

Introduction

Utilities and community facilities are important factors in determining development potential and quality of life. The information contained in this chapter, coupled with demographic trends and projections, provides a realistic picture of service supply and demand. The information regarding community facilities and utilities provided here was carefully considered in the development of the Future Land Use Map.

Wisconsin's Comprehensive Planning Law includes 14 goals for local comprehensive planning. Those listed below specifically relate to planning for utilities and community facilities in Bradford:

- Promotion of the redevelopment of lands with existing infrastructure and public services and the maintenance and rehabilitation of existing residential, commercial, and industrial structures.
- Providing adequate infrastructure and public service and an adequate supply of developable land to meet existing and future market demand for residential, commercial, and industrial uses.

Utilities & Community Facilities Vision

In 2030, the Town of Bradford coordinates with neighboring local governments and the County to ensure that Town residents have easy access to efficient services and quality facilities. The Town's property taxes have been maintained at a stable level by controlling debt, maintaining Town equipment, and carefully planning expenditures. The Town has been able to reduce costs and improve efficiencies in services by entering into shared service agreements with neighboring communities.



RESIDENT OPINIONS REGARDING COMMUNITY SERVICES
Table 20: Community Survey Responses Related to Utilities & Community Facilities.

	Very Satisfied	Somewhat Satisfied	Neither Satisfied or Unsatisfied	Somewhat Unsatisfied	Very Unsatisfied
Ambulance	51%	17%	29%	2%	1%
Fire Protection	51%	19%	25%	4%	1%
Safety	46%	25%	23%	5%	1%
Snow Removal	34%	32%	7%	21%	6%
Road Maintenance	25%	31%	13%	22%	9%
Road resurfacing	21%	26%	21%	21%	11%
Recycling Service	37%	18%	32%	9%	4%
Park & Recreation	36%	34%	26%	3%	1%

Source: Town of Bradford Community Survey.

Utilities Inventory: Location, Use & Capacity¹

This section documents those utilities provided by the Town, Rock County, neighboring communities, and private providers.

WI Fund Grant

The WI Fund provides financial assistance to homeowners in the rehabilitation or replacement of failing septic systems. The type of septic failure, household income, and state funding determines grant eligibility. For additional information, contact the WI Department of Commerce.

WASTEWATER COLLECTION & TREATMENT

All development in the Township of Bradford is accommodated with private on-site wastewater treatment systems (POWTS). These systems must comply with the state plumbing code (COMM 83), to ensure that on-site systems do not threaten groundwater resources and to keep each permitted system functioning properly over the course of its lifetime. Waste from existing POWTS (primarily septic systems) is trucked to area treatment plants.

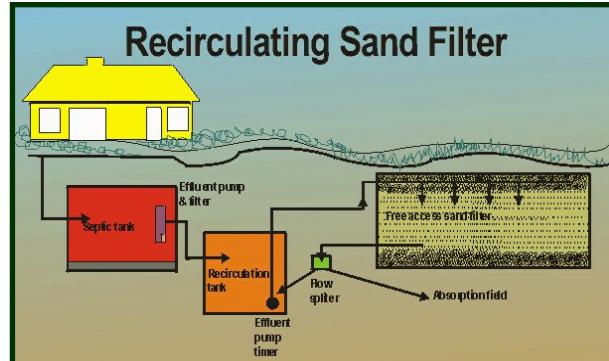
The cost of developing a Township-wide municipal wastewater treatment system is not practical given the scattered development located within Bradford. However, clustered, alternative sanitary facilities can provide an environmentally-friendly wastewater treatment system at a fraction of the cost of on-site systems. Options for clustered sanitary systems for future development include re-circulating sand filters, constructed wetlands, and The Living Machine System, among others.

- Re-circulating Sand/Gravel Filters. Re-circulating sand/gravel filters (RS/GF) offer an economically viable, environmentally benign alternative to conventional drain field-based treatment systems. The basic components of a RS/GF system include a septic tank,

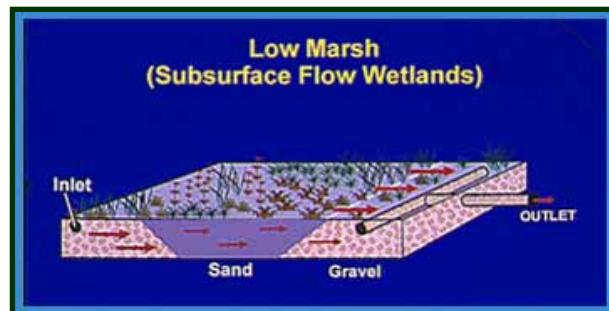
¹ Much of the information related to existing facilities and services in this chapter was provided by the Town of Bradford Clerk.

recirculation tank, and sand or gravel filter. Water discharged from the system far exceeds the quality of a conventional system, and at a fraction of the price. RS/GFs have been in use for more than a century and are a permitted alternative to septic tanks and mound systems.

- **Constructed Wetlands.** Constructed wetlands have been used as effective wastewater treatment systems for more than thirty years. They have become the dominant treatment system for communities in the Minneapolis metropolitan region not served by municipal wastewater treatment. Although there are a variety of wetland-based systems used to treat effluent, the most common is a sub-surface flow wetland. Sub-surface flow wetlands utilize an anaerobic reactor (septic tank) for pretreatment followed by a forced-bed aeration system and wetland treatment cells. Constructed wetlands are designed to achieve tertiary treatment at a fraction of the cost of a municipal system. They become cost-effective at the small scale when treating effluent from eight or more homes.
- **Living Machines®.** Living Machines are a patented wastewater treatment system that is growing in popularity around the world. They entail a linked-system of tanks teeming with live plants, trees, grasses, algae, fish, shrimp, snails and a diversity of microorganisms and bacteria. Each tank is a mini-ecosystem designed to eat or break down waste. The process takes about four days to turn wastewater crystal clear. It is chemical-free, odor-free, and, compared to conventional wastewater treatment, costs less financially and ecologically².



Source: ToolBase Services, 2005.



Source: North American Wetlands Engineering, 2004.



Source: Living Machines, Inc., 2001.

² SOURCE: *The Living Machine*, Jeff Wolovitz, Penn State Department of Research and Policy, 2000.

Living Machines are permitted systems and are currently in use at the Conserve School in Land O' Lakes, at Cedar Grove Cheese Factory in Cedar Grove, and at Edgewood College in Madison.

The Town supports the continued use of POWTS, as approved by the Town and County. Based on soil conditions, current and anticipated development densities, state laws governing POWTS and anticipated future technologies in private waste disposal, a municipal sanitary system is not needed for the Town.

STORMWATER MANAGEMENT³

The Town of Bradford realizes the need to control storm water drainage, because of various creeks and streams that feed into Turtle Creek. Turtle Creek runs through the town. The Town of Bradford currently has no curb and gutter in place. Currently the County Subdivision and Land Division apply. In the event of development of a residential subdivision in the town consideration will have to be given to such practices.

Open grass lined natural drainage ways slow the flow of stormwater, reduce erosion, filter pollutants, and allow infiltration of groundwater. These grass lined drainage ways are a good way of controlling stormwater in rural areas with small amounts of impervious surface. Given the rural character of Bradford, existing practices will meet most future rural residential development need in this part of Town. However, additional development may require the use of more effective means of stormwater treatment. Bradford will protect surface waters by utilizing:

- **Watershed Planning.** All watershed planning activities in the Town of Bradford will be coordinated with the Rock County Land Conservation Department to identify, protect, and enhance critical habitat and aquatic corridors in the community.
- **Land Conservation Techniques.** Land conservation techniques include: conservation subdivisions, setbacks, buffers, land acquisition, and adherence to the development patterns outlined on the Future Land Use Map.
- **Riparian Buffers.** Riparian buffers are natural areas extending inland from the streambank and are comprised of a blend of trees, grasses, and other plants. Riparian buffers have proven to be the most effective means of reducing runoff to surface waters.
- **Site Design Techniques.** Effective site design techniques encourage the use of natural landscaping, limit impervious surface, enforce setbacks and buffers, and protect natural resources.
- **Stormwater Best Management Practices (BMP).** Stormwater best management practices seek to reduce stormwater pollutant loads, maintain groundwater recharge and quality, protect stream channels and safely maintain the 100-year floodplain. Successful BMPs

³ For additional information on stormwater management, including descriptions of local watersheds, please refer to Chapter 7: Agricultural, Natural and Cultural Resources.

include ponds, wetlands, infiltration areas and filtering systems, and grassed swales, among others.

- **Erosion and Sediment Control.** The State of Wisconsin establishes construction site erosion control requirements for development and redevelopment projects in the county. Effective erosion and sediment control measures reduce the amount of time that soil is exposed to the elements.

Given the rate and density of projected future development, existing practices are expected to meet future development needs. However, the Town of Bradford may adopt and enforce its own stormwater management and construction site erosion control ordinance should it choose to do so.

WATER SUPPLY⁴

All of the Bradford residents currently receive water from private wells. The water quality is said to be good with some iron and other mineral deposits.

The cost of well installation can range between \$7,000 and \$17,000 depending on soil conditions, depth-to-groundwater, and casing requirements. Shared and clustered wells, serving a small number of homes, may provide a viable alternative to individual private wells; however, they require effective agreements to address issues related to metering and well placement. In addition, they may lead to disagreements over water usage by the homeowners served by the shared water system. A more effective alternative for new subdivisions may be requiring a community water system. Community wells would serve the entire subdivision and offer the safest and most cost-effective alternative for larger residential development projects (typically 20 or more homes). Additional information about groundwater is provided in *Chapter 7: Agricultural, Natural and Cultural Resources*.

ELECTRICITY AND NATURAL GAS TRANSMISSION

The Town of Bradford residents receive their electrical services from either Alliant Energy or Rock Energy Cooperative. Alliant Energy and WE Energies provide some natural gas to residential areas in the town and various other private facilities. Residents who do not have access to natural gas use various other sources of energy from various different companies.

Alliant Energy Corporation (Wisconsin Power and Light) is a growing energy-services provider with both domestic and international operations.

Headquartered in Madison, Alliant Energy provides electric, natural gas, water, and steam services to 1.4 million customers in Iowa, Minnesota and Wisconsin. Alliant has no immediate plans to expand the type or level of services offered in Bradford.⁵



⁴ For additional information on Bradford's water supply, including a description of the geology and underground aquifers, please refer to *Chapter 7: Agricultural, Natural, and Cultural Resources*.

⁵ Source: Alliant Energy corporate website, 2009.

WE Energies is the trade name of Wisconsin Electric Power Co. and Wisconsin Gas LLC, the principal utility subsidiaries of Wisconsin Energy Corporation (WEC). WEC has headquarters located in Milwaukee. WE Energies serves more than 1.1 million electric customers in Wisconsin and Michigan's Upper Peninsula and more than one million natural gas customers in Wisconsin.⁶

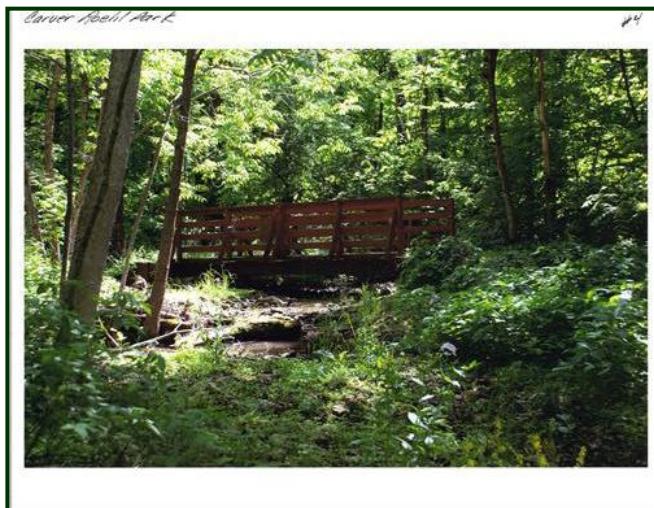


ALTERNATIVE ENERGY SOURCES

At this time there are no alternative energy source providers located in Bradford, however, a percentage of Alliant and WE Energies production capacity is generated by wind power. Additional information related to wind energy is provided later in this chapter.

LOCAL PARK AND RECREATION FACILITIES

The Town of Bradford has a county park, Carver Roehl Park and DNR public lands. There is also a golf course in the town. Carver Roehl Park is 52.34 acres in size and includes hiking and cross-country ski trails, a shelter with electricity, play apparatus, and picnic facilities. There are various other parks and facilities in nearby towns and cities. Opportunities for future park development, including potential funding for land acquisition, are provided later in this chapter.



COMMUNICATION FACILITIES

Access to communication facilities is very important in the modern economy. Several communication companies provide service to Bradford. The quality of communication services depends on the capacity of the network (wires, fiber optics, towers, etc.) serving the Town.

- Local and Long Distance Telephone Service. MCI, Verizon, AT&T, US Cellular, and Sprint provide telephone service in the community.
- Internet. Internet services in Bradford are provided by T6 Broadband, Verizon, and other DSL providers in addition to various satellite services dial-up connections.
- Newspapers. The Clinton Topper, Janesville Gazette, Beloit Daily News, and the Wisconsin State Journal Courier are the most frequently read daily newspapers in Bradford.

⁶ Source: WE Energies corporate website, 2009.

- Television and Radio. There are no television or radio stations located in Bradford, but signals are available from surrounding communities. Various cable and satellite providers offer television access in the community. A variety of televisions and radio stations are reachable by residents via antennae.
- Postal Service. The Avalon Post Office is located in nearby Avalon. The Town also has mail routes from Janesville, Clinton, and Darien.
- Cellular/PCS Towers. Cellular/PCS towers include Verizon and US Cellular on S. Avalon Road, AT&T on a monopole near O'Riley Road, and a third tower off of B-C Townline Road.

CEMETERIES

There are three cemeteries currently located in Bradford. Emerald Grove cemetery is located on Emerald Grove Road just south of USH 14/STH 11. Mt. Philip Cemetery is located east of O'Riley Road on B-C Townline Road. The third, Smithton Cemetery, is a very small, old cemetery on Carvers Rock Road just north of the Bradford Town Hall.

HEALTH CARE FACILITIES

There are no medical or healthcare facilities located in the Town of Bradford. The nearest providers are Mercy Health System, Dean Care, and Mercy Hospital in Janesville and the Beloit Clinic and Beloit Hospital in Beloit.

CHILDCARE FACILITIES

There are no licensed child-care or daycare providers currently located in the Town of Bradford. In general, people seek childcare providers located near their homes or near their places of employment. Town residents also have informal networks of child care (i.e. family or friends), and some residents may provide licensed childcare from their homes.

LIBRARY

The Arrowhead Library System was established in 1974 to expand and coordinate the Rock County Library System for local residents. Its delivery system connects with the state-wide delivery system to bring materials from throughout the state to the Rock County libraries. Residents utilize the services offered by the Clinton Public Library and Janesville Library, both members of the Arrowhead Library System.

SENIOR SERVICES

According to the 2000 U.S. Census, 103 Bradford residents (10.2% of the population) were age 65 or over, a decrease of six from the 1990 U.S. Census. However, demographic projections anticipate considerable growth in the Town's population of seniors during the coming two decades. As the percentage of the population over the age of 65 increases, increased scope of services may be required to serve this growing demographic group. As the demand for senior

services grows during the coming decades the Town will work with Rock County to ensure that necessary services are available to those in need.

SCHOOL DISTRICTS

The Town of Bradford is served by the Clinton Community and Delavan/Darien School Districts. The majority of the community lies within the Clinton District boundaries with a smaller section in the eastern part of Bradford falling within the Delavan/Darien District (please see Community Facilities Map on page 6-10). A brief description of each of the Districts appears below.

- Clinton Community School District. The Clinton Community School District (CCSD) is ranked 167th in size of the 442 school districts in Wisconsin. It provides a 4k through 12th grade education for 1,259 students in the Village of Clinton and the surrounding towns. The CCSD includes the Clinton Elementary, Middle and High Schools. District offices are located at 112 Milwaukee Road in Clinton.

Clinton High School. The Clinton High School and Clinton Community School District, proud to be in partnership with family and community, are committed to ensure that all students receive a solid education foundation in a safe environment that fosters lifelong learning and empowers students to be contributing members of our global society.

Clinton Middle School. Kids come first at Clinton Middle School. A dedicated staff challenges students to be accountable for and successful in their academic performance, co-curricular activities, and peer relationships. The middle school is home to fifth, sixth, seventh, and eighth grade students. Communication Arts provides instruction in English, reading, and research. Math, Social Studies, Science, Health, Physical Education, and elective classes are also part of the curriculum. The school district has an extensive special education program designed to meet the needs of all identified students.

Clinton Elementary School. The Clinton Elementary School provides quality education to students in grades K through fourth.

- Delavan/Darien School District⁷. The Delavan/Darien School District (DDSD) is the 67th largest in the state, with a total 2009 enrollment of 2634 students. Facilities within the DDSD include: Delavan/Darien High School; Phoenix Middle School; and Darien, Turtle Creek, and Wileman Elementary Schools. DDSD offices are located at 324 Beloit Street in Delavan.
- Delavan-Darien High School offers a complete college preparatory program and courses to prepare students for the world of work. Students leave the high school ready to compete in the workplace, in the technical college system, or at the university level. Add to this an excellent athletic program, music and drama productions, and advanced placement courses, and you have a recipe for success.

⁷ Much of the text in this section was excerpted from the Delavan/Darien School District website, 2009.

- Phoenix Middle School has recently completed major additions and renovations. Building on their strong elementary foundations, students are introduced to foreign languages, allied arts, and technology in the award-winning Tech Lab. Exploration and involvement are emphasized to help students broaden their horizons and begin to make decisions about their future interests.
- The district's three elementary schools, Darien, Turtle Creek, and Wileman, serve students from pre-kindergarten through fifth grade. Each school offers a complete program of academic education supplemented with art, music, and physical education. In addition, special opportunities for the gifted and accommodations for those with disabilities provide a comprehensive educational experience.

Like many school districts in Wisconsin, the Clinton and Delavan/Darien Districts have experienced fluctuating enrollment during recent years (see Table 21 at right). Under the full-time, inter-district open enrollment program, Wisconsin students may apply to attend school in any K-12 public school district in the state, regardless of whether or not they live in the district. Families of students who transfer from their local district do not pay

tuition. However, a local district loses state aid for each student who transfers to another district and gains state aid for each student who transfers from another district. The program first took effect in the 1998-99 school year. It is designed to encourage competition among districts as a means of fostering improvement in public schools and to provide families with increased flexibility in their educational choices. Participation has increased each year since the program's inception.

Wisconsin also has a charter schools program. The Wisconsin Charter School Program was initiated in the 1993-1994 school year. Charter schools are public schools that are exempt from many state regulations and rules. In exchange, the schools are accountable to their chartering authority for meeting measurable goals in their charter. This freedom encourages various programs that may stimulate change, innovation, and creativity to enhance student learning. In 2004, there were 137 charter schools in the state. Charter schools are nonsectarian, employ DPI-certified staff, and participate in statewide assessments.

TOWN HALL

The Bradford Town Hall is located at 3622 South Carvers Rock Road.

Table 21: School District Enrollment Trends, 2001-08.

Year	Clinton Community School District		Delavan/Darien School District	
	Total Enrollment	Change from Previous Year	Total Enrollment	Change from Previous Year
2009	1,259	15	2,634	-55
2008	1,244	-11	2,689	-44
2007	1,255	28	2,733	-42
2006	1,227	100	2,775	-29
2005	1,127	-63	2,804	-15
2004	1,190	-10	2,819	48
2003	1,200	46	2,771	30
2002	1,154	-13	2,741	52
2001	1,167	n/a	2,689	n/a

Source: Wisconsin Department of Public Instruction, 2009.

Community Services Inventory

SOLID WASTE DISPOSAL AND RECYCLING

Residents in Bradford contract privately for solid waste disposal and recycling with various contractors including Waste Management, Lentells Disposal, and Nienhuis and Sherman Sanitation, among others. The Town contracts with Lentells Disposal of Beloit which provides a drop-off site for recycling once per month.

POLICE PROTECTION

Police protection in the Town of Bradford is provided by the Rock County Sheriff's Department (RCSO) located at 200 E. U.S. Highway 14 in Janesville. The Law Enforcement Services Division employs a variety of resources to control crime or other unlawful or dangerous activity that occurs within our community. Deputies will quickly respond to nearly any emergency and attempt to protect citizens and restore order. They engage in traffic enforcement, crime prevention initiatives, and criminal investigations. Arrest warrants are served and orders of the court are enforced to support the Constitution and ensure that justice is served. In all of these efforts, the Sheriff's Office is dedicated to honesty, integrity and professionalism.

The Correctional Services Division is responsible for the security and safety of all inmates in the custody of the Rock County Sheriff's Office. In addition, Correctional Services staff administer all community corrections and jail diversion programs that are sponsored by this office. Finally, our personnel ensure that our inmates make all required court appearances and that extraditions and other prisoner transports are completed in a safe and timely manner.⁸

Bradford has a Town Constable whose primary responsibility is providing animal control.

FIRE PROTECTION

The Town of Bradford is part of the jointly owned Clinton Fire Protection District (CFPD) with assistance available from other area fire departments. The CFPD fire station is located at 145 Ogden Street in Clinton. The department has an on-call staff of 29 volunteer firefighters. Services provided by CFPD include fire suppression, hazardous material response, rescue and vehicle rescue.

EMERGENCY MEDICAL SERVICE

Emergency medical service is provided by the jointly owned, Clinton Fire Protection District. Licensed volunteers from throughout the respective communities staff the EMS services.

⁸ Much of the narrative in this section was excerpted from the Rock County Sheriff Office website, <http://www.co.rock.wi.us/Dept/Sheriff/Sheriff.htm>, 2009.

ANIMAL CONTROL

Animal control in Bradford is provided by the Town Constable and under an annually-reviewed contract with the Rock County Humane Society.

COMMUNITY FACILITIES MAP TO BE
INSERTED HERE

Utilities and Community Facilities Issues & Opportunities

This section of the chapter describes the various issues, concerns, and opportunities related to utilities and community facilities that arose during the SWOT and Vision Exercises and during monthly meetings of the Bradford Planning and Zoning Committee.

MAINTAINING REASONABLE TAX LEVELS

Town residents respect the fiscal discipline demonstrated by local officials and value their reasonable tax rates. Given limited finances, coupled with long-term uncertainties surrounding Wisconsin's shared revenue program and state-imposed levy limits, the Town of Bradford understands the need to carefully consider all expenditures. This consideration certainly extends to providing utilities and community facilities for the community. To provide efficient, cost-effective services, the Town has a history of cooperatively working with neighboring communities and Rock County (i.e. fire protection, police protection, senior services, road maintenance, etc.). Regionalizing services can minimize duplication and promote cost efficiency, which may reduce the tax burden for all residents. To keep local taxes at a reasonable level, Bradford will continue to consider shared service opportunities with neighboring communities.

WIND ENERGY

With the rising cost of energy in the U.S., capturing the wind has grown in popularity as a source of alternative, renewable energy. Although it is a very cost-effective source of electricity, it has raised other concerns, particularly with respect to wildlife. Opponents of wind farms have argued that the rotating blades can disrupt, and even kill, certain bird and bat species. Studies conducted on the affect of wind turbines on bird and bat mortality have thus far shown minimal impacts. However, proponents believe that the greater benefit provided by this renewable energy source, given increased awareness of global climate issues, more than justifies its recent and future growth.



Wind turbines in Kewaunee County. Source:
Renewable Energy Policy Project, 2007.

Current wind-generation capacity is found in the locations listed below. A listing of proposed wind power projects in Wisconsin can be found in Table 22 on 6-13.

▪ De Pere, Brown County:	1.2 MW (megawatts)
▪ Red River, Kewaunee County:	11.22 MW
▪ Lincoln, Kewaunee County:	9.24 MW
▪ Byron, Fond du Lac County:	1.32 MW
▪ Monfort Wind Farm (Eden, Iowa City):	30MW
▪ Green Field Blue Sky (Fond du Lac County)	154MW

The Town of Bradford does not have an ordinance focused on the regulation of wind turbines. To effectively regulate their placement and operation, the Town should consider adopting such an ordinance. A model ordinance has been drafted by the Wisconsin Department of Administration (available on-line at <http://www.doa.state.wi.us/docview2.asp?docid=2869&locid=5>). It must be mentioned, however, that the State legislature is considering adopting state-wide standards for wind farms similar in scope to ATCP-51, the livestock siting standards.

The installation of wind turbines, should they be constructed, will result in benefits and challenges in Bradford. Challenges are largely focused on three aspects: visibility, noise, and wildlife impacts.

1. Wind towers are highly visible. Modern wind turbines producing power on the megawatt scale typically stand 212+ feet, with blade rotors of about 230+ feet in diameter (up to 393 feet tall and 341 foot rotor diameters for the 3.6 MW turbine)⁹. Wind power plants consist of clusters or lines of turbines spread across hilltops, ridgelines, or open stretches of water. Turbine viewsheds, or distances within which the turbines can be readily seen, can reach 5 miles. A formal study conducted by the Renewable Energy Policy Project indicated that the wind turbines in Kewaunee County had no negative effect on the property values in the view shed, described as the 5-mile radius around the wind turbines¹⁰.
- | Source | Distance (feet) | Sound Levels (decibels) |
|---------------------|-----------------|-------------------------|
| Jet Engine | 200 | 120 |
| Freight Train | 100 | 70 |
| Vacuum Cleaner | 10 | 70 |
| Freeway | 100 | 70 |
| Large Transformer | 200 | 55 |
| Wind in Trees | 40 | 55 |
| Light Traffic | 100 | 50 |
| 300 kW Wind Turbine | 400 | 45 |
| Soft Whisper | 5 | 30 |
- Source: Paul Gipe, Wind Energy Comes of Age, 1995, as cited in National Wind Coordinated Committee, "Wind Energy Environmental Issues," Wind Energy Series, January 1997 and "The Environmental Case for Wind Power in Wisconsin," Elizabeth Ridlington and Jennifer Giegerich, July 2005.
2. Wind power plants produce steady, low-volume noise caused by wind trailing off rotor blades and by the machinery driven by the turbines. The wind itself may mask any such noise produced by the turbine. Table 22 provides a comparison of noise volumes.
 3. Compared with other energy sources, wind has a modest impact on wildlife. It does not require the mining or transportation of fuel, nor does it produce air pollution or contribute to global warming. Wind installations do consume small amounts of land for each turbine footing and may alter wildlife behavior in the surrounding areas. Some species change their feeding, breeding, and nesting habits within the immediate area of wind towers. In areas where the land is already used for intensive agriculture (i.e. row crops), the wildlife

⁹ Source: General Electric

¹⁰ Source: Renewable Energy Policy Project, *The Effect of Wind Development on Local Property Values*, 2003.

impact and habitat loss is minor. In more remote areas, the disruption from a wind farm will be more significant, if only from a visual perspective. Overall, wind power projects are responsible for one or two of every 10,000 bird collision-deaths in the country annually. Housecats, office buildings, and patio doors each kill far more birds than wind turbines¹¹.

There are several benefits that may be accrued by the Town of Bradford should it encourage the creation of wind farms in the community. First, Town has a relatively low population density. This would help to limit the impact of the towers (particularly with respect to noise) to the limited number of people living within 500 or 1000 feet of the proposed structures. Moreover, the lease of land for the turbines will provide a source of revenue for those landowners on which the tower is sited. Since many of these landowners are farmers, the supplemental income will help to sustain their farm operation. Finally, by siting any prospective towers in the community, demand for additional residential development in this portion of the town will likely be reduced, therefore, helping the town to retain its undeveloped lands and farmland resources. However, any proposal to site wind farms in the Town is sure to generate passionate discussion regarding their merits.

Table 23: Proposed Windpower Projects in Wisconsin, 2007.

	Town/County	Developer	Utility	MW	Name and In-service Date
1	Fond du Lac and Dodge Cty	Invenergy, LLC.	MG&E (15 MW), WPPI (25 MW), Other utilities	99	Forward Wind Center – 2008
2	Marshfield- Calumet and Fond du Lac Cty	WE Energies	WE Energies	145	Blue Sky / Green Field – 2008
3	Eden and Empire- Fond du Lac Cty	Alliant Energy	Alliant Energy	68	Cedar Ridge – 2008
4	Herman-Dodge Cty	Midwest Wind Energy	WPPI	54	Butler Ridge – 2008
5	Springfield-Dane Cty	EcoEnergy LLC.	None	9	EcoDane – 2008
6	Seymour- Lafayette Cty	Horizon Wind Energy	None	99	Darlington Wind Farm – 2009
7	Eden-Fond du Lac Cty	Eden Wind Energy, LLC.	None	3	2007-08
8	Addison- Washington Cty	Addison Wind Energy, LLC.	None	2	2007-08
9	Rhine, Sheboygan Cty	Ritger Law	None	2	Unknown
10	Ashford-Fond du Lac Cty	Eden Wind Energy, LLC.	None	3	Unknown
11	Fredonia-Ozaukee Cty	Ritger Law	None	1.65	Unknown
12	Two Creeks, Mishicot, and Two Rivers – Manitowoc Cty	Navitas Energy	None	98	Unknown
13	Randolph and Scott-Columbia Cty	Midwest Renewable Energy	None	80	Columbia Wind Farm – 2008

¹¹ Source: Wallace Erickson, et. al., *Avian Collisions with Wind Turbines: A Summary of Existing Studies and Comparison to Other Sources of Avian Collision Mortality in the United States*, National Wind Coordinating Committee, August 2001.

14	Mishicot-Manitowoc Cty	Emerging Energies	None	19	2008
15	Ridgeville-Monroe Cty	Invenergy, LLC.	None	75	2008-09
16	Glenmore-Brown Cty	Emerging Energies	None	12-19	2008
17	Chilton and Rantoul-Calumet Cty	EcoEnergy, LLC.	None	60-80	Ecomet, 2009
18	Casco-Kewaunee Cty	Urban Wind Co.	None	5-10	2008
19	New Holstein-Calumet Cty, Kaukauna-Outagamie Cty, Westby-Vernon Cty, and Evansville-Rock Cty	EcoEnergy, LLC.	WPPI	Up to 24	2008-09

Source: RENEW Wisconsin, www.renewwisconsin.org, 2007.

PARK AND RECREATIONAL OPPORTUNITIES

The National Recreation and Park Association (NRPA) recommend a community standard of 10 acres of local recreation land per 1,200 residents. The current population of Bradford is an estimated 918 persons, with a projected 2025 population of 1,018. To meet the NRPA standard by 2025, the Town would need a minimum of 8.5 acres of public parkland.

The funding of local parkland acquisition and development has become more difficult with recent legislation limiting local government's ability to establish and enforce impact fees upon new residential development projects. As a result, more Wisconsin communities are seeking grant funding to offset the cost of park and recreation development. Wisconsin statutes prohibit local government from applying for State and Federal park and recreation funding without a locally-adopted Comprehensive Outdoor Recreation Plan (CORP).

By adopting and periodically updating an Outdoor Recreation Plan, the Town will become eligible for state grant funds. Grants, donations, park impact fees (which can be collected from developers proposing any new land divisions or subdivisions -

What is a Comprehensive Outdoor Recreation Plan?

A Comprehensive Outdoor Recreation Plan, or CORP, is a document that describes existing open spaces, parks, and recreational facilities and identifies future needs. Typical components of a CORP include:

- A definition of the planning area
- The identification of park and outdoor recreation planning standards
- An inventory of existing parks, trails, wildlife areas, and other recreational assets
- A natural resources assessment
- A park and outdoor recreation facility needs assessment
- Recommendation for necessary facilities and improvements
- A trail plan
- Acquisition, maintenance, and operation recommendations
- Goals, objectives, and policies
- Maps of existing and proposed parks and recreational facilities

must be compliant with Act 477)¹² are all tools available to offset taxpayer costs for new park space. Potential locations for future parks and recreational facilities are illustrated on the Future Land Use Map in Chapter 10.

Utilities and Community Facilities Programs

Numerous grant and loan programs are available to Town government to finance future improvements. Programs are available through the State of Wisconsin and the federal government. The following sections provide a description of some of the opportunities available to the Town of Bradford.

WATER AND WASTEWATER GRANT AND LOAN PROGRAM

The USDA Rural Development (Rural Utility Service) has a water and wastewater grant and loan program to assist cities, villages, tribes, sanitary districts, and towns in rural areas with a population up to 10,000. The program provides loans and grants to construct, improve, or modify municipal drinking water and wastewater systems, storm sewers, and solid waste disposal facilities. This program may be useful for establishing shared/cluster sanitary and water systems in Bradford.

STATE TRUST FUND LOAN PROGRAM

The Board of Commissioners of Public Lands provides this loan program with terms of up to 20 years and deeply discounted interest rates. Loans may be used for a variety of purposes including: road improvements, water and sewer, equipment, recreational facilities, industrial development, and other public facilities that may include community centers/halls and trail development. The funds available fluctuate annually. The current annual loan limit is \$2,000,000. The Town of Bradford could utilize these funds for development of new park facilities, trails, road projects (including projects to pave shoulders for trail routes), or expansion and renovation of the Town Hall. However, it must again be noted that federal and state funding for parks acquisition is contingent upon the approval and adoption of a local CORP (see box on previous page).

RURAL DEVELOPMENT COMMUNITY FACILITY GRANTS

The USDA Rural Development also offers grants to communities seeking to build or improve their community facilities. These include schools, libraries, childcare, hospitals, medical clinics, assisted living facilities, fire and rescue stations, police stations, community centers, public buildings and transportation. These grants are awarded to communities with a population up to 20,000 based on a competitive application process.

¹² Passed May 30, 2006, Act 477 updates impact fee legislation. Counties can no longer collect impact fees, and municipalities can no longer use them for “other transportation uses,” “other recreational uses,” or vehicles. Fees are to be collected from the builder or property owner within 14 days of the issuance of the building or occupancy permit, must be placed in separate accounts, and must be spent within 7 years or refunded.

ASSISTANCE TO FIREFIGHTERS GRANT PROGRAM

The U.S. Department of Homeland Security awards competitive grants to fire departments and non-affiliated emergency medical services that will enhance the ability of first responders and firefighters. In 2006, the program was allotted \$485,595,000 to be disbursed through three separate programs: the *Assistance to Firefighters Grant*, *Staffing for Adequate Fire and Emergency Response Grants*, and *Fire Prevention and Safety Grants*.

STATE STEWARDSHIP FUND

The Stewardship Fund is the State of Wisconsin's land acquisition program for public outdoor recreation and habitat protection. Administered by the Department of Natural Resources, the fund makes 60 million dollars a year available to buy land for nature-based parks and associated infrastructure improvements, trails, habitat areas, and campgrounds. The funds can also be used for shoreland stabilization and riparian buffer enhancement projects. The Stewardship Grants provide up to a 50% match in funds to that coming from the local government. In order to be eligible, local and tribal governments must have a DNR approved Comprehensive Outdoor Recreation Plan or Master Plan that has also been adopted by the local governing unit (Town Board). Bradford could use these funds to establish local trails or a new nature-based park and its associated infrastructure.

CAPITAL IMPROVEMENTS PLAN

A Capital Improvements Plan (CIP) is typically a five-year plan with updates occurring annually. Capital items are generally defined as those items that are more expensive and will last at least 3-5 years. These items are financed through borrowing, as they may overburden the annual operating budget. A general CIP includes a community's capital items such as:

- Parkland acquisition and improvements
- Trail development projects
- Public buildings improvements and maintenance
- Emergency vehicle or road maintenance vehicle purchase and replacement
- Street maintenance and reconstruction
- Replacement of aged sanitary sewer and water mains

The Town of Bradford does not currently use a CIP. To more effectively implement the Comprehensive Plan and prepare for future expenditures, the Town should consider developing a CIP.

Coordination with Other Comprehensive Plan Chapters

Utilities and community facilities can dictate future planning for a community if capacity, location, and services are not adequate to support development. Therefore, it is important to inventory existing utilities and community facilities to understand how utilities and community facilities will be provided during the tenure of the Comprehensive Plan.

HOUSING

Improvements such as roads, sewer, parks, recreational facilities, and schools are all affected by residential development. The recommended method to coordinate improvements is to follow the land use pattern presented on the Future Land Use Map as closely as possible and plan for future improvements in a CIP.

FUTURE LAND USE CHAPTER

Land use drives the need for utilities and community facilities. Conversely, the availability of utilities and community facilities can determine where development can occur. The Future Land Use Map was developed with careful consideration of where utilities and community facilities are now available, or will be available, within the planning period. In addition, the Future Land Use Map carefully considers the economic feasibility of utilities and community facility extensions to serve areas planned for future development. Areas where the extension of sewer service, alternative treatment systems or other basic infrastructure is cost prohibitive are not encouraged for future development.

INTERGOVERNMENTAL COOPERATION

The Town currently participates cooperatively with the County and neighboring communities to provide efficient services. During the implementation of this plan, Bradford will consult with adjoining municipalities and Rock County, among others, to coordinate road maintenance, park planning, wastewater treatment options, and other utilities and facilities needs.

Utilities & Community Facilities Goals, Objectives, and Policies

The goals, objectives, and policies related to utilities & community facilities in the Town of Bradford can be found in *Chapter 12: Implementation*.