CITY OF WAUKESHA COMPREHENSIVE PLAN VOLUME 1: 2022 INVENTORY

Section 6

UTILITIES AND COMMUNITY FACILITIES INVENTORY

SEWER SERVICE

State legislation adopted in the late 1970s in response to the Federal Clean Water Act effectively established requirements for urbanized municipalities to prepare and adopt sewer service area plans. The plans are required to define the outer boundary to which a municipality's sanitary sewers may be extended. As the State-designated areawide water quality planning agency under Section 208 of the Federal Clean Water Act, the Southeastern Wisconsin Regional Planning Commission (SEWRPC) was responsible for developing plans to comply with the legislation. SEWRPC prepared a regional water quality management plan (RWQMP)² establishing initial sewer service areas for numerous municipalities within the Region, including the City. Sewer service areas established by the RWQMP were designed using the general urban land use pattern set forth in the year 2000 regional land use plan and therefore did not reflect detailed local planning

¹ The plans also identify the extent of environmentally sensitive lands within each sewer service area, wherein sanitary sewer extensions will be approved only on a special exception basis.

² SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000, (September 1978), was endorsed by the Wisconsin Natural Resources Board in 1979.

considerations. State legislation enables a municipality or sanitary district to address local and areawide planning concerns by preparing a sewer service area plan amendment for SEWRPC review and comment.³

First refined in an amendment to the RWQMP adopted by the City in March 1999,⁴ the City's sewer service area has been refined via numerous subsequent amendments through 2007.⁵ The City's designated sewer service as of 2023 is shown on Map 4.SSA. Sewer system maintenance in the City is the responsibility of the Public Works Department.

WATER SUPPLY SERVICE

The Waukesha Water Utility has provided water supply service for the City for over a century. Like many communities in the County, the City has historically relied on groundwater for its water supply. Groundwater is present within three major aquifers underlying the City, including two shallow aquifers and a deeper sandstone aquifer. Over time, development overlying these aquifers increased both within and outside of the City, placing greater demand on the aquifers. The increased development and demand limited groundwater recharge and led to greater reliance on the deep aquifer for water supply. In time, the water supply began to show higher concentrations of radium, a naturally occurring element in bedrock throughout the Region. These concentrations eventually exceeded levels deemed acceptable under Federally established safety standards, which the Waukesha Water Utility has worked to address using expensive treatments and processes. Prior to publication of the previous edition of this report, the City began to consider securing an alternate water supply, specifically Lake Michigan water, the use of which as a water supply source is regulated by the Great Lakes Compact.

³ SEWRPC and is also required to review and comment on each proposed sewer extension as to its relationship to the approved plan and sewer service areas.

⁴ SEWRPC Community Assistance Planning Report No. 100, Sanitary Sewer Service Area for the City of Waukesha and Environs (March 1999).

⁵ As noted in Chapter 2 of this report, the Town of Waukesha incorporated as a Village under Section 66.02162 of the Wisconsin Statutes on May 12, 2020, limiting the City's ability to annex and potentially provide sanitary sewer service to former adjacent township lands.

⁶ Chapter 3 of this report contains information on groundwater and aquifers.

Adoption of the Great Lakes Compact Law (Wisconsin Act 227) in 2007 established new requirements for public water supply systems statewide. The law requires that a water supply plan be prepared by any public water supply system that serves a population of 10,000 or more as well as by specified smaller systems needing approval for certain new or increased withdrawals from the Great Lakes Basin. Under the law, the Wisconsin Department of Natural Resources (DNR) is required to administer the water supply planning process and regional planning commissions within the State are authorized to assist with preparing such plans. In accordance with the law, the Waukesha Water Utility solicited SEWRPC's assistance to prepare a water supply plan in 2008. The resulting plan set forth a water supply area that encompassed the City of Waukesha and surrounding lands within the Towns of Delafield, Genessee, and Waukesha. As shown on Map 6.X, these surrounding lands are not within the City's water service area as approved due to boundaries set by the Great Lakes Diversion agreement.

In June of 2016 the Great Lakes Compact Council unanimously approved the City's application to source water from Lake Michigan and return the same amount used via the Root River. The project is on-schedule to be completed in 2023 with the transition to Lake Michigan water occurring late summer 2023.

As part of the project the Waukesha Water Utility also constructed a Booster Pumping Station on the east side of the City on Broadway Avenue, east of Les Paul Parkway (STH 164). This facility contains a booster pumping station, water reservoirs, and a water tower. The facility is designed to store 18 million gallons of water and distribute 8-10 million gallons per day.

SOLID WASTE MANAGEMENT

The Wisconsin Department of Natural Resources (WDNR) is responsible for issuing solid waste licenses and permits for landfills, solid waste transfer facilities, recycling facilities, composting facilities, and other solid waste management facilities and activities. In 1990, a State law related to solid waste reduction, recovery, and recycling banned the disposal of certain materials and delegated to local governments the responsibility for managing the proper disposal of those banned materials. Designated local governments, including the City, are required to accomplish this task, in part, by implementing municipal recycling programs.

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⁷ The law requires that a water supply plan be prepared by any public water supply systems that serve a population of 10,000 or more as well as by specified smaller systems needing approval for certain new or increased withdrawals from the Great Lakes Basin.

As of 2023, the City was under contract with Waste Management to collect residential solid waste and recycling. Solid waste from the City is directed to two active landfills: the Parkview/Orchard Ridge Landfill in Menomonee Falls and the Emerald Park Landfill in Muskego.

Figure: In 2021, the amount of solid waste landfilled from City of Waukesha residents was 14,255.24 tons and the amount collected for recycling was 4,933.42 tons.

The City also operates a drop off center that accepts limited solid waste from City or County residents. The center allows City and County residents to drop off recyclables ranging from cardboard, paper, bottles, and cans to scrap metal, used oil/antifreeze, and cooking oil. The center also allows City residents to drop off yard waste and limited solid waste for landfill disposal. In the past, the City managed residential yard waste collected at the drop off center through a collaborative composting project with other local governments in the County. To implement the project, the City contracted with a private vendor to transport residential yard waste at the center to a County-owned composting facility. The yard waste was then processed into compost and wood chips and made available to City residents at no cost on a limited basis.⁸

Graphic: Trends indicate that the per capita generation of solid waste is continually increasing.

Call Out: Trends also indicate a heightened public awareness of the need to process and dispose of solid waste in an environmentally sound and cost-effective manner.

ELECTRIC AND GAS UTILITIES

The electric system is comprised of three components: power generation facilities, transmission lines and distribution facilities. The City's electric power is generated by WE Energies, a subsidiary of WEC Energy Group. WE Energies owns 12 sites with power generation facilities that include coal-, oil, and natural gasbased plants as well as wind, hydroelectric, and biomass-based, cogeneration facilities. We Energies generates electricity for Wisconsin and Michigan residences and businesses has increased production over years preceding publication of this report to ensure customers can receive adequate service and offers a variety of services and programs to promote energy efficiency, conservation, and renewable energy usage.

⁸ In 2004, the County initiated operation of the composting facility at a former gravel and sand mine in the Town of Genesee as a strategy to generate topsoil to reclaim the site. Reclamation of the site, which composted and processed over 6,600 tons of yard waste on an annual basis, was anticipated to be complete within ten years.

Call Out: We Energies electric services and programs include Energy for Tomorrow, a voluntary renewable energy program through which We Energies produces or purchases renewable energy for participants. Energy users opting to participate in the program at one of three levels pay a higher rate for their renewable energy, which costs We Energies more to generate than energy produced from fossil-fuels. We Energies also allows customer-owned power generation systems, including wind turbines, solar photovoltaic systems, microturbines, or fuel cells owned by State residents and businesses, to interconnect with We Energies' distribution system. An EV charger pilot program aims to reduce potential cost barriers for We Energies customers wanting to install EV charging equipment at their place of residence or business.

The American Transmission Company (ATC), a privately owned, public utility is headquartered in Pewaukee, provides electric transmission service to the City and other portions of Wisconsin and adjacent states. ATC extends 138-Kilovolt (kV) single and multiple circuit transmission lines through a substation in the City to deliver local and regional power.

Image: ATC substation.

Call Out: An assessment completed in 2006 identified potential energy transmission issues in Southeastern Wisconsin, including transmission service limitations and facility overloads. The assessment also identified low voltages in an area around the City, which has been vulnerable to facility overloads. The low voltages may be attributed to low probability substation outages and may indicate that the existing network may be insufficient without significant reinforcements.

The City's electric service is distributed by the City of Oconomowoc Electric Utility, one of 81 community-owned electric power providers in the State.

Call Out: The Region and State have faced an emerging electricity shortage. On average, electricity consumption increases by a rate of 2.5 to 3 percent per year due to population growth, business expansion, and higher usage among all customer segments. Projections show that Wisconsin will require an additional 7,000 megawatts of electricity in 2016 to keep pace with increasing demand. Because other areas of the country are facing the same supply situation, purchasing power is not a future option due to limited supplies and the need for an improved transmission line grid.`

WE Energies⁹ also provides natural gas service to the City.

TELECOMMUNICATIONS

There are 26 cellular tower antenna sites within the City as documented in a regional wireless infrastructure plan designed to develop a high level of telecommunications service within the Region that promotes economic competitiveness and helps meet growing needs in relation to public safety, emergency response, and home health care.¹⁰

PUBLIC SAFETY

Public safety within the City is the primary responsibility of the Waukesha Police Department (WKPD), which works to prevent and detect criminal activity through three service divisions: Patrol, Special Services and Criminal Investigation. Each WKPD division has specialties designed to enhance community engagement and supplement traditional patrol units.

Call out: examples of which include the Neighborhood Engagement Unit and the Public Safety Cadet Program. Another specialty, the Crisis Response Unit (CRU), is a two-person team consisting of a Waukesha County Department of Health and Human Services (DHHS) Crisis Clinician and a WKPD Patrol Officer trained in crisis intervention focused on solutions-based outreach through response and prevention.

Public safety service provided by the City of Waukesha Fire Department includes emergency medical response, fire prevention and inspections, fire suppression, hazardous materials mitigation, technical rescue service, juvenile fire education, special rescue services, and other community programs. Fire Department services are not limited to the City; the department provides technical rescue service to 16 communities overall and provides hazardous materials mitigation to all Waukesha County communities through an intergovernmental agreement.

Call out: State-licensed emergency medical technicians (EMTs) with the Fire Department provide emergency medical services and pre-hospital medical care including basic life support (BLS) and advanced life support (ALS).

⁹ The trade name for the Wisconsin Electric Power Company and Wisconsin Gas LLC.

¹⁰ SEWRPC Planning Report No. 51, A Wireless Antenna Siting and Related Infrastructure Plan for Southeastern Wisconsin, September 2006.

WKPD and the Fire Department are also responsible for providing City weather and other emergency warnings and alerts, including testing and activating weather warning sirens and managing the emergency alert system to transmit verbal information via local cable television system overrides.

Public safety facilities are shown on Map 6.x and listed in Table 6.x.

CITY AND COUNTY ADMINISTRATION

The City's elected officials and staff are housed in City Hall, a new facility completed in 2021 on the same site as the previous facility. Located one half-mile northwest of the City's historic downtown, City Hall is directly connected to the City's Transit Center and parking garage. City Hall houses the Mayor's office, Council chambers, municipal court, emergency operations center, data center, various City departments, and a public service counter.

As the County seat, the City is also home to County administrative facilities. These facilities are clustered in a campus setting known as the Waukesha County Administration Center, which houses the County Executive office, courthouse, and numerous County departments that are essential to managing and providing Statemandated programs and services.

City and County administrative and operational facilities are shown on Map 6.x and listed in Table 6.x.

LIBRARY SYSTEM

Public libraries are hubs for community engagement and information that provide the general public with access to a variety of educational resources. Built in 1904, the Waukesha Public Library is centrally located in the City's downtown area at the south end of Cutler Park. The library is part of the Bridges Library System, which includes 15 public libraries in other Waukesha County communities and eight public libraries in communities within neighboring Jefferson County. The library provides additional service and support for all Bridges Library System staff and users, including technical support with digital library platforms and reference service and support as the system's primary resource library.

¹¹ The Waukesha County Federated Library System was established by the Waukesha County Board of Supervisors under Chapter 43 of the Wisconsin Statutes in 1981 and was renamed in 2016 as the system transitioned to add service for Jefferson County, a change that earned Bridges an award for intergovernmental cooperation.

Graphic: The library was staffed by a team of 46.5 full time equivalent (FTE) employees, was visited by approximately 208,000 patrons, and had a total circulation of over 745,000 items in 2021.

The library has undergone four major renovations and has provided new and adapted services and programs to meet the community needs as societal shifts, innovative resources, and advanced technologies present public library systems nationwide with new demands and opportunities. The library's 2021 and 2022 renovations modernized the building's first floor and resulted in significant updates to the library's original Carnegie Room. The renovation also helped to expand library services and created more meeting space, including a commercial/demonstration kitchen and a new makerspace. Additional new and adapted services and programs include the Library Memory Project and free access to virtual continuing education courses, WiFi hotspots, passes to local and regional institutions, and other specialty items.

Challenges attributable to the COVID-19 pandemic have emphasized the role of libraries in ensuring equitable public access to a variety of educational resources, temporary Pandemic-associated relief enables Libraries to provide increased public access to resources that are essential for learning, working, and daily life. Library systems in the State may, however, be inhibited from continuing to meet people's ever-changing needs, including the provision of services required under State law, due to long-term reductions in funding.¹⁴

Call Out: Appropriations for the Bridges Library System, and for other library systems in the State, were reduced by 10 percent in 2011 and had not been restored to previous funding levels prior to this plan's publication.

CHILD CARE

The Wisconsin Department of Children and Families (DCF) regulates child care facilities in the State. Child care providers can operate within two types of settings: family child care and group child care centers. Child

¹³ The Memory Project is a partnership between libraries in the Bridges Library System and additional public libraries within Racine and Washington Counties, which provides social and educational programs on memory loss and brain health to individuals directly and indirectly affected by memory loss, Alzheimer's disease, and other forms of dementia.

¹⁴ Library systems that provide services required under State Statutes receive funding calculated based on a formula involving population, geographic area, and local funding levels and appropriated by the Wisconsin Department of Public Instruction through the Division for Libraries and Technology.

¹² Bridges Library System 2018-2021 Strategic Plan.

care providers in both settings are required to have completed training prior to providing service and must complete annual continuing education. Child care providers in each setting are, however, subject to different limitations on the number of children they can care for based on the children's ages. Group child care centers licensed under Chapter DCF 251 provide care for nine or more children while family child care providers, which generally care for a smaller number of children within a provider's home, may be certified or licensed under Chapter DCF 250 of the *Wisconsin Administrative Code*.

Family and group child care establishments can provide different benefits to meet guardians' diverse needs. Family care centers may be able to fill gaps in service by providing more personalized, culturally appropriate, conveniently located care in a home-like setting. Family care providers operating as home-based businesses may require minimal start-up and operating costs. However, the small size of family care centers may make it difficult to ensure a substitute may be available when a primary care provider is not. Licensed group child care centers, meanwhile, may provide standardized care for larger groups of similarly aged children. As they are subject to more stringent requirements and require greater investment, licensed group child care centers may be more permanent fixtures within a community.

Acknowledging this permanence, group child care centers in the City as of 2023 are listed in Table 6.X and shown on Map 6.X. DCF maintains up-to-date data on group and family child care centers throughout the State. This publicly accessible information can assist City residents and workers and guardians in nearby areas to locate child care providers that meet their needs.

EDUCATION

Primary and Secondary

City of Waukesha residents are served by the School District of Waukesha (SDW), the seventh largest public school district in the State. SDW provides basic education services to students within six additional municipalities, including the Towns of Brookfield, Delafield, and Genesee, the Village of Waukesha, and the Cities of Brookfield and Pewaukee. Private schools offer additional opportunities for primary and secondary education within the City. SDW schools, private schools, and other SDW-owned facilities within the City as of 2023 are shown on Map 6.X and listed in Table 6.X.

Call Out: According to the National Center for Education Statistics, about 12,340 students were enrolled in pre-kindergarten through 12th grade in SDW schools in 2021-2022.

Post-Secondary

Post-secondary educational facilities within the City include Carroll University, the University of Wisconsin-Milwaukee (UWM) at Waukesha, and Waukesha County Technical College (WCTC). These post-secondary facilities are shown on Map 6.X and listed with primary Carroll offers undergraduate programs, graduate programs, professional development resources and courses, and pre-college programs. UWM at Waukesha offers youth classes, bridge programs, two-year associate degrees, four-year bachelor's degrees, and continuing education for professional development or personal enrichment. Within its Waukesha campus and its nearby Pewaukee campus, WCTC offers associate degrees, technical diplomas, apprenticeships, and certificates in 176 programs as well as high school completion and dual enrollment options.

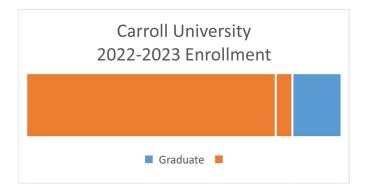




Chart: Carroll University 2022-2023 Enrollment; orange is undergraduate students, more of which are full-time than part-time.

Graphic: In 2022-2023, the University of Wisconsin-Milwaukee at Waukesha had 810 students enrolled within 29 areas of study.

HEALTH CARE

Health care facilities can provide a community with access to essential services including preventative and routine care as well as treatment to help address health issues. The adequacy of a community's access to health care may be determined by considering a variety of factors. The proximity of and transportation network elements serving health care facilities can affect the ease by which residents can travel to and access care. The adequacy of health care may also depend on the type and affordability of services provided and the capacity of facilities providing those services in relation to the area's population and needs.

Health care for City residents is available through hospitals offering a full range of medical services as well as at clinics supporting non-specialized medical services, including the facilities shown on Map 6.x and listed on Table 6.X as well as facilities within the broader Region.

Call Out: While health care facilities are important to providing services to promote health and wellness, additional community features can also significantly contribute to promoting community health. One such feature is a community's development pattern, which involves the spatial distribution and connectedness of various land uses. A development pattern that promotes active transportation, including walking and biking, can enable residents, workers, and visitors to exercise while accessing daily needs.

Graphic: As the proportion of City residents 65 years of age and older increases, so will the demand for health care and for access to land use patterns that support overall wellness/increase quality of life.

CEMETERIES

There are three cemeteries or mausoleums within the City. The smallest, Northview Cemetery, is less than 5 acres in size and located adjacent to the Waukesha County Airport. This inactive cemetery is owned by Waukesha County and was often used to bury unknown or unclaimed bodies. The last burial occurred in 1951. A memorial was established in the early 2000s. St. Joseph's Cemetery, comprised of 18 acres near the City's eastern edge, is owned by the Archdiocese of Milwaukee. Prairie Home Cemetery officially opened in 1849 and is now the City's largest, encompassing 62 acres in the south-central portion of the City. Prairie Home is City-owned cemetery and is managed by the City of Waukesha Cemetery Commission.