UniverCity Year

Pepin County

A three-year partnership to ignite innovation in Pepin County, Wisconsin
Pepin County and the University of Wisconsin-Madison partnered to research key issues facing the county during 2018-2021.

This booklet provides a brief glimpse into the work of hundreds of students, faculty, staff, and local government leaders. For detailed information on project goals, research methods, findings, and recommendations, download the final reports from the UniverCity Year website at: univercitywisc.edu/pepincounty.
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UniverCity Year Pepin County was a three-year partnership between UW-Madison and Pepin County, along with its cities, towns, and villages.

The concept was simple.

Local government leaders in Pepin County identified three overarching themes, and 25 individual projects, that would benefit from UW-Madison expertise. The projects addressed:

- Economic development
- Education
- Environmental sustainability

Faculty and staff from across UW-Madison incorporated these projects into their courses and research programs. Meanwhile, UniverCity Year staff provided administrative support to ensure a successful partnership.

The results were powerful.

With the support of their community and university mentors, students generated big ideas and feasible recommendations to spark momentum towards a more sustainable, livable, and resilient Pepin County.
198 total people involved

22 faculty, instructional staff, and researchers
12 Pepin County project leads
164 students

25 projects
12 courses
9 independent research projects

6 UW-Madison schools & colleges
1 UW-River Falls department
1 UW-Eau Claire department
ACKNOWLEDGEMENTS

Thank you to the many community and university representatives who were essential to this project’s success.

Maria Nelson organized this partnership on behalf of the county and served as an expert resource on all community projects. Your efforts are making a lasting impact on Pepin County.

Staff and community members from Pepin County spent countless hours mentoring students and helping them connect their coursework with on-the-ground issues in the community. Thank you for sharing your knowledge with the university.

- Sandi Anderson, Durand Improvement Group
- Rob Buntz, Village of Pepin
- Gretchen Cipriano, Durand-Arkansaw School District
- Harley Cochran, Village of Stockholm
- Chase Cummings, Pepin County
- Greg Doverspike, Durand-Arkansaw School District
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- Rachel Kromrey, Pepin County
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- Carol Wiersma, Stockholm Merchants Association
- William Wroblewski, Village of Pepin
- Pepin County Board of Supervisors

Members of community organizations and government units in Pepin County provided resources, advice, and feedback on the partnership and projects. Thank you for your support.

- Pepin County Board of Supervisors and Staff
- Durand-Arkansaw School District
- City of Durand
- Village of Pepin
- Village of Stockholm
- Durand Improvement Group (DIG)
- Pepin Area Community Club (PACC)
- Stockholm Merchants Association (SMA)

Thank you to the faculty, staff, researchers, and extension specialists from UW-Madison, UW-River Falls, UW-Eau Claire, and UW-Stevens Point. You embodied the Wisconsin Idea by focusing your courses, research programs, students, and time on the needs of local government leaders and residents in Pepin County. You are igniting innovation across the UW System, Wisconsin, and the world.

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Matthew Wyndham, COWS
1 “Community branding for Durand.” Independent project with the Division of Extension. Kristin Runge.

Durand residents and city staff partnered with the Division of Extension to better understand the community’s identity and to unify the city’s communications materials. A survey revealed that Durand offered a family environment, an idyllic small-town setting, and a high quality of life. Additional benefits included Durand’s close proximity to outdoor recreation and easy access to larger urban centers. The group recommended the city use these selling points to attract new residents, tourists, businesses, investors, and other stakeholders to the area.


Like many small cities across rural Wisconsin, Durand was focused on growing the local economy, attracting visitors, filling vacant buildings, and enhancing the visual characteristics of the area. Students developed a plan to meet these objectives for a six-block radius of downtown Durand. Their recommendations included installing murals on buildings, creating a trailhead for the Chippewa River State Trail and connecting it to downtown, and adding infrastructure for river users to leave their vessels and visit downtown. The students also recommended using vacant buildings for pop-up shops, updating zoning, providing tax incentives to attract new businesses, and improving the aesthetics of downtown with planters, trees, seating, and lighting.


To help attract new businesses to the area, students compiled a guidebook that describes the variety of resources available to business owners and entrepreneurs. It included information on the county’s population, demographics, and workforce as well as the various loans, grants, and tax credits available.
Additionally, students listed workshops, training, and other types of non-financial support that can help local businesses succeed in Pepin County.


Students developed a mobile phone app for tourists to plan their visit to the Village of Pepin. App users can learn more about businesses—their history, building, hours, and contact information—and add places of interest to a custom walking map.


Should Durand build an industrial park to attract new and growing businesses to the area? Students investigated the feasibility of such an endeavor, designing an industrial park in the city to house small manufacturing businesses. Their designs included where to locate the park, and then where to place roads, sanitary and stormwater sewers, drinking water, retention ponds, and possible residential expansion at the site. Students also included a timeline and cost estimate for the entire project.


Students developed two proposals designed to attract more tourists to Pepin County. One campaign featured vintage illustrations and the slogan “Pepin
7 “Pepin County economic analysis and business development strategies.” Independent project with the Division of Extension. Steve Deller and Matt Kures.

This project was delayed due to COVID-19. When able, researchers and residents will review the county’s strengths, discuss economic development strategies, and identify opportunities to improve the local economy.

8 “Pepin County economic benchmarking.” Independent project with UW-Eau Claire. Tom Kemp.

This project was delayed due to COVID-19. When able, researchers will benchmark the county’s assets against those of surrounding and like-size counties.


This project was delayed due to COVID-19. Students have updated demographic data, and when able, they will conduct interviews with residents about future priorities for the Village of Pepin.

Projects 7-9 have been delayed due to COVID-19.

Please check the UniverCity Year website for updated information: univercity.wisc.edu/pepincounty.
1. “Best practices for analyzing school data.” Independent project with the School of Education. Sarah Archibald.

Representatives from the Durand-Arkansaw School District and UW-Madison met to discuss the data available to the school district and best practices for collecting and analyzing data.


The Durand-Arkansaw School District employs 158 people and is one of the top two employers in the county. How much impact does the school have on the local economy? Research found that employees who lived in and spent money in the community were a driving force of the economy. As a result, any reduction in the school district’s budget would create an economic loss in the county.


Researchers held focus groups with residents to better understand the role that the school district played in the community. They found that the school was a point of pride in the community. Though not without room for improvement, overall the school was viewed as welcoming and an active participant in the larger community’s progress. This project grew out of Steve Deller’s “Economic impact of the Durand-Arkansaw School District” project.


The Wisconsin Forward Exam tested students in grades 3-8 on their English and Language Arts abilities. UW-Madison students examined the Durand-Arkansaw School District’s test scores and identified the individuals with the most potential to improve, and analyzed how the students performed at each grade level.


The Wisconsin Forward Exam tested students in grades 3-8 on their Mathematics abilities. UW-Madison students examined the Durand-Arkansaw School District’s test scores and identified individuals with the most potential to improve, and analyzed whether gender, race, disability status, or level of English proficiency affected student scores.

Many Pepin County residents rely on wells as their main source for water. At the same time, groundwater in Pepin County is becoming increasingly contaminated with nitrates, much of it from the agriculture industry. Students surveyed farmers and developed communication strategies to promote agriculture best practices and conservation methods that could improve soil health and nitrate levels.

2. “Best practices for managing GIS data.” Independent student project with the State Cartographer’s Office and the Nelson Institute for Environmental Studies.

Pepin County collected geographic information system (GIS) data from a variety of sources. A student reviewed all the data, sorted it, and recommended process improvements to make the data more easily accessible and in-line with industry best practices for data management.


The Fall Creek Watershed flows into the Chippewa River. The extensive history of crop and livestock monoculture within this area led to deterioration of the soil and stream ecosystems in the watershed. Students developed a 10-year plan to improve the health of the freshwater stream ecosystem and the riparian habitat of the watershed. They recommended increasing staff’s administrative and technical capacity in order to focus on communication and education with local residents. Additionally, the students identified opportunities to implement best practices in conservation and restoration within the area.


Manure is commonly applied to fields because it contains concentrations of nitrogen, phosphorus, and potassium. However, runoff containing high levels...
of these nutrients has led to ecosystem damage and poses health risks. To assist with these issues, students investigated the environmental, economic, and social impacts of composting the manure instead. They found that composting manure reduced greenhouse gas emissions, groundwater pollutants, and odor while increasing human safety. Students also researched different types of composting systems and made recommendations for which ones to implement.

“Feasibility study of composting yard waste.” Civil Engineering 421: Environmental Sustainability Engineering. Andrea Hicks.

Pepin County residents drop off organic waste at a facility where the material is left in a pile to decompose. Students researched a more efficient composting process that would increase usage and production while keeping the cost and maintenance of the facility low. The students found that other methods, like an aerated static pile, windrow composting system, or in-vessel system were more environmentally, economically, and socially sustainable.

“Groundwater quality protection in Pepin County” (research paper) and pamphlet. Environmental Studies 600/Soil Science 499: Capstone. Steve Ventura and Nick Balster.

Water contamination in Pepin County was steadily increasing, with roughly 20 percent of private wells exceeding the hazardous limit of 10 ppm (parts per million) nitrate concentration. To mitigate these pressing issues, students recommended improved well water and septic tank testing, and they created a susceptibility map identifying areas in Pepin County with a high likelihood of water contamination. Students also created a handout to help residents assess the quality of their drinking water.
The Pepin County Multi-Hazards Mitigation Plan 2017-2022 evaluated residents’ exposure to hazards and identified strategies to reduce risks to life, health, and property within Pepin County. Students assessed four topics from the plan—extreme weather, flooding, water quality, and agricultural land use—through the lens of impact on residents’ health. Their recommendations were wide ranging, including planting more shade trees, increasing children’s resiliency, restoring wetlands, moving people and assets out of the floodplain, sealing abandoned wells, and encouraging agricultural practices that protect and build soil health.

Holden Park is the largest county park in Pepin County. It has the potential to be a top recreation spot in the area; however, it suffers from challenging terrain, invasive plants, and storm damage. A student recommended that the county develop a master plan to prioritize and implement improvements, specifically focusing on restoration, recreation, placemaking, and wayfinding.

The overall amount of rain falling in Pepin County has steadily increased since 1950, and intense precipitation events are projected to become even more frequent. The Village of Stockholm is particularly susceptible to the flooding and erosion that results from rain events. To mitigate flooding risks, students designed a large retention pond to be located just outside of the village. The pond also featured a walking trail and a pedestrian bridge to create an outdoor recreation area at the same time.

Students researched design options for an affordable and environmentally conscious system for treating wastewater in the Village of Stockholm. After considering three options, they recommended the Village build a recirculating sand filter system that uses microbes to clean the wastewater before discharging it to a drainage field.


Many Pepin County residents rely on private wells and septic systems for water and sewer needs. The integrity of these private wells has been threatened by malfunctioning septic systems, agricultural chemicals, and the land-spreading of animal wastes. Students researched strategies to display well-quality data anonymously and educate residents on the importance of preserving water quality, all while protecting the privacy of residents and supporting collaborative relationships between all county residents.