergencies. The most likely threats are non-malevolent. Situations created by serious traffic incidents that block key roadway segments for long periods of time. Less likely threats come from deliberate, malevolent sources -- some perhaps simply from local crime perpetrators, others from persons or parties with more far-reaching and devious intents. Whatever the cause or reason for major system disruptions, it is in the best interest of the Stateline Area, if not the larger region or country as a whole, that concerted efforts be devoted to reducing system vulnerabilities and developing contingency plans to deal with major disruptions. The events of September 11, 2001 in New York and Washington were a rude awakening to the need to better prepare for and respond to serious unexpected incidents. All government agencies, not just those involved in police, fire, and emergency management need to contemplate the coordination of their roles in responding to such incidents.

Admittedly, it is unlikely that an area the size of the Stateline Area would be the choice of a terrorist attack. And while it is difficult to determine much less protect all possible targets, it seems likely that the area's bridges would be the most vulnerable and potentially disruptive targets. Bridge inspection is conducted every two years to determine structural safety, but there is no program to inspect for potential terrorist activity. Area police resources are already spread thin. Whether this should be added to their burdens or whether it is enough to simply ask the traveling public and general citizenry to keep watchful eyes and report suspicious activity is a question this LRP can only pose, not answer.

The transportation situations that developed in conjunction with recent hurricanes illustrate other concerns. It was disconcerting to watch live television coverage showing tens of thousands of vehicles fleeing the Houston area, jamming the northbound lanes to a standstill, while the southbound lanes were virtually empty. Hours went by with this condition before some southbound lanes were reversed to relieve some of the northbound congestion. Equally unpleasant was watching hundreds of motorists run out of fuel and become stranded, in need of food and water, and watch other emergency situations develop that could not be properly attended to. Hopefully, the Stateline Area will never face comparable disaster situations -- certainly, hurricanes are out of the question. But blizzards, floods, tornados, occasional earthquakes and man-made disasters that could cause thousands of persons to flee are not. Whether the Stateline Area is prepared for such disasters is not known. And although, the SLATS MPO is not empowered, qualified, or staffed to prepare plans to deal with such situations, SLATS could assist in the preparation of such plans by aiding in the identification of emergency and evacuation routings.

Much work has already been done in this regard for the most important transportation facility in the area -- Interstate 90/39. In the last 5 years, a major partnering agreement was developed between the multiple police, emergency and transportation agencies along I-39/90 within Boone, Winnebago and Rock Counties, including WisDOT, IDOT,

and the Illinois State Toll Highway Authority. Referred to as the Beloit-Janesville-Rockford (BJR) Arterial Management Workgroup, the objective was to anticipate the consequences of major incidents in the region, with emphasis on the Interstates. The effort sought to better coordinate inter-agency activities, facilitate communication and the dissemination of timely, reliable information; and provide travelers with safe and efficient alternate routings. An **Interstate Alternative Route Operations Guide** was developed. The guide provides alternative routings for I-39/90 between Janesville and Belvidere, and establishes a procedure for how motorists are to be directed to and along those routings. The effort is melded with relevant Intelligent Transportation System components (see more below) and it is with the planning and deployment of these new and evolving tools that SLATS can, perhaps, help the most.

XV INTELLIGENT TRANSPORTATION TOOLS

Over the last two decades numerous new tools have evolved from the computer and communications industries and related technologies that can aid in increasing the capacity and safety of our roadway systems. Collectively referred to as Intelligent Transportation Systems (ITS), considerable concern has been voiced from the Federal level that these tools be employed cost-effectively, consistently (so that motorists traveling from area to area are not baffled by system differences), and cooperatively (so that the greatest benefit can be achieved). To address these and related concerns, the Federal government has required that every State and area deploying such tools develop an ITS Architecture. Through the use of intelligent transportation tools, deployed under an ITS Architecture, SLATS, WisDOT and IDOT hope to improve the safe movement of goods and people on the Stateline Area road network.

An ITS Architecture was developed for North-Central Illinois (Boone, Winnebago, DeKalb and Ogle Counties) via a cooperative effort of IDOT and WisDOT. The following candidates for future regional implementation were identified. Implementation decisions are pending. This LRP supports these efforts.

1. **Traffic Management and Maintenance Control Center.** This center would coordinate interagency activities during incidents. It would also coordinate and distribute information on the area's system of dynamic message signs.
2. **Interstate Traffic Monitoring and Traveler Information.** This system will verify incidents with traffic detectors and cameras. (Note that a system of cameras has recently been installed on a portion of I-39/90 in the Stateline Area but they are not yet operational.)
3. **Advance Signal Operations/Coordination and Street Traffic Monitoring.** This system will enhance coordination of existing signal systems as per actual traffic conditions.
4. **Agency Data Sharing.** Enhance the traffic data sharing of emergency response agencies.

5. **Winter Weather Maintenance Enhancement.** Better predict, respond to, and minimize winter weather impacts.
6. **Arterial Dynamic Message Signs and Dynamic Trailblazer Signing.** Provide alternative routes and timely information on these signs.
7. **Construction Work Zone Safety, Traffic Monitoring and Traveler Information.** Monitor changes in traffic conditions influenced by construction or incidents.
8. **Advance Rail Crossing Notification System.** Enhance the estimate of time of arrival and duration of closing.
9. **Supplement Emergency Vehicle Traffic Signal Preemption.** Improvements on all State routes that will allow emergency vehicles to preempt a signal or temporarily modify its timing.

WisDOT has also developed ITS Architecture for use in communities throughout Wisconsin. That architecture should and will be consulted and complied with when planning, designing, and implementing transportation improvements in the Stateline Area north of the State Line.

XVI LEVEL OF SERVICE ON RESIDENTIAL STREETS

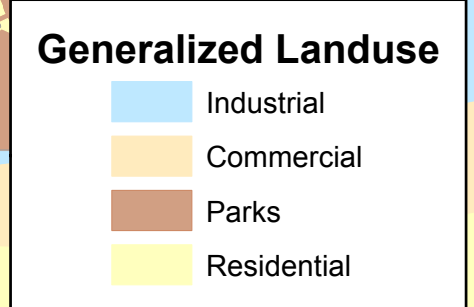
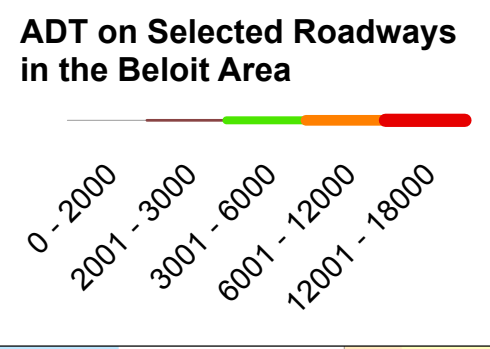
As previously noted, the LOS concept can also be applied to residential streets but the criteria for service determinations are nearly the opposite that use for higher level roadways. The Stateline Area has not rated residential streets in this manner in the past but the reasoning for such consideration in the future is as follows.

Because they are designed to accommodate emergency situations, most residential streets in the Stateline area could convey from 1,000 to 1,600 vehicles per hour in each lane (2,000 to 3,600 v/h, both directions, or over 20,000 vehicles per day). Obviously, from the quality of life standpoint of many people, this would be undesirable. Unfortunately, it appears that several streets in the Stateline area that traverse residential areas but carry substantial amounts of traffic. **MAP 6-11** illustrates the traffic volumes of the majority of streets in the Beloit area in relation to the predominant nearby land uses. As to be expected, most of the high-volume streets are functionally classified as collectors or above but still many of these abut substantial residential neighborhoods. This examination is not thorough enough for street-by-street recommendations, but this LRP suggest that further research, sometime over the next 5 years, would be warranted. If the results of that work substantiate that residential areas are being adversely impacted by high volumes of traffic, consideration should be given, to the extent possible, to diverting some of this traffic or the deployment of traffic calming measures that will reduce traffic impacts. Traffic calming is the term describing a wide variety of techniques that are used to divert, slow, or quiet vehicular traffic. As initially stated in this section, the LOS concept can be modified and applied to help make decisions in this regard. Some communities have made elaborate evaluations of their residential streets. The following Residential Street LOS criteria (**Chart 6-11**) are posed as an example.

StateLine Area Transportation Study

2035 PLAN

Map 6-11



Source: Beloit Public Works Dept., 2000 to 2004

Chart 6-11 Residential Street LOS Criteria

Local Residential Street LOS Criteria -- EXAMPLE					Chart 6-11			
LOS	Traffic O/D	Commuter short-cutting	Ped / Bike Conditions (using or crossing)	Drive-way Access	Vehicle Speeds	Residents Concerned	Peak Hr Vehs (max)	ADT (max)
A	small no. of adjacent residences	none	Easy/safe		25 mph or less	none	30 or less	300 or less
B	1-2 block stretches	none	Easy/safe		25-30 mph	some	60	600
C	2-4 block stretches	none	Relatively easy / usually safe		25-35 mph	some	120	1,200
D	4-6 block stretches	some	Increased caution needed		30-35 mph	many	180	1,800
E	6-8 block stretches	significant numbers	High level of caution needed, difficult or dangerous during peak hour		35 mph +	many	240	2,400
F	more than 8 blocks	significant numbers	Extreme caution needed, difficult or dangerous during all but low-volume hours, vehicles entering/exiting driveway frequency stop/block or slow traffic		35 mph +	many	>240	>2,400

Source: Adapted from Annual Baseline Traffic Report - 2003, City of Pleasanton, CA

Residential LOS Example.xls

In addition to the above Residential LOS serving as a means of evaluating the condition of existing streets, the chart might serve as an example of possible goals for future residential streets. Obviously, however, several of the above conditions are quite subjective. Doubtless, for example, some residents actually enjoy living along busy streets in the vicinity of intense activity centers (shopping, entertainment, places to eat and socialize, within walking distance of their places of employment). "Quality of life" values differ substantially from person-to-person, family-to-family and from time to time in people's lives. Families with young children are likely to prefer quiet neighborhoods with little traffic. Other young and some older adults, singles or couples, might prefer busy commercial areas where opportunities for social interaction abound. Others, although perhaps desirous of quieter surroundings, find residences along busy streets tolerable for the sake of convenience, lower housing costs, access to public transit, and other factors. This LRP recognizes this diversity as the situations along residential streets are evaluated and dealt with.

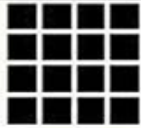



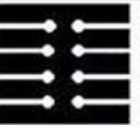
XVII RESIDENTIAL STREETS AND RELATED STREET LAYOUT ISSUES

Residential streets connect the private domain of persons' residences to the public domain of the community as a whole. Their design can significantly affect the quality and the character of the community. This section looks at appropriately designing streets to create safe, quiet and healthy environments.

Good street pattern design balances concerns for the efficiencies of infrastructure and traffic movements with concerns for aesthetics and peaceful, healthy living environ-

ments. One key in this balancing is the choice between traditional "grid designs" and "loop and cul-de-sac designs". **Chart 6-12** illustrates the basic difference between grid, loop and cul-de-sac designs. Each drawing represents roughly a quarter section tract (40 acres) divided with local streets; surrounding each drawing would be two arterials and two collectors. Also shown is the percent of the area actually consumed by the streets and the remaining buildable area.

Chart 6-12 Street Pattern Layout Illustration

Street Pattern Layout Illustration		Chart 6-12			
					
	Square Grid. (Miletus, Houston, Portland etc.)	Oblong grid. (most cities with a grid)	Oblong grid 2 (some cities, or in certain areas)	Loops. (Subdivisions - 1950 to now)	Cul-de-sacs. (Radburn, 1932 to now)
Percent of area for streets	36.0%	35.0%	31.4%	27.4%	23.7%
Percent of buildable area	64%	65%	68.6%	72.6%	76.3%

Source: See note at start of Section XVII, Chapter 6. Residential LOS Example.xls

A. Street Design/Layout Pros & Cons

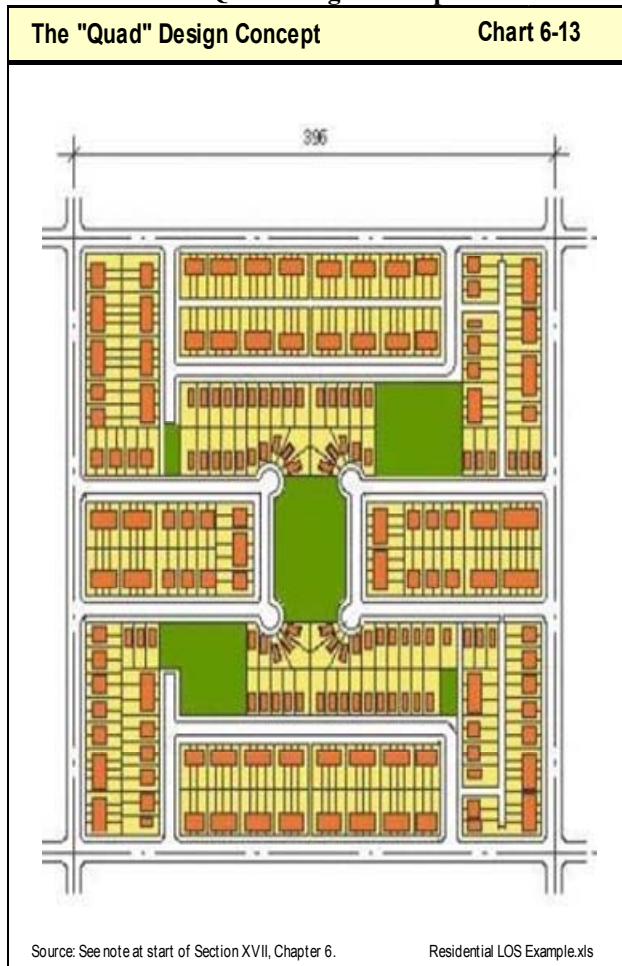
1. Traditional grid designs consume considerably more land in streets.
2. Loop and cul-de-sac (L&C) designs naturally exclude through or commuter traffic where as grid designs pose maximum alternatives for traffic seeking short cuts or avoiding congested arterials or collectors.
3. L&C designs have fewer 4-way intersections than grids. This poses fewer opportunities for auto crashes and actually permits more rapid auto travel, although the distances may sometime be longer.
4. Grid designs are better for pedestrians. The discontinuity of L&C inhibits pedestrian access to facilities and amenities. The L&C curvilinearity lengthens and confuses walking trips.
5. Places are easier to locate with grid designs and it is difficult to get lost in grid communities. Elaborate L&C designs are quite frustrating for persons unfamiliar with the community.

B. Good residential street qualities to strive for

1. **Sociability.** Good residential streets allow and encourage social contact among the pedestrians and residents. Streets that have heavy volumes of traffic or are very wide discourage pedestrian use and social interaction.
2. **Walkability.** Walkable residential streets provide comfortable access to schools, recreation, commerce, jobs and other amenities. Confusing patterns in L&C streets compromise accessibility. The best walkable neighborhoods, in addition to walkable street designs have an arrangement of desirable amenities that are in walkable (5-10 minutes) distances.
3. **Delight.** Good streets are aesthetically pleasing, both for the pedestrian and the motorist. Quality green and open space, visible from the street by traveler and from the homes of the residents is vital for quality, livable neighborhoods.

C. The Residential Quad Example

Chart 6-13 The "Quad Design Concept



The residential quad is one street design plan that attempts to combine the positive attributes of both the Grid and L&C designs while removing many of their shortcomings. Modeled somewhat after the successful 18th Century plan of Savannah, Georgia, the residential quad incorporates open space amenities, in a regular, easy-to-navigate grid, loop, and partial cul-de-sac system. The roughly ^a mile square (40 acres) and can be crossed on foot in five minutes. The quad is bounded by two collector streets and two arterial streets. The modified grid prevents cars from crossing the entire quad, eliminating non-residential traffic. The use of looped, narrow streets reduces the speed of all vehicular traffic. A continuous pedestrian footpath system provides several direct route options to parks, public transit, retail, and services. The pedestrian system is generally overlaid on the streets. In one of twelve possible layouts, three parks are laid out diagonally and act as connectors. Connections made on foot are established by way of an extensive and accessible network of open space and parks. Eight percent of the area is devoted to open space; 26 percent is

devoted to streets. By exchanging street space for open space connectivity is enhanced, walking is made visually rewarding and developable land increases. The concept is illustrated in **Chart 6-13**.

The residential quad of Chart 6-13 is presented as just one example of street layout/design that can improve the livability of Stateline Area communities as they grow. Others are certainly conceivable. Designs like this, coupled with other elements of comprehensive land use planning can provide quality living environments, accommodate the automobile but limit its undesirable aspects, and provide living spaces where walking and biking are reasonable alternatives for many trip purposes.

XVIII TRANSPORTATION AND COMPREHENSIVE PLANNING - OTHER ISSUES

There are a number of other planning issues, some that have been touched on, that need to be further stressed in relation to this LRP.

Transportation and Comprehensive Planning are artificially separated in the U.S. This separation is primarily the result of the existence of a large and very powerful (well-funded) entity known as the U.S. Department of Transportation, that when first established, was charged with only transportation issues. Although there are several other entities within the Federal government (Bureau of Land Management, Department of Agriculture, Department of Forestry, the Department of Housing and Urban Development and others) that involve themselves in comprehensive planning, there is no single agency that has this topic as its primary intended purpose. Comprehensive Planning is a topic held within the realm of the States.

This is not to say that at various times over the last half-century that the Federal government has not dabbled in comprehensive planning. Sizable amounts of Federal funds have been and continue to be devoted to subsidizing such planning, via grants to the States and local governments, across the country. And to its credit, the U.S. Department of Transportation, over the last 2-3 decades, has recognized and stressed the importance of integrating the planning, development and improvement of transportation systems with all the various systems that comprise the human and natural living environment.

Still, however, there is no complete integration of planning efforts. While many of the Federal entities pose requirements for "comprehensive" plans of sorts, there is no single oversight agency whose function it is to assure that the various infrastructure plans and social service plans that the Federal government participates in are fully integrated. Perhaps this is because it is such a daunting task. Perhaps it is because the States fear and resist further Federal involvement. Perhaps it is a matter better left to the States and local governments. Whatever the reason, it is unimportant here. What is important to the Stateline Area and this LRP is the recognition that Transportation and Comprehensive Planning are inseparable endeavors; a fact long recognized by the communities in the Stateline Area and the States of Wisconsin and Illinois.

Specifically, with transportation planning there are six non-transportation elements that must be considered and integrated, lest there be conflict and waste as transportation systems are improved. These are:

1. Other publicly funded (or assisted/regulated) infrastructures, mainly sewer, water, power generation and distribution structures, and communications infrastructure.
2. The main social services assisted by government, schooling, public welfare, health.
3. Preparing for, minimizing and mitigating disaster events.
4. Law and order services.
5. Conservation and/or preservation of cultural heritages.
6. Conservation and/or of the natural environment.

Earlier in this chapter, the analogy of the roadway network to the blood circulatory system in the human body was noted. Here, as we discuss the importance of integrating transportation with other governmental endeavors, that analogy is even more valid. Just as blockages or constraints in the circulatory system inhibit the functions of the human body, so too do failures in our transportation systems inhibit the workings of our communities. Just as abnormalities or breaks in the circulatory systems can harm or destroy the human body, so too can poorly planned or integrated road networks or improvements harm our communities.

This LRP recognizes the need to integrate the roadway infrastructure with all the other elements of the community and encourages all transportation providers and stakeholders in the Stateline Area to plan accordingly. Because it is not always possible to foresee or predict the impacts of transportation decisions, this LRP advocates that all transportation decisions be made in open, transparent settings where input from all parts of the community can be heard and considered.

XIX HIGHWAY PLANNING AND ENVIRONMENTAL JUSTICE

The planning, design, construction, and maintenance of virtually all public infrastructures will have positive and negative impacts. Some will intrinsically be more positive, some more negative. The construction of a new public library in a neighborhood would, most likely, always be more positive. The siting of a public waste disposal landfill or incinerator would most likely negatively impact an area. Both types of facilities are, however, essential to our communities. Both must be put somewhere within our communities.

The concept of environmental justice is simple. It recognizes positive and negative impacts. And, it puts forth the proposition that no neighborhood, community, or group of people should be forced to bear a disproportionate share of the negative impacts of public endeavors or receive a disproportionate share of the positive benefits of such endeavors.

Within the last decade, by Presidential Executive Order, environmental justice has been brought to the forefront. All publicly funded endeavors are required to consider the concept as they are planned, designed, and implemented. Transportation infrastructure is no exception.

Roadways can have positive and negative impacts. Roadways provide access and opportunities. Roadways also provide dangers to people and neighborhoods in the form of noise, pollution, and crash hazards. Roadways can also present barriers, separating people and neighborhoods from other parts of the community.

This LRP recognizes the positive and negative impacts of roadways and urges all transportation providers in the Stateline Area to consider those impacts as improvements are planned, designed, programmed and implemented. In particular, persons of low economic status and neighborhoods where low-income populations are predominant should not be asked to bear disproportionate burdens related to roadway improvements. Conversely, those same persons and neighborhoods should not be neglected, when it comes to the benefits of transportation improvements. As part of the prioritization process of transportation improvements, both in this LRP and in the more frequently developed Transportation Improvement Programs of SLATS, the impact of the improvements will be evaluated for the sake of environmental justice.

XX METRO AREA BUILD-OUT ARTERIAL & COLLECTOR ROADWAY LAY-OUT PLAN

Although the improvements likely to be made in the Stateline Area within the next 2-3 decades will be quite substantial, they will not encompass all of the roadway expansions that will eventually be needed within the delimited metropolitan planning boundaries. This section will look at aspects that need to be planned for the more distant future.

The SLATS Metropolitan Planning Area (MA) is considerably broader than the area necessary to accommodate dwelling unit, commercial, and industrial growth in the next 2-3 decades. This is illustrated by the previously discussed **MAPS 6-4 thru 6-6**. The area is broader for several reasons.

A. Free Market Supply & Demand Forces

Although considerable effort was devoted to determining geographically where the community's growth would be in the next 2-3 decades, such forecasts cannot be taken as perfect. The exact locations of new development are (and should be) determined by factors beyond governmental control. The marketing of land for development is primarily a private enterprise endeavor. Properties are offered for sale and development (or re-development) in a free market system that is governed by the basic economic law of supply and demand. Farming has been and still is the predominant economic use of most land acreage throughout the Rock and Winnebago Counties. The market for other profitable land uses is limited by other economic factors. The demand for land for non-farm housing is controlled primarily by the growth or decline in the non-farm economy. If

non-farm commerce and industry grows in the Stateline Area, the number of jobs will grow and the demands for housing will grow. The growth of non-farm commerce and industry is affected by factors both outside and inside the Stateline Area. These intertwined economic relationships are affected by governmental decisions but, in our free economy, are deliberately not fully controlled. The MA is deliberately broader to take that unpredictability into account.

We have already expressed the likelihood that the Stateline Area will continue to urbanize (i.e., grow in non-farm population, jobs, and land uses). Moreover, because America has abundant farm land and produces substantial farm surpluses, the supply of farmland exceeds the demand. In turn, the cost of acquiring and developing farmland is typically less than the cost of acquiring already urbanized or partially urbanized lands and redeveloping those lands into denser uses. Hence, there is a propensity for new development across America, no less in the Stateline Area, to sprawl outward into the adjacent agricultural areas. Further, although extensive efforts are devoted by government, from many directions, to limit this sprawl, it cannot be fully controlled in a free market system. In a free market system, only a substantial increase in the value of farm land for farming purposes will ultimately curb the tendency toward urban sprawl. However, this is not to say that governments in the Stateline Area should not continue to make efforts to limit sprawl.

B. "Smart Growth" Considerations

Smart Growth, a term recently in vogue, refers to comprehensive planning efforts that, a few decades ago, were called "resource conservation." Both refer to the wise planning, use, and conservation (sometimes preservation) of resources (natural and man-made) to the maximum benefit of current generations and posterity. Smart Growth is an important new term, however, because it shows the current recognition of resource conservation by a much larger segment of government and society than decades ago when only environmentalists and conservationists viewed the topic as important. This LRP relates to Smart Growth in three important ways.

- The first is the broadness of the Metropolitan Area. The MA, by being considerably larger than the area necessary to accommodate growth in the period of this plan, allows for the uncertainties of the free enterprise land development system noted above. There is, within this broad area, room for free market competition in land marketing that could otherwise not occur if the boundary was more constrained.
- The second is the boundary itself. This LRP recommends that because the MA is large enough to allow marketing choices, future urban growth within the vicinity of and related to the Stateline communities should not be allowed outside this boundary. In other words, urban sprawl should be constrained and contained, at least for the next 2-3 decades, within this boundary. Within that time span, growth in human populations at home and world-wide, may increase the value of farmland for commodity production and, in turn, the free market system will minimize further erosions of the agricultural resources of Rock and Winnebago Counties.

- Within the MA boundary, detailed transportation planning should occur based on the premise, that for a transportation system to be efficient, effective and minimally intrusive on quality of life, the system of collectors and arterials must be laid out well in advance of the development itself.

C. A Plan for the Transition from Rural to Urban

The current road system throughout most of the undeveloped parts of the Metro Area was designed to accommodate only the needs of the farming community or the need to connect Stateline communities with more distant communities. It is in the best interest of the region to develop a detailed plan for future roadway improvements based on full build-out (urbanization) of the Metropolitan Area. Such a plan can accommodate changes resulting from unforeseen land marketing and thereby help preserve an efficient collector and arterial ROW layout that might otherwise be thwarted by haphazardly placed land developments. **MAP 6-12** provides a long-term collector/arterial roadway layout. This layout scheme is only a rough proposal at this stage. Over the next 2-3 years, SLATS should involve area stakeholders in an effort to refine and firm this plan.

As **MAP 6-12** was developed, three overall observations became are noteworthy.

- United States Geological Survey (USGS) Ortho Quad aerial photography via Windows Live Local (<http://local.live.com/>) was used as the primary source of existing land use information. These Quads were invaluable for that purpose but were somewhat dated (1992 and 1998). More recent photography will be helpful when refining **MAP 6-12**.
- The Ortho Quads were sufficient to lay out a future road system that avoids the displacement of most of the scattered land developments that have occurred in recent decades. However, this scattered development was disturbing in two ways. First, it appears that a number of land developments have been permitted with little regard for the placement of future collector and arterial roads. Second, considerable development appears to have been permitted along rural roadways that will someday need to be upgraded to urban collector or arterial standards. Sufficient time was not available during the preparation of **MAP 6-12** to review current area policies for permitting land subdivisions and developments but should be done as part of the future refinement of **MAP 6-12**. Such efforts should be aimed at assuring: (1) that major land developments are planned in concert with future road needs, (2) that sufficient ROW is available for future road expansion needs, and (3) that building setbacks are large enough or other mitigating measures are incorporated into new developments to minimize the adverse effects of future traffic increases on the residences or businesses.
- Sufficient time also was not available during the preparation of **MAP 6-12** to thoroughly review the adopted land use plans of the area jurisdictions. Rock County Smart Growth As pointed out in other parts of this LRP, transportation and land use planning are closely related and must be coordinated. **MAP 6-12** does show generalized anticipated land uses. This generalization was developed by Beloit Public Works staff based on their general knowledge of the area and may not completely reflect adopted area land use plans. As **MAP 6-12** is refined, area

land use plans should be thoroughly reviewed and updated where appropriate and the road layouts adjusted appropriately -- particularly where there are conflicts between abutting jurisdictions. It was noted that the City of Beloit and Winnebago County are currently scheduling updates of their comprehensive plans. That planning effort and the refinement of the future arterial / collector network should dovetail, as should similar comprehensive planning efforts by the other Stateline Area communities.

The following principles were used by staff in constructing **MAP 6-12**. They should be reviewed and evaluated as part of the refinement process.

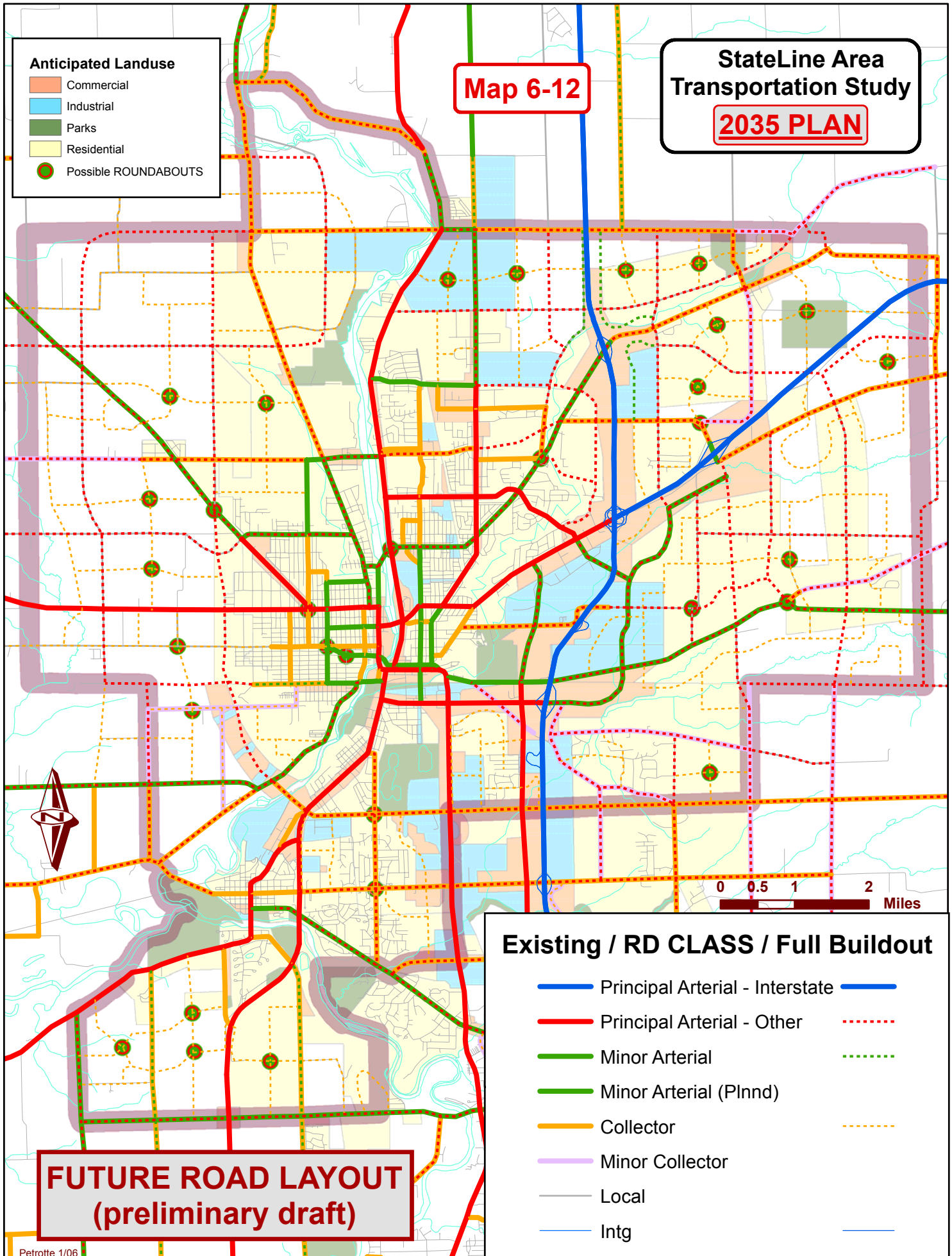
1. The spacing of arterials and collectors roughly follows the mile/half-mile intervals noted previously in this Chapter.
2. Following the above, arterials are planned mostly along existing section line roads. This will sometimes create undesirable (quality of life) situations where the roads have already been lined with residential development that is not properly protected.
3. This effort attempted limit collectors to lengths of 2 miles or less to discourage long distance through movements.
4. Roundabouts are suggested at numerous collector intersections for the sake of calming traffic. Some roundabouts also suggested at arterial intersections, these may have to be double lane designs.
5. It is assumed that if this or a similar plan is adopted, local governments will take measures to assure some level of access control on all of the arterials and many of the collectors to allow them to function safely and efficiently. Further, that road/subdivision designs through residential areas will incorporate measures to minimize or mitigate the adverse effects of vehicular traffic. These efforts may necessitate some level of governmental cost sharing.
6. The effort did not differentiate between collectors and minor collectors, arterials and minor arterials. It may be desirable that subsequent refinements make these differentiations.

Map 6-12

StateLine Area
Transportation Study
2035 PLAN

Anticipated Landuse

- Commercial
- Industrial
- Parks
- Residential
- Possible ROUNDABOUTS



Existing / RD CLASS / Full Buildout

- Principal Arterial - Interstate
- Principal Arterial - Other
- Minor Arterial
- Minor Arterial (Plnnd)
- Collector
- Minor Collector
- Local
- Intg

**FUTURE ROAD LAYOUT
(preliminary draft)**

When **MAP 6-12** is fully refined and finalized, it is expected that it will be made part of the Official Map (s) for the Stateline Area communities. This process will differ somewhat for the communities in Wisconsin and Illinois and may also differ from community to community. The location-specificity of the proposed collector / arterial alignments may also differ from road to road or road segment to road segment. For example, a proposed roadway may have precise termini at one or both ends (in order to link with other segments), but its precise path for the internal parts of its reach may be negotiable depending on other parts of the land development design. The important aspects to convey are that there must be a high degree of connectivity and continuity for the arterials, some continuity for the collectors but less than arterials to discourage long-distance through-movements, and there must always be respect for and mitigation of the adverse effects of vehicular traffic on residential neighborhoods.

Finally, this effort did not attempt to further define construction cost responsibilities beyond the general statements made on that topic in previous sections of this Chapter. It is assumed that arterials will be primarily paid for by government and collectors paid for by developers. As previously stated, the later may vary for collectors that will convey high volumes of traffic or need to be constructed in difficult or expensive situations. As **MAP 6-12** is refined, it might also be important to establish general rules and processes for negotiating government involvement in collector funding.

XXI FINANCIAL PLAN FOR ROADWAYS

In accordance with Federal guidance, the Roadway element of this LRP, like all other elements, must contain a financial component. The financial component must compare the estimated revenues from existing and reasonably expected funding sources with (1) the estimated costs of operating and maintaining the existing roadway system and (2) the estimated costs of proposed roadway or roadway system expansions over the period of the plan.

Transportation improvement projects or proposals can only be included in this LRP if they meet one of two financial conditions:

- They are capable of being funded during the term of this Plan with funding that is reasonably forecasted to be available.
- They are specifically identified as projects for which funding is not forecasted but are considered desirable projects if extra funding is made available. These projects are called “Illustrative Projects.”

An LRP that meets the above two conditions is considered to be “**financially constrained**” in accordance with Federal requirements.

A. Funding Sources for Roadways

Funding for roadways is available from a variety of sources, some more certain than others, at the Federal, State, and local levels.

Within a designated Metropolitan Planning Area, such as SLATS, eligibility for most roadway improvement aid is contingent on the transportation planning process. Specifically, to be eligible for funding projects or proposals must:

- Be contained within, or be fully compatible and consistent with this LRP.
- Be programmed and prioritized within an annual Transportation Improvement Program (TIP).

A Transportation Improvement Program is more detailed in certain aspects than this LRP. Generally, a project can make it into a TIP only after:

- Enough detailed planning or preliminary engineering has been done to determine specific scope and alignment.
- A good estimate of project cost has been developed.
- A source of funding has been determined and duly allocated to the project.
- The project was sufficiently described and justified in the LRP and/or the TIP Project Se-

lection Process to convince the SLATS committees and the general public that the project is justified.

- ❑ The project has been sufficiently compared in the LRP or TIP Process with other funding needs or wishes to assign it a priority for implementation.

An exception to the above, of course, could be some major planning, preliminary engineering, alternative analysis, or feasibility studies. The results of these studies may be needed to determine the scope, cost, funding source, and/or priority of some proposals or projects, or even, for that matter, whether some improvement concept should be part of the LRP. Open discussion and public input is the main requirement for the consideration and provision of aid for such studies. The Metropolitan Planning Process provides opportunities for this input as part of the development of this LRP (updated every 5 years), the annual TIP Process, and the annual Unified Planning Work Program development process.

In most Metropolitan Areas, the TIP describes projects that are to be implemented within the next 3 years. The projects are prioritized by year of intended implementation. Generally, projects first appear in the third or out-most year and are advanced, annually, until they reach the first or implementation year. The priorities, however, are reevaluated annually. A project may advance more quickly, skipping the second year and moving directly to the implementation year – or may stay in the out-years indefinitely, being superseded by other projects that have risen in importance or have become better candidates for funding.

In the Stateline Area, the TIP Process is extended to 6 years. This longer time frame provides greater opportunities for public information, input, and project prioritization.

B. Sources of Financial Aid for Roadway Improvements

Before discussing the sources of Federal aid for roadway improvements in the Stateline Area it is important to reiterate three facts. First, the Federal government, although responsible for substantial aid, does not itself design, construct, maintain, or operate any roadways. All public roadways in the Stateline Area are the responsibility of State and Local governments. Second, most Federal aid for roadways is provided to the States. The State, in turn, either uses this funding, accompanied often by considerable State revenues, on the State and Federal-marked highways in the area; or they pass large portions of the Federal funds to the Local governments for use on major roadways in their areas. Third, very little Federal aid is provided as the sole source of funding for roadway projects. Most Federally-assisted projects require a minimum local share contribution of 20% (20 or more local dollars for every 80 Federal dollars). This local share can come from any combination of the local or State governments.

At the Federal level, aid for roadway construction is derived from Federal excise and motor fuel taxes. These revenues are administered by the U.S. Department of Transportation (USDOT) and the Federal Highway Administration (FHWA). Currently, the Federal gas tax stands at 18.4 cents per gallon but it would be a mistake to assume that all of this revenue is available for roadway improvement projects. Parts of this revenue

are used for deficit reduction, mass transportation assistance, abatement of leaking fuel storage tanks, and other needs.

The parts that are available for roadway improvements are passed to the State and local governments for the construction of qualified new roadways and the improvement of other roadways that are in the national interest. Federal aid is not usually available for Local roads (under the functional classification system described previously) or for general operational maintenance and administration. It can be used on most Arterial and Interstate facilities and some Collector facilities, both urban and rural, depending on the exact source and other specific criteria in the Federal law.

State aid for roadway improvements is also derived predominantly from motor fuel taxes. In Wisconsin, the current rate is 32.1 cents per gallon (cpg) for both gasoline and diesel fuel. In Illinois, the rates are more complicated. There, gasoline is currently taxed at 19 cpg while diesel fuel is taxed at 21.5 cpg and 27.5 cpg for some commercial vehicles. In addition, 6.25% in sales tax is added, plus another 0.3% for leaking storage facility mitigation. Additional sales taxes may also be added by local jurisdictions. In Wisconsin, until recently, the amount was adjusted annually based on the Consumer Price Index. There is some talk of reinstating the indexing but the outcome is uncertain. In Illinois, there is currently considerable debate over the sales tax add-on. With gas prices now exceeding \$3/gallon, the 6.25% sales tax is boosting the State's general fund, much to the chagrin of the motoring public.

According to a recent report from the American Petroleum Institute, Tax Foundation, when all fuel taxes (Federal and State) are added together, the average American driver pays 45.9 cpg. There is considerable variance from State-to-State. The lowest rate paid is in Alaska (26.4 cpg) while the highest rates paid are in Hawaii and California (60.1 and 60.0 cpg, respectively).

The average total rate for Illinois was computed at 54.6 cpg, while Wisconsin weighed in at 51.3 cpg. Rates in the surrounding States were: Minnesota at 40.4, Iowa at 40.1, Missouri at 36, Kentucky at 36.9, Indiana at 48, and Michigan at 52.4 cpg. As stated above, however, a sizable part of the 18.4 cpg Federal component of these figures is used for budget deficit reduction and other non-roadway uses.

Local sources of funds for roadway projects come from a variety of sources. General assessments of local property taxes or sales taxes are two main sources. A rebate of motor fuel taxes levied by the States is another example. Fees, fines and other charges for services are also sources. Local governments can require and sell vehicle stickers, levy room taxes on hotels and motels, and charge parking and rental fees. Special tax assessments can be levied for major improvements that are of benefit to specific properties. Revenues can be garnered from off-track betting and other gaming establishments.

To finance major improvements without actual tax revenue in hand, local governments can sell general obligation bonds or water utility bonds. The bonded indebtedness is then paid off over time from the above and other creative sources.

Another recent and popular local funding mechanism is tax increment financing (TIF). This method earmarks all or a portion of the increases in property tax revenues that result after improvements are made in an area. These earmarks are used to pay of the bonds used to finance the improvements.

Smart local fund administrators carefully use their locally generated revenues to match and capture State and Federal aid. It is important that all local governments become knowledgeable and remain abreast of changing State and Federal aid sources so that they can leverage their local funds as much as possible. Where there is a choice between building one project with local funds only and another where State or Federal funds can be captured, it is nearly always best to give the latter the priority.

Over the last 5-years, sizable amounts of Federal and State aid have been awarded for projects in the Stateline Area. Two sources were consulted to estimate the amounts and sources:

- ❑ SLATS TIPs from 2002 thru 2006.
- ❑ Estimates provided by WisDOT for the Wisconsin-side of SLATS.

The next two sections of this Chapter discuss those two funding estimate sources.

C. Analysis of SLATS TIPs

Charts 6-14 a thru c summarize the roadway transportation improvement projects programmed in the SLATS TIPs for the years 2004 thru 2006.

A number of difficulties were encountered when attempting this summarization. First, sometimes identical projects were listed in the implementation year of two or more TIPs. In these instances it was assumed that the project failed to be fully implemented in the first year and was simply carried to subsequent years. Some projects were similar but not identical. Some of these projects were tallied for both years, if it appeared the project may have been partially implemented in one year and continued in the next. Some were tallied only for the last year listed, if it appeared they represented the entire project cost.

Second, some listed projects appeared to apply to broader regions than the SLATS Metropolitan Area. IDOT and WisDOT “district-wide” or “county-wide” safety projects are examples. WisDOT interstate improvement projects that applied to far longer stretches of the interstates (say, from Madison to the State line) are similar examples. In these instances, the project costs were reduced by simple “eye-ball” estimates of the proportion of the project scope within SLATS.

Third, although the TIPs in the Stateline Area were diligently prepared by SLATS staff, uncertainties or changes in the project funding or prioritization process were sometimes missed or left unreported by the responsible agencies. Numerous projects identified as funded and scheduled for implementation were, in fact, left unfunded and unimplemented and these changes were not reported until the next annual TIP was developed. Several such projects in the FY06 TIP, unreported until this financial element was devel-

oped, complicated the finalization of this financial plan. Particularly noteworthy were changes pertaining proposed to I-39/90 improvements and IL-2 improvements on the Illinois-side of SLATS.

Note also that the values have not been adjusted for inflation. FY02 projects are in FY02 dollars, and so on. With only five years of time span, inflation should not make a great deal of difference but will tend to make any forecasts derived from these numbers very slightly on the conservative side.

The above limitations in mind, **Chart 6-14a** provides a project-by-project listing of the projects programmed in 2004 thru 2006. In total, 114 projects were identified, 32 of which were on the Illinois-side of SLATS, and 81 on the Wisconsin-side. After adjustments for mid-year changes in funding status and priority, the total cost of these improvements was nearly \$72 million, or approximately \$14 million annually. Note that projects funded with enhancement funds are not included in this list. Note also that this includes one major project that is not actually within located within the SLATS MPA – i.e., the Open Road Toll Plaza project of the Illinois State Toll Highway Authority (ISTHA). This project was included in the SLATS TIP and this LRP because of its proximity and importance to transportation in the Stateline Area.

Chart 6-14a Improvement Projects 2002-2006

SLATS Highway & related Improvement Projects 2002 thru 2006											Chart 6-14a			
State	Agent	Year	Extent	Type	EorP	Phase	FedAmt	FedSrc	StateAmt	StateSrc	Local Amt	LocalSrc	TotalAmt	
ILL	IDOT	03	IL-75, Rock River to IL-2	Road	E	ROW	0		250	IDOT	0		\$250	1
ILL	IDOT	04	IL-2, Whittemore to IL-75 S Beloit (IDOT adjusted May 05)	Road	P	Const	635	NHS	0		159	SB	\$794	2
ILL	IDOT	04	RR Crossing Projects (Note 1)	Road	P	Const	45	RR-Saf	8	IDOT	0		\$53	3
ILL	IDOT	04	Safety Projects (Note 1)	Road	P	Const	153	HES	17	IDOT	0		\$170	4
ILL	IDOT	05	RR Crossing Projects (Note 1)	Road	P	Const	22	RR-Saf	2	IDOT	0		\$24	5
ILL	IDOT	05	Safety Projects (Note 1)	Road	P	Const	153	HES	17	IDOT	0		\$170	6
ILL	IDOT		I-39/90, Wis to Rockton Rd (in TIP, not funded, moved to 08-11)	Road	E	Const	0		0		0		\$-	7
ILL	IDOT		IL-2, Elmwood to Latham (in TIP, not SLATS)	Road	E	ROW	0		0		0		\$-	8
ILL	IDOT		IL-2, Latham to Rockton (in TIP, not funded, moved to 07-11)	Road	E	Const	0		0		0		\$-	9
ILL	IDOT		IL-75, Rock R to IL-2 in Rockton (IDOT adjusted May 05)	Road	E	ROW	0		1,000	IDOT	0		\$1,000	10
ILL	IDOT		Open Road Toll Plaza (Note 8)	Road	E	Const	0		24,800	IDOT	0		\$24,800	11
ILL	IDOT		RR Safety Projects (Note 1)	Road	P	Const	23	RR-Saf	3	IDOT	0		\$26	12
ILL	S Beloit	02	Annual Overlay Program	Road	P	PE	0		0		8	SB	\$8	13
ILL	S Beloit	02	Annual Overlay Program	Road	P	Const	0		0		100	SB	\$100	14
ILL	S Beloit	02	Shirland Av, Bluff to Moore	Road	E	PE	0		0		52	SB	\$52	15
ILL	S Beloit	02	Shirland Av, Bluff to Moore	Road	E	Const	0		0		650	SB	\$650	16
ILL	S Beloit	03	Annual Overlay Program	Road	P	Const	0		0		100	SB	\$100	17
ILL	S Beloit	03	Annual Overlay Program	Road	P	PE	0		0		8	SB	\$8	18
ILL	S Beloit	04	Annual Overlay Program	Road	P	PE	0		0		8	SB	\$8	19
ILL	S Beloit	04	Annual Overlay Program	Road	P	Const	0		0		100	SB	\$100	20
ILL	S Beloit	05	Annual Overlay Program	Road	P	PE	0		0		8	SB	\$8	21
ILL	S Beloit	05	Annual Overlay Program	Road	P	Const	0		0		100	SB	\$100	22
ILL	S Beloit		Annual Overlay Program	Road	P	Const	0		0		100	SB	\$100	23
ILL	S Beloit		Annual Overlay Program	Road	P	PE	0		0		8	SB	\$8	24
ILL	V Rockton	05	Union St, Race to Blackhawk	Road	P	Const	486	STP-U	0		121	VR	\$607	25
ILL	V Rockton	05	Union St, Race to Blackhawk	Road	P	PE	39	STP-U	0		9	VR	\$48	26
ILL	Winn Co	02	Prairie Hill Rd, IL-2 to IL-251	Road	P	Const	480	STP-U	0		120	WC	\$600	27
ILL	Winn Co	02	Prairie Hill Rd, IL-2 to IL-251	Road	P	PE	0		0		30	WC	\$30	28
ILL	Winn Co	02	Willowbrook Rd, IL-173 to IL-75	Road	E	PE	0		0		365	WC	\$365	29
ILL	Winn Co	05	Hononegah Rd, W of IL-251 to Checherberry	Road	E	Const	0		0		2,200	WC	\$2,200	30
ILL	Winn Co	05	Willowbrook RD, Rockton to IL-75	Road	E	Const	0		0		3,000	WC	\$3,000	31
ILL	Winn Co		Rockton Door Rd	Road	P	Const	0		0		1,700	WC	\$1,700	32
WIS	COB	02	Annual Overlay Program	Road	P	Const	0		0		350	COB	\$350	34
WIS	COB	02	Cranston Rd Brdg at Turtle Creek	Brdg	E	Const	0		1,326	WDOT	332	COB	\$1,658	35
WIS	COB	02	Shirland Av, Bluff to Moore	Road	E	Const	0		0		650	COB	\$650	36
WIS	COB	02	Shirland Av, Bluff to Moore	Road	E	PE	0		0		52	COB	\$52	37
WIS	COB	03	Annual Overlay Program	Road	P	Const	0		0		350	COB	\$350	38
WIS	COB	03	Gateway Blvd, Cranston Rd. to Water Tower	Road	E	Const	0		1,200	WDOT	1,000	COB	\$2,200	39
WIS	COB	03	Henry Av, Riverside to Wisconsin Rehab	Road	P	PE	0		0		60	COB	\$60	40
WIS	COB	03	Henry Av, Riverside to Wisconsin Rehab	Road	P	Const	0		0		690	COB	\$690	41
WIS	COB	03	Maple Av, 4th to 6th	Road	E	ROW	0		0		430	COB	\$430	42
WIS	COB	03	Maple Av, 4th to 6th	Road	E	PE	0		0		30	COB	\$30	43
WIS	COB	03	Willowbrook Rd, I&M RR to Staline Rd	Road	E	PE	0		0		50	COB	\$50	44
WIS	COB	03	Willowbrook Rd, I&M RR to Staline Rd	Road	E	ROW	0		0		250	COB	\$250	45
WIS	COB	04	Annual Overlay Program	Road	P	Const	0		0		350	COB	\$350	46
WIS	COB	04	Park Av RR Crossing	Road	P	Const	0		0		80	COB	\$80	47
WIS	COB	04	Willowbrook Rd, IC&E to Staline Rd	Road	E	Const	0		0		1,790	COB	\$1,790	48
WIS	COB	05	Annual Overlay Program	Road	P	Const	0		0		350	COB	\$350	49
WIS	COB	05	Maple Av, 4th to 6th	Road	E	Const	0		0		510	COB	\$510	50
WIS	COB		Annual Overlay Program	Road	P	Const	0		0		350	COB	\$350	51
WIS	COB		Freeman Prky, WI-81 to Hart Rd	Road	E	PE	0		0		280	COB	\$280	52
WIS	COB		Gateway Blvd, Eagle's R to Hart and to Cty X	Road	E	PE	184	DEMO	0		46	COB	\$230	53
WIS	COB		Milwaukee Rd, I-90 to Lee	Road	P	PE	0		0		100	COB	\$100	54
WIS	COB		Riverside Dr (US-51), Emerson to Henry	Road	P	PE	0		50	WDOT	17	COB	\$67	55
WIS	COB		Shirland Av, Moore to Division, resurfacing	Road	P	Const	0		0		200	COB	\$200	56
WIS	COB		White Av, Central to Milwaukee	Road	P	Const	0		0		990	COB	\$990	57
WIS	COB		Wisconsin Av, Woodward to Henry	Road	P	PE	0		0		85	COB	\$85	58
WIS	Rock Co	02	Turtle Creek Brdg at Shopiere Rd (Cnty S)	Brdg	P	PE	0		32	WDOT	8	RC	\$40	59
WIS	Rock Co	03	Shopiere Rd (Cnty S), Murphy Wds to I-90	Road	P	PE	428	STP-U	0		107	RC	\$535	60
WIS	Rock Co	03	Turtle Creek Brdg at Shopiere Rd (Cnty S)	Brdg	P	PE	0		38	WDOT	9	RC	\$47	61
WIS	Rock Co	04	Turtle Creek Brdg at Shopiere Rd (Cnty S)	Brdg	P	Const	0		517	WDOT	129	RC	\$646	62

State	Agent	Year	Extent	Type	EorP	Phase	FedAmt	FedSrc	StateAmt	StateSrc	Local Amt	LocalSrc	TotalAmt	
WIS	Rock Co	05	Cnty P, WI-67 to WI-140 (related to Yahara Brdg)	Road	P	PE	27	BR	0		7	RC	\$34	63
WIS	Rock Co	05	Cnty S, IH90 to E limits of Shopiere	Road	P	PE	46	STP-R	0		12	RC	\$58	64
WIS	Rock Co	05	Lathers Rd Brdg over Turtle Crk	Brdg	P	PE	80	BR	0		20	RC	\$100	65
WIS	Rock Co	05	St. Lawrence Rd Bridge	Brdg	P	PE	27	BR	0		7	RC	\$34	66
WIS	Rock Co		Cnty S, IH90 to E limits of Shopiere	Road	P	PE	46	STP-R	0		12	RC	\$58	67
WIS	Rock Co		Cnty S, Murphy to Hart & Bridge	Road	P	PE	80	BR	0		20	RC	\$100	68
WIS	Rock Co		Shopiere Rd, Hart to I-39/90	Road	P	PE	80	STP-U	0		20	RC	\$100	69
WIS	Rock Co		St. Lawrence Rd Bridge	Brdg	P	PE	8	BR	0		2	RC	\$10	70
WIS	Rock Co		Yahara Brdg on Cnty P	Brdg	P	PE	8	BR	0		2	RC	\$10	71
WIS	T Beloit	02	Annual Overlay Program	Road	P	PE	0		0		8	TB	\$8	72
WIS	T Beloit	02	Annual Overlay Program	Road	P	Const	0		0		100	TB	\$100	73
WIS	T Beloit	02	Park Av, Bayliss to Cranston	Road	P	Const	682	STP-U	0		170	TB	\$852	74
WIS	T Beloit	03	Annual Overlay Program	Road	P	PE	0		0		8	TB	\$8	75
WIS	T Beloit	03	Annual Overlay Program	Road	P	Const	0		0		100	TB	\$100	76
WIS	T Beloit	04	Annual Overlay Program	Road	P	Const	0		0		100	TB	\$100	77
WIS	T Beloit	04	Annual Overlay Program	Road	P	PE	0		0		8	TB	\$8	78
WIS	T Beloit	05	Annual Overlay Program	Road	P	Const	0		0		100	TB	\$100	79
WIS	T Beloit	05	Annual Overlay Program	Road	P	PE	0		0		8	TB	\$8	80
WIS	T Beloit		Annual Overlay Program	Road	P	PE	0		0		8	TB	\$8	81
WIS	T Beloit		Annual Overlay Program	Road	P	Const	0		0		100	TB	\$100	82
WIS	Turtle	02	Annual Overlay Program	Road	P	Const	0		0		64	TT	\$64	83
WIS	Turtle	03	Annual Overlay Program	Road	P	Const	0		0		64	TT	\$64	84
WIS	Turtle	03	Hart Rd, Shopiere to I-90	Road	P	Const	0		94	WDOT	0		\$94	85
WIS	Turtle	04	Annual Overlay Program	Road	P	Const	0		0		70	TT	\$70	86
WIS	Turtle	04	Hart Rd, Shopiere to I-90	Road	P	Const	0		0		110	TT	\$110	87
WIS	Turtle	05	Annual Overlay Program	Road	P	Const	0		0		70	TT	\$70	88
WIS	Turtle	05	E. Colley Rd, Townhall to Walker	Road	P	Const	0		0		40	TT	\$40	89
WIS	Turtle	05	Hickory Ct overlay	Road	P	Const	0		0		10	TT	\$10	90
WIS	Turtle	05	S. Peter Rd widening	Road	P	Const	0		0		50	TT	\$50	91
WIS	Turtle		Annual Overlay Program	Road	P	Const	0		0		86	TT	\$86	92
WIS	WDOT	02	Cranston Rd Brdg	Brdg	E	UTIL	0		27	WDOT	0		\$27	93
WIS	WDOT	02	Cranston Rd Brdg	Brdg	E	Const	209	IM	23	WDOT	0		\$232	94
WIS	WDOT	02	Cranston Rd Brdg	Brdg	E	PE	0		120	WDOT	0		\$120	95
WIS	WDOT	02	I-39/90 EB Bridges	Road	P	PE	21	IM	2.1	WDOT	0		\$23	96
WIS	WDOT	02	Newark Rd Brdg over Rock	Brdg	P	PE	0		30	WDOT	0		\$30	97
WIS	WDOT	03	Beloit Westside ByPass	Road	E	PE	0		175	WDOT	0		\$175	98
WIS	WDOT	03	Cranston Rd Brdg	Brdg	E	Const	3,561	IM	489	WDOT	0		\$4,050	99
WIS	WDOT	03	I-39/90 EB asphalt overlay	Road	P	PE	10	IM	0.9	WDOT	0		\$11	100
WIS	WDOT	03	I-39/90 EB asphalt overlay	Road	P	Const	1,271	IM	141.4	WDOT	0		\$1,412	101
WIS	WDOT	03	I-39/90 EB Bridges	Road	P	Const	3,973	IM	441.4	WDOT	0		\$4,414	102
WIS	WDOT	03	I-39/90 WB Bridges	Road	P	PE	31	IM	3.4	WDOT	0		\$34	103
WIS	WDOT	03	Lathers Rd Brdg	Brdg	P	PE	0		28	WDOT	7	TT	\$35	104
WIS	WDOT	03	Newark Rd Brdg over Rock	Brdg	P	Const	0		614	WDOT	0		\$614	105
WIS	WDOT	04	Beloit Westside ByPass	Road	E	PE	0		175	WDOT	0		\$175	106
WIS	WDOT	04	I-39/90 WB asphalt overlay in Rock Co (Note 2)	Road	P	Const	1,172	IM	130.3	WDOT	0		\$1,302	107
WIS	WDOT	04	I-39/90 WB Bridges in Rock Co (Note 2)	Road	P	Const	4,300	IM	478.3	WDOT	0		\$4,778	108
WIS	WDOT	04	I-43, I-90 to Co Line, Replace Pavement (Note 3)	Road	P	PE	220.0	IM	55	WDOT	0		\$275	109
WIS	WDOT	04	WI-67, Old Cnty P & W intersection	Road	P	Const	693	FLX	173	WDOT	0		\$866	110
WIS	WDOT		Henry Av Brdg over Rock River	Brdg	E	PE	0		116	WDOT	0		\$116	111
WIS	WDOT		I-39/90, 6-lane EIS (Note 4)	Road	E	PE	0		120	WDOT	0		\$120	112
WIS	WDOT		RR Crossing Projects (Note 5)	Road	P	Const	20	RR-Saf	11	WDOT	0		\$31	113
WIS	WDOT		RR Crossing Projects (Note 5)	Road	P	Const	27	RR-Saf	3	WDOT	0		\$30	114
														115
		113	All SLATS Totals				19,240	34	32,711	29	19,974	80	\$71,925	126
		32	Illinois side Totals				2,036		26,097		8,946		37,079	127
		81	Wisconsin-side Totals				17,204		6,614		11,028		34,846	128
Source: SLATS Transportation Improvement Programs, 2002 thru 2006 plus later adjustments by IDOT														
NOTES	1	Amts posted in this summary are 1/10 of the "District-wide" amts posted in the TIP.										Reductions (left) to amts stated in the TIP were made because the amts posted in the TIPs were for areas or road stretches substantially larger than the SLATS MA.		
	2	Amts posted in this summary are 3/70ths of the amts posted in the TIP.												
	3	Amts posted in this summary are 55% of the amts posted in the TIP.												
	4	Amts posted in this summary are 7/45ths of the amts posted in the TIP for the 45 mile stretch to Madison.												
	5	Amts posted in this summary are 30% of the "county-wide" amts posted in the TIP.												
	6	Bike / Pedestrian and other enhancement projects are not included.												
	7	All amts are for programmed estimates only, and do not reflect actual "as built" costs.												
	8	This project is not actually an IDOT project nor is it actually within SLATS (it is located just SE of the SLATS MPA). The project is an Illinois State Toll Highway Authority (ISTHA) project. It is included here in this table because of its importance to SLATS and because it was included in the SLATS TIP. Although not technically an IDOT project, it is lumped with the IDOT totals for the sake of simplicity and because ISTHA is a State-empowered entity.												

Chart 6-14b Project Purpose, Type, & Phase

Lead Agency Roadway Expenditures by TYPE & PHASE (Avg Annual based on FY02 thru FY06 SLATS TIPs) (Not including enhancements)										
TypePhase \ Lead	City of Beloit	IDOT	Rock Co	S Beloit	Town of Beloit	Town of Turtle	Village of Rockton	WisDOT	Winn Co	Totals
Capacity Expansion	1,626,000	5,210,000	0	140,400	0	0	0	1,003,000	1,113,000	9,092,400
System Preservation	804,400	247,400	354,400	108,000	278,400	131,600	131,000	2,771,360	466,000	5,292,560
Totals	2,430,400	5,457,400	354,400	248,400	278,400	131,600	131,000	3,774,360	1,579,000	14,384,960
Road Project	2,098,800	5,457,400	177,000	248,400	278,400	131,600	131,000	2,729,560	1,579,000	12,831,160
Bridge Project	331,600	0	177,400	0	0	0	0	1,044,800	0	1,553,800
Totals	2,430,400	5,457,400	354,400	248,400	278,400	131,600	131,000	3,774,360	1,579,000	14,384,960
Construction Phase	2,103,600	5,207,400	129,200	230,000	270,400	131,600	121,400	3,546,080	1,500,000	13,239,680
Engineering Phase	190,800	0	225,200	18,400	8,000	0	9,600	222,880	79,000	753,880
ROW	136,000	250,000	0	0	0	0	0	0	0	386,000
Utility	0	0	0	0	0	0	0	5,400	0	5,400
Totals	2,430,400	5,457,400	354,400	248,400	278,400	131,600	131,000	3,774,360	1,579,000	14,384,960

Chart 6-14c Project Purpose, Type, & Phase

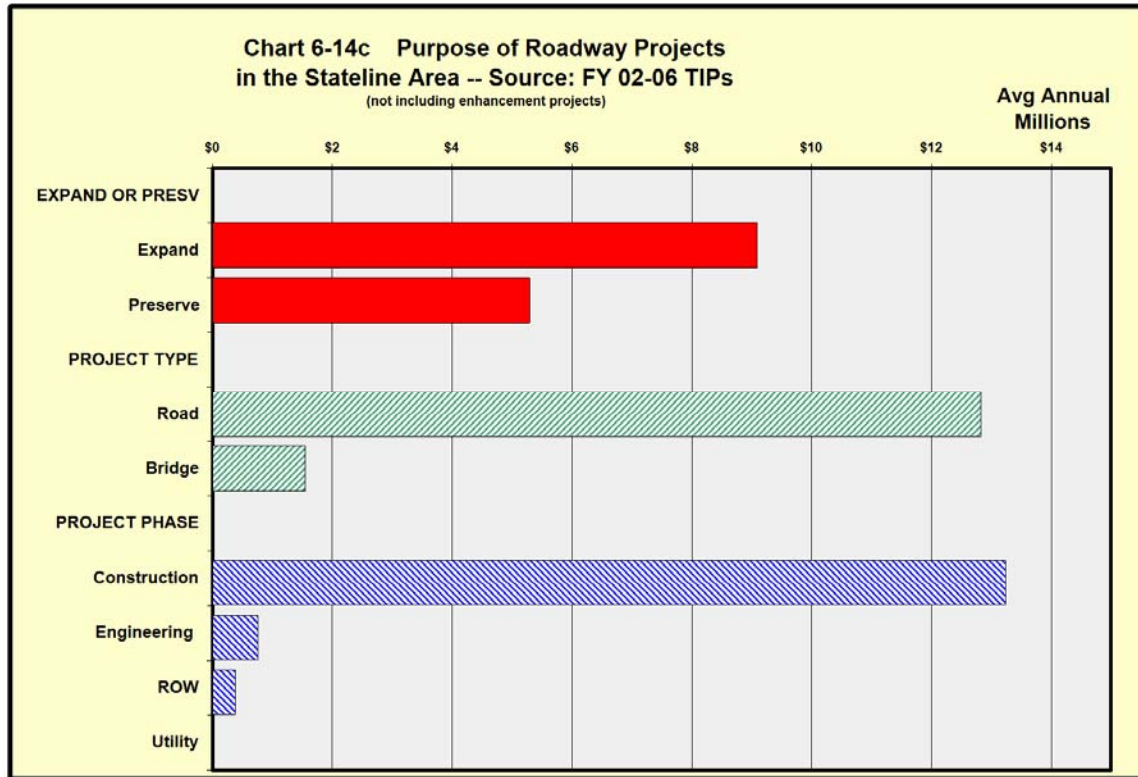


Chart 6-14b summarizes the projects by Lead Agency and project purpose, type, and phase. **Chart 6-14c** illustrates this data. During the 5-year period, capacity expansion projects exceeded system preservation projects by a ratio of 2:1. Roadway projects dominated the expenditures. Funding for roadway improvements was over 8 times more than that programmed for bridge improvements and, although not shown in the charts, over 32 times more than that programmed for improvements to the bike and pedestrian

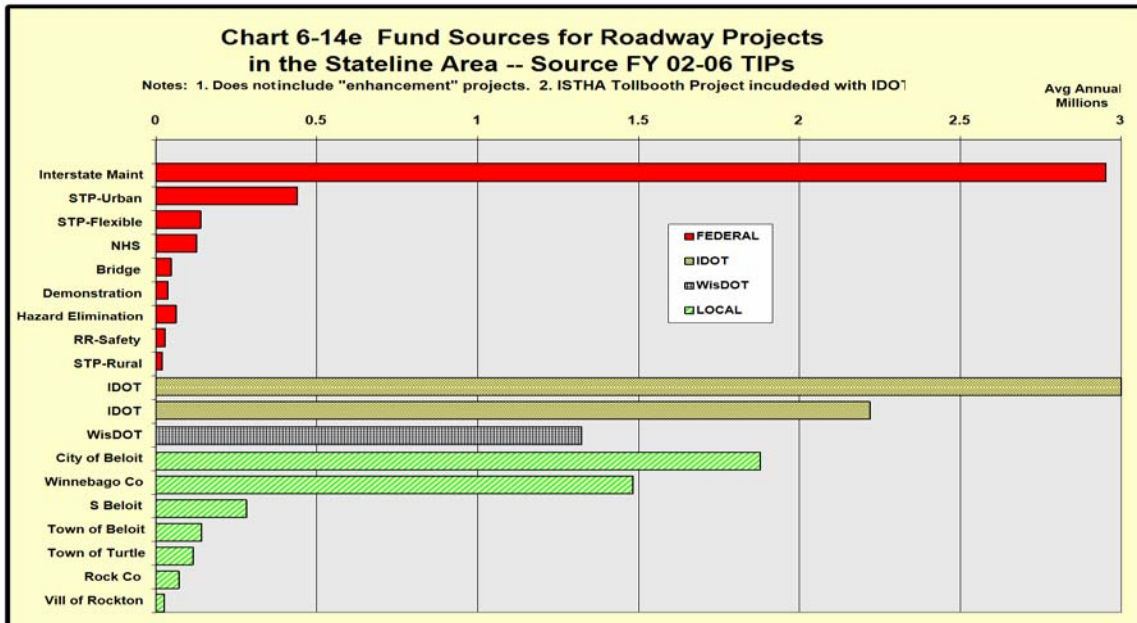
system. In terms of the type of work accomplished, the great majority was actual construction. Less than 6% of the expenditures were for engineering and less than 3% was for right-of-way acquisition.

Chart 6-14d summarizes the projects by Lead Agency and funding source. **Chart 6-14e** illustrates this data.

Chart 6-14d Roadway Expenditures by Funding Source

Lead Agency Roadway Expenditures by FUNDING SOURCE (Avg Annual based on FY02 thru FY06 SLATS TIPs) (Not including enhancements)										Chart 6-14d
Source \ Lead	City of Beloit	IDOT	Rock Co	S Beloit	Town of Beloit	Town of Turtle	Village of	WisDOT	Winn Co	Totals
Federal Sources										
Interstate Maint								2,953,600		2,953,600
STP-Urban			101,600		136,400		105,000		96,000	439,000
STP-Flexible								138,600		138,600
NHS		127,000								127,000
Bridge			46,000							46,000
Demonstration	36,800									36,800
Hazard Elimination		61,200								61,200
RR-Safety		18,000						9,400		27,400
STP-Rural			18,400							18,400
Sub Totals	36,800	206,200	166,000		136,400		105,000	3,101,600	96,000	3,848,000
State Sources										
IDOT		5,219,400								5,219,400
WisDOT	515,200		117,400			18,800		671,360		1,322,760
Sub Totals	515,200	5,219,400	117,400			18,800		671,360		6,542,160
Local Sources										
City of Beloit	1,878,400									1,878,400
Winnebago Co									1,483,000	1,483,000
S Beloit		31,800		248,400						280,200
Town of Beloit					142,000					142,000
Town of Turtle						112,800		1,400		114,200
Rock Co			71,000							71,000
Vill of Rockton							26,000			26,000
Sub Totals	1,878,400	31,800	71,000	248,400	142,000	112,800	26,000	1,400	1,483,000	3,994,800
Totals	2,430,400	5,457,400	354,400	248,400	278,400	131,600	131,000	3,774,360	1,579,000	14,384,960

Chart 6-14e Fund Sources graph



Eleven categories of Federal funding were noted in the Highway Elements of the TIPs. Nine of these sources were used for roadway improvements. Listed in the order of the amounts awarded to the Stateline Area, the funds are described as follows:

1. **Interstate Maintenance (IM) funds. \$15 million total, Avg Annual \$3 million.** Ten projects or project phases were funded with these funds, matched with funds from WisDOT.
2. **STP-Urban funds. \$2.2 million, Avg Annual \$439 thousand.** STP stands for the Federal Surface Transportation Program funding source. STP-Urban funds can be used for variety of major roadway improvements within the SLATS MA, at the discretion of the SLATS Policy Committee (and pertinent Federal guidance). **Eight projects or project phases were funded with these funds and were matched with funds from IDOT, WisDOT or other local sources.**
3. **STP-Flexible funds. \$700 thousand, Avg Annual \$139 thousand.** Another STP source available for qualified projects at the State's discretion. **One project was funded with these funds, matched with funds from WisDOT.**
4. **NHS funds. \$635 thousand, Avg Annual \$127 thousand.** NHS stands for National Highway System, a system of roads deemed in the national interest. A special category of funds is set up to assist in maintaining or improving these roads. One project was funded with these funds, matched with funds from South Beloit.
5. **Bridge funds. \$230 thousand, Avg Annual \$46 thousand.** From either the Bridge Replacement & Rehab Program or the Major Bridge Fund, these categories funded six projects or project phases, all matched by funds from Rock County.
6. **Demonstration funds. \$184 thousand, Avg Annual \$37 thousand.** These are funds that are set aside by the US Congress as part of authorization bills or annual appropriation bills for specific projects. One such project was funded for Beloit in recent years.
7. **HES funds. \$306 thousand, Avg Annual \$61 thousand.** The Hazard Elimination and Safety funding category applies to improvements to reduce or eliminate high traffic incident situations on State and local roadways (excluding the interstate system). The program is usually aimed at intersection improvement and signal modernizations. Exactly what projects were funded in the Stateline Area was not precisely specified in the SLATS TIPs. The estimate of funding applied to the Stateline Area is estimated by rough proportion of the Stateline Area to the larger area specified in the TIPs.
8. **RR-Safety funds. \$137, Avg Annual \$27 thousand.** There are two categories of these funds that were lumped together for this discussion. As with HES funds, it was not possible, from the TIPs, to determine exactly what improvements were funded in the Stateline Area. The estimate of the funds used in the Stateline Area is based on the size of the Stateline Area roughly compared to the larger area specified in the TIPs.
9. **STP-Rural. \$92 thousand, Avg Annual \$18 thousand.** STP-Rural funding can be used in rural areas (areas outside the boundaries of designated Metropolitan Areas) and on projects inside the Stateline Area boundary but outside the Adjusted Urbanized Area. Rock County was able to use these funds for two projects partly within the boundaries of the Stateline Area.

The other two Federal funding sources used in the Stateline Area were STP-Discretionary funds and STP-Enhancement (STP-EN) funds. Over the 5 years, nearly \$1.7 million (most of which from the enhancement source) was awarded from these two sources for 14 projects or project phases. As previously noted, most of the projects were bike and pedestrian path improvements. A small amount was used for billboard removal. STP-EN funds cannot be used directly on roadway projects. They must be used for special projects that enhance the beauty of a roadway project, improve non-motorized transportation opportunities, mitigate the adverse impacts of traditional roadway projects, and other qualified enhancements not typically funded from other sources.

Although not apparently utilized in the Stateline area during the five years analyzed (i.e., not specifically noted in the TIPs), there are numerous other sources of possible State and Federal funding that might be available for projects in the Stateline area in the future. Some such sources include funding from the Illinois Department of Natural Resources for roadway and pathway improvements in conjunction with park, recreation, and natural areas; funding from the Illinois Commerce Commission for railroad crossing improvements; funding from the State of Illinois for Truck Access Routes; and funding from the Illinois and Wisconsin general funds.

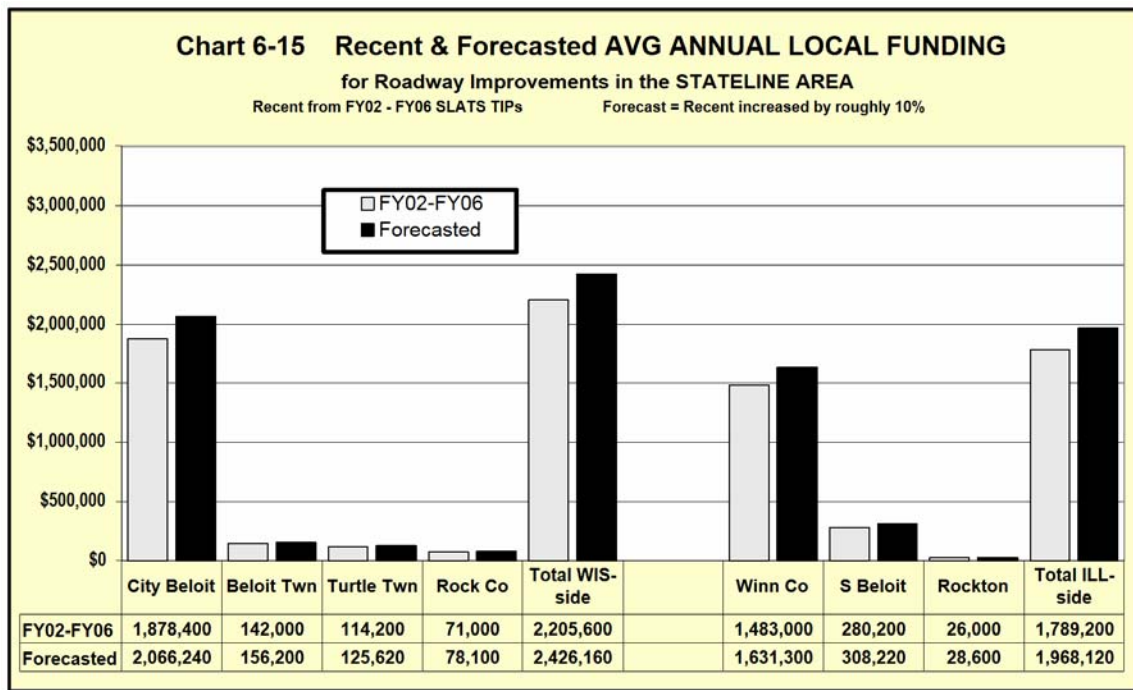
With the passage of the new Federal highway act, SAFETEA-LU, several new programs and funding sources will become available for transportation improvements across the country. Some of these may be useful to the Stateline Area and this LRP encourages diligent investigation of these programs and sources.

Substantial funding from the States of Illinois and Wisconsin is also demonstrated by the past TIPs. (Refer again, to **Charts 6-14 d & e.**) In the past five years, Wisconsin has committed nearly \$7 million to transportation improvements in the Stateline Area, while Illinois has committed over 4 times that amount. The commitment in Illinois is substantially larger because the programmed work on the I-39/90 Open Road Toll Plaza was included in this summary. Similar work is planned in Wisconsin on I-39/90 but is not yet programmed.

The TIPs also demonstrates substantial Local Funding for improvements in the last 5 years. Beloit, Winnebago County, and South Beloit, have led the way in making improvements, programming \$9.4 million, \$7.4 million, \$1.4 million within their communities, respectively. The Average Annual funding from the local communities is illustrated in **Chart 6-15**. In total, an average of over \$2.2 million was appropriated for roadway projects on the Wisconsin-side of the Stateline Area; nearly \$1.8 million was appropriated on the Illinois-side.

Overall, within the Stateline Area over the last five years, \$20 million, \$33 million, and \$20 million in Federal, State, and local funds have been committed, respectively, for roadway improvements. Note, however, the short time period of this data. For reasons mentioned previously and others to be discussed later, the Federal funds and the local funds may have been underestimated. Stated another way, it appears that over 70% of the major roadway improvements in the Stateline Area were funded from Federal and State sources, while the other 30% was funded from local sources.

Chart 6-15 Recent & Forecasted Local Funding



Finally, with regard to the past TIPs, this analysis demonstrates that substantial Federal, State, and local funds have been made available for transportation improvements in the Stateline area. **This LRP assumes that similar funding will be made available for future improvements over the term of this LRP.**

D. Funding Estimates from WisDOT

As noted previously, the State of Wisconsin also provided estimates of the State and Federal funding likely to be available to the Wisconsin-side of the Stateline Area over the next 30 years. These estimates were provided for every MPO in the State of Wisconsin and are reproduced for SLATS in **Chart 6-16a** and illustrated in **Chart 6-16b**. Because Wisconsin provided these estimates by funding categories that differ somewhat from those used in the TIPs (above), these estimates are not directly comparable to the TIP values. However, the totals (i.e., all State and Federal funding combined) should be comparable.

Wisconsin divides its roadway funding assistance into four groups

- ★ **STH Expansion**
- ★ **STH Preservation, Maintenance & Operations**
- ★ **Local Road Expansion & Preservation**
- ★ **Bike & Pedestrian**

STH stands for Wisconsin’s State Trunk Highways, the system of arterial and interstate roadways deemed most important in Wisconsin. Currently, the STH designation

applies to only 4-6 roadways in the Stateline Area. These are: WI-67, WI-81, WI-213, and US-51; and, if the Interstates are counted, I-39/90 and I-43.

All of Wisconsin's roadway aid programs are administered by the State and involve varying amounts for Federal, State, and local funding for qualified projects. Some projects are funded totally by the State. Some require local match amounts, at varying levels. The four groups are further divided into 16 categories. STH Expansion has three categories that are applicable to what are called "**Major**" roadways or projects. A roadway project designated as a Major is considered a high priority project. Major Projects must be so-designated by the Wisconsin Transportation Project Commission and the State Legislature. Major Projects can use varying combinations of State and Federal funding but do not require a local match. The Majors Highway Development Program is for expansion projects greater than 5 miles or for new roadway segments greater than 2.5 miles. The **STH Expansion group** categories and their applicability to the Stateline Area are as follows:

1. **Existing Majors Enumerated for Construction.** One project is identified for the Stateline Area: the WI-81 Bypass. Based on an August 2005 report to the Transportation Projects Commission, Wisconsin has committed **\$7 million to this project. It is uncertain when this project might be built because Illinois has not made a commitment to the Illinois side of the project. For this LRP it is assumed that Wisconsin will commit \$234 thousand annually for this or an improvement that would function similar to the WI-81 Bypass, at a minimum.**
2. **Existing Majors Enumerated for Study.** Although an amount of funding was not specified by WisDOT in this category, Wisconsin is committed to making major improvements to I-39/90 between Madison and the State line. Judging by the funding committed to I-39/90 south of the State line by Illinois, the costs on the Wisconsin side are likely to be substantial – perhaps in the order of \$20-40 million. Because this project is so likely, SLATS adjusted this category. **\$1 million annually was added.** This should be sufficient to cover the current proposal of 6-laning the road section, plus some additional improvements, as determined by further study.
3. **Potential Majors.** None have been identified in the Stateline Area but Wisconsin is usually receptive to studying reasonable suggestions or proposals.

In the **STH Preservation group**, Wisconsin has five categories of funding aid. Funds for projects in this group can be assembled from many sources including Federal NHS, IM, STP, Safety, & Bridge sources.

4. **Backbone Rehabilitation.** Three Roadways are currently designated as part of the Wisconsin Backbone system in the Stateline Area: I-39/90, I-43, and WI-81. WisDOT forecasts that roughly **\$1.3 million will be available annually from this program for projects in the Stateline Area.**
5. **Non-Backbone 3R.** This Wisconsin aid category is applied to all the other roads in the State highway system. WisDOT forecasts that roughly **\$1 million will be available annually from this program for projects in the Stateline Area.**
6. **STH "Low Cost" Bridges.** For maintaining and repairing low cost bridges in the Stateline Area, WisDOT forecasts **\$150 thousand will be available annually.**

7. **STH “High Cost” Bridges.** No funds are forecasted as available to the Stateline Area in this category but proposals can be recommended for further study.
8. **STH Maintenance & Operations.** For the general maintenance and operation of all State roadways in the Stateline Area, WisDOT forecasts that roughly **\$1.4 million will be available annually.**

In the **Local Road Expansion & Preservation** group, Wisconsin has lumped funding aid into 6 categories. Again, the sources of this funding aid can come from a variety of State, Federal, and local sources depending on the circumstances of the projects.

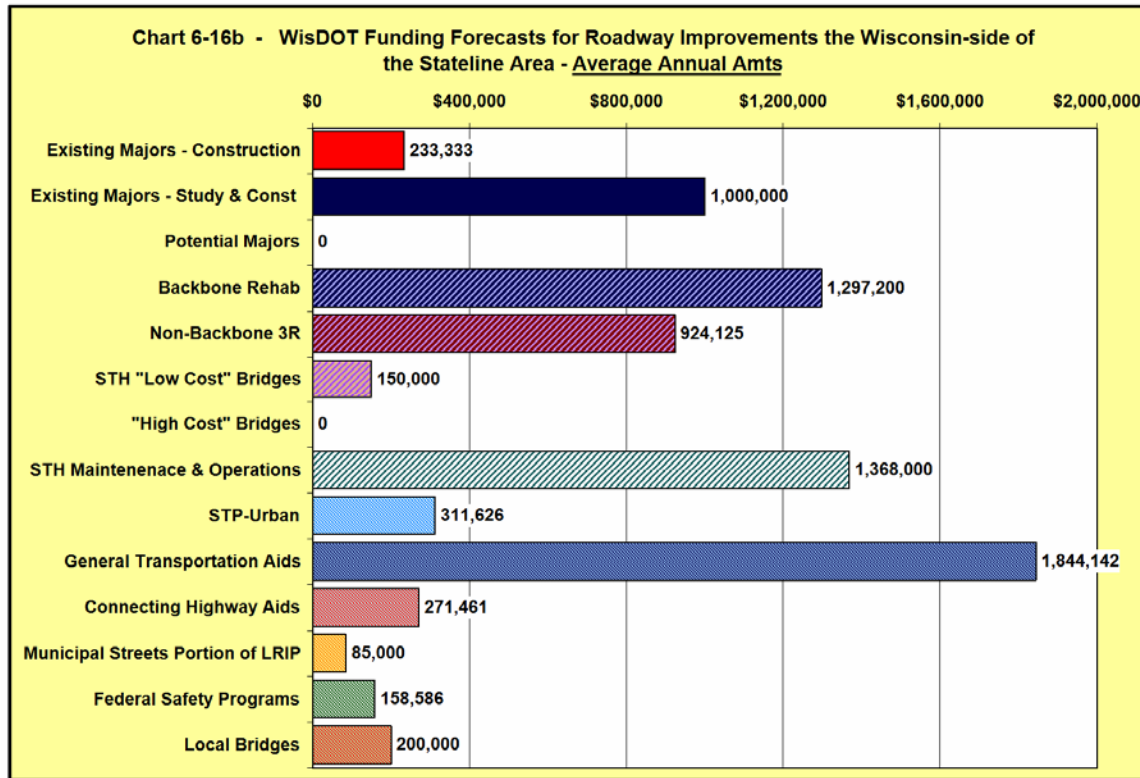
9. **STP-Urban.** As described in the previous section of this Chapter, this fund can be used at the discretion of the SLATS Policy Committee for major road projects within the MA Boundaries. WisDOT estimates annual availability of **\$312 thousand.**
10. **General Transportation Aids. \$1.85 million annually.**
11. **Connecting Highway Aids. \$271 thousand annually.**
12. **Municipal Streets. \$85 thousand annually.**
13. **Federal Safety Programs. \$159 thousand annually.**
14. **Local Bridges. \$200 thousand annually.**

Finally, in the Bike & Pedestrian funding group WisDOT forecasted funding in two categories: In-street accommodations (\$0) and STP-Enhancements (\$360 thousand annually). This amount is not shown in **Charts 16a and b** because it cannot be used directly for roadway improvements.

Chart 6-16a WisDOT Federal & State Forecasts

WisDOT Forecasted Federal & State Funding for Roadway Improvements to Wisconsin-side of the Stataline Area				Chart 6-16a
Source		Forecast Rationale as per WisDOT	Factor	Avg Annual
STH Expansion	1 Existing Majors - Construction	81 By Pass. Based on "cost to complete" from August 2005 report to Transportaion Projects Commission.		\$ 233,333
	2 Existing Majors - Study & Const	39 (IL - Madison). <i>This amt added to WisDOT Forecast based on assumption that this amt or more will be needed to make necessary improvements.</i>		\$ 1,000,000
	3 Potential Majors	If not one of the existing enumerated projects, just list in plan as "Recommended for Further Study" and do not include a cost.		
STH Preservation, Maintenance & Operations	4 Backbone Rehab	Based on each MPO's % of total non-SEWRPC MPO BB Miles x estimated BB \$ available in non-SEWRPC MPO areas in 2006, which is based on 03-05 spent in non-SEWRPC MPO areas. Total MPO ave. annual statewide total = \$28,176,749 (was rounded to 28.2M).	4.6%	\$ 1,297,200
	5 Non-Backbone 3R	Based on % of MPO non-BB miles x estimated SHR available statewide to MPO areas from OPB (-BB \$). OPB SHR = \$265, 772, 800 (-\$78.4m for BB) = \$187,372, 800. Statewide total for MPO areas = Each MPO was assigned a % based on its 03-05 expenditures. Total SHR in MPOs = \$5,775,788.	1.6%	\$ 924,125
	6 STH "Low Cost" Bridges	Based on MPO areas having on average 10% of total funds in 03-05 (\$2.5 m out of \$25.0 m) and SEWRPC getting about 70%, assumed \$150,000 / yr per non-SEWRPC MPO.		\$ 150,000
	7 "High Cost" Bridges	If the project is identified now and funding is committed, include cost and funding. If new project, just list it as "Recommended for Further Study".		\$ -
	8 STH Maintenance & Operations	Based on % of STN miles in MPO planning areas applied to OPB estimate of \$ 171m statewide X 2 to better account for lane miles in MPO areas.	0.4%	\$ 1,368,000
Local Road Expansion & Preservation	9 STP-Urban	% to each MPO is based on 2007-09 program applied to OPB estimate of 2006 funding (\$31.1m for >200K tier and \$8.7m for > 50K tier	3.6%	\$ 311,626
	10 General Transportation Aids	Based on 2005 assistance to constituent municipalities, and counties factored by CTH miles in MPO planning area.		\$ 1,844,142
	11 Connecting Highway Aids	Based on 2005 assistance. No increase assumed.		\$ 271,461
	12 Municipal Streets Portion of LRIP	Based on 2004-05 state expenditures in MPO areas.		\$ 85,000
	13 Federal Safety Programs	Allocations to each MPO based on average expenditures over last 5 years applied to a budget office estimate of \$15.2m statewide with 52% in non-SEWRPC MPOs (= \$7.9m). Allocations were then adjusted based on share of population to ensure a 2% minimum allocation (1% for Superior as the sammler unit of the bi-state MPO).		\$ 158,586
	14 Local Bridges	Based on 03-05 projects an average statewide of \$2.8m was spent in non-SEWRPC MPOs per year. Our budget office estimated a 34% increase statewide. Increasing \$2.8m by 34% = \$3.8m which was allocated based on the 03-05 average of funding, with a minimum of \$200,000 and a maximum of \$575,000.		\$ 200,000
	Road & Bridge Total			
SOURCE: Provided by WisDOT, late 2005. NOTES: These are annual forecasts, esitimated in 2005 dollar values. The forecasts of STP-Enhancement funds and other funds used primarily for bike and pedestrian facilities are not included in this summary chart. Estimates of local funding were not provided by WisDOT. Some funding sources that were difficult to estimate were not included. Possible funding increases or new funding sources that may result from SAFETEA-LU are not included. Also, \$1 million avg annual added for likely improvements to I-39/90. Final MPO revenue Estimates by Program 1 wo ehnhance.xls				

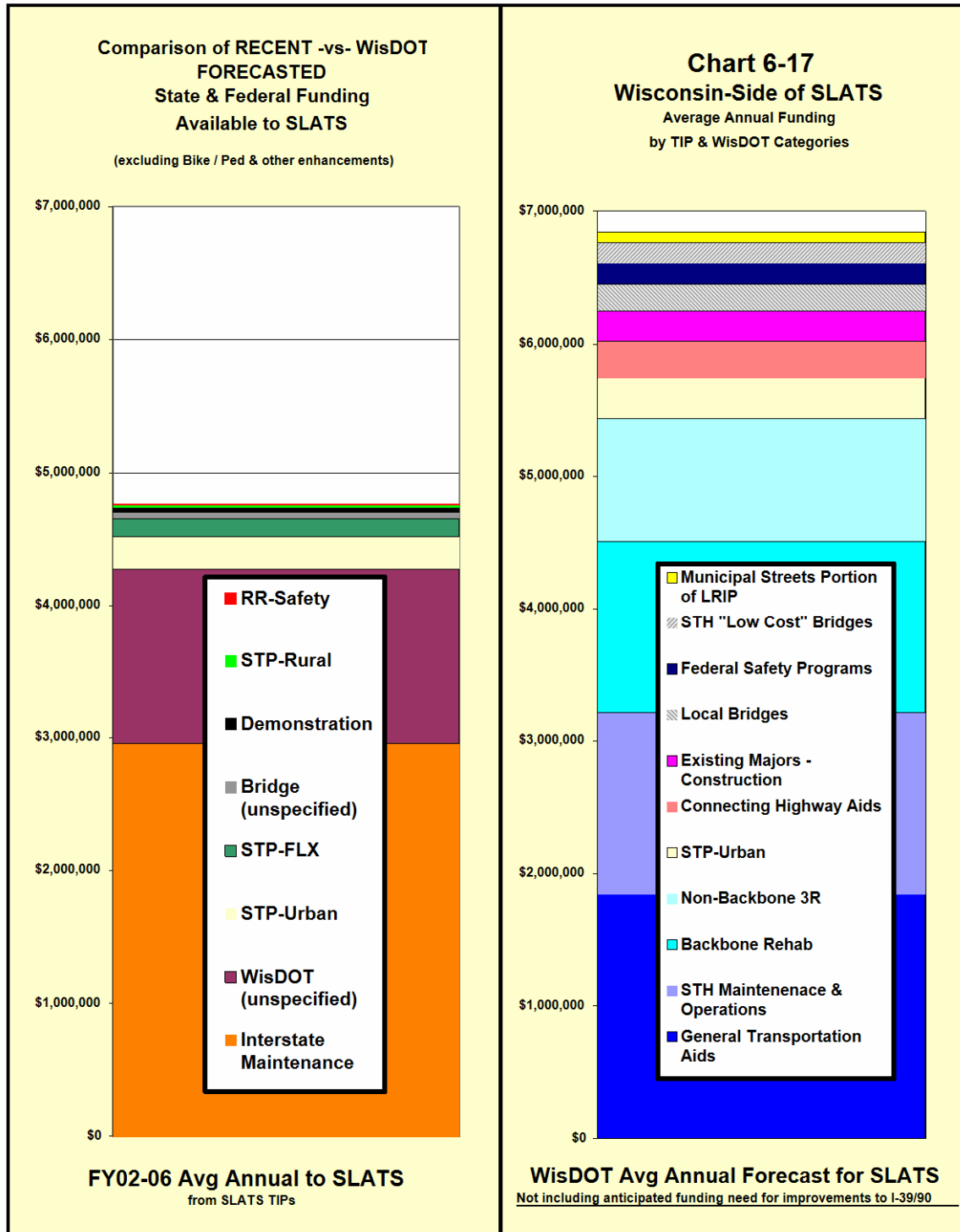
Chart 6-16b WisDOT Funding Forecast bar chart



E. Comparing Recent and Forecasted Funding on the Wisconsin-side

Chart 6-17 compares the recent State & Federal Funding taken from the SLATS TIPs of the last 5 years with the forecasted funding for SLATS as developed by WisDOT. The chart illustrates two issues. First, as already noted, the funding sources cited in the TIPs differ slightly in terminology from the sources forecasted by WisDOT. This is simply because WisDOT merges many of the Federal funding sources into their own nomenclature of State funding categories. This is of little real consequence except that it adds an element of confusion for casual observers – the general public. It also begs the question as to how Wisconsin determines the fair shares of the various Federal funding sources among its numerous Metropolitan Planning Areas. Secondly, **Chart 6-17** shows a substantial difference in the amount of funding actually spent in the Stateline Area versus what WisDOT is forecasting that the Stateline Area may be entitled to. Between FY02 and FY06 the average annual award of State and Federal funds to the Stateline Area for roadway improvements amounted to \$4.7 million. The original WisDOT forecast (minus the \$1 million added by SLATS for 1-39/90) of funds available is \$6.843 million – or an annual difference of more than \$2 million. Over the last 5 years that shortage totals to over \$10 million.

Chart 6-17 Comparison of Recent vs. WisDOT Forecasted Funding



There are obvious explanations for the shortage and this discussion is not meant to imply that there has been any deliberate disregard for needs in the Stateline Area. In fact two major improvements have been on the horizon for years that will cost substantial

amounts. These were mentioned briefly in the previous section. They are: the WI-81 Bypass west of Beloit and the improvements being contemplated on I-39/90.

Regarding the former, money has been programmed in the out-years of SLATS TIPs for quite some time. This multi-million dollar project will alone consume the entire shortage mentioned above. The second project, the I39/90 expansion to six or more lanes will consume several times more. The former project has been delayed by indecision on the appropriate routing in Illinois. The latter project is being delayed by deliberations as to whether the Interstate should be widened to more than 6 lanes.

This LRP acknowledges the complicated circumstances of the above two major projects and urges further prompt study of the situation.

In general this LRP accepts the WisDOT forecasts of State and Federal funding on the Wisconsin-side of SLATS but recognizes that the forecasts may be on the low-side in that they do not appear to take into account the needed improvements on I-39/90 or the shortage over the last 5 years.

F. Comparing Recent Funding and Making Forecasts on the Illinois-side

State and Federal funding forecasts on the Illinois-side of the Stateline Area were not provided by the State of Illinois, leaving the past TIP-documented funding trends as the only basis. During the last 5 years, the TIPs show the Illinois-side of SLATS to have been substantially funded -- \$37 million over that period. This figure might seem somewhat beyond normal for the area during more typical 5-year periods because the Open Road Toll Plaza project on I-39/90 was included. (As previously noted, that project is not actually in the Stateline MPA but was included because of its importance to transportation thru and within SLATS.) On the other hand, just to the north of that Toll Plaza is a stretch of I-39/90 that is both inside SLATS and in need of substantial improvement in the near future. Also, another costly project on the short-term horizon is the IL-2 expansion project just south of Rockton. When combined these two large expansion projects will create a substantial funding need in the Stateline Area in the next 5, or at most 10, years and actually make the documented FY02-07 funding levels on the Illinois-side considerably smaller than what is likely to be needed, even with the expensive Toll Plaza project included.

Considering the above, the approach used to forecast State and Federal funding needs on the Illinois-side consisted of the following:

1. All projects of the past 5 years, as documented in the SLATS TIPs, were totaled. The corrections recently provided by IDOT were incorporated (Listed in **Chart 6-14a**).
2. All projects in the SLATS FY06 TIP programmed in the "out-years," FY07-11, were totaled (Listed in **Chart 6-18**).
3. Two projects that had been recently dropped from the implementation year of the FY06 TIP were added to the FY07-11 out-years: The IL-2 Expansion project and

the I-39/90 Expansion project (both in Illinois) that had recently been dropped from the FY06 "implementation year."

- From the above list, total and average annual funding (State and Federal) was computed for the 10-year period FY02 thru FY11. That average annual funding level was applied to the entire 30-year planning period on the Illinois-side.

Chart 6-18 Ill-side Funding Forecast basis

ILL-SIDE FUNDING FORECAST based on SLATS Highway Projects 2002 thru 2011										Chart 6-18				
State	Lead Agent	Year	Extent or Description	Structure Type	Expand or Preserve	Proj Phase	Fed \$1000	Fed Source	State \$1000	State Source	Local \$1000	Local Source	Total \$1000	Row#
ILL	IDOT	03	IL-75, Rock River to IL-2	Road	E	ROW	0	0	250	IDOT	0	0	\$250	1
ILL	IDOT	04	IL-2, Whittemore to IL-75 S Beloit (IDOT adjusted May 06)	Road	P	Const	635	NHS	0	0	159	SB	\$794	2
ILL	IDOT	04	RR Crossing Projects (Note 1)	Road	P	Const	45	RR-Saf	8	IDOT	0	0	\$53	3
ILL	IDOT	04	Safety Projects (Note 1)	Road	P	Const	153	HES	17	IDOT	0	0	\$170	4
ILL	IDOT	05	RR Crossing Projects (Note 1)	Road	P	Const	22	RR-Saf	2	IDOT	0	0	\$24	5
ILL	IDOT	05	Safety Projects (Note 1)	Road	P	Const	153	HES	17	IDOT	0	0	\$170	6
ILL	IDOT		I-39/90, Wis to Rockton Rd (in TIP, not funded, moved to 08-11)	Road	E	Const	0	0	0	0	0	0	\$-	7
ILL	IDOT		IL-2, Elmwood to Latham (in TIP, not SLATS)	Road	E	ROW	0	0	0	0	0	0	\$-	8
ILL	IDOT		IL-2, Latham to Rockton (in TIP, not funded, moved to 07-11)	Road	E	Const	0	0	0	0	0	0	\$-	9
ILL	IDOT		IL-75, Rock R to IL-2 in Rockton (IDOT adjusted May 06)	Road	E	ROW	0	0	1,000	IDOT	0	0	\$1,000	10
ILL	IDOT		Open Road Toll Plaza (Note 8)	Road	E	Const	0	0	24,800	IDOT	0	0	\$24,800	11
ILL	IDOT		RR Safety Projects (Note 1)	Road	P	Const	23	RR-Saf	3	IDOT	0	0	\$26	12
ILL	S Beloit	02	Annual Overlay Program	Road	P	PE	0	0	0	0	8	SB	\$8	13
ILL	S Beloit	02	Annual Overlay Program	Road	P	Const	0	0	0	0	100	SB	\$100	14
ILL	S Beloit	02	Shirland Av, Bluff to Moore	Road	E	PE	0	0	0	\$-	52	SB	\$52	15
ILL	S Beloit	02	Shirland Av, Bluff to Moore	Road	E	Const	0	0	0	\$-	650	SB	\$650	16
ILL	S Beloit	03	Annual Overlay Program	Road	P	Const	0	0	0	0	100	SB	\$100	17
ILL	S Beloit	03	Annual Overlay Program	Road	P	PE	0	0	0	0	8	SB	\$8	18
ILL	S Beloit	04	Annual Overlay Program	Road	P	PE	0	0	0	0	8	SB	\$8	19
ILL	S Beloit	04	Annual Overlay Program	Road	P	Const	0	0	0	0	100	SB	\$100	20
ILL	S Beloit	05	Annual Overlay Program	Road	P	PE	0	0	0	0	8	SB	\$8	21
ILL	S Beloit	05	Annual Overlay Program	Road	P	Const	0	0	0	0	100	SB	\$100	22
ILL	S Beloit	05	Annual Overlay Program	Road	P	Const	0	0	0	0	100	SB	\$100	23
ILL	S Beloit	05	Annual Overlay Program	Road	P	PE	0	0	0	0	8	SB	\$8	24
ILL	V Rockton	05	Union St, Race to Blackhawk	Road	P	Const	486	STP-U	0	0	121	VR	\$607	25
ILL	V Rockton	05	Union St, Race to Blackhawk	Road	P	PE	39	STP-U	0	0	9	VR	\$48	26
ILL	Winn Co	02	Prairie Hill Rd, IL-2 to IL-251	Road	P	Const	480	STP-U	0	0	120	WC	\$600	27
ILL	Winn Co	02	Prairie Hill Rd, IL-2 to IL-251	Road	P	PE	0	0	0	0	30	WC	\$30	28
ILL	Winn Co	02	Willowbrook Rd, IL-173 to IL-75	Road	E	PE	0	0	0	0	365	WC	\$365	29
ILL	Winn Co	05	Hononegah Rd, W of IL-251 to Checherberrv	Road	E	Const	0	0	0	0	2,200	WC	\$2,200	30
ILL	Winn Co	05	Willowbrook RD, Rockton to IL-75	Road	E	Const	0	0	0	0	3,000	WC	\$3,000	31
ILL	Winn Co		Rockton Door Rd	Road	P	Const	0	0	0	0	1,700	WC	\$1,700	32
IL	IDOT	07 to 11	DISTRICT-WIDE RR SAFETY (1/10th of District-wide amt in TIP X 5 yrs)	<>	P	<>	113	RR-Saf	13	0	0	0	\$125	1
IL	IDOT	07 to 11	DISTRICT-WIDE SAFETY (1/10th of District-wide amt in TIP X 5 yrs)	<>	P	<>	708	HES	177	0	0	0	\$885	2
IL	IDOT	07	IL-75, Rock River to IL-2 in Rockton	Road	P	Utility	0	0	300	0	0	0	\$300	3
IL	IDOT	07	IL-75, Rock River to IL-2 in Rockton	Road	P	PE	0	0	0	0	0	0	\$-	4
IL	IDOT	07	IL-75, Rock River to IL-2 in Rockton	Road	P	Const	4,200	NHS	1,050	0	0	0	\$5,250	5
IL	IDOT	07	IL-75, Rock River to IL-2 in Rockton	Road	P	ROW	0	0	250	0	0	0	\$250	6
IL	IDOT	07 to 11	IL-2, Latham to Rockton (Note 1)	Road	E	Const	0	0	20,000	IDOT	0	0	\$20,000	7
IL	IDOT	07 to 11	I-39/90, Wis to Rockton Rd (Note 1)	Road	E	Const	25,600	NHS	6,400	IDOT	0	0	\$32,000	8
IL	S Beloit	07 to 11	ANNUAL MAINT. (TIP amt X 5)	Road	P	PE	0	0	0	\$-	40	SB	\$40	9
IL	S Beloit	07 to 11	ANNUAL MAINT. (TIP amt X 5)	Road	P	Const	0	0	0	\$-	500	SB	\$500	10
IL	V Rockton	09 to 11	Main St, IL-2 to Bridge St	Road	P	PE	25	STP-U	0	0	6	VR	\$31	11
IL	V Rockton	09 to 11	Main St, IL-2 to Bridge St	Road	P	Const	314	STP-U	0	0	78	VR	\$392	12
IL	V Rockton	07	Race Street, Union St to Main St	Road	P	PE	28	STP-U	0	0	7	VR	\$35	13
IL	V Rockton	07	Race Street, Union St to Main St	Road	P	Const	348	STP-U	0	0	87	VR	\$435	14
IL	Winn Co	07	Hononegah Rd, Checherberrv to West End	Road	E	Const	0	0	0	0	2,200	WC	\$2,200	15
IL	Winn Co	07	Rockton Rd, I-39/90 to IL-251	Road	E	Const	0	0	0	0	1,600	WC	\$1,600	16
IL	Winn Co	07	Willowbrook Rd, at Prairie Hill Rd Intersection	Road	P	Const	0	0	0	0	2,400	WC	\$2,400	17
See Charts 6-14a & 6-21 for note explanations							Illinois-side Totals		33,371	54,287	15,864		103,522	
							Illinois-side FY02-06		2,036	26,097	8,946		37,079	
							Illinois-side FY07-11		31,335	28,190	6,918		66,443	
ILL-side Fed/State Forecast							Fed & State based on FY02-06, programmed FY07-11, & other certain projects - Avg Annual \$		Fed \$1000 3,337	State \$1000 5,429	Local \$1000		Total \$1000	
ILL-side Local Forecast							Local \$ Forecast base (from FY02-06 projects only) Base increase factor for area growth Average Annual Forecast of Local funds				1,789	1.1	1,968	
ILL-side Total Forecast (Fed/State/Local) (\$1,000)													10,734	
ILL-SIDE FORECAST SUMMARY							Average Annual (\$1,000)		8,766	1,968	10,734			
							Average Annual \$		8,765,750	1,968,120	10,733,870			
							Total 30-yr \$		262,972,500	59,043,600	322,016,100			

The above forecasting methodology yields an average annual Federal/State fund level of \$8.8 million on the Illinois-side, almost \$1 million more than that forecasted on the Wisconsin-side. Admittedly, this may seem large, but it is important to remember that this part of SLATS is one of the fastest growing parts. It is an area where traffic increases are beginning to reach the threshold levels where the historic rural road system is soon going to need major upgrades to handle the increasing traffic situations. Additional examples of other possible funding needs facing the area include funding for the Illinois-side of the WI-81 Bypass, and improvements likely to be needed on IL-251, and numerous intersection projects to address safety issues. Those, coupled with the above-discussed all-but-certainly committed major upgrades to IL-2 and IL-39/90, justify the high forecasts.

G. Comparing Recent Funding and Making Forecasts of Local Funding

Chart 6-15, previously discussed, summarizes and illustrates the Local funding provided for roadway improvements in the Stateline Area between FY02 and FY06. On the Wisconsin-side, over \$11 million was provided during the period – an annual average of \$2.2 million. Most of this was provided by the City of Beloit. On the Illinois-side, \$9.3 million was provided during the period – an annual average of \$1.789 million with most of this provided by Winnebago County and the City of South Beloit. These figures serve as the basis for the Local Funding forecasts for this LRP but have been increased by 10% for the following reasons.

First it should be noted that, when the TIPs are developed, local governments are not always diligent in identifying and including all of their smaller projects that are funded solely with local funds. Second, over the period of the LRP the Stateline Area road system will be expanded to accommodate new development – and so will local expenditures for roadway preservation and expansion. Both factors considered, the 10% increase in Local Funding is considered conservative.

The forecasted Local Funding is illustrated in the previously included **Chart 6-15**.

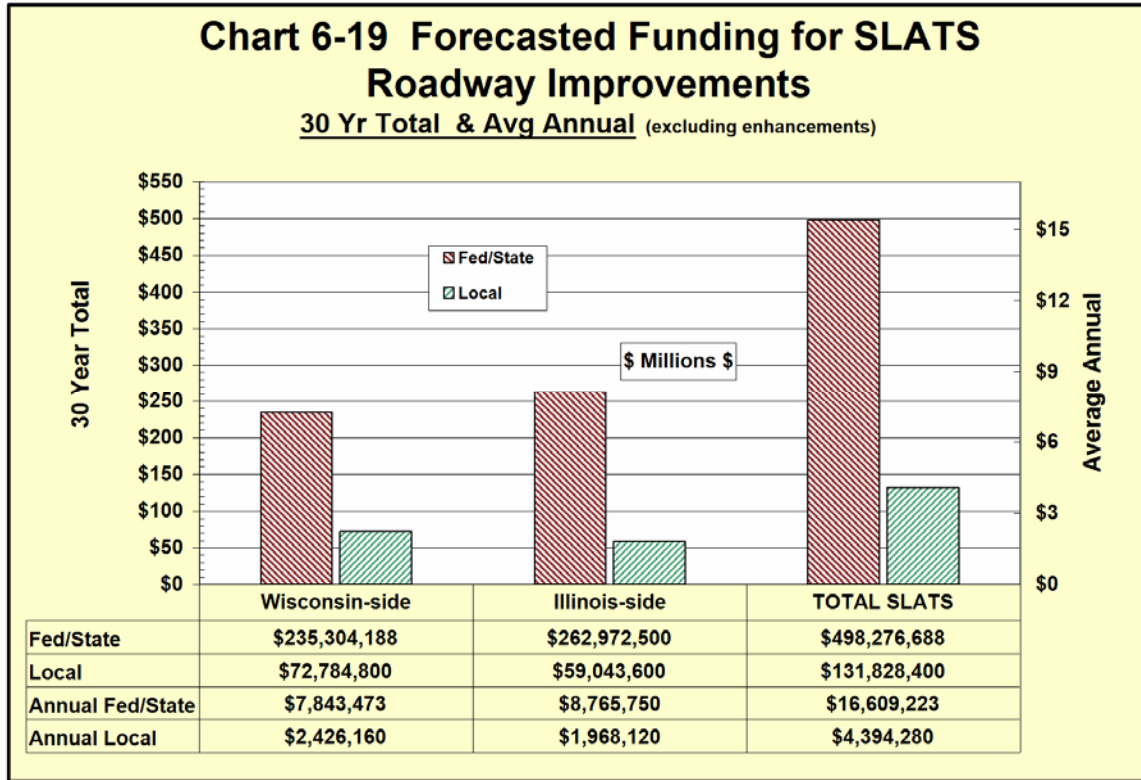
H. Funding Forecast Summary

Chart 6-19 summarizes and illustrates the total funding forecasted for roadway improvements in the Stateline Area. The graph is dual axis – the left-hand side illustrates the 30-year total, the right side illustrates the average annual amounts.

Combined, this LRP anticipates that an annual average of over \$21 million will be available annually in the Stateline Area for roadway improvements. This amount will be split nearly equally north and south of the State line. In total, over \$600 million dollars will be available during the 30-Yr planning period.

Note again, amounts in **Chart 6-19** and the previous tables were developed in dollar values approximate to 2005 values. No attempt has been made to adjust for dollar value inflation or deflation but these changes have been small since 2002 when some of the past TIP data was developed. These estimates will be reevaluated in 5 years and are considered reasonable for planning purposes at this time.

Chart 6-19 Forecasted Funding Summary



XXII MAJOR IMPROVEMENT PROJECTS TO 2035

Exactly what the above forecasted monies should or will be spent on is also somewhat debatable. In an ideal situation, the exact scope, timing, and cost of every roadway system expansion and every roadway preservation measure, needed over the next 30 years, would be forecasted. This would include every new roadway shown on **MAP 6-12**, plus all of the maintenance and minor improvements to the existing system, plus all of the alternates that might be considered. Subsequently, every project would be paired with a funding source sufficient to accomplish the project according to a timely schedule. Realistically, such forecasting is nearly impossible.

The situation is analogous to forecasting weather and climate in the Stateline Area. Weather forecasts are accurate only for short time periods. The forecast for tomorrow is usually accurate but anything beyond 5-10 days is suspect. Climate is a broader environmental condition that can be stated with longer-term confidence. It is probably safe to assume that the climate (or average weather) situation in the Stateline Area will be quite similar 30 years from now to what it is today. Distinct Spring, Summer, Fall, and Winter seasons will continue with average temperature and precipitation conditions similar to what they are today. But even climate is unpredictable beyond a half century or so. Just 50-100 years ago, Winters were far more severe in the Stateline Area than they have been recently. Forecasting roadway improvement needs is analogous to predicting weather and climate. The shorter the term of forecast the more accurate. With reasonable certainty we can predict and program our needs over the next 1-5

years. With some confidence we can extend our predictions to 10 or so years but eventually the variables of scope, funding, and timing render the forecasts to little more than guesswork.

Section XX of this Chapter discussed the full build-out scenario illustrated by **MAP 6-12**. While it can be said with some certainty that the road system of **MAP 6-12**, or something similar to it, will eventually be needed in the Stateline Area, it is highly uncertain as to when this full-build out will be needed. Given present rates of growth, full build-out will not fully materialize until decades beyond the term of this LRP.

Therefore, this LRP will attempt only to put forth broadly stated parameters and policies of where to focus roadway improvement resources couched with the stipulations that:

1. This LRP will be reevaluated and updated every five years and project forecasting will be extended each time.
2. Projects already included in the SLATS FY 2006 TIP, which extends through 2011, are certain enough to be included in this Plan, although the timing may be adjusted.
3. Projects pertaining to cost-effectively maintaining the existing system will always take precedence over expansion projects. (See the discussion on System Preservation vs. System Expansion and Chart 6-20, below.)
4. Projects with important safety and security components will also take precedence over system expansion projects.
5. The Project Evaluation Criteria (see Chapter 2, Section VI) of the annual or biennial Transportation Improvement Program will be used to identify, evaluate, prioritize, and schedule projects for more intensive study and/or actual implementation, as appropriate.
6. Projects listed in the “out-years” (FY07-11) of the 2006 TIP will be regarded as projects endorsed by this LRP, with the exact timing of their implementation to be determined in accordance with the TIP Project Evaluation Criteria (Ch 2, Sec VI). See Chart 6-21 for a list of projects.
7. Previously mentioned, two projects that had been recently dropped from the implementation year of the FY06 TIP will be added to the FY07-11 out-years and will be endorsed directly by this LRP: The IL-2 Expansion project and the I-39/90 Expansion project (both in Illinois) that had recently been dropped from the FY06 “implementation year.” The exact scope and timing to be determined by future documented study and/or the TIP Project Evaluation Criteria (Ch 2, Sec VI). Included in Chart 6-21
8. The I-39/90 Expansion project, on the Wisconsin-side of the Stateline Area, is endorsed by this LRP with the exact scope and timing to be determined by future documented study and/or the TIP Project Evaluation Criteria. In-

cluded in Chart 6-21. For the purpose of this LRP, the cost of this project is assumed at \$30 million with the exact cost to be determined by future study.

9. Four additional projects are endorsed by this LRP with their exact scope and timing to be determined by further documented study and the TIP Project Selection Criteria. These projects are listed in Chart 6-22. Alternates to these projects are also endorsed by this LRP if those alternates prove to better serve the purpose of a project listed in Chart 6-22 as documented by further study and the TIP Project Selection Criteria.

10. The planning process called for in Section 20 of this Chapter, whereby MAP 6-12 will be refined, will also be called upon to develop a more extensive list of future projects, including project scope, cost, and timing considerations.

A. System Preservation vs. System Expansion

Previous discussion and **Chart 6-14c** illustrated that, by far, most of the roadway expenditures in the last 5 years were devoted to system expansion. **Chart 6-20** looks at broader time periods and illustrates that the last 5 years may have been uncharacteristic. Data contained in the last SLATS LRP indicates that in the period before the last 5 years, from 1988 to 2002, less than 5% of the area’s roadway expenditures were spent on system expansion aspects. Unfortunately, this statistic, even though it covers a larger time span, is also unlikely to be representative of future roadway expenditure needs. If one went back further, to the time periods when the Interstates or the State and Federal roadways were first constructed, expansion expenditures would again have dominated the picture.

In the mid to late 1990s, when the last SLATS LRP was developed, SLATS concluded that roadway expansion needs would rise significantly. Population and economic activity growth had reached threshold levels where parts of the system were inadequate. Anticipated growth would further exacerbate the situation. Hence, the last LRP set a goal that over 43% of future roadway expenditures should be on system expansion. As we have seen, in the last 5 year such expenditures exceeded that goal and rose to 63%.

Chart 6-20 Roadway Preservation vs. Expansion

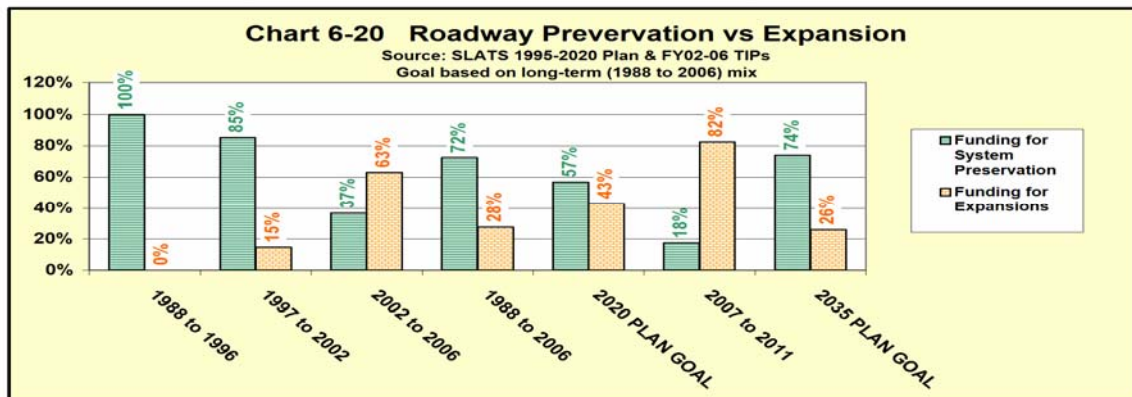


Chart 6-21 lists the projects programmed in the out-years of the FY 2006 TIP. Annual maintenance projects have been added at amounts similar to those programmed in previous years. Between FY 2007 and FY 2011 another \$135 million worth of projects are already programmed or almost certain to be initiated. Of these projects, 82% are for capacity expansion and 18% are for system preservation (illustrated in **Chart 6-20**).

Although it is highly likely that additional preservation projects will be put forth as the annual TIPs are finalized in the next 5 years, there are also significant expansion projects now being considered that are not in the FY 2006 TIP. These projects are listed in **Chart 6-22**. When all is tallied during the next 10 years, it is not inconceivable that the proportion of roadway funding allocated for system expansion will greatly exceed the 82% mentioned above. Even so, it is arguable that such expenditures for system expansions are not likely for the entire 30-year planning period of this LRP. Such expansions would not be necessary unless the area realizes levels of population and economic growth far beyond that visualized earlier in this LRP – perhaps, for example, the complete build-out of the Stateline Metropolitan Area as discussed in Section XX of this Chapter and illustrated by **MAP 6-12**. Such rapidity and intensity of growth is unlikely in the 30-year time frame of this LRP.

Therefore a long-term tentative expansion/preservation goal is set for 26% / 74%, for the overall 30-year period of the plan. This assumes that the high level of expansion projects in the first third or of the planning period will suffice to accommodate traffic growth needs for quite some time. In the latter years of the planning period the area will concentrate on maintaining and preserving its then existing system.

Chart 6-21 Improvements Programmed thru 2011

SLATS Highway & related Improvement Projects 2007 thru 2011											Chart 6-21			
State	Lead Agent	Year	Extent or Description	Structure Type	Expand or Preserve	Proj Phase	Fed \$1000	Fed Source	State \$1000	State Source	Local \$1000	Local Source	Total \$1000	Row#
IL	IDOT	07 to 11	DISTRICT-WIDE RR SAFETY (1/10th of District-wide amt in TIP X 5 yrs)	<>	P	<>	113	RR-Saf	13		0		\$125	1
IL	IDOT	07 to 11	DISTRICT-WIDE SAFETY (1/10th of District-wide amt in TIP X 5 yrs)	<>	P	<>	708	HES	177		0		\$885	2
IL	IDOT	07	IL-75, Rock River to IL-2 in Rockton	Road	P	Utility	0		300		0		\$300	3
IL	IDOT	07	IL-75, Rock River to IL-2 in Rockton	Road	P	PE	0		0		0		\$-	4
IL	IDOT	07	IL-75, Rock River to IL-2 in Rockton	Road	P	Const	4,200	NHS	1,050		0		\$5,250	5
IL	IDOT	07	IL-75, Rock River to IL-2 in Rockton	Road	P	ROW	0		250		0		\$250	6
IL	IDOT	07 to 11	IL-2, Latham to Rockton (Note 1)	Road	E	Const	0		20,000	IDOT	0		\$20,000	7
IL	IDOT	07 to 11	I-39/90, Wis to Rockton Rd (Note 1)	Road	E	Const	25,600	NHS	6,400	IDOT	0		\$32,000	8
IL	S Beloit	07 to 11	ANNUAL MAINT. (TIP amt X 5)	Road	P	PE	0		0		40	SB	\$40	9
IL	S Beloit	07 to 11	ANNUAL MAINT. (TIP amt X 5)	Road	P	Const	0		0		500	SB	\$500	10
IL	V Rockton	09 to 11	Main St, IL-2 to Bridge St	Road	P	PE	25	STP-U	0		6	VR	\$31	11
IL	V Rockton	09 to 11	Main St, IL-2 to Bridge St	Road	P	Const	314	STP-U	0		78	VR	\$392	12
IL	V Rockton	07	Race Street, Union St to Main St	Road	P	PE	28	STP-U	0		7	VR	\$35	13
IL	V Rockton	07	Race Street, Union St to Main St	Road	P	Const	348	STP-U	0		87	VR	\$435	14
IL	Winn Co	07	Hononegah Rd, Checkerberry to West End	Road	E	Const	0		0		2,200	WC	\$2,200	15
IL	Winn Co	07	Rockton Rd, I-39/90 to IL-251	Road	E	Const	0		0		1,600	WC	\$1,600	16
IL	Winn Co	07	Willowbrook Rd, at Prairie Hill Rd Intersection	Road	P	Const	0		0		2,400	WC	\$2,400	17
WIS	COB	09 to 11	Annual Overlay Prog. (TIP amt X 5)	Road	P	Const	0		0		1,750	COB	\$1,750	18
WIS	COB	07	Freeman Prky, WI-81 to Hart Rd	Road	E	Const	0		0		1,605	COB	\$1,605	19
WIS	COB	08	Freeman Prky, WI-81 to Hart Rd	Road	E	Const	0		0		1,200	COB	\$1,200	20
WIS	COB	09 to 11	Freeman Prky, WI-81 to Hart Rd	Road	E	Const	0		0		2,905	COB	\$2,905	21
WIS	COB	07	Gateway Blvd, Eagle's R to Hart and to Cty X	Road	E	PE	375	DEMO	0		125	COB	\$500	22
WIS	COB	08	Gateway Blvd, Eagle's R to Hart and to Cty X	Road	E	PE	5,238	DEMO	0		1,062	COB	\$6,300	23
WIS	COB	07	Inman Parkway, Prairie Av to Shopiere Rd	Road	E	PE	0		0		80	COB	\$80	24
WIS	COB	08	Inman Parkway, Prairie Av to Shopiere Rd	Road	E	PE	0		0		80	COB	\$80	25
WIS	COB	08	Inman Parkway, Prairie Av to Shopiere Rd	Road	E	ROW	0		0		410	COB	\$410	26
WIS	COB	09 to 11	Inman Parkway, Prairie Av to Shopiere Rd	Road	E	Const	0		0		5,515	COB	\$5,515	27
WIS	COB	09 to 11	Lathers Rd Bridge over 1-43	Brdg	E	Const	0		1,768	WDOT	442	COB	\$2,210	28
WIS	COB	07	Riverside Dr (US-51), Emerson to Henry	Road	P	PE	0		50	WDOT	17	COB	\$67	29
WIS	COB	07	Riverside Dr (US-51), Emerson to Henry	Road	P	Const	1,738	STP-FLX	833	WDOT	0	COB	\$2,571	30
WIS	COB	09 to 11	Shopiere Rd, Henry Av to Prairie Av & Royce	Road	P	PE	0		0		165	COB	\$165	31
WIS	COB	09 to 11	Shopiere Rd, Henry Av to Prairie Av & Royce	Road	P	Const	0		0		810	COB	\$810	32
WIS	COB	09 to 11	Willowbrook Rd, Colley to Milwaukee Rd	Road	E	PE	0		0		105	COB	\$105	33
WIS	COB	09 to 11	Willowbrook Rd, Colley to Milwaukee Rd	Road	E	Const	0		0		1,164	COB	\$1,164	34
WIS	COB	09 to 11	Willowbrook Rd, Staline to Colley Rd	Road	E	PE	0		0		70	COB	\$70	35
WIS	COB	09 to 11	Willowbrook Rd, Staline to Colley Rd	Road	E	Const	0		0		918	COB	\$918	36
WIS	COB	07	Wisconsin Av, Woodward to Henry	Road	P	Const	0		0		1,300	COB	\$1,300	37
WIS	Rock Co	07	Cnty S, IH90 to E limits of Shopiere	Road	P	PE	46	STP-R	0		11	RC	\$57	38
WIS	Rock Co	07	Cnty S, IH90 to E limits of Shopiere	Road	P	Const	533	STP-R	0		133	RC	\$666	39
WIS	Rock Co	07	Cnty S, Murphy to Hart & Bridge	Road	P	Const	2,112	BR	0		520	RC	\$2,632	40
WIS	Rock Co	08	Lathers Rd Bridge over Turtle Creek	Brdg	P	Const	0		240	WDOT	60	RC	\$300	41
WIS	Rock Co	07	Shopiere Rd, Hart to I-39/90	Road	P	Const	1,129	STP-R	0		282	RC	\$1,411	42
WIS	Rock Co	07	St. Lawrence Rd Bridge	Brdg	P	Const	115	BR	0		29	RC	\$144	43
WIS	Rock Co	07	Yahara Brdg on Cnty P	Brdg	P	Const	165	BR	0		41	RC	\$206	44
WIS	T Beloit	07 to 11	ANNUAL MAINT. (TIP amt X 5)	Road	P	PE	0		0		40	TB	\$40	45
WIS	T Beloit	07 to 11	ANNUAL MAINT. (TIP amt X 5)	Road	P	Const	0		0		500	TB	\$500	46
WIS	Turtle	07 to 11	ANNUAL MAINT. (TIP amt X 5)	Road	P	Const	0		0		430	TT	\$430	47
WIS	WDOT	07	Henry Av Brdg over Rock River	Brdg	E	PE	0		115	WDOT	0		\$115	48
WIS	WDOT	09 to 11	WI-81 Beloit West Side Bypass	Road	E	PE	0		175	WDOT	0		\$175	49
WIS	WDOT	09 to 11	WI-81 Beloit West Side Bypass	Road	E	ROW	0		1,700	WDOT	0		\$1,700	50
WIS	WDOT	09 to 11	I-39/90 Expansion from Staline north thru SLATS (see Note 2)	Road	E	Const	24,000	NHS	6,000	WDOT	0		\$30,000	51
51	Projects		SLATS TOTALS				66,786		39,071		28,687		\$134,544	
17			Illinois-side Totals		\$ Sums		31,335		28,190		6,918		66,443	
34			Wisconsin-side Totals				35,451		10,881		21,769		68,101	

Source: SLATS FY 2006 Transportation Improvement Program

Note 1: Projects in 06 TIP but not funded -- assume will be funded 07-11

Note 2: Project not yet in TIP but considered so likely that it is included in this list.

Note 3: Bike / Pedestrian and other enhancement projects are not included.

Chart 6-22 Expansion (Illustrative) Projects under consideration

Major Expansion Projects Under Study in the Stateline Area						Chart 6-22				
#	Lead Agency	Project	Description	Est Cost Millions	Sources	%WIS	%ILL	WIS	ILL	
1a	TBD	Inman / Cnty G Expansion	New east-west road from US-51 to Freeman Prky	\$2.7	TBD (Fed, State, & Local)	100%	0%	\$ 2.65		
1b	TBD	Further Cnty G Expansion	Northward to Janesville area	\$4.0	TBD (Fed, State, & Local)	100%	0%	\$ 4.00		
2	City of Beloit or Turtle Twp	Lathers Rd Expansion	New north-south 4-lane road from Eagles Ridge to Town Line Rd	\$4.9	TBD (Fed, State, & Local)	100%	0%	\$ 4.93		
3a	WisDOT / IDOT / TBD	WI-81 / 213 By Pass Alternates -- New 4-lane road	Nye School Rd, Stateline to WI-213	\$2.5	\$5.3	TBD (Fed, State, & Local)	50%	50%	\$ 2.64	\$ 2.64
3b			Fisher Rd, Ny School to I-39/90	\$6.9						
3c			Nye School Rd, WI-213 to Town Line Rd	\$4.0						
3d			Nye School to Prairie Hill to I-39/90	\$7.7						
4	Varied	Further Modeling Studies and Planning Studies to determine the exact purpose, need, scope, and priority of other future projects in the Stateline Area	Projects listed above in this Chart	\$3.0	TBD (Fed, State, & Local)	50%	50%	\$ 1.50	\$ 1.50	
	Potential projects illustrated in Map 6-12 (Total Buildout in the Stateline Area)									
	Potential capacity expansion north-south corridor alignment planning studies east of I-39/90, connecting Illinois & Wisconsin									
Total using average of WI-81 ByPass alternates				\$19.86				\$15.72	\$ 4.14	

Before concluding this section a few additional comments might be appropriate. It has been stressed previously in this LRP that the most cost-effective maintenance of public infrastructure is timely maintenance. Like anything else subject to the destructive forces of nature, some aspects of roadway maintenance must be diligently performed, lest the damage will become irreparable and necessitate early complete rebuilds.

Many large urban areas have established extensive “pavement management” databases and programs to assure that the links in their roadway system are programmed for timely maintenance. Such databases start with a comprehensive system inventory. Every link in the system is inspected and evaluated, sometimes down to minute details. Segments are categorized by their condition and by the type of repair or maintenance that can cost-effectively extend their useful life. Segments beyond repair are prioritized for rebuild. All segments are put on a maintenance schedule. The City of Rockford recently established such a program. One quarter of the City is evaluated each year to keep the database current. The condition data is used each year both to prioritize street repairs and to assure the City aldermen that their respective wards are being treated equitably.

In smaller urban areas “pavement management” can be less formal. The road system is not so large that the community leaders cannot develop an effective and equitable maintenance / repair / rebuild program without a computerized database. Citizen input can be relied upon to make sure that some streets are not neglected. In the RATS Metropolitan Area, the smaller cities such as Loves Park, Machesney Park, and Cherry Valley rely effectively on this less formal approach. In the SLATS MA it is likely that Rockton, South Beloit and the towns and townships are also adequately served by such a less formal approach. The City of Beloit may also be adequately served in this manner.

This LRP assumes that the responsibility for determining whether existing roadways are being adequately maintained is a matter that should be decided individually by each of the component communities of SLATS. It is recognized, however, that the more formal pavement management approach is a potential tool that should be periodically considered by area communities. Factors that should steer communities toward the more formal approach include: high numbers of citizen complaints over roadway maintenance, concerns expressed by officials that parts of the community are not being equitably maintained, and/or conflicts or doubts among the community's planning and engineering staff when setting priorities for roadway maintenance projects.

If a more formal and detailed pavement management program is considered necessary, there are diverse methods of acquiring the detailed data. The City of Rockford used manual visual inspections to acquire the data and used GPS (global positioning system) technology to help locate and map the information. More sophisticated methods are available that utilize special vehicles equipped with cameras, GPS technology, and other sensors that automate the data acquisition and initial evaluation work. Although expensive, it might be wise to consider the latter methods because they remove some of the bias of manual evaluation methods and they enable the entire process to be accomplished much more quickly.

B. Funding vs. Currently Programmed Projects

Chart 6-19 shows the currently forecasted funding for the Stateline Area in average annual amounts. **Chart 6-21** lists the projects that are currently programmed in the SLATS Area between 2007 and 2011. **Chart 6-22** lists the other major expansion projects under study in the Stateline Area. **MAP 6-13** shows the general locations of the projects listed in **Charts 6-21 & 6-22**

Charts 6-23a thru c show the average annual funding forecasted for the entire 30-year planning period, the average annual funding forecasted for the projects listed in **Chart 6-21**, and the funding remaining for projects after 2011.

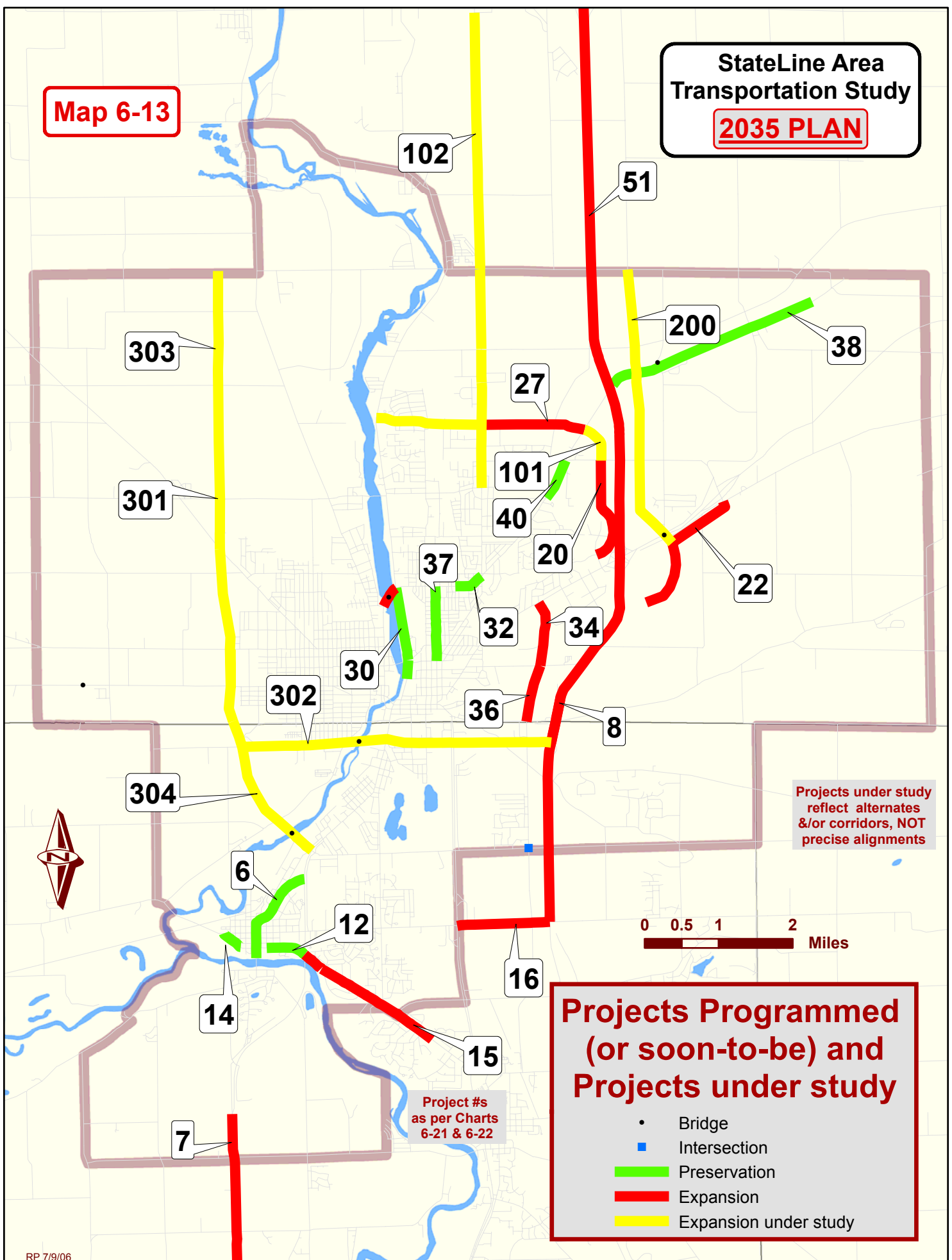
Charts 6-23d thru f show the funding forecasted for the entire planning period, the funding forecasted for the projects programmed thru 2011, the funding for the projects under study (**Chart 6-22**) and the funding remain for other future projects to be proposed by further documented study.

Chart 6-24 illustrates the number of years of funding, at the forecasted rates, that is need to accomplished the programmed projects (**Chart 6-21**) and the projects currently under study (**Chart 6-22**).

Together these charts illustrate a viable program for roadway improvements in the Stateline Area through the next 10 years. During that time further studies will be conducted to determine additional improvement needs – those needs to be inserted when the next LRP updates are conducted.

Map 6-13

StateLine Area
Transportation Study
2035 PLAN



Projects under study
reflect alternates
&/or corridors, NOT
precise alignments

**Projects Programmed
(or soon-to-be) and
Projects under study**

- Bridge
- Intersection
- Preservation
- Expansion
- Expansion under study

Chart 6-23a Wis-side Annual Funding vs. Improvements

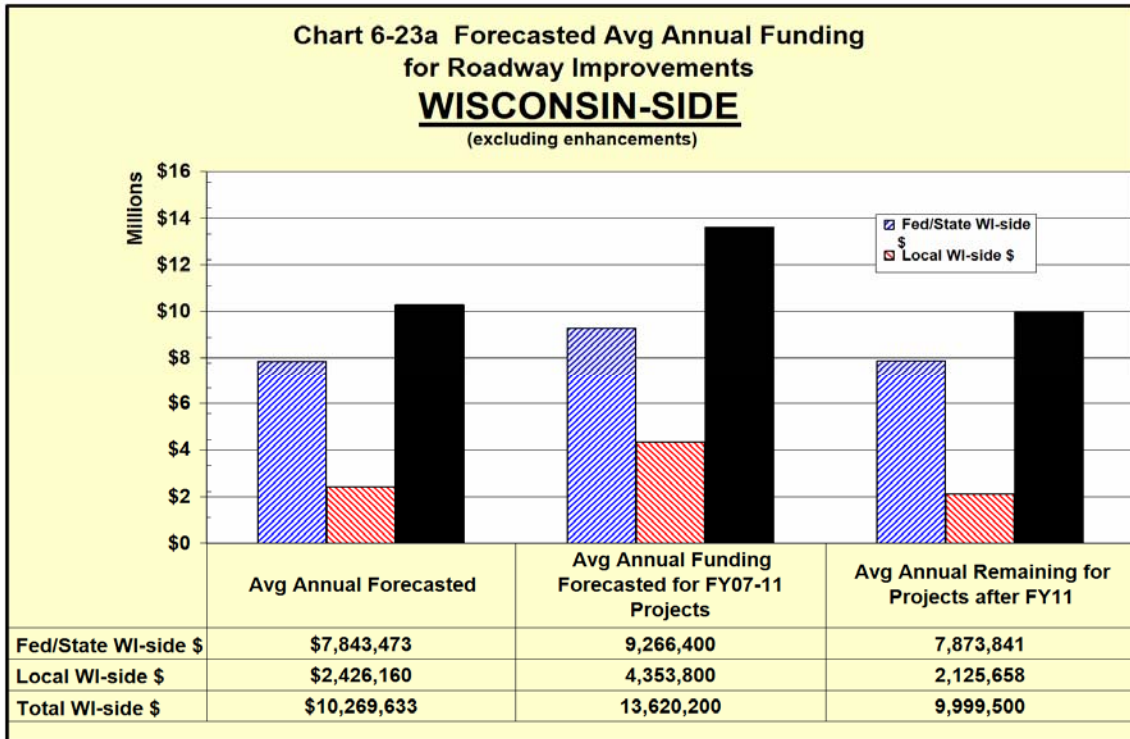


Chart 6-23b Ill-side Annual Funding vs. Improvements

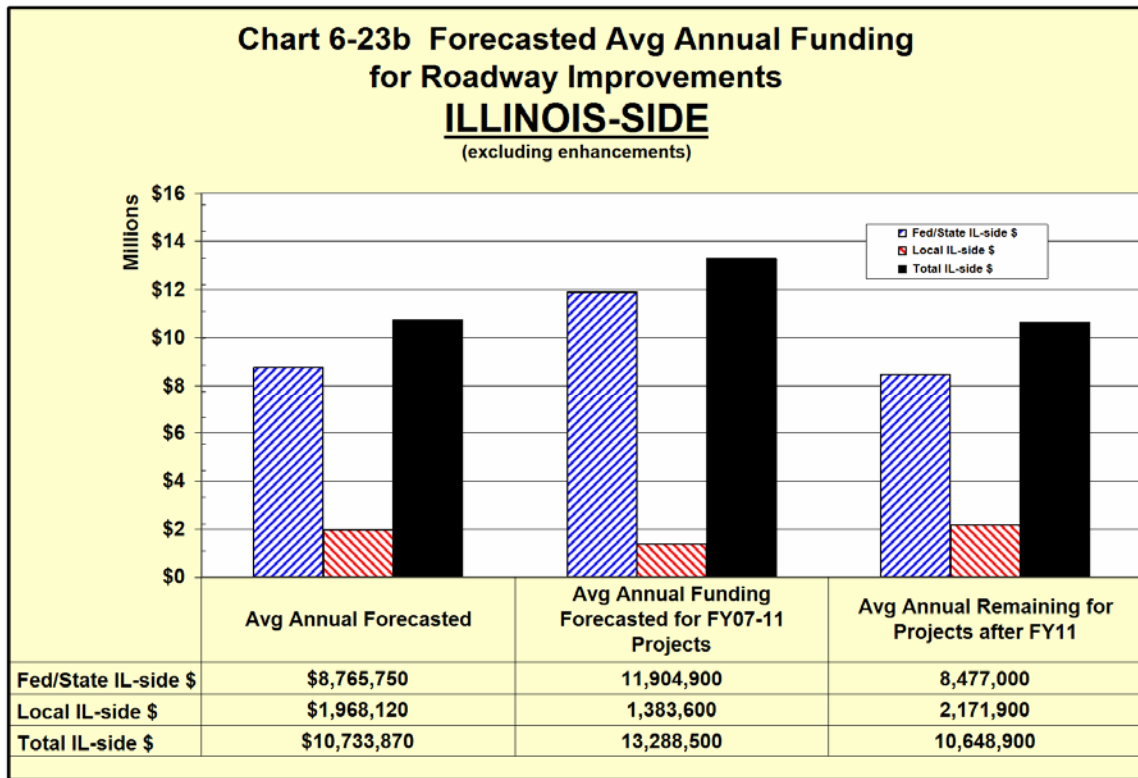


Chart 6-23c All SLATS Annual Funding vs. Improvements

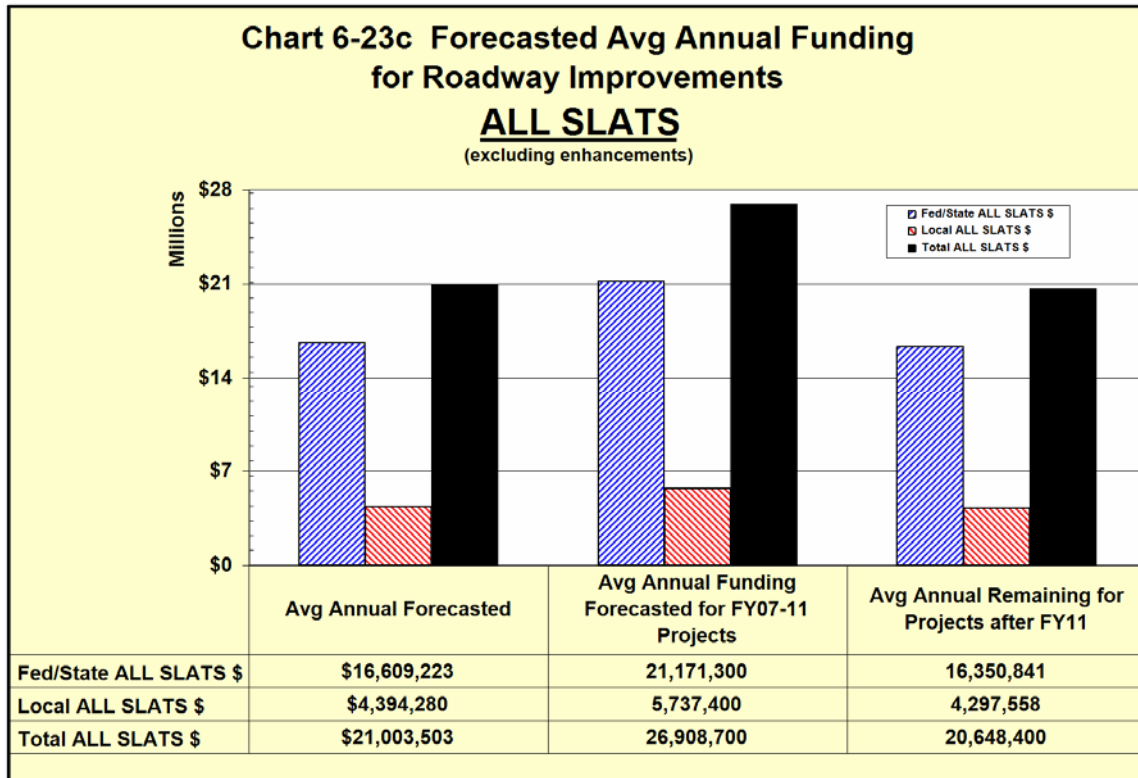


Chart 6-23d Wis-side Total Funding vs. Improvements

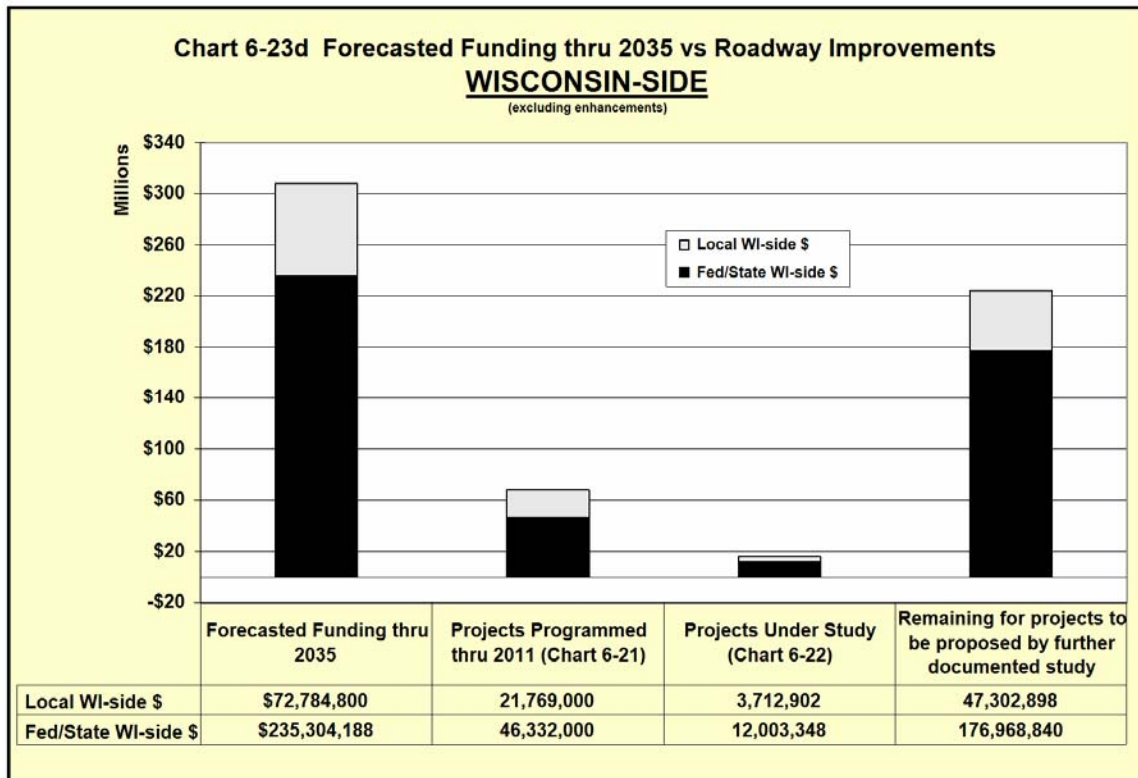


Chart 6-23e ILL-side Total Funding vs. Improvements

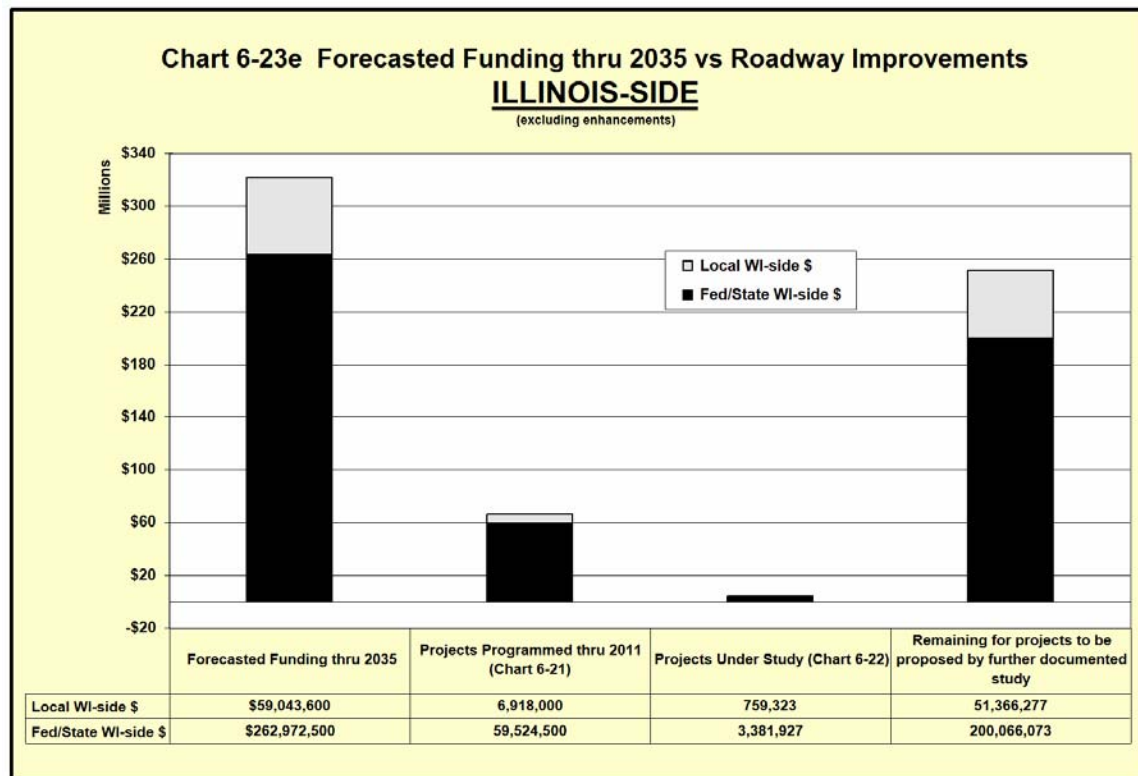


Chart 6-23f All SLATS Total Funding vs. Improvements

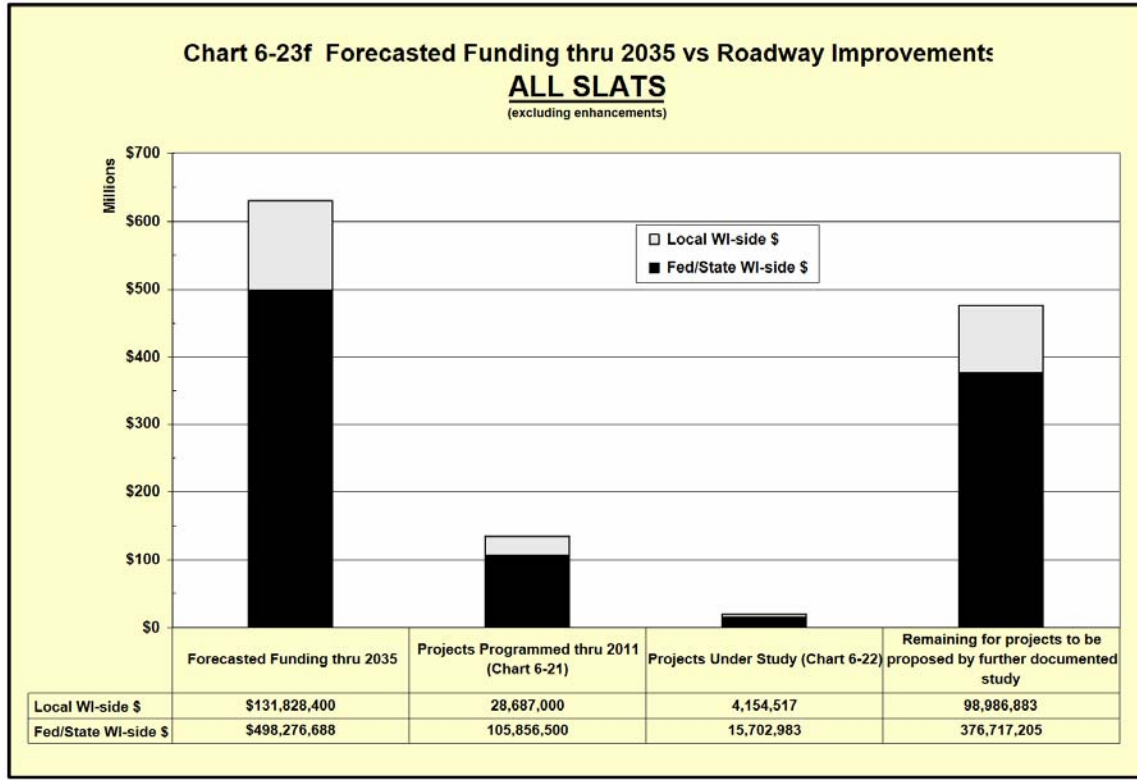
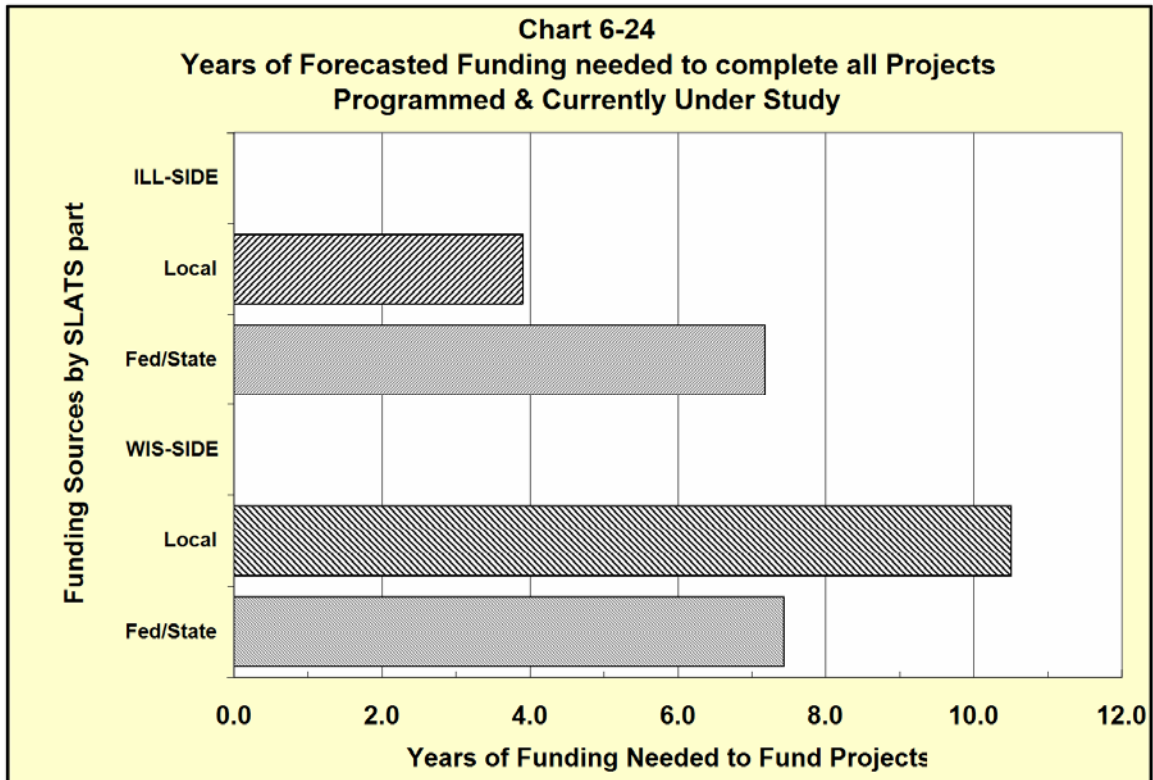


Chart 6-24 Years of Funding needed to complete improvements



XXIII OPERATION AND MAINTENANCE OF THE ROADWAY SYSTEM

The moment-to-moment, day-to-day operation of the area's roadway system requires efforts only vaguely considered, previously in this LRP. Previously, this Chapter looked primarily at the major structural elements of the roadway system, the ability of those elements to convey traffic, the major efforts needed to preserve that system, and where appropriate the major structural changes needed to modify or expand the system's structure so that it can convey future increases in traffic. In simple terms, previous sections of this chapter concentrated on the "big" construction measures – the new roadways, new lanes, lane widenings, roadway rebuilds, new bridges and bridge rebuilds, major intersection improvements, and major pavement resurfacing projects. Many of these projects require the acquisition of new ROW and all require extensive and expensive planning and engineering to determine the need, scope, priority and timing, funding sources and eligibility, and other aspects of these major projects.

Although the above major endeavors are certainly important to the vitality of the area's roadway system, there are also many other aspects of the area's roadway system that are essential to its safe and efficient use. These aspects are referred to as the "Routine Maintenance and Operations" aspects. These aspects include, but are not limited to, such things as:

1. Off-pavement ROW maintenance. Such as mowing, debris and litter cleanup, weed control, tree trimming, ditch and culvert maintenance, stormwater detention area maintenance, grading on un-paved roads and/or shoulders, soil erosion repair, animal carcass removal, and road sign repair or replacement.
2. On-pavement maintenance. Such as pavement patching and pothole repair; crack and joint sealing; litter and debris removal; street sweeping and cleaning; striping and other marking; spot repairs of pavement failures; curb, gutter and storm sewer inlet maintenance; and placement of temporary warning signs.
3. Traffic control device maintenance. Signal maintenance and signal timing maintenance, stop sign and other sign maintenance, evaluation of traffic control requests from the public, the installation of minor new traffic control devices, the installation and maintenance of street lighting, and directional and trail-blazing signing.
4. Parking maintenance. Such as parking lot/deck maintenance, parking area striping, parking meters and other parking area controls, and parking area sign maintenance.
5. Seasonal maintenance. Winter snow clearing and ice prevention, Fall leaf removal, seasonal road posting, and spot repairs or flood damage and pavement frost or heat buckling.

6. Facility and equipment acquisition, repair and maintenance. Vehicles and construction equipment, vehicle and equipment storage facilities, maintenance facilities, salt storage facilities, administrative facilities, roadside rest areas and facilities, and information centers; maintenance of traffic control centers and related intelligent transportation system equipment and facilities.
7. Administrative costs and other staffing costs.
8. Associated utility costs. Water, gas, electric, telephone and communications equipment, sewage and other waste disposal costs.
9. Pavement Monitoring and Management Systems. Data collection, database maintenance, and periodic analyses necessary to effectively coordinate and prioritize short- and long-term roadways system maintenance operations.

SLATS has endeavored to determine its Routine O&M costs for the metropolitan area. **Chart 6-25** lists the best estimates of these costs at this time.

Forecasting the Routine O&M expenditures is based on planning judgment and the following general assumptions: (1) the incorporated communities O&M expenses will expand as they annex properties and construct or assume responsibility for new roads. (2) the County and townships expenses will decline as properties and roads are taken from them by the municipalities. (3) the State's responsibilities will stay about the same over the period of the plan – their new lane miles will be balanced by jurisdictional transfers of lesser importance State roads. Overall these forecast assumptions result in roughly an 8.5% increase in total Routine O&M expenses over the 30-year period of the Plan.

Chart 6-25 General Roadway O & M

General Roadway Operations & Maintenance Expenditures & Forecasts in the Stateline Area				Chart 6-25
Entity with O&M duties in Stateline Area	<u>Annual O&M</u> (rounded to nearest \$1,000)	<u>Annual adjustment</u> for additions or reductions in road mileage responsibility	<u>30-Yr O&M</u> (Annual O&M x adjstmnt, rounded to nearest \$1000)	<u>Info Sources, Assumptions & Comments</u> (all data in FY05 dollars, no adjustments for changes in dollar values)
Beloit, WI	\$ 3,014,000	1.0%	\$ 104,842,000	Beloit Public Works Dept
S Beloit, IL	\$ 478,000	1.0%	\$ 16,627,000	S. Beloit
Rockton, IL	\$ 275,000	1.0%	\$ 9,566,000	Rockton, IL
Turtle Town, WI	\$ 246,000	-1.0%	\$ 6,403,000	Turtle Town, WI
Beloit Town, WI	\$ 507,000	-1.0%	\$ 13,197,000	Beloit Town, WI
Rockton Twp, IL	\$ 96,000	-1.0%	\$ 2,499,000	Assumed at 20% of S Beloit level
Roscoe Twp, IL	\$ -	0.0%	\$ -	The road mileage within SLATS for these jurisdictions are so small that the O&M aspects are considered negligible for purposes of this Plan
Rock Town, WI	\$ -	0.0%	\$ -	
Winnebago Co, IL	\$ 378,000	-0.5%	\$ 10,555,000	Winnebago County Highway Dept
Rock Co, WI	\$ 660,000	-0.5%	\$ 18,429,000	Info provided by Rock County to Janesville MPO for LRP development. Assume 150 lane miles and average cost per mile of \$4,400
States (Wis & ILL)	\$ 870,000	0.0%	\$ 30,263,000	Info provided by Rock County to Janesville MPO for LRP development. Assume 150 lane miles and average cost per mile of \$5,800
SLATS AREA	\$6,524,000		\$ 212,381,000	Overall growth in O&M costs in Stateline Area as result of application of Annual Adjustment factors 8.51%

CHAPTER SEVEN – COMPLIANCE WITH SAFETEA-LU & OTHER MISCELLANEOUS CONCERNS

I COMPLIANCE WITH SAFETEA-LU – GENERAL OVERVIEW

Nearly two years ago, when work on this Long-Range Planning effort was first initiated, the Federal law mandating the work (TEA-21) was nearing expiration. In August of 2005, the old law did, in fact, expire and was replaced by SAFETEA-LU. Shortly thereafter, in November of 2005, the previously adopted LRP for the Stateline Area also expired.

In the early months of 2006, as work on this new LRP was nearing completion the decision was made by the SLATS Policy Committee to delay finalizing the document until provisions could be developed and incorporated that would make this LRP fully comply with the new Federal law. However, complicating this decision was the fact that even though SAFETEA-LU had been enacted by Congress and signed by the President of the United States, the law was not complete. It was not complete in the sense that the new Federal rules and guidance documents, as mandated by the new law, had not yet been developed by the US Department of Transportation (USDOT). Although SAFETEA-LU itself sets forth the general principles that must be followed, it is the subsequent rules and guidance of USDOT that provides the details of what is to be required of Metropolitan Planning Organizations, throughout the country, as they develop and refine their Long-Range Transportation Plans.

On June 9, 2006, on behalf of USDOT the “**Statewide Transportation Planning; Metropolitan Transportation Planning; Proposed Rule**” was published in the Federal Register. As part of that notification, comments on the Proposed Rule must be submitted by September 7, 2006. USDOT is seeking to have a Final Rule enacted as soon as possible, sometime in the Fall of 2006 or early 2007, but the exact timeframe will depend on the extent and nature of the comments received.

For the purpose of completing this LRP in a more timely fashion: (1) it is assumed that the Proposed Rule will reach Final stage largely as it is proposed; (2) SLATS staff has reviewed the Proposed Rule with respect to this LRP; and (3) staff has attended a number of meetings with State of Illinois, State of Wisconsin and Federal Highway Administration officials for the purpose of determining where this LRP falls short of achieving the requirements of SAFETEA-LU and the most likely final rules (referred to as “gap analysis”).

For the most part, it appears this LRP, as developed over the last year, is in compliance with SAFETEA-LU. This is not surprising because SAFETEA-LU is not significantly dif-

ferent from the preceding transportation bills and the transportation planning process has been well established in the Stateline Area for many years. Nevertheless, some gaps were found. Some of these gaps have been addressed by revisions or additions to the text of previous Chapters of this LRP. Some will be attended to here in this Chapter.

The “gap analysis” and review of the Proposed Rule identified four areas where further work was needed or further documentation was requested:

1. Operational and Management Strategies for maintaining existing facilities.
2. Environmental Mitigation.
3. Transportation and Transit Enhancements.
4. Public Involvement.

These four areas are discussed in the following sections.

A. Operational and Management Strategies

The gap analysis found that the initial draft of the financial plan of this LRP did not sufficiently address operational and management resources and expenses. This was addressed by adding **Section XXIII** to the previous Chapter. **Chart 6-25** of that Section, summarizes existing and forecasted revenues and expenses in this area.

The primary strategy toward O&M in the Stateline Area is simply that O&M and related System Preservation projects take precedence over System Expansion projects. This policy has been stated or eluded to in several parts of this LRP with respect to all modes of transportation throughout the area and is reiterated here.

It is also recognized here that day-to-day O&M is a part of transportation planning that requires diligent attention. O&M involves a multitude of entities (hence, the complexity of designating responsibilities, evaluating effectiveness, and monitoring accomplishments). Timeliness is an important element of O&M, as opposed to system expansion projects that can be delayed by months or sometimes years without significantly adverse consequences. And the O&M situation is constantly changing (there are changes in technology, changes resulting from environmental situations, changes resulting from increases or decreases in travel characteristics, and changes in the travel needs and demands of the area’s population).

SAFETEA-LU stresses the need to better coordinate the transportation / transit needs and services of human service providers within metropolitan areas. This LRP recognizes that need. The growing population of the Stateline Area, particularly in the youth and elderly age groups, is placing increasing demands on the area’s human service, mass transit, and paratransit providers. The limited resources for these services are stretched tight at present. However, these resources can sometimes be stretched farther by better coordination of the many entities involved. To the extent possible, this coordination can involve sharing equipment, staff and other resources. Unfortunately, there are sometimes prohibitive institutional and/or inadvertent legislative barriers that prevent or inhibit this sharing. In other instances, the lack of sharing is simply the result of poor communication and/or ignorance among the various providers.

As a result of the gap analysis, this LRP now recognizes the possible benefits of better human services transportation, encourages the development of a Human Services Transportation Plan (HSTP), and puts forth a draft initial HSTP for review and consideration. See **Section VIII of Chapter Four**.

In addition, the Proposed Rule states that the LRP must include: "Operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods." This LRP complies with that requirement in four very important ways.

1. Considerable efforts have been devoted to the development of two traffic simulation models for use in the evaluation of traffic conditions and transportation improvement alternatives in the Stateline area. Additional runs of these models will be made to select and prioritize the improvements proposed and considered in this LRP. Moreover, the Stateline Area is committed to maintaining these models for use in evaluating other alternates as may be proposed as part of the ongoing planning process. **See Chapter Six**.
2. Extensive consideration has been devoted to traffic incident data in this LRP. Although sufficient time was not available to definitively prioritize all of the locations experiencing high incident levels, enough knowledge was gained to determine that traffic incidents should be strongly considered as projects are brought forth from the Long-Range planning process into the area's Transportation Improvement Program. Also, sufficient safety information was developed to determine that improving the situation on the I-39/90 freeway is paramount.
3. This LRP endorses the use of Intelligent Transportation System technology to improve safety and relieve congestion. This LRP concurs with the ITS architecture developed for the area by the States and supports only the deployment of such technology when it is compatible and consistent with this architecture. **See Chapter Six, Sections XIV and XV**.
4. This LRP recognizes that the most serious congestion situation in the Stateline Area is on the I-39/90 freeway and supports further planning and improvement efforts to relieve that congestion. In addition, in recognition of the potential seriousness of this situation, SLATS participates with the Beloit-Janesville-Rockford Arterial Management Workgroup. The objective of the Workgroup is to enhance cooperation among the multiple transportation-related agencies in the area and communicate timely and reliable information in the event of major incidents in the region. One of the most significant achievements of the Workgroup was the development of the **Interstate Alternative Route Operations Guide**. The Guide enhances communication between the agencies, provides a common listing of contacts and areas of concern, and provides for the implementation of a predetermined traffic diversion route for use when a serious incident occurs on I-39/90 between Janesville, Wisconsin and Belvidere, Illinois.

B. Environmental Mitigation

The gap analysis and review of the Proposed Rules revealed the need for stronger and earlier consideration of the natural environment in the transportation planning process. The fifth of the eight planning factors in the Proposed Rules states that the planning process must: ***“Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.”*** This planning factor has been incorporated into **Chapter 2 – the Goals of this LRP**.

The Proposed Rules further states that: ***“The MPO shall consult, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation concerning the development of the transportation plan.”*** Further, the LRP must be compared with State conservation plans or maps and / or inventories of natural or historic resources, if available.

The planning process and the development of this LRP has abided by the above requirement in the following ways:

1. Area land use plans were consulted as the maps and proposals of this LRP were developed.
2. Area land use planning entities were invited to all SLATS meetings and invited to comment on all aspects of the LRP.
3. In addition to consulting area land use plans, in the development of the Metro Area Build-out Arterial & Collector Roadway Layout Plan, MAP 6-12, the most recently available aerial photography of the Stateline Area of was consulted. To the extent possible, forested and obvious wetland areas were avoided or crossed in shortest-path fashion. Further with regard to this Layout Plan, it is strongly encouraged that more intensive work be conducted to refine this Layout Plan. This work should involve knowledgeable representatives pursuant to the Federal guidance. **See Chapter 6, Section XX.**
4. This LRP stresses, to the extent possible, the expansion of the area’s public transit systems and bike and pedestrian systems to meet growing transportation demand and reduce the need for more environmentally disruptive roadway systems. **See Chapters 4 and 5.**
5. This LRP stresses the concepts of Smart Growth and Context Sensitive Solutions (CSS). CSS is an interdisciplinary approach that seeks multimodal solutions. Early, frequent, and broad spectrum communication is encouraged such that projects are developed that are respectful of all stakeholders views and concerns.

In addition to the above, as part of this LRP staff researched available information regarding environmentally sensitive lands in the Stateline Area. **MAP 7-1** broadly illustrates these areas. South of the Stateline, the information on this map was taken from

the most recent **Boone and Winnebago Counties Greenways Plan**. Participating in the development of this Plan were the following agencies: the Winnebago County Forest Preserve District; the Boone County Conservation District; the Cities of Rockford, Loves Park, and Belvidere; the Village of Rockton; the Rockford Park District; the Belvidere Park District; the Natural Land Institute; the Boone and Winnebago County Planning Departments; and the Rockford MPO. The Plan identifies land for which the preferred use is to remain green (i.e., as close to natural as possible – especially not paved or improved with structures). Another core concept of the Greenways Plan is that of connected green or natural lands. By connecting these lands, the animals that inhabit them are able to move more-or-less freely through these corridors thereby providing for better foraging and survival conditions and better plant propagation opportunities. The information shown on **MAP 7-1** is only part of the information contained and presented in the Greenways Plan. The Greenways Plan is adopted by reference as part of this LRP. To the extent possible, the natural lands and resources depicted on the Plan should be respected as transportation projects are conceived, planned, designed and constructed.

Environmentally sensitive areas are also depicted in **MAP 7-1** on the Wisconsin-side of the Stateline. On the Wisconsin-side however, this information is still somewhat in the developmental stage. Further work must be done to confirm this mapping and prioritize the importance of various components. This LRP endorses further efforts in this regard and SLATS offers its assistance, to the extent possible, in refining and prioritizing these tentatively depicted sensitive areas. Appreciation is extended for the information assembled thus-far.

Finally, in accordance with the new Federal guidance, the SLATS planning process, as part of the adoption process of this LRP, extends an invitation to all interested parties and stakeholders to review this LRP from the standpoint and for the sake of:


- **environmental preservation, conservation, and mitigation,**
- **Smart Growth and Context Sensitive Solutions**
- **improving the conditions of all life and endeavors in the Stateline Area.**

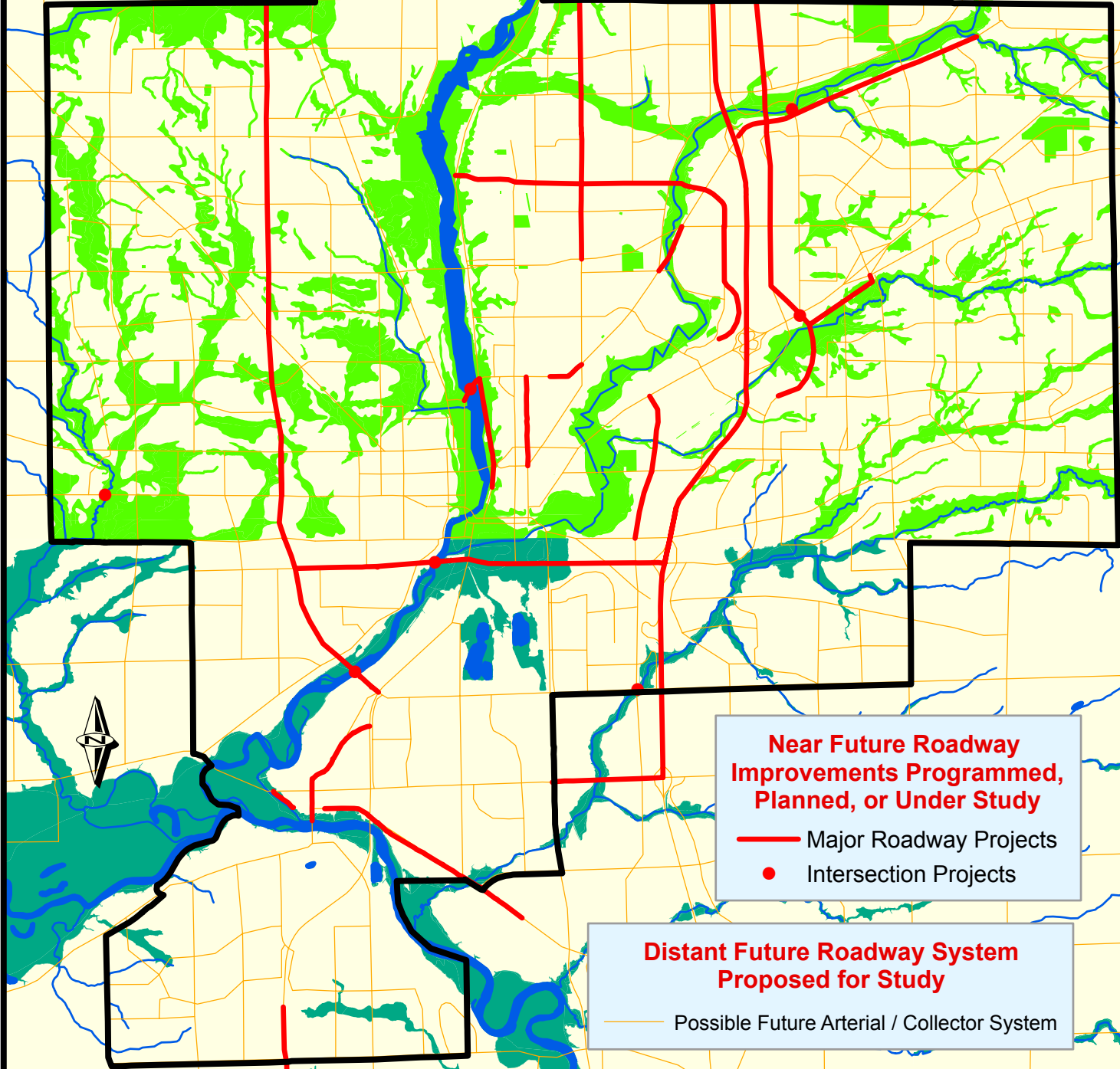
Map 7-1

StateLine Area Transportation Study 2035 PLAN



Sensitive Lands Stateline Area

-  Sensitive Areas on WIS-side
-  Sensitive Areas on ILL-side
-  Streams & Water Bodies


 MPA Boundary



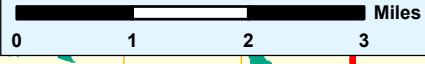
Near Future Roadway Improvements Programmed, Planned, or Under Study

-  Major Roadway Projects
-  Intersection Projects

Distant Future Roadway System Proposed for Study

-  Possible Future Arterial / Collector System

The depiction of environmentally sensitive lands on this map is from a variety of sources. The information (both environmental and roadway locations) is highly generalized and subject to further study and verification as more precise information and other community input becomes available. Please see text for further explanation.



C. Transportation and Transit Enhancements

In the gap analysis the question of “enhancements” was posed. In metropolitan transportation planning, the term “enhancements” refers to a category of required funding consideration that was first posed under the Federal ISTEA legislation in the early 1990s. In that legislation, emphasis was given to certain kinds of improvements that offset, softened, or mitigated the often starkly unaesthetic impacts of roadway structures. Qualifying for enhancement funding were a wide variety of transportation-related activities that improved the aesthetic appearance of roadways (i.e., landscaping, decorative lighting), improved their appearance (i.e., artistically designed bridges), reduced their adverse impacts (i.e., sound barriers), preserved some endangered historic aspects (i.e., preservation of an old train station or an old archway bridge), or supported a less obtrusive transportation mode (bike and pedestrian facilities or transit). Even certain amounts of funding reserved strictly for transit were set aside for enhancements (bus stop shelters and other aspects that improved the attractiveness of public transit).

In the gap analysis, the emphasis of the Stateline Area toward spending most or all available enhancement funds on bike and pedestrian improvements was overlooked. In the past virtually all enhancement funding has been spent on such improvements. The only exception in the past decade was a small amount of funding that was allocated for advertising billboard abatement.

Chapter 5 of this LRP is extensively devoted to the commitment of the Stateline Area to improve its bike and pedestrian facilities. This commitment is reiterated here with the reservation that other types of enhancement projects can still be considered pending thorough analysis and justification through the TIP Project Selection Process and/or amendment to the LRP.

The LRP policy for the extremely limited amount of funding available through FTA administered sources is that these funds should be spent for eligible transit expenses in accordance with the TIP Project Selection Process.

Lastly, question of how enhancements will be funded if specific Federal funds are withheld or cease to be set aside for enhancements can only be answered with the assumption that State and local funds will be sought for the enhancement activities proposed in the LRP. In that event, however, it is unlikely that all of the bike and pedestrian improvements suggested in Chapter Five of this LRP will be funded in the timeframe suggested in this LRP.

D. Public Involvement

Public involvement with regard to the SLATS transportation planning process is currently in accordance with a Public Involvement Process (PIP) that was updated in accordance with Federal guidance as recently as 2005. With regard to the development of the LRP, public involvement efforts have exceeded the minimums specified in the PIP. This LRP has been under development since late 2004, almost two years from its anticipated adoption date in August or September of 2006. During that time period, every meeting

of the SLATS Technical and Policy Committees have included some aspect of the LRP in its meeting agenda. At every meeting, opportunities for the public to comment on the LRP have been afforded at least two time – first, early in the agenda when the public is invited to comment on any transportation issue, and second, later in the agenda when the LRP topic of the meeting is discussed.

Every meeting of the SLATS Technical and Policy Committees is announced to the public and the public is invited to attend. Notice is published in the Beloit Daily News approximately one week prior to the meetings. Most meeting notices are also posted on the SLATS WEB site.

Starting in the Fall of 2005, drafts of Chapters 1-3 of the LRP have been posted on the SLATS WEB site. Drafts of Chapters 4 and 5 have been available since December of 2005. Since February of 2006, a draft of the Highway Chapter (Chapter 6 has been available). All of these drafts have been in easy-to-download PDF formats and all have been accompanied by full color illustrations (maps and graphs) of the information and data developed for the LRP.

As a result of developing and presenting this LRP over a long period and in small digestible Chapters, instead of the full and formidably large document that it is, numerous comments have been received by the participants in the planning process. Most notably, the State of Wisconsin and the Federal Highway Administration have diligently critiqued nearly every aspect of the LRP to date. Subsequently, numerous aspects have been modified or expanded to comply with State and Federal comments. When the changes have been significant, the revised parts have been reposted on the SLATS Web site.

While some attention has been given to the LRP by the general public, a great deal of attention was given to the Bike and Pedestrian Chapter. A representative from the area bikers support group was present at nearly all meetings where that Chapter was discussed. To the best of SLATS' knowledge changes to that Chapter were accepted by or met the approval of that representative.

In July of 2006 a full version of the LRP was assembled, presented to the SLATS committees and the general public and placed on the SLATS web site for review. Comments on that version were received from the FHWA on August 10th and responded to on August 27th (see **Appendix A**). On August 21, 2006 a formal Open House was held on the Plan (also, see **Appendix A**). The September 1, 2006 version of the LRP incorporates all changes resulting from the FHWA comments. No changes were needed as per the Open House.

Given the above availability of the LRP as it was being developed and the opportunities for public comment, it is generally concluded that the public involvement requirements for this LRP have initially been met.

With the passage of SAFETEA-LU, however, some new public involvement requirements now need to be considered. In accordance with SAFETEA-LU, these new requirements can be addressed during or after the initial adoption. Specifically, the following changes need to be addressed:

1. Currently, SLATS has an adopted Public Involvement Plan (PIP). The Proposed Rule now refers to a “documented participation plan” (we will call it a DPP, for short) instead of a PIP. If this new terminology persists through the Final Rule, SLATS will change its PIP to a DPP. Under the current SLATS PIP numerous public entities and stakeholders are notified and involved. The Proposed Rule expands the list of entities that must be involved in the DPP to include:
 - a. affected public agencies,
 - b. representatives of public transportation employees,
 - c. freight shippers,
 - d. providers of freight transportation services,
 - e. representatives of users of public transportation,
 - f. representatives of uses of pedestrian walkways and bicycle transportation facilities,
 - g. representatives of the disabled,
 - h. agencies or entities responsible for safety/security operations,
 - i. providers of non-emergency transportation services receiving financial assistance from a source other than title 49, USC, Chapter 53,
 - j. the general citizenry,
 - k. other interested parties, and
 - l. consultation with state and local agencies responsible for:
 - i. land use management,
 - ii. natural resources,
 - iii. environmental protection,
 - iv. conservation,
 - v. historic preservation, and
 - vi. Indian Tribal governments.
2. Visualization techniques must now be part of the DPP. SLATS currently does this with numerous maps, charts and graphs but they are not specifically mentioned as part of the PIP/DPP.
3. Information must be available in electronic format (i.e., on a Web site). Again, SLATS currently does this as a matter of practice.
4. For the most part all other required participation elements are mentioned in the SLATS PIP (i.e., timely notice, meetings at convenient and accessible locations, etc.).

Most significantly, as part of the adoption process of this LRP, SLATS will:

- expand its list of persons and entities invited to comment on this LRP,
- acknowledge, consider, and respond to any comments received,
- provide for extended comment periods if significant changes are made, and
- agree to modify its current PIP into a “documented participation plan” (DPP) that includes all of the provisions of the Federal guidance (this last work to be accomplished after adoption of this LRP).

E. Additional Environmental Justice & Non-Discrimination Issues

A comment on the July 2006 Draft of the LRP noted that there appeared to be insufficient attention to the potential impact of proposed projects in the Plan on minority and low-income areas, particularly highway projects.

There are, in fact, several maps of minority and low-income populations in the Plan. They were presented early in the Plan, in Chapter Three. To better address this issue, this section of the Plan includes some additional maps that superimpose the currently proposed highway projects (shown on **Map 6-13**) over the minority and low-income population concentrations shown previously in **Maps 3-1 & 3-2**. The new **Maps, 7-2 thru 7-3**, show that:

- Some of the proposed projects traverse areas with high minority or low-income populations. This demonstrates that such populations are not being ignored when it comes to the use of publicly-financed transportation investments. On the other hand, the maps help illustrate that the proposed projects, by their scope and nature, do not bear adversely on these populations. Specifically, because of their limited scope, they are not projects that will destroy or divide neighborhoods, burden those neighborhoods with excessive amounts of traffic, or do things to those neighborhoods that are dissimilar from other proposed projects in other neighborhoods in the Stateline Area.
- Many of the projects outside the older central city(s) are proposed for the purpose of allowing or encouraging economic development and the creation of jobs. However, the small size of the Stateline Area, the good transportation system throughout the area, and the capacity improvement efforts within the central areas make these projects good for all people in the area, minority and low-income populations included.
- All of the projects are designed to help people get to and from work. Decreasing roadway congestion, improving traffic safety, and decreasing travel times are primary or secondary goals of nearly all of the proposed improvements. Therefore these projects will benefit minority and low-income people throughout the Stateline Area.

It is also important to reiterate here, as noted in Chapter 3, the homogenous nature of population distributions in the Stateline Area, especially within the older portions of the central city (Beloit / S. Beloit). Stated another way, the community is well-integrated. There are no dense and broad area areas populated solely by minority or low-income persons. White people, moderate-income households, and even high-income households are interspersed among minority and low-income populations. See **Maps 3-1 A thru D and Maps 3-2 A thru C**. This characteristic of the Beloit area makes it inherently difficult to adversely affect or disproportionately benefit one group or another.

In addition, the area's strong and continued commitment to public transit deserves re-emphasis. This commitment further demonstrates concern for low income and minority groups and persons. This fact is re-illustrated in **Maps 7-4 and 7-5**.

Finally, the following is also important:

- There are no projects proposed in the Stateline Area that will displace or adversely affect large numbers of homes or businesses. Those that will displace any homes or businesses (such as the Beloit west-side bypass), do not appear to concentrate that aspect in minority or low-income areas.
- There have been no complaints or allegations of discrimination. Nor have there been any allegations of inequitable or disproportionate distribution of undesirable effects or desirable benefits pertaining to transportation improvements in the Stateline Area, recently implemented or proposed.

II SUMMARY FINANCIAL PLAN

A Financial Plan was developed for each of the primary modes of transportation covered by this LRP. The following **Chart 7-1** summarizes the modes and provides an overall Financial Plan for transportation improvements and the operation and maintenance of public surface transportation systems in the Stateline area.

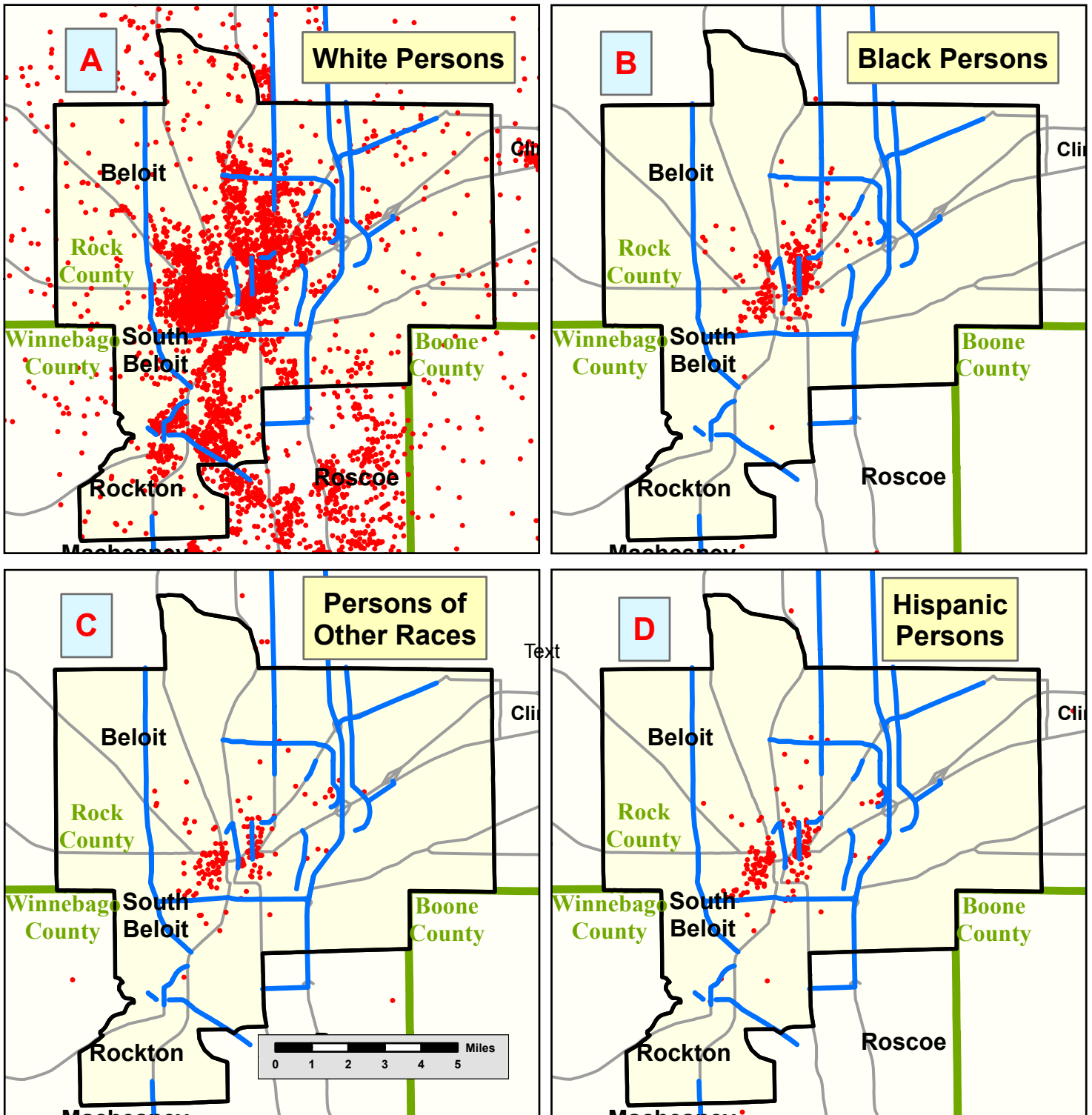
**StateLine Area
Transportation Study**

2035 PLAN

Maps 7-2

**Distribution of Persons by Race
or Major Ethnic Group Compared to
Committed Road Projects / Alternates**

Committed Road Projects / Alternates 1 Dot = 20 Persons



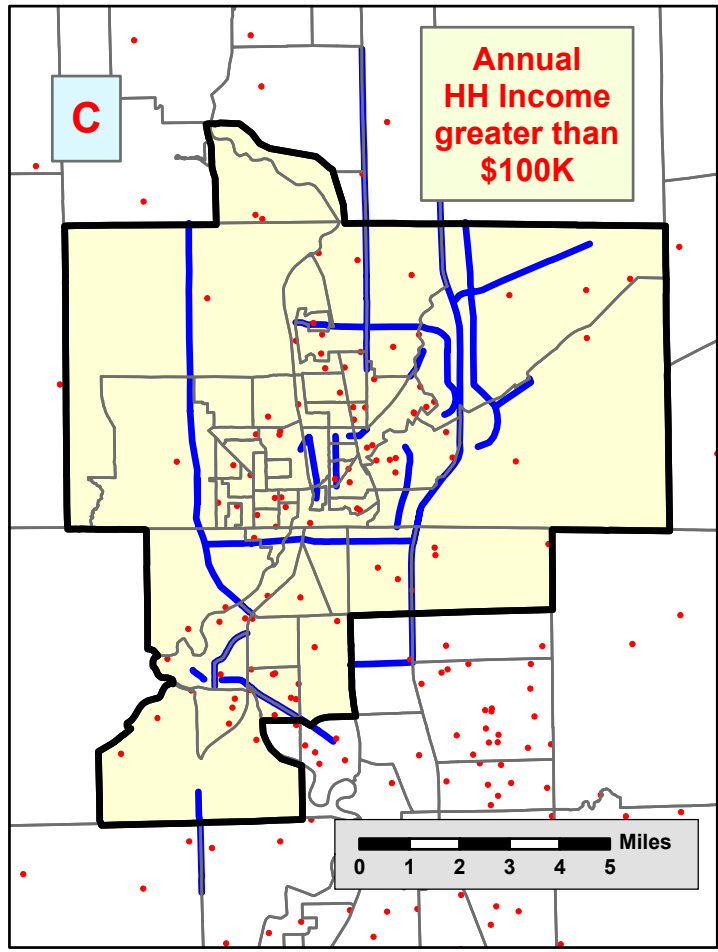
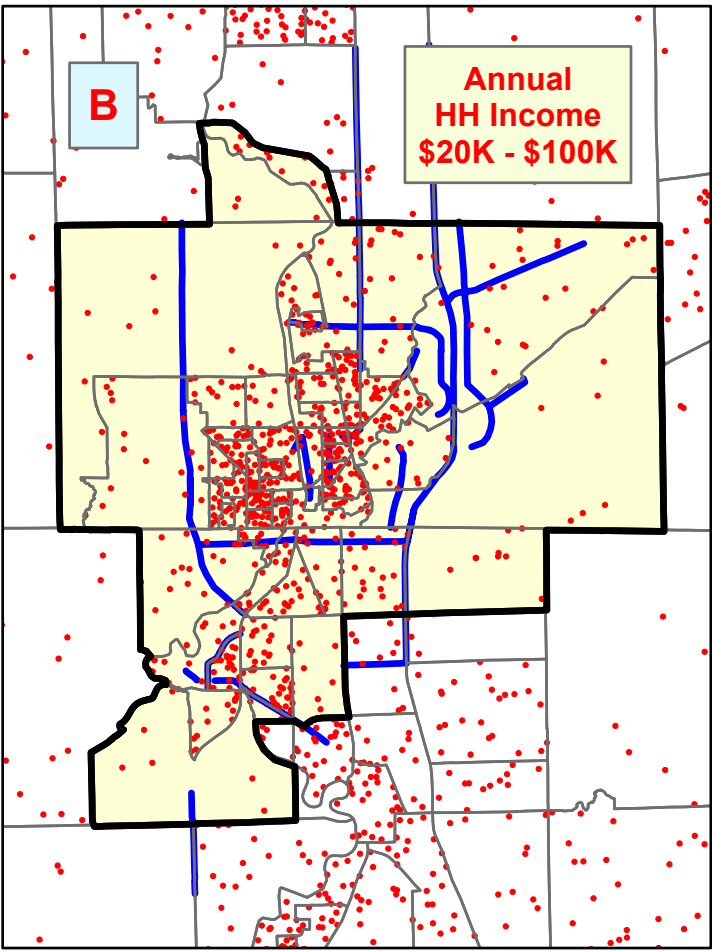
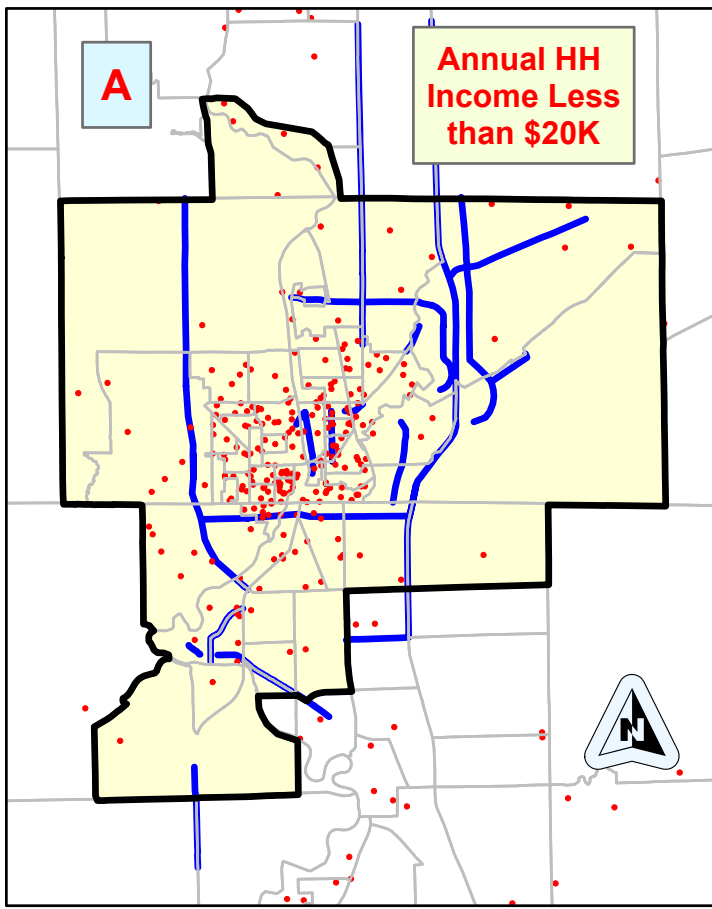
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2035 PLAN

Maps 7-3

**Household Distribution by Annual
Income Ranges Compared to
Committed Road Projects / Alternates**

- SLATS MPA
- Committed Road Projects / Alternates

1 Dot = 20 Households



**StateLine Area
Transportation Study**

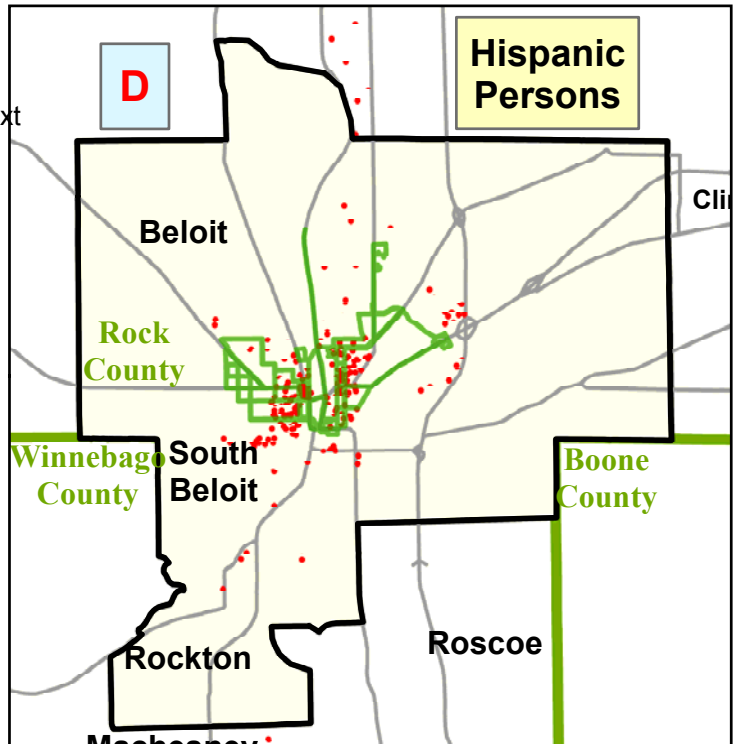
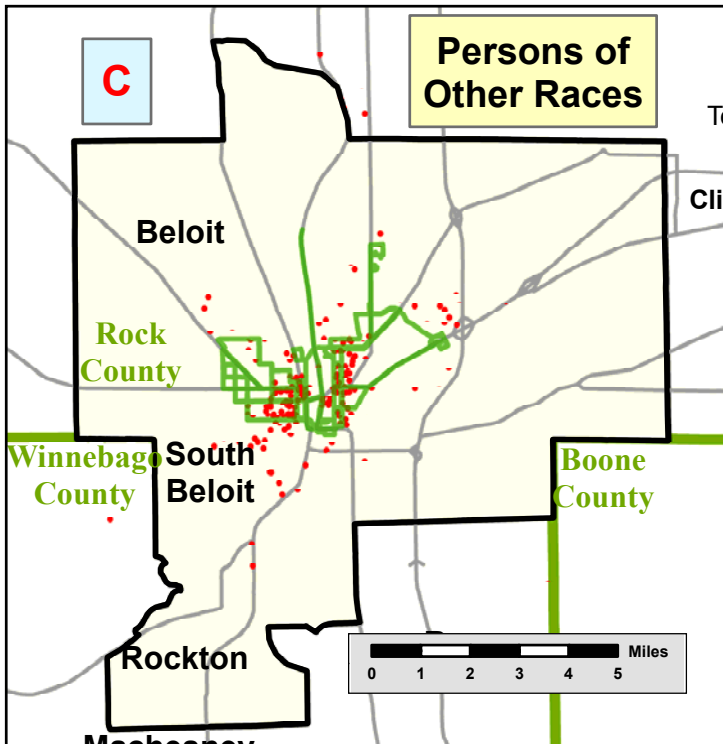
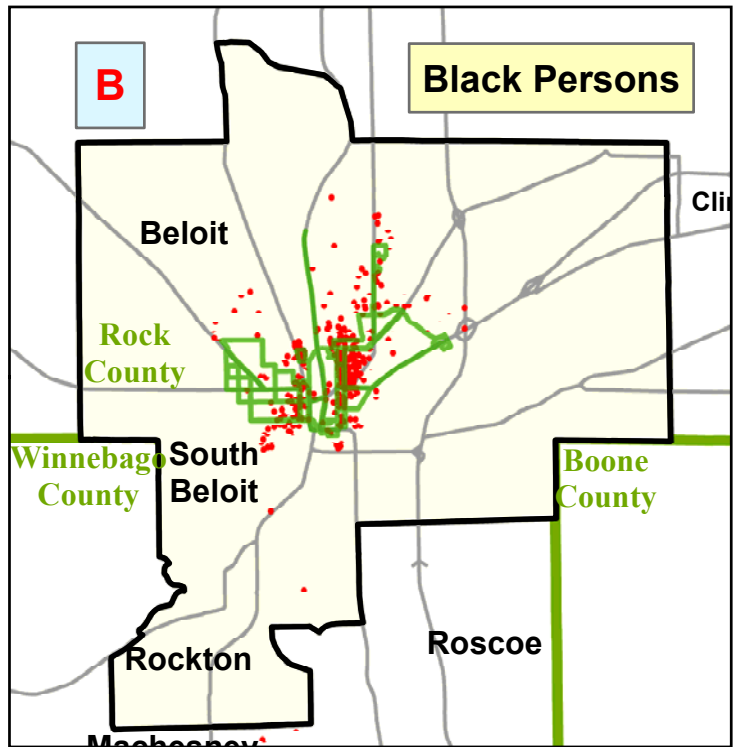
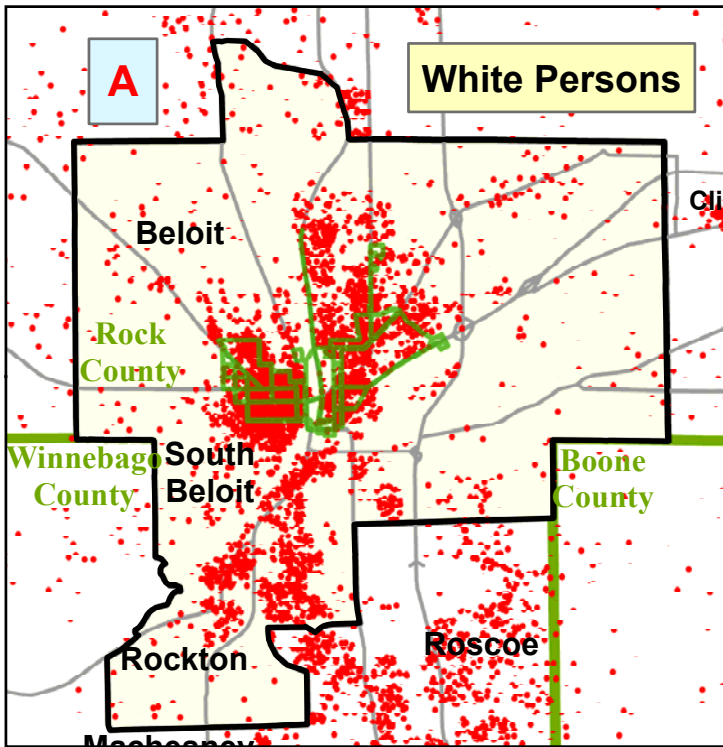
2035 PLAN

Maps 7-4

**Distribution of Persons by Race
or Major Ethnic Group Compared to
PUBLIC TRANSIT ROUTES**

Beloit Transit Routes

1 Dot = 20 Persons



**StateLine Area
Transportation Study**
2035 PLAN

Maps 7-5

**Household Distribution by Annual
Income Ranges Compared to
PUBLIC TRANSIT ROUTES**

- SLATS MPA
- BTS Transit Routes

1 Dot = 20 Households

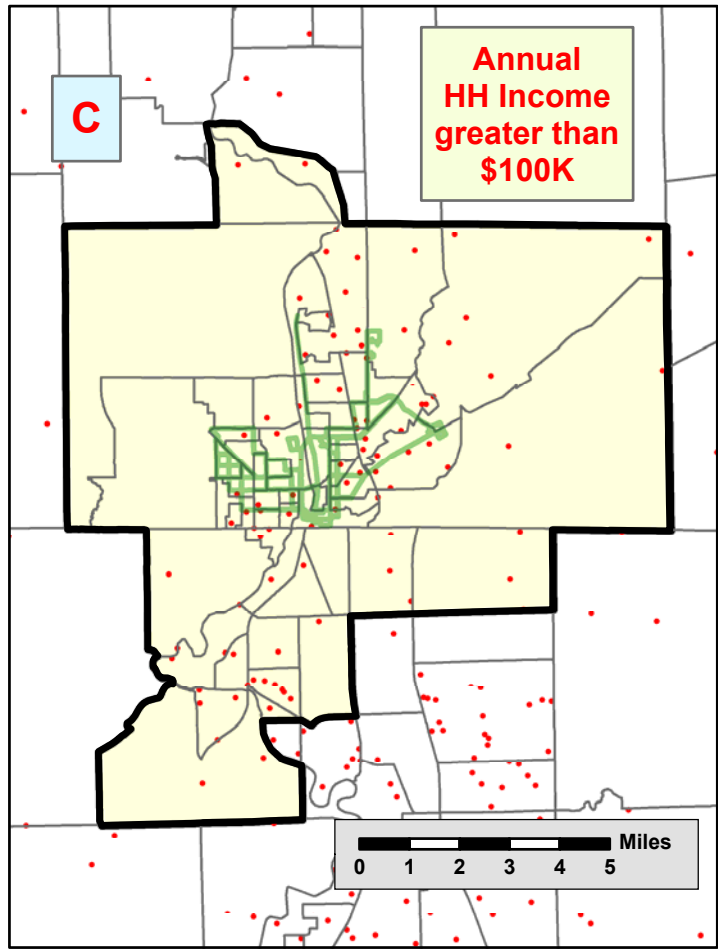
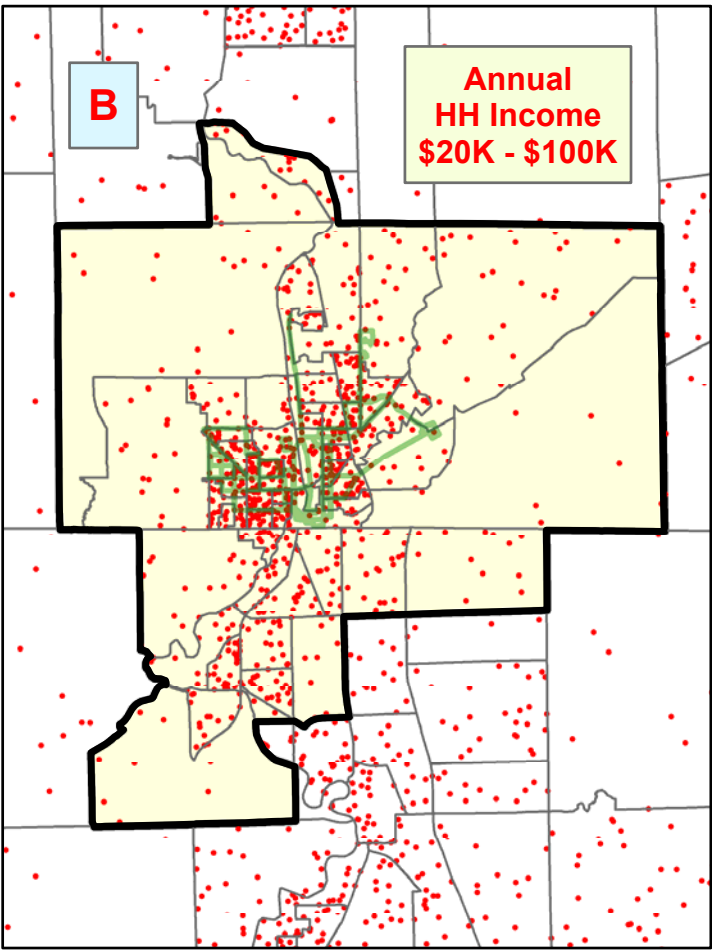
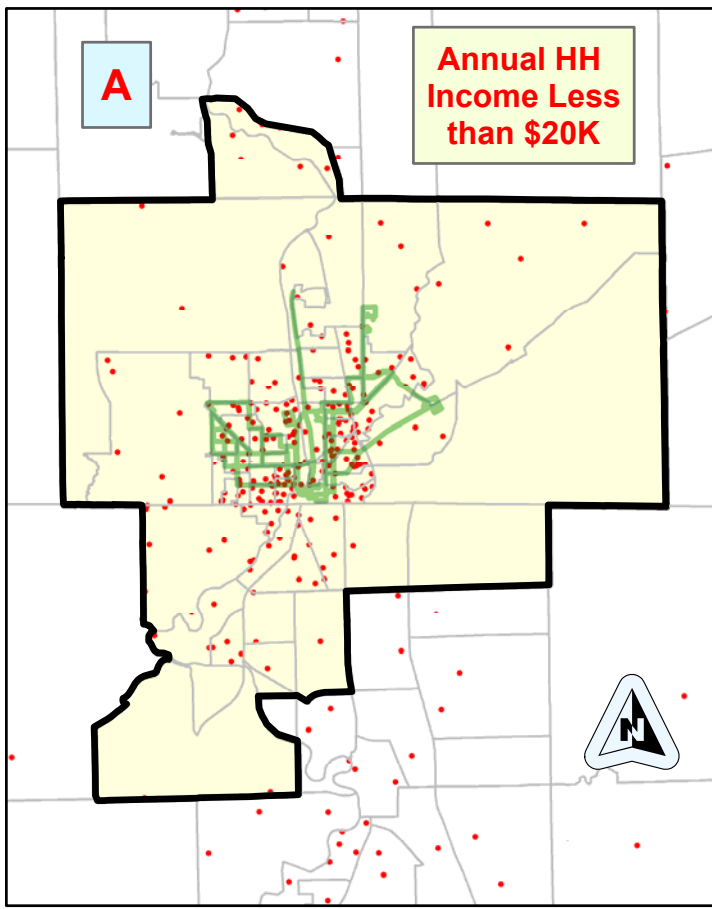


Chart 7-1 Summary Financial Plan

Summary Financial Plan							Chart 7-1	
Element / Description	FUNDING FORECASTS		FUNDING PROGRAMMED or BEING CONSIDERED FOR A USE		Illustrative & Other Possible Projects		Comments	
	Avg Annual	30-year Total	Avg Annual	30-year Total	Avg Annual	30-year Total		
A. ROADWAYS							ALL FUNDING IN \$MILLIONS	
Forecasted Funding	\$21.004	\$630.105					Primarily from Charts 6-19 & 6-20; derived from Charts 6-14a-d, 6-15, 6-16a, & 6-18.	
Preservation	74%	\$15.554	\$466.632					
Expansion	26%	\$5.449	\$163.473					
FY06 TIP, 48 Projects FY07-11				\$4.485	\$134.544			From Chart 6-21. Source: SLATS FY 2006 TIP.
Preservation	18%			\$0.790	\$23.692			
Expansion	82%			\$3.695	\$110.852			
Projects Under Consideration (3 - 7 Projects)						\$0.662	\$19.858	From Chart 6-22. Selection will be part of TIP Development Process and further analysis via the Traffic Simulation Model.
Preservation	0%					\$0.000	\$0.000	
Expansion	100%					\$0.662	\$19.858	
Illustrative Projects						\$15.857	\$475.704	Projects to be considered from Map 6-12, when finalized, progress & selection will depend on rate of growth & other factors in the Planning Process
Preservation	93%					\$14.765	\$442.941	
Expansion	7%					\$1.092	\$32.764	
B. BIKE & PEDESTRIAN SYSTEM								
Forecasted Funding	\$0.418	\$12.540						See Chart 5-6 & 5-7. Plan is for nearly all enhancement funding will be devoted to improving B&P.
1st Priority Projects				\$0.418	\$6.753			Chart 5-7. Approximately 17 years to accumulate funding to implement all 1st Priority projects.
2nd & 3rd Priority Projects						\$0.193	\$5.788	See original Bike & Pedestrian System Plan adopted by SLATS. Regarded as Illustrative Projects, at this time.
Maintenance of System	Adequate funding for normal maintenance of B&P system to come primarily from local sources and included in Part E below. Maintenance of the existing system to take precedence over system expansion and special or unusual maintenance situations may necessitate delay of expansion projects.							
C. TRANSIT (BTS) (WISCONSIN-SIDE)								
Operating Funds	\$1.538	\$46.140						See Charts 4-3 & 4-4.
Capital Equipment Funds	\$0.435	\$13.048						
Operating Needs -Min Viable				\$1.538	\$46.140			No service expansion planned at this time. See Charts 4-3 & 4-4
Capital Needs -Min Viable				\$0.435	\$13.048			
Capital Expenses - Optimal for Continued Current Level of Service						-\$0.127	-\$3.818	Revenue sources being actively sought.
Operating & Capital Expenses for Service Expansions								To be determined as part of the next BTS Transit Development Plan in 6- 7 years
D. TRANSIT (ILLINOIS-SIDE)								
Estimated cost of operating fixed-route and complimentary paratransit service from Rockford to Beloit via servics contracted from RMTD						\$0.734	\$22.028	Based on Estimate provided by RMTD in Fall 2005 plus additional 10% for paratransit needs. See Chart 4-2.
Possible Funding (operating)	\$0.734	\$22.028						Assumes the area becomes fully qualified for Federal & State funding and local jurisdictions of Rockford, Machesney Park, Roscoe, Rockton & S Beloit participate. See Chart 4-2.
Likely Federal & State	\$0.538	\$16.135						
Additional Local & farebox	\$0.196	\$5.892						
Additional available (Cap/Op)	\$0.812	\$0.812						Accumulated Fed & State match. Chart 4-2.
E. GENERAL OPERATIONS & MAINTENANCE EXPENSES / FORECASTS								
Highway & Pathway anticipated Revenus & Expenses	\$6.524	\$212.381	\$6.524	\$212.381				Will increase proportionately if land use changes & growth accelerate. Source: Chart 6-25; Transit O&M included in Operating above.
30-Yr Totals - All Modes & needs		\$937.054		\$412.865		\$519.558		

APPENDIX A

I COMMENTS & RESPONSES TO JULY 2006 VERSION

Beloit Final Draft FHWA Comments 10 August 2006 with SLATS Responses and Plan changes - August 27, 2006

FHWA comments are in this type style.

SLATS responses are in this style. Corrections refer to changes made in the September 1, 2006 Version..

- A. General: There are some misspellings in the document that will not be caught by spell-check. Please review the document for these errors.

Staff re-proofed the document and, hopefully, corrected most of these errors in the September 1, 2006 Version.

- B. Several of the maps show "Statelin Area." You may want to fix the spelling on these maps.

Corrected spelling on maps from "Statelin" to "Stateline".

- C. Page 13 (of 218): In the second paragraph of the TIP discussion, you indicate that the TIP must cover 3 years at minimum. Under SAFETEA-LU requirements, the TIP is now statutorily required to cover 4 years. Please change these references to the new requirements.

Corrected.

- D. Page 69: You mention several transit "trial services" in Section I. (Paragraphs 2 &3) These have dates of 2005. Do you have updated information on these trials?

Those paragraphs updated to reflect current conditions.

- E. Page 72: In the first paragraph under Chart 4-2, you discuss factors that could increase or decrease the costs of extending bus service between Beloit and Rockford. You mention complimentary demand-response. Would this service actually be free to riders, or would it complement the service proposed? (see also statements on page 73)

RMTD was very reluctant to provide an estimate of the cost of paratransit services for several reasons. Among the unpredictable variables: (1) The number of persons eligible and likely to take advantage of the service is hard to estimate. This depends on the definition of disabled persons; whether the area desires to be more liberal in that definition than strictly required by ADA law; and the portion of the eligible population likely to utilize the service. Large numbers of persons in the NE Winnebago County area are economically affluent, compared to other areas

served by RMTD and those persons may not utilize the service the same as persons in less advantaged areas. (2) The area of service is undefined (the minimal 3/4 miles of fixed-routes; the entire incorporated limits of Rockton, Roscoe, and S. Beloit; or all of NE Winnebago County including unincorporated parts of Rockton and Roscoe Townships). (3) The level of service is undefined (door-to-door or curb-to-curb) and the maximum distance persons will be transported (locally within the NE Winnebago County Area, south to the Rockford Area, and/or north to the Beloit Area).

Most certainly, at this time, the service would not be free to riders. Some fare will be required but it is unlikely that this fare will cover the full cost of service. Probably not more than 10-20% of the cost will be recovered by farebox returns, regardless of whether it is complementary to a fixed-route or is a stand-alone service.

The intent of the discussion was to provide a scenario of possible service with some broad "ball-park" ideas of what the maximum costs might be – not to propose a firm plan or program. Further planning and negotiation will be needed (and is currently underway) to develop the actual plan proposed for implementation. Hence, the other notes in Chart 4-2. No changes are will be made to the plan at this time.

- F. Page 86: The reference to "ASHTO" should probably be "AASHTO."

Corrected.

- G. Page 155: The Security discussion is, overall, good. It might be more prudent, however, not to identify bridges as potential targets. Could you indicate, instead, that to prevent attacks on *infrastructure*, it would be inspected as agreed upon by the jurisdictions in the SLATS area? Or something on that order, in order to avoid calling attention to any specific type of infrastructure?

With regard to the surface transportation system, bridges are obvious vulnerable targets for terrorist or malicious activity. Potential perpetrators most certainly recognize this and there is no point in omitting the obvious. Some bridges, of course, are more vulnerable or potentially disruptive targets than others and we wouldn't want to point those out. However, because there are so many bridges, it is difficult for law enforcement alone to constantly monitor them. Hence, the suggestion that the general citizenry be enlisted to help with the monitoring. That can't happen unless we tell them what to monitor. There may be other possible targets where monitoring assistance from the general public may be encouraged. We leave the identification and/or public edification of other vulnerabilities to the expertise and discretion of area law enforcement officials. No change to the text is advised.

- H. Page 156: Under XV—ITS, you may want to note that the WisDOT SW Region also has a regional architecture. Areas north of the state line should consult that architecture before implementing any ITS projects.

Reference to WisDOT ITS Architecture added to that section.

- I. Page 163: There's a big gap in the Environmental Justice analysis. The impacts of the projects on areas of high (for the area) minority and/or low-income populations should be analyzed. At the very least, identify projects from the LRP that may impact those populations, and identify whether there is access to major facilities (medical, post-secondary education, employment, retail, and recreation), and modes that serve those areas. There are no maps of those areas with high proportions of minority and/or low-income popula-

tions, and nothing that indicates those projects in the vicinity. Many of the maps used in the TIP may be of value in this discussion. It is not sufficient to say that the analysis will come later. The content of the plan must indicate whether there may be an impact, not necessarily how it would be addressed. The mitigation of any project would need to be identified when that project got to the environmental analysis.

Four additional map sets and a lengthy discussion addressing this issue is inserted in Chapter Seven, Section I-E.

- J. Page 191, Bullet point 2: There does not appear to be a complete sentence here and the thought is difficult to follow.

There were words omitted. The sentence was corrected to read: "Projects already included in the SLATS FY 2006 TIP, which extends through 2011, are certain enough to be included in this Plan, although the timing may be adjusted."

II AUGUST 21, 2006 OPEN HOUSE MINUTES

**To: STATELINE AREA TRANSPORTATION STUDY
Policy and Technical Committees**
From: Robert Soltau, Coordinator of Planning Services
Date: August 22, 2006
In Re: Summary of the Open House and Public Hearing on August 21, 2006

A Public Open House and Public Hearing was held on August 21, 2006 at the Rotary River Center in Beloit from 4:00 PM to 7:00 PM with a presentation at 6:00 PM on each of the following items:

- 1) The Stateline Area Transportation Study Draft Long-Range (2006-2036) Plan (LRP) Transportation Plan for the Beloit Urbanized Planning Area
- 2) A Resource Agency Review of the LRP for Purposes of Identifying Conflicts and Issues Between the Plan and Projects and Environmentally Sensitive Areas and Related Concerns
- 3) A Beloit Transit System Draft Fare Policy
- 4) A Beloit Transit System Operational Proposal for a Bus Fare Adjustment/ Increase

Official notice was printed in the Beloit Daily News, I talked about the meeting on the Beloit Radio Station WCLO on the morning of the meeting, and announced at the SLATS Technical and Policy Committee meetings and the RATS Technical Committee that the meeting would be held. An announcement was mailed to 22 State and Federal Resource Agencies which is the entire list of Resource Agencies provided by the Southeast Wisconsin Regional Planning Commission as well as all the contacts provided through the Northwest Illinois - IDOT District 2, FHWA Illinois Division Resource Agency Coordination meeting held in Rock Island. The announcement was also mailed to the 51 contacts on the SLATS agenda only mailing list as well as the 42 contacts on the SLATS Policy and Technical Committee mailing list.

It should be noted that all communications point out that: 1) The Draft Long-Range Plan could be found at the City of Beloit website at <http://www.ci.beloit.wi.us>, 2) The LRP could also be found

at the information desk at local libraries, 3) The Fare Policy and Proposal for Adjustment/Increase could be found at beloittransit.com or by contacting the Beloit Transit System.

At the event there were copies of the: 1) Long-Range Plan (L-RP), 2) Summaries of the L-RP, 3) Fare Policy Proposal, and 4) Proposal to Adjust/Increase the Fare, and 5) Forms where people could present their views in writing. Also on display were: 1) Bike/Pedestrian Project Maps, 2) Projects shown in relation to environmentally sensitive areas and income areas, and 3) SLATS boundary and Functional Classification maps.

Two SLATS representatives were present at the Open House as well as two Beloit Transit System representatives. Four Non-SLATS government representatives attended.

The sign-in list of those who attended is attached. Other than local government agency people who attended, there were 3 citizens who stopped by. One person represented the League of Women Voters, and another is a former Beloit City Council member who came with a friend. The public presentation was given on a one to one basis with the citizen participants as they arrived.

Concerning the Long-Range Plan, the only comments made were: 1) Concern about widening White Street which is not a proposed project, and 2) Discussion of the Beloit Transit System (BTS) Downtown Transfer Center. There was a general discussion with the government agency representatives about the Bike Plan, and Long-Term development of the roadway system.

Concerning the BTS Fare Policy Proposal and Fare Adjustment/Increase, there were no comments.

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