Section C

TRANSPORTATION ELEMENT

EXECUTIVE SUMMARY

In 1977, SWWRPC staff and representatives from its five member counties conducted a thorough analysis of the region's transportation system. The report's goal was to: serve as a resource for the residents of southwest Wisconsin to use in analyzing transportation proposals; inform readers of the many varied and complex interrelationships evident in any transportation system; help determine where the emphasis should be placed in planning activities; and to provide a more comprehensive outlook when dealing with transportation problems.

In the intervening years, other transportation plans and reports have also looked at Iowa County and the region, resulting in many improvements to the transportation system.

This document is structured to provide historic context (see Map C.1 for early transportation routes in southwest Wisconsin) and to provide information on local issues within the transportation framework. Although many issues are presented in a regional context, the assertion made in the SWWRPC 1972 *Technical Report No. 4: Prospective for Regional Transportation Planning* holds true today: "It should be emphasized, however, that regional planning is not a substitute for local planning. On the contrary, regional planning is intended to strengthen local planning efforts by providing a more comprehensive base of information in a regional context in order to facilitate rational private and public decisions on the local level."

The advantage of using a regional context to inform local transportation planning is that the relationship to scale is reinforced. From this perspective, the Transportation Element provides historic and regional context, considers local transportation needs, and based on local input provides a 20-year jurisdictional plan that can serve as a resource guide and implementation tool.

Wisconsin State Statute 66.1001(2)(c)

(c) Transportation element.

A compilation of objectives, policies, goals, maps and programs to guide the future development of the various modes of transportation, including highways, transit, transportation systems for persons with disabilities, bicycles, electric personal assistive mobility devices, walking, railroads, air transportation, trucking and water transportation. The element shall compare the local governmental unit's objectives, policies, goals, and programs to state and regional transportation plans. The element shall also identify highways within the local governmental unit by function and incorporate state, regional and other applicable transportation plans, including transportation corridor plans, county highway functional and jurisdictional studies, urban area and rural area transportation plans, airport master plans and rail plans that apply in the local governmental unit.

Beginning on January 1, 2010, any program or action of a local governmental unit that affects land use shall be consistent with that local governmental unit's comprehensive plan, including ... (m) An improvement of a transportation facility that is undertaken under s. 84.185.

TRANSPORTATION POLICIES

The following are the transportation policies (not in order of priority) for the Town of Arena.

- **Local Transportation Infrastructure and Issues**
  - Work with the Town of Arena and WisDOT to create and promote a "Park & Pool" ride lot to support and increase carpooling.
  - Add bicycle improvements to targeted town roads to improve safety, connectivity, and support tourism as a part of economic development.
  - Support future passenger/commuter rail.

- **Local Economic Development**
  - Increase the transportation system's ability to support tourism as a part of economic development.

- **Aesthetics**
  - Consider nominating qualifying road(s) for the state's Rustic Roads program.

- **Accessibility and Special Needs Users**
  - Support the development and promotion of paratransit services for local residents.

- **Efficiency and Safety**
  - Support efforts to mitigate traffic congestion on USH 14.
  - Improve safety at blind, unmarked intersections.

- **Cost**
  - Explore and possibly establish, a Capital Improvements Program for major projects.

TOWN OF ARENA

In reviewing the transportation survey responses that had been completed by residents, the Town of Arena's Plan Commission identified the primary issues and concerns for this plan.

- The most satisfactory part of the Town of Arena's existing transportation system was identified as its well maintained paved roads.

- The least satisfactory aspect of the community's transportation system is increased traffic congestion and the impact that this has on local police.

- The aspect of the community's transportation system that respondents felt was most important to improve was related to safety—specifically blind, unmarked intersections.

In addition, Plan Commission respondents identified transportation projects or issues that they foresee in the jurisdiction:

- Within 10 Years: USH 14 improvements (passing lanes and resurfacing).
- Within 20 years (planning window for the comprehensive planning process): No response.

The next section looks more closely at the locally identified transportation issues. In reviewing the transportation survey responses that had been completed by residents, the Town of Arena's Plan Commission respondents ranked the following transportation issues as having the highest priority for meeting local needs (#1 is the highest priority ranking):

1. **Transportation safety**
2. **Connectivity with the larger transportation system**
3. **Supporting economic development**
4. **Tourism (including preservation of rural views)**
5. **Freight mobility**
6. **Agricultural-vehicle mobility**
7. **Mobility needs of the elderly and disabled**
8. **Recreational transportation uses**

These issues thread throughout the Town of Arena's plan—including its housing, economic development, land use, and implementation elements. Although the scope of this plan is local, it recognizes that local planning is part of the mosaic that should inform WisDOT's vision and priorities for budgeting and planning. WisDOT also acknowledges the complexity of balancing these issues:

> *"Wisconsin's healthy economy has also caused increased commuter and commercial demand on local roads and streets. Much of the state's 100,000 miles of local roads are facing the same aging infrastructure needs as the state highways. Furthermore, an ever-increasing number of local roads are experiencing congestion problems as communities continue to grow. Because it is essential that state highways and local roads and streets work in unison, the state has to continue to provide funding to local units of governments to help support construction, improvement and maintenance of locally owned highways, roads, streets and bridges. As is the case with the state highway system, it is likely that demands on local roads and streets will continue to grow in the future (WisDOT)."*

Like WisDOT, local governments grapple with these issues and constraints as they make decisions related to housing, development, schools, roads, and funding. A report entitled *The Evaluation of Statewide Long-Range Transportation Plans*, examined Wisconsin's Transportation Plans and concluded:

> *"Population growth alone is a challenge that is anticipated in many states. Wisconsin anticipates a 13 percent growth over the plan period [through 2020]. This will create additional demand on existing transportation facilities, along with requiring additional services. This need for services will be compounded by the fact that both its elderly and working age populations will be increasing, with their separate transportation needs" (prepared for the FHWA and US DOT, April 2002)."*

2000 US Census for the Town of Arena

Table C.1, drawn from transportation-related responses, is included because it provides some insights related to possible future needs.

- The age of residents is important—those under 15 do not drive; those over 62 may, at some point, be users of shared-ride transportation services. Data for Vehicles Available is also included.
- Employment Status and Work-at-Home numbers provide some perspective on commuting patterns, as does information on Commute Time and Time Leaving Home To Go To Work.
- Information on the Age of Housing Stock is included because housing construction yields increased trip generation and its impacts should be considered.

What future needs are indicated? How do they overlap? It can be difficult be difficult to answer these questions and it is more difficult without public input and participation. For WisDOT, this is not simply a goal—it's an obligation. As required by federal law**,** *"Environmental Justice"* requires public involvement efforts to reach out to minority and low-income populations.

Why? Because historically the interests of these groups have been ignored in transportation decision-making. In Iowa County a four-person household is considered to be *low-income* if it has a total annual income of $18,100 or less/year. According to the 2000 U.S. Census, 7.3 percent of Iowa County's residents are in this income category and WisDOT is required to make every effort to ensure that their input helps to inform transportation planning decisions.

Table C.1 – 2000 US Census Data

POPULATION	T Arena **1509**	V Arena **623**	T Ridgeway **590**	T Wyoming **324**	Iowa Co. **22,780**	Wisconsin **5,363,675**
AGE						
Percentage of the population under 15 years	19.8%	23.8%	23.7%	19.4%	22.0%	21.0%
Percentage of the population age 62 or older	12.2%	9.8%	12.4%	9.3%	15.5%	15.4%
Median age (in years)	38.2	32.6	38.0	42.2	37.1	36.1

Table C.1 (cont.) – 2000 US Census Data

EMPLOYMENT STATUS						
Employed percentage in the workforce (age 16 and older)	72.0%	77.2%	72.7%	75.9%	72.5%	65.8%
Unemployed percentage in the workforce	3.9%	1.9%	4.5%	3.9%	3.0%	3.2%
WORK TRANSPORTATION/CARPOOLING						
Percentage residents in the labor force working at home:	7.8%	2.5%	16.4%	11.5%	8.4%	3.9%
Percentage who drove to work alone	76.3%	78.0%	71.1%	75.9%	74.6%	79.5%
Percentage who carpooled	13.8%	15.8%	10.4%	11.5%	12.6%	9.9%
2-person carpool	10.8%	10.7%	9.1%	5.2%	9.5%	8.1%
3-person carpool	2.4%	3.9%	0.6%	3.7%	1.8%	1.2%
4-person carpool	0.0%	0.6%	0.0%	0.0%	0.6%	0.4%
5- or 6-person carpool	0.0%	0.6%	0.0%	0.0%	0.2%	0.2%
7-or-more-person carpool	0.6%	0.0%	0.6%	2.6%	0.4%	0.1%
Public transportation	0.2%	0.0%	0.9%	0.0%	0.2%	2.0%
Motorcycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Bicycle	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%
Walked	1.7%	2.3%	1.3%	1.0%	3.8%	3.7%
Other means	0.2%	1.4%	0.0%	0.0%	0.4%	0.4%
COMMUTE TIME TO WORK						
Less than 10 minutes	8.6%	12.1%	7.9%	13.0%	25.7%	20.7%
10-14 minutes	13.2%	9.8%	16.2%	13.6%	13.8%	18.4%
15-19 minutes	7.9%	7.8%	21.4%	14.8%	11.2%	17.0%
20-24 minutes	8.3%	8.4%	10.9%	13.6%	10.7%	14.4%
25-29 minutes	7.8%	3.8%	0.8%	5.3%	4.8%	6.2%
30-34 minutes	12.1%	14.5%	2.3%	3.0%	8.2%	9.6%
35-44 minutes	16.8%	11.3%	8.3%	3.6%	7.3%	4.7%
45-59 minutes	20.6%	19.4%	22.9%	16.0%	9.8%	4.6%
60-89 minutes	4.2%	6.4%	7.5%	13.6%	6.3%	2.6%
90 or more minutes	0.5%	6.6%	1.9%	3.6%	2.2%	1.7%
Mean travel time to work (in minutes)	**29.5**	**39.5**	**29.5**	**33.9**	**24.7**	**20.8**
TIME LEAVING HOME TO GO TO WORK						
5:00 to 5:59 a.m.	14.9%	17.3%	16.9%	15.4%	12.5%	9.6%
6:00 to 6:29 a.m.	14.9%	19.7%	13.5%	9.5%	12.0%	8.9%
6:30 to 6:59 a.m.	10.3%	15.3%	7.5%	10.7%	11.4%	11.7%
7:00 to 7:29 a.m.	20.1%	9.8%	16.9%	21.3%	15.5%	14.3%
7:30 to 7:59 a.m.	14.2%	9.8%	15.8%	17.2%	15.6%	15.7%
8:00 to 8:29 a.m.	7.8%	2.9%	6.0%	7.1%	7.1%	8.0%
8:30 to 8:59 a.m.	2.3%	0.3%	1.5%	1.2%	2.5%	3.7%
9:00 to 11:59 a.m.	2.5%	2.0%	4.9%	4.7%	5.3%	6.7%
12:00 to 3:59 p.m.	3.4%	5.5%	5.3%	1.8%	6.7%	9.0%
All other times	9.6%	17.3%	11.7%	11.2%	11.4%	12.3%

Table C.1 (cont.) – 2000 US Census Data

HOUSING STOCK						
Housing constructed between1990 to March 2000	18.5%	36.0%	24.8%	22.3%	17.6%	16.4%
1940 to 1989	55.7%	41.9%	40.2%	35.5%	45.7%	60.0%
1939 or earlier	25.8%	22.1%	35.0%	42.2%	36.7%	23.6%
VEHICLES AVAILABLE						
None	1.4%	6.1%	1.0%	3.7%	4.5%	7.9%
One	18.0%	21.3%	14.6%	12.6%	26.7%	32.5%
Two	44.1%	47.1%	54.4%	54.1%	43.6%	41.5%
Three or more	36.4%	25.4%	30.1%	29.6%	25.2%	18.1%
HOUSEHOLD INCOME						
Median reported 1999 household income (in dollars)	$51,042	$45,870	$50,938	$48,438	$42,518	$43,791

LOCAL TRANSPORTATION INFRASTRUCTURE & ISSUES

The initial comprehensive planning survey yielded these responses from the residents of the Town of Arena:

- Eighty-seven percent agreed or strongly agreed that Iowa County's overall road network (roads, streets, and highways) meets the needs of its citizens.
- Seventy-eight percent agreed or strongly agreed that the condition of local roads in the Town of Arena is adequate for intended uses.

Transportation Modes

Plan Commission respondents were asked to identify the transportation modes that currently use public infrastructure within the Town of Arena (in addition to personal cars, trucks, and motorcycles). They are identified below with an **X**.

MODE		Used	Not Used
Travel	Carpooling	X	
	Para-transit (shared-ride, taxi)		X
Agriculture	Tractors	X	
	ATVs (all terrain vehicles)	X	
Recreation	Bicycles	X	
	ATVs	X	
	Horse-drawn wagons	X	
Freight	Trucking	X	
	Rail	X	
	Air		X

Existing Roadways

The Town of Arena has 103.66 miles of roads:
- 25.88 miles of County Trunk Highways
- 77.78 miles of Local Roads

The most heavily trafficked is the USH 14 corridor, which has the following designations:
- National Highway System (NHS) route
- WisDOT *Corridors 2020* connector
- Principal arterial, connecting traffic from La Crosse and Richland Center to Madison
- Designated passing lane corridor
- Designated long truck route

USH 14 – Annual Average Daily Travel (AADT)
- Year 2003 7,239
- Year 2022 9,283

Level of Service (LOS) USH 14 (current conditions)
Year 2003 3.67 = LOS C
Year 2022 4.19 = LOS D

LOS C (3.01-4.0) = stable traffic, back-ups are beginning to occur
LOS D (4.01-5.00) = lowest acceptable rating for an intersection
LOS E (5.01-6.00)
LOS F (>6.01) = traffic is extremely restricted, many times experiencing gridlock.

Low level of service rates, higher crash rates, substandard pedestrian and bicycle accommodations, and insufficient turn lane lengths are all indications of intersections that are over loaded with vehicles. Sections of USH 14 east of the Town of Arena are rated as LOS D. USH 14 through the Town of Arena has not experienced a crash rate that exceeds the critical rate (one standard deviation above the average rate). However, USH 14 east of the Town of Arena is classified as an area identified by Meta Manager Data as possible warranted capacity expansion. USH 14 through the Town of Arena is an area identified by Meta Manager Data as a possible passing lane corridor.

USH 14 is the major east-west connector in northern Iowa County linking the area to both Richland Center and Madison. As the demographic data in this plan indicate, many residents of both the Town of Arena and the Village of Arena commute to their work. U.S. Census data from 2000 indicate that 13.8 percent of Town of Arena residents carpool to work and 15.8 percent of Village of Arena residents' carpool (both are higher percentages than that of Iowa County or the State of Wisconsin). For more information, see Maps C.2, C.3, and C.4 and Tables C-2a and C-2b at the end of this Section.

PRIORITIES & FUTURE PROJECTS - INFRASTRUCTURE

1) Work with the Village of Arena and WisDOT to create and promote a "Park & Pool" ride lot to support and increase carpooling or vanpool use.
In rural areas, as the report *Rural Ridesharing* noted, "Because people usually live farther apart in rural areas, central meeting places are often designated for people to drive to and leave their cars ito join ridesharing arrangements. These can be formal park-and-ride lots, such as those set up along major highways by State and local governments or, as more often is the case in rural areas, informal arrangments made by members of a car or vanpool who park in cleared areas near a mutually convenient road or intersection. Arrangements can also be made with local churches or shopping centers to use their parking lots during the day for free or for a minimal charge."

Informal Park & Ride lots currently exist along USH 14. In their responses, both the Town of Arena and Village of Arena Plan Commission respondents expressed interest in establishing a more formal facility. Earlier, WisDOT District 1 pinpointed Mazomanie as a potential Park & Ride site. However, a "Park & Pool" facility—to support carpooling—in or near the Village of Arena merits further study. Depending upon its location, it could also support bicycle tourism by providing a convenient location for riders to leave their cars in the area near the Wisconsin River, Tower Hill State Park, and Frank Lloyd Wright's Taliesin. See Map C.5 at the end of this Section for more information.

POSSIBLE NEXT STEPS: discussions with the Village of Arena, Iowa County, and WisDOT to 1) identify a possible location—whether public, private, new, or use of an existing facility; 2) resources for implementation, if necessary; 3)if appropriate, develop a possible survey to determine likliy use; 4) if implementation is to be pursued, develop a marketing/promotions program.

2) Add bicycle improvements to targeted town roads to improve safety, connectivity, and support tourism as a part of economic development.
Of Town of Arena survey respondents who expressed an opinion, 53 percent indicated that they agreed or strongly agreed that there should be more biking and walking lanes along public roadways.

The *Bicycle Trails & Road Improvemensts* section of this document includes the WisDOT/Bicycle Federation of America (BFA) current "Bicycling Conditions" map for Iowa County and WisDOT's "Bicycling Conditions Assessment with Planned State Highway Priority Corridors and Key Linkages" for Iowa County.

The map of current conditions indicates that USH 14 is "high volume; undesirable conditions for bicycling." Although the planned improvements to USH 14 will make the roadway safer, it will not be rated as a desirable route for bicyclists. Nonetheless, connectivity options are limited and a portion of USH 14—from the Dane County line to the Town's Village Edge Road—is slated for planned state highway bikeways priorities and linkages improvements. The WisDOT plan proposes that the Town of Arena consider Village Edge Road, Helena Road, and School Road as potential local bicycle route connections for this segment. Bicyclists would re-enter USH 14, with appropriate improvements planned by WisDOT, in order to cross the Wisconsin River. County Road C, which connects to Tower Hill State Park, is rated as "moderate conditions for cycling." WisDOT also proposes potential local bicycle route connection improvements to the Town of Arena's Golf Course Road, High Point Road, Bennett Road, Coon Rock Road, Amacher Hollow Road (connecting with a portion of County H and HH), and Knight Hollow Road (connecting with County K and KK); these County linkages are currently rated "best conditions for bicycling" by WisDOT/BFA. See Maps C.6 and C.7 at the end of this Section for more information.

The Town of Arena's Plan Commission respondents reviewed these maps and expressed support for adding these bicycle improvements when local road improvements are made. They also expressed support for including bicycle lane improvements when making other local road improvements. Given the rural nature of the Town of Arena, respondents indicated that sidewalks in new and/or existing residential development are not applicable but designated lanes would improve safety for both bicyclists and pedestrians.

NEXT STEPS: 1) work with appropriate stakeholders and resources—Village of Arena, Iowa County, WisDOT District 1, WisDOT's Bicycle & Pedestrian Coordinator—to further explore the idea; 2) determine schedule for work on these roads and estimate costs for the additional improvements; determine if improvements can be funded locally and what other possible funding options may be (for example, the next funding cycle for the Statewide Multi-Modal Improvement Program (administered by WisDOT using federal funds) will be in 2006.

3) Support future passenger/commuter rail.
WisDOT's draft 2003 Wisconsin Rail Issues & Opportunities Report includes a related section, which explains: "Commuter rail refers to passenger service that operates between and within metropolitan and suburban areas, connecting those areas with large business and/or urban centers. Commuter rail service usually operates during peak travel times with limited stops, and usually operates in conjunction with other transit modes as part of a regional transit system. Commuter rail service operates primarily on existing railroad tracks."

As explained in the Rail freight section of this document, the trackage through the Town of Arena is owned by the Wisconsin River Rail transit Commission (WRRTC), of which Iowa County is a member. The rail commission's operator is currently the Wisconsin & Southern Railroad (WSOR). In 2001, the City of Middleton did launch a short-lived passenger train on this line that targeted recreational riders.

One of the five commuter rail corridor studies, mentioned in the WisDOT draft report, was Transport 2020, which looked at Dane County/Greater Madison Metropolitan Area. Several groups in Madison and Dane County are working together to develop this passenger rail system and seeking funding from the state and other sources. One of the proposed routes would extend to Mazomanie.

West of the Town of Arena, tthe Village of Spring Green has also, as a part of its comprehensive planning visioning process, expressed interest in: "Preserv[ing] the rail corridor and promot[ing] its use by both freight and potential potential passenger and specialty tourist service" (*Home News*, 4 February 2004).

NEXT STEPS: The Town of Arena may want to ally itself with other interested jurisdictions, stay informed, and find opportunities to indicate its support.

LOCAL ECONOMIC DEVELOPMENT

Transportation is a factor in location decisions of commercial and industrial development. In locations where the development is included in local plans, communities should also assess their transportation infrastructure and determine what future improvments may be needed. Communication, during this planning process and when unforeseen development opportunities arise, should include WisDOT, adjacent governmental units, as well as interested parties and other stakeholders. The value of local plans is that they inform county, regional, and state plans and this coordination can help to identify the transportation facilities needed by future development.

The Town of Arena's Plan Commission respondents were asked whether their existing local transportation system does a good job of meeting the needs of the jurisdiction's economic development goals related to

- Agriculture Yes
- Retail/Commerce Yes
- Shipping Yes
- Manufacturing Yes
- Tourism No

Given the Town of Arena's location along the Wisconsin River and its proximity to regional traffic generators including Historic Spring Green, Frank Lloyd Wright's Taliesin, and American Players Theatre, tourist travel has tremendous potential to buoy the local economy. Bicycle-oriented improvements (explored above) are one aspect of this.

ENVIRONMENT

Transportation and construction projects can impact the natural environment around a project area. When making short- and long-term transportation decisions, it is important to adequately address environmental implications on air quality and energy consumption; agricultural lands; and wetlands and wildlife. To minimize these effects, efforts to preserve the environment of a project area can include:

- Wetland mitigation (preservation, creation, enhancement and restoration)
- Prairie restoration
- Archeological work
- Hazardous waste management
- De-icing procedures and salt reduction
- Storm water management
- Noise monitoring and noise walls
- Nesting boxes
- Erosion control

One aspect of this is to manage stormwater run-off from transportation facilities. Additionally, transportation improvements and community development decisions should be coordinated and the impacts that each has on the other should be considered.

According to WisDOT District 1, sensitive environmental areas are located along USH 14 in the northwestern corner of the Town of Arena at the Wisconsin River Crossing & Helena Marsh and further east along USH 14 where there are multiple dry prairies.

The Town of Arena expressed interest in learning more about these areas and about both impacts and ways to reduce damage to the environment. For more information on this topic, see Appendix C-1 and Section E, Agricultural, Natural, and Cultural Resources Element.

AESTHETICS

The Town of Arena is located in an area of significant natural beauty, which can be savored from its rural roads or on the Wisconsin River. As previously noted, several attractions bring people to the area visit and to live. The conundrum is how to balance growth and to maintain the very qualities that attract people in the first place.

There is a Scenic Easement west of the Village of Arena along USH 14 near the Lower Wisconsin Riverway. The easement serves to perpetuate the rural character of this portion of the highway. Decisions about siting housing and business/commercial development elsewhere in the town should seek balance, preserving and even strengthening existing assets.

For the Town of Arena's truly rural roads, the state's Rustic Roads program may be an appropriate designation to seek. Respondents expressed some interest in learning more about this program.

PRIORITIES & FUTURE PROJECTS - AESTHETICS

Consider nominating qualifying road(s) for the state's Rustic Roads program.

NEXT STEPS: According to WisDOT, to qualify for the Rustic Road program, a road:

- should have outstanding natural features along its borders such as rugged terrain, native vegetation, native wildlife, or include open areas with agricultural vistas which singly or in combination uniquely set this road apart from other roads.
- should be a lightly traveled local access road, one which serves the adjacent property owners and those wishing to travel by auto, bicycle, or hiking for purposes of recreational enjoyment of its rustic features.
- should be one not scheduled nor anticipated for major improvements which would change its rustic characteristics.
- should have, preferably, a minimum length of 2 miles and, where feasible, should provide a completed closure or loop, or connect to major highways at both ends of the route.
- A Rustic Road may be dirt, gravel or paved road. It may be one-way or two-way. It may also have bicycle or hiking paths adjacent to or incorporated in the roadway area.
- The maximum speed limit on a Rustic Road has been established by law at 45 mph. A speed limit as low as 25 mph may be established by the local governing authority.

For more information, see Appendix C-2.

TRANSIT, ACCESSIBILITY, and SPECIAL NEEDS USERS

As noted elsewhere in this document, options are limited. Although Greyhound bus service travels on the USH 14 corridor and makes stopes both east and west of the Village of Arena, there are no stops in Iowa County. Some commuters utilize the State of Wisconsin Van Pool Service, which currently operates two vans that make trips to Madison with pick-up points in Arena, Mazomanie, Black Earth, and Cross Plains.

Although limited, transportation for the elderly and disabled is provided by the Iowa County Commission on Aging. WisDOT's report *Transportation in Wisconsin: a Vision for the 21st Century* projects that by 2020 the number of state residents over 65 will increase by more than 50 percent. Wisconsin has funded a share of local transit operating costs since 1974. Today, state aid is the largest source of funding for Wisconsin's 69 public transit systems—covering more than 40 percent of eligible operating costs. These transit operating aids topped $251 million in the 2003-05 biennium. According to WisDOT, Wisconsin is ranked 7th nationally in the level of state support for transit operating costs. However, as the *Transit* section of this document indicates, the state's aging rural population will be likely to require more transportation options.

PRIORITIES & FUTURE PROJECTS

Support the development and promotion of paratransit services for local residents.

NEXT STEPS: Work with the Iowa County Commission on Aging to better-promote existing services and to support expanded services.

LAND USE

The land use and transportation relationship is cyclical, beginning when population and economic growth create demand for land development. New development results in more vehicle trips and places greater demand on surrounding streets, roads, and highways. This is a complex interrelationship. As a WisDOT report acknowledges,

> *"WisDOT influences land development mostly through the provision of infrastructure. Some transportation-related regulations also may have an effect. For state transportation, the effects on surrounding land uses are often more unintentional than intentional … the most significant role that transportation plays in land development is affecting access to land."*

Some land use trend indicators include:

- Past and projected population growth
- Employment trends by sector
- Residential housing permits housing prices over the last 5-10 years
- Population densities changes: persons/acre; households/acre; commercial persons/acre use (indicating rate of land consumption)
- Conversion of age-land to non-age-land uses and comparison with the land sale prices land remaining in age (indicating stability of age-uses)
- Participation in Farmland Preservation Program (indicating stability of age-uses)
- Septic system permits (indicating development in unsewered areas)
- Changes (or requests) to expand sewer service areas (indicating expansion of urban service areas)
- Commuting patterns (indicating the relationship between employment and residential land uses)

(From *Land Use in Environmental Documents: Indirect and Cumulative Effects Analysis for Project-Induced Land Development*. WisDOT, 1993)

Local government plans, in conjunction with a zoning ordinance, attempt to direct residential, commercial, industrial, and agricultural uses to the most appropriate part of the community. When coordination is lacking or inadequate, the outcome can cause congestion and increase the chance for crashes. Retrofitting transportation facilities for enhanced mobility and safety is difficult for local governments and WisDOT. For more information, see Appendix C-3.

But realistically, given the cyclical nature of the transportation-land use relationship, when transportation improvements alleviate congestion, the newly developed land may become even more accessible, resulting in higher land values and greater pressure to develop adjacent, undeveloped land. The cycle begins again with more intensive levels of development and greater transportation demands. These pressures are being felt in eastern Iowa County. Although some parts of the county are not seeing growth, they may anticipate continued spillover that will have an impact on local development and infrastructure within the 20-year planning window.

Coordination with local governments and WisDOT can serve to address future mobility needs by looking at the potential impacts of planned development. If plans indicate that increased capacity will be needed, it can be incorporated into the transportation plan for that area. If this communication occurs during the planning process, coordination can help to ensure that more options are considered. One of the tools that can help to assess alternatives is to conduct a traffic impact analysis, looking at possible scenarios.

Ideally, WisDOT is included in the local planning process and effective planning helps the community to realize its local goals for development, efficiency, and safety, while minimizing environmental impacts. This can save both money and time, over the long- and short-term. When developments are planned and sited with adequate transportation facilities the community benefits. Land is developed more efficiently if proximity to other development and to transportation infrastructure. WisDOT (and the taxpayers) benefit because transportation investments continue to function throughout their projected life cycle and the public gets the best return on its tax investment.

The community can plan for areas of new business and housing development that will be served by a system of local roads or streets. Rather than wait for a developer proposal, the comprehensive planning process is an opportunity for the community to lay out a logical system of collectors and local roads in undeveloped areas with the jurisdiction's boundaries. The community can potentially alter the plan to suit a particular development's needs and still uphold an overall plan that ensures efficient and safe connectivity. If there are questions during the planning process about the access management implications of a proposed development, coordination with WisDOT early in the process can help minimize future conflicts. For more information, see Appendix C-4.

PRIORITIES & FUTURE PROJECTS – LAND USE

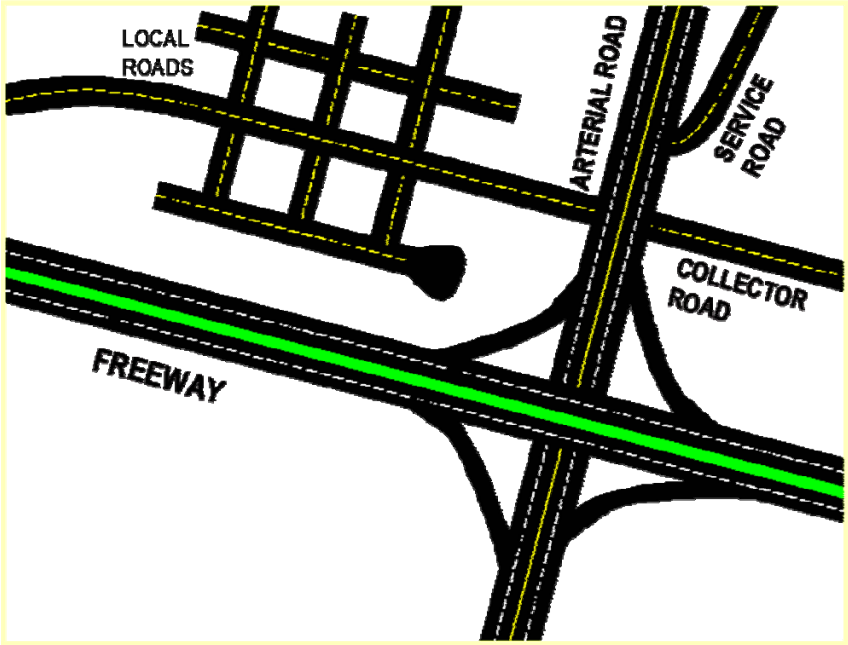
Siting of Development

Not surprisingly, given the increased housing development in the Town of Arena, respondents foresee increased growth that will impact the jurisdiction's transportation system. The Town's *Land Use Guidance System* (first adopted in October 1985) was "stimulated to address a series of problems that have worsened during the past several years … related to population growth in Arena Township. During the last ten years the population of Arena Township increased faster than any other township in Iowa County." Its long-range land use planning goals are

- Preserve the family farm and farmland in the Town of Arena.
- Guide future growth of the Town in a planned fashion.
- Plan for the provision of necessary public services.
- Protect the natural environment.

More information is also included in Section B, Housing Element.

NEXT STEPS: Continue to coordinate land use planning with Iowa County and WisDOT.



ENHANCING & IMPROVING CONNECTIVITY

Access management attempts to minimize conflicts by coordinating land development access, while preserving the flow of traffic on the surrounding road system in terms of safety, capacity, and speed. The main function of access management is to establish a balance between the existing traffic flow and highway access. It is achieved through managing the design and location of driveways, median openings, and points of access to the state highway system. The level of highway access control is based on the importance of the highway to regional and statewide travel as determined through a functional classification system. Although controversial in some jurisdictions, its primary goal is to ensure highway safety and to sustain the efficiency of the transportation system so costly retrofits don't have to be made later.

Town of Arena Plan Commission respondents noted that are there are regular traffic delays on some roads or streets from increased traffic volume with seasonal (summertime) weekend traffic along USH 14. Traffic is also heavy on weekday mornings when there can be delays entering USH 14. The respondents identified passing lanes as one solution to better accommodate traffic flow.

The WisDOT Six Year Highway Improvement Program (2002-2007) indicates that, in 2004, work will be done on the 12.3 mile segment of USH 14—from the Wisconsin River to Mazomanie Road. The pavement replacement project will pulverize the existing asphalt and overlay with asphaltic pavement. The projected cost of the project is $4,000,000-$4,999,999. This project, if it incorporates the "three-lane" design adopted on USH 14 between Gotham and Richland Center, should help to address some of the congestion.
The Town of Arena has design guidelines for new development and respondents expressed interest in receiving more information about guidelines for new development.

The Town of Arena uses WisDOT's Access Management Guidelines when considering new development. Because of the high volume of traffic along USH 14, access should only be from public roads. USH 14 is currently classified as Access Priority Category 2—Public Road Access Only. This is regulated under Statute 84.25 and Trans 233. Respondents requested more information on these provisions. The next section looks at the rationale behind Access Management in greater detail.

EFFICIENCY & SAFETY

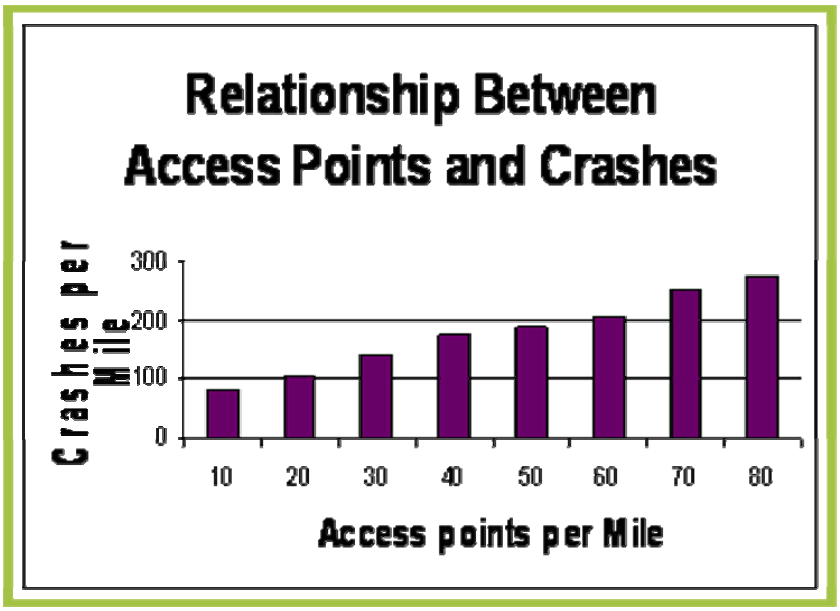
A 1980 report entitled *Access Control* explained the rationale for the state's access management regulations:

"The highly interdependent relationship that exists between land use and highways makes it necessary for the planning of each to be coordinated with the other. … A property system must provide access to property and safe, efficient movement of traffic from one place to another. Both of these functions cannot easily be provided on the same street or highway. Vehicles entering or leaving the roadway slow traffic and cause congestion. Congested streets or highways handle less traffic than if traffic were moving freely. In addition, congestion imposes increased travel costs on users in the form of longer travel time and greater operating costs, higher accident rates, and loss of the public investment in the street or highway because its traffic carrying capacity is reduced. Access control can provide an effective and low cost means of abating the harmful effects of congestion. Five direct advantages are afforded by controlling access:

- *Preservation of the capacity and integrity of the roadway*
- *Reduction of travel times*
- *Improved safety and driving conditions*
- *Economy of operation*
- *And protection of the public investment in streets and highways.*

In contrast, relieving congestion by building new streets and highways [and bypasses] is becoming increasingly less desirable as it becomes more and more difficult to acquire the necessary rights-of-way and to find public funds to pay high construction costs. Continued new construction also consumes extensive amounts of land that may more profitably be put to other uses. … Like it or not, none of us have an absolute unlimited right to use our land in any manner we please. We must take into consideration the impact that our use of land and land rights will have on others, both our immediate neighbors and the general public. Thus, if use of the right of access creates harmful interference with the public right to travel on a street or highway by increasing congestion and the liklihood of having an accident, the right of access may be regulated…"

Since 1980, when the quoted report was written, development pressures have only increased. Perhaps the reason that crash data has decreased is that jurisdictions have worked to ensure the safety of corridor routes is preserved.



Nonetheless, access management has been a contentious issue and some people believe that the regulations impede development. Efforts to repeal Administrative Rule 233 came to fruition in 2004. Doubtlessly, there are examples where the implementation of the regulation had been less than ideal. However, congestion, caused by poor planning, and the resulting loss of the efficiency of a roadway may make development less attractive. On a human scale, the most important issue and the greatest responsibility is to ensure safety. For more information, see Maps C.8 (Access Management), C.9 (Setbacks), and C.10 (Iowa County Traffic Counts) and Tables C-3a and C-3b (Motor Vehicle Crash data for the Town of Arena) at the end of this Section and in Appendix C-5.

PRIORITIES & FUTURE PROJECTS - SAFETY

Support plans to add passing lane improvements to USH 14.

NEXT STEPS: Communicate with WisDOT District 1.

MAINTENANCE & IMPROVEMENTS

Each year WisDOT completes 350 to 400 state highway projects, costing an average of $1.5 million each. In addition, WisDOT returns more than $500 million to local governments to help finance the operation and improvement of locally-owned roads, streets and bridges. According to WisDOT, highways and bridges face increasing pressures as more traffic and larger trucks cause more wear and tear. At this time, more than 30 percent of the state's highway pavement and 10 percent of bridges are deemed to require rebuilding or replacement. WisDOT projects that even with proper maintenance, the average pavement life is approximately 40 years and the average life of a bridge is about 70 years. Almost the entire highway system and a significant number of bridges will need to be replaced by 2020. See Tables C.4 and C.5 and Maps C.11a and C.11b at the end of this Section for more information.

Reconstruction

- Completely rebuilds road
- Flattens curves and hills
- Widens pavement and shoulders
- Improves safety and rideability
- May require some land acquisition

Reconditioning

- Involves reconditioning plus resurfacing
- Retains existing pavement core
- Improves roadside-shoulder widening and ditch restoration
- Improves isolated deficient curves, hill crests, intersections

Resurfacing

- Includes new pavement and gravel shoulders (includes base patching)
- May include intersections paving
- Places beam guards where needed
- Highway needing improvement:
- Maintains specific areas of potholes, extensive cracking, uneven pavement, low shoulders and rutting

—WisDOT

At the time that this plan is being written, local communities receive one-third of state transportation funds. Transportation aids to local communities include funds for local road construction and maintenance, bridge improvements, capital assistance for airports, rail and harbor facilities, flood damage, expressway policing, and transit operating assistance. General Transportation Aids (GTA) are distributed to every town, village, city, and county in the state to help offset the cost of maintaining and improving the local road and street system. This is the largest category of local aid. In the 2003-05 state budget, GTA funding totals $747 million.

A WisDOT pilot program is underway to encourage local government officials and WisDOT district staff to jointly evaluate potential local projects before they apply to WisDOT for funding. The purpose of this effort is to improve program stability by providing accurate cost estimates and realistic delivery timelines for local highway and bridge projects at the outset, saving both local governments and WisDOT time and money in delivering local transportation projects.

According to the UW-Madison Transportation Information Center, by using the PASER system and Roadware software, municipalities can determine budget parameters, select possible projects, and evaluate the implications of maintenance decisions.

The Town of Arena uses the state's PASER (**PA**vement **S**urface **E**valuation & **R**ating) system and reported that the system has been a useful tool for selecting projects and local budgeting.

WISLR
Wisconsin Information System for Local Roads

COST

For many local governments, maintenance of the local road system is the single largest expenditure category. Privatization is often touted, but to-date, only a small handful of Wisconsin cities and villages (less than 1 percent) have privatized street repair and maintenance A more common municipal practice in Wisconsin is contracting with county highway departments for certain types of repairs and maintenance, ranging from complete contracting to cooperative projects. Not surprisingly, development can add new demands for services and increase local costs without providing comparable increase in revenues. (Taken, in part, from UW-Extension *Fact Sheet #2: Comparison of Service Production Methods and the Incidence of Privatization.*)

In both 2003 and 2004, the Town of Arena was budgeted to receive $141,948.50 in General Transportation Aids and Connecting Highway Aids. For more information, see Table C-6 at the end of this Section and Appendix C-6.

In 2002-2003 the Town of Arena was one of the few Iowa County municipalities to apply for and receive Local Road Improvement Program (LRIP) funds. Under the Town Road Improvement Program (TRIP), they received funding towards two projects:

- Reconstruction—Coon Rock Road, High Point Road, and Demby Road ($17,877.88 towards a total project cost of $85,346.04)
- Reconstruction—Ray Hollow Road, Knight Hollow Road, and USH 14 ($9,000 towards a total project cost of $25,419.43).

Information on Iowa County recipients of LRIP funds is included in Table C-7 at the end of this Section and in Appendix C-6.

FUTURE PROJECTS & PRIORITIES - COST

Capital Improvement Program

Many municipalities use a Capital Improvement Program (CIP) to assist in planning for major project costs. A CIP is a multi-year scheduling of physical public improvements, based on the examination of available fiscal resources, as well as the prioritization of specific public improvements, to be constructed for a period of five to six years into the future. Capital improvements are those that include new or expanded physical facilities that are relatively large in size, expensive, and permanent. Street improvements, public libraries, water and sewer lines, and park and recreation facilities are common examples of capital improvements. For more information, see Appendix C-7.

The Town of Arena currently does not have a Capital Improvement Plan, but respondents expressed interest in creating a capital improvement program and requested more information.