



COMMUNITY PLANNING ASSISTANCE TEAM

Connecting Heritage: Linking Community

Heritage Trail
Dubuque County, IA
Final Report

January 24, 2013



American Planning Association

Making Great Communities Happen

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Cover Photos: Staring at top left, moving clockwise: (1) snowmobilers on Heritage Trail, courtesy of Dubuque County; (2) young girl with bike, photo by Ryan Scherzinger; (3) two people walking trail, photo by Ryan Scherzinger; (4) biking in the snow during the Triple D Winter Race, courtesy of "rideonpurpose" blog; and (5) runner, photo by Ryan Scherzinger.

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Dubuque Convention and Visitors Bureau

City of Dubuque | City of Dyersville | Dubuque County

Friends of Dubuque County Conservation | Tri-State Trail Vision

City of Farley | City of Sageville



INTRODUCTION

In October 2012, the American Planning Association (APA), through its professional institute, the American Institute of Certified Planners (AICP), organized a Community Planning Assistance Team (CPAT) project in Dubuque County, Iowa with the Heritage Trail as its focus. Dubuque County is the eleventh community to participate in APA's Community Planning Assistance Teams initiative.

The project was selected from proposals submitted during CPAT's winter 2011 community application cycle. Anna O'Shea, Zoning Administrator for Dubuque County submitted the successful application on behalf of the Dubuque Smart Planning Consortium, and served as APA's primary community liaison throughout this regional effort. The Dubuque Smart Planning Consortium is a partnership of the following entities: Dubuque County; City of Dubuque; City of Asbury; City of Cascade; City of Dyersville; City of Epworth; City of Farley; City of Peosta; Dubuque Soil & Water Conservation District; and East Central Intergovernmental Association (ECIA). Other supporting partners of the application included: Dubuque County Conservation Board; Greater Dubuque Development Corporation (GDDC); Dubuque Chamber of Commerce; City of Dubuque Economic Development Department; Dubuque Metropolitan Area Transportation Study (MPO); Dubuque Area Convention & Visitors Bureau; Tri-State Trail Vision; Regional Planning Affiliation 8; and Dyersville Chamber of Commerce.

This report presents the Team's findings, observations, and recommendations for the Dubuque Smart Planning Consortium and its partners, including the residents of Dubuque County.

The Purpose of the CPAT Initiative

The purpose of the Community Planning Assistance Team (CPAT) initiative is to serve communities facing limited resources by helping them address planning issues such as social equity and affordability, economic development, sustainability, consensus building, and urban design. By pairing expert urban planning professionals from around the country with citizen planners from local communities, the initiative seeks to foster education, engagement, and empowerment. As part of the team's goals, a community develops a vision plan that promotes a sustainable, livable, economically vibrant, and healthy urban environment.

APA staff works with the community, key stakeholders, and the host organization(s) to assemble a team of planners with the specific expertise needed for the project. The team meets on-site for three to five days, during which a series of site visits, focused discussions, and analysis are performed. On the final day, the team reports their results back to the community with local press in attendance. A final, more detailed report is issued to the community at a later date.

Guiding Values

APA's professional institute, the American Institute of Certified Planners (AICP), is responsible for the CPAT initiative. It is a part of APA's broader Community Assistance Program.

Addressing issues of social equity in planning and development is a priority of APA and AICP. The Community Assistance Program, including the CPAT initiative, was created to express this value through service to communities in need across the United States.

Community assistance is built into the professional role of a planner. One principle of the AICP Code of Ethics and Professional Conduct states that certified planners shall aspire to "seek social justice by working to expand choice and opportunity for all persons, recognizing a special responsibility to plan for the needs of the disadvantaged and to promote racial and economic integration. Yet another principle is that certified planners should aspire to "contribute time and effort to groups lacking in adequate planning resources and to voluntary professional activities."

Program Background

In recognition of the key role urban and regional planners play in shaping vibrant, sustainable, and equitable communities, the APA Board of Directors established the “Community Planning Team” initiative in 1995. This initiative resulted in a very successful pro bono effort to assist an economically struggling African American community in North Carolina. APA has continued to develop a pro bono planning program that provides assistance to communities in need.

Another Community Planning Assistance Program is the Community Planning Assistance Workshop initiative, which is held in the host city of APA’s National Planning Conference every year. The workshop is a one-day event that engages community leaders, citizens, and guest planners in discussing and proposing specific solutions to urban planning challenges. Workshops typically begin with an introduction of individuals involved and a tour of the community, neighborhood, or site. Participants form breakout groups that begin by discussing existing issues and formulate new ideas based on community needs and sound planning techniques. Each breakout group “reports out” on its results to the entire group. Facilitators then lead a discussion to form consensus around future goals and ways to achieve these goals. Upon the conclusion of the workshop, it is the responsibility of the local community to compose a final report that incorporates workshop results and specific actions that local officials should take to turn the project vision into reality.

In 2005, program efforts were notably increased after the tragic and devastating effects of Hurricane Katrina in the Gulf Coast region. APA immediately embarked on a number of initiatives and projects including Planning Assistance Teams in the affected cities of Henderson Point, Mississippi, and Mandeville and Slidell in Louisiana. Another ongoing Gulf Coast recovery project is the Dutch Dialogues, which has brought American planners together with Dutch experts to transform the way that Louisiana relates to and manages its water resources.

AICP broadened the scope of the CPAT program with its 2009 project in Buzzard Point, a neighborhood in Southwest Washington, D.C. Over the course of the site visit, the team met with more than 40 neighborhood groups, government agencies, residents, and other stakeholders. The team advised community leadership on long-range strategies to strengthen both existing and proposed transit links and increase accessibility, improve existing affordable housing developments, position the area as a major gateway to the city, and to deal with dominant industrial areas within the neighborhood.

Recently completed projects in Matthews, North Carolina, Story County, Iowa, Maricopa, Arizona, Wakulla County, FL, and the current Heritage Trail project are important landmarks in the development of the CPAT program. They mark the inauguration of CPAT as an ongoing programmatic effort. The initiative will increase in scope and frequency in coming years, becoming an integrated part of APA’s service, outreach, and professional development activities.

More information about APA’s Community Assistance Program and the Community Planning Assistance Team initiative, including full downloadable reports, is available at www.planning.org/communityassistance/teams.



EXECUTIVE SUMMARY

The Team prepared this report after studying the CPAT application and materials prepared by the Dubuque Smart Planning Consortium; meeting with residents, advocates, stakeholders, officials, and private sector representatives; conducting field investigations of Heritage Trail; and extensive discussion and evaluation of the varied possibilities and concerns. We offer this document for all those interested in the potential of Heritage Trail and the communities of Dubuque County.

The full report organization presents:

- A background and evaluation of the Heritage Trail, including its most recent bout with three epic rain events and the significant repairs and maintenance efforts that followed;
- A variety of ideas and strategies to connect surrounding communities along the trail to promote economic development within Dubuque County and add value to trail users' experience;
- Guidelines and recommendations toward creating an identity for the trail, including a coordinated wayfinding system and promotional outreach strategies;
- Data collection tools and methods to better plan and manage the trail;
- Potential safety improvements; and
- An examination of existing and potential opportunities along the trail.

The CPAT program provides an independent, professional, third-party planning analysis and suggested planning approach. *It is not a definitive plan, but information, analysis and suggestions on how to plan Heritage Trail.* Heritage Trail is a 26-mile, multi-use recreational trail comprised of compacted crushed limestone that follows an abandoned railroad right-of-way connecting the City of Dubuque on the eastern edge of Dubuque County to the City of Dyersville on the western edge. After a series of three 100-year floods starting in 2008, the aging (100+ years) railroad infrastructure that the trail relies upon was devastated and forcibly closed many sections. Many of the trail's 32 bridges were severely damaged by the epic rain events. Other parts of the trail located along steep embankments were completely washed out. Since 2008, the County Conservation Board, the entity who initially built the trail 30 years ago and who is currently responsible for the maintenance of the trail, has worked vigorously to assess and implement the repairs necessary to keep the trail functioning.

With the completion of repairs and the new bike & pedestrian overpass over Highway 52, Heritage Trail's future is bright. With structural issues along the trail soon-to-be resolved, the Dubuque County community is now offered an opportunity to build upon the great asset that the trail already represents. The trail's new beginning requires data collection to establish benchmarks, whereby progress toward any planned goals can be measured. From start to finish of the CPAT's work on this project, the question of, "to pave or not to pave" the trail, was unrelenting throughout the team's many interactions with residents, advocates and other stakeholders. The common message conveyed by trail users, however, was the desire for a well-maintained, stable and reliable surface. The prolonged, albeit necessary, attention to the physical features of the trail drew focus away from developing an identity for Heritage Trail. However, wayfinding signs along the trail and to the trail, spreading the word, trail counts and expanding uses for the trail are all discussed in this report.

Myriad possibilities for tourism, education and conservation exist along Heritage Trail. The native flora and fauna, unique geological features and histories of place comprise many areas of interest. Opportunities abound to highlight these characteristics along the trail, which can work to leverage and educate users about the natural and cultural assets of the region as well as connect them to adjacent communities. Regional planning efforts such as watershed management, compatible land uses surrounding the trail and proliferation of native species is also discussed in relation to the trail's natural assets.

Increasing user-friendliness and accessibility was another key concern among many of the trail users that CPAT members spoke with. Presented within this report are examples of potential treatments to the trail that would enhance one's experience and increase safety for users of all ages. Those treatments include trail crossings, parking, lighting, and emergency management systems. Further discussion on connectivity to cities neighboring the trail and creating additional opportunities, such as hiking and camping sites along the trail, is also included.

A participatory planning process is one of the signatures of APA's CPAT program. The Smart Planning Consortium expressed it as a goal to promote more regional planning in Dubuque County. The Heritage Trail CPAT project gathered broad range participation from residents, business owners, advocates, government agencies and elected officials. Each was given the chance to discuss a vision for a trail that spans the entire county. The collaborative effort pursued by the CPAT and Consortium members serves as a model and is a stepping stone toward other future regional planning projects in the area.

PROJECT OVERVIEW

The Dubuque Smart Planning Consortium submitted a community application to APA's CPAT program in December 2011. Upon official selection, the Heritage Trail project began in April 2012 when APA staff started working with Anna O'Shea, Zoning Administrator for Dubuque County, to identify the expertise needed for the project. Particular areas of specialization included: trail and recreation planning; transportation planning; stormwater management; environmental planning; regional planning; public engagement; and consensus building. Paula Reeves, AICP CTP was selected as the Team Leader.

Paula Reeves and APA staff member/project manager, Ryan Scherzinger, conducted a preliminary visit to Dubuque County, June 21-22, 2012. During the preliminary visit, Reeves and Scherzinger toured the full 26-mile length of Heritage Trail with Anna O'Shea and Executive Director of the County Conservation Board, Brian Preston, beginning in the City of Dyersville and ending in the City of Dubuque. In Dyersville, they met with staff from the cities of Dyersville, Cascade and Farley, and representatives from the Dyersville Chamber of Commerce and Dyersville Foundation. In Asbury, they met with representatives from the cities of Epworth, Peosta, and Asbury, the East Central Intergovernmental Association (ECIA), and members of the Asbury snowmobile club. Finally, in Dubuque, they met with members of the County Board of Supervisors, City of Dubuque staff, and representatives from the Dubuque Area Chamber of Commerce, Dubuque Area Convention and Visitor's Bureau, Greater Dubuque Development Corporation, property owners (adjacent to Heritage Trail), bike and snowmobile trail enthusiasts, and other interested County residents.

Reeves and Scherzinger also briefly visited many of the Consortium cities and explored their connections and access points to the trail. Brian Preston provided much of the background on the Conservation Board's repair and maintenance of the trail, particularly work conducted following the two devastating, epic rain events in 2008 and 2010. On the following day, Reeves and Scherzinger explored the City of Dubuque with Anna O'Shea and the City's Planning Director, Laura Carsten. Carsten provided a tour of Dubuque's expanding bicycle and pedestrian trail system, as well as select sites such as the Mines of Spain, Eagle Point State Park, the Bee Branch Creek Restoration Project, and the new Millwork District.

Following the preliminary visit, Reeves and Scherzinger worked to identify the additional expertise needed for the project. The other team members selected were: Jean Akers, AICP; Jason Epley, AICP; and Steve Lane, AICP (see the *Meet the Team* section on *page 38* for more information on each team member). The team participated in several conference calls to discuss the project and studied a wide variety of background materials in the months leading up their visit. In addition, the team worked with the County to administer a short survey about Heritage Trail, which was closed and analyzed before the team's visit (see the results of the survey in *Appendix B*).

The full team arrived in Dubuque on October 16, 2012. On the following morning, the team was met by Anna O'Shea and County Conservation Board staff, who led the team on a comprehensive tour of Heritage Trail and many of the Consortium cities. Following a dinner meeting with Consortium members, the team held a public meeting at the Dyersville Social Center. Over 100 people attended the public input session. During the meeting, APA staff member, Ryan Scherzinger, presented the results of the survey. Then, participants formed breakout groups to discuss the following questions (among others as they surfaced through discussion within each of the groups):

- What is your vision for this trail corridor?
- What are your goals for this corridor?
- What are some steps you think need to be taken in the short and long term?
- What are the current challenges facing trail development or use?
- What obstacles are preventing the broader population from using the trail?
- What is the most significant barrier to achieving the vision for the trail?

Team members facilitated conversations within the groups and recorded key points made by group members. Following breakout group discussions, one person from each group reported out their group's findings to the whole group. The public meeting ended with a full group discussion.

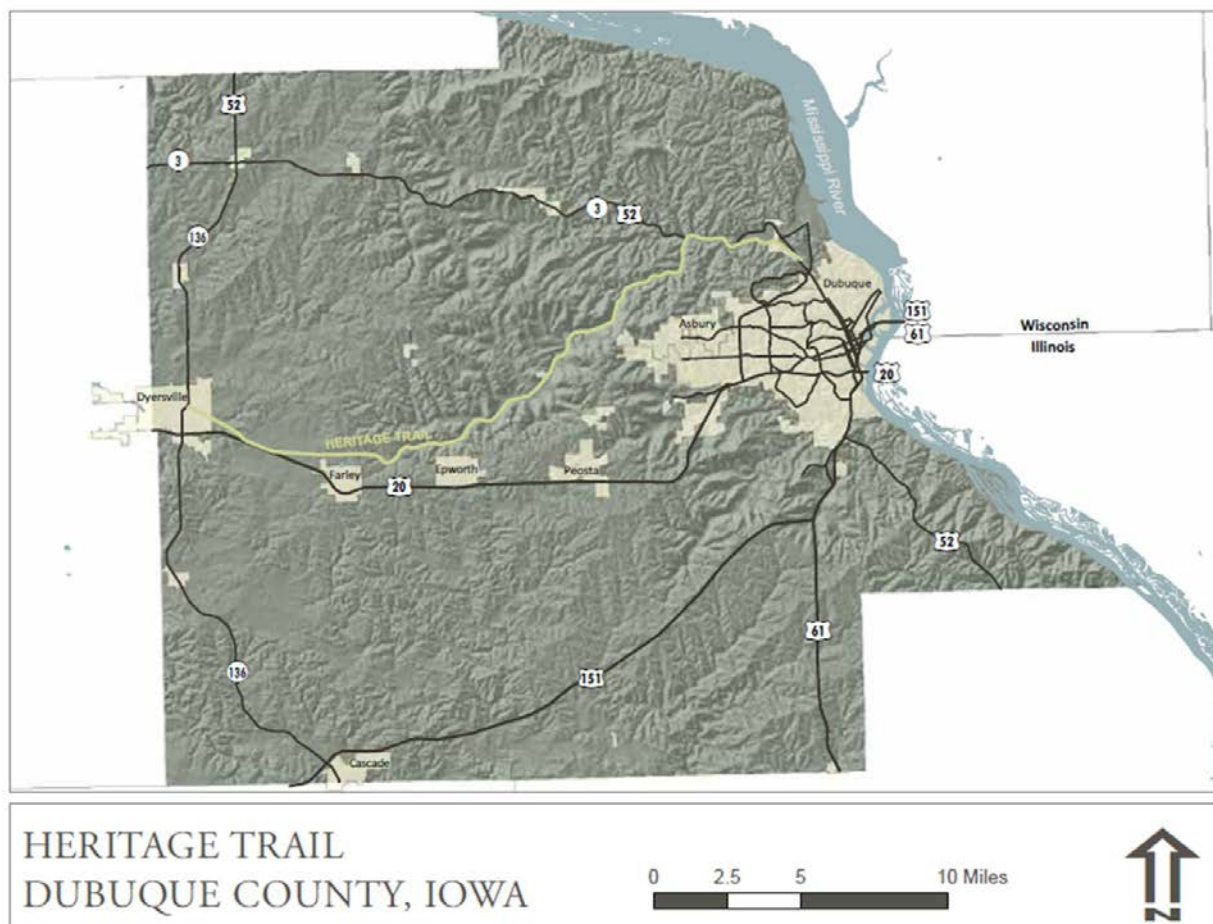
The following day, October 18, 2012, the team met privately from 8:30am to 8:30pm with various groups of stakeholders, including: Consortium city officials, Dubuque County Conservation Board members and staff, snowmobile and bicycle club representatives, trail-related event organizers, runners and walkers, property owners (adjacent to trail), engineers who conducted work on the trail, and regional planners.

On Friday, October 19, 2012, and the morning of Saturday, October 20, 2012, the team worked independently to assess and analyze all findings and prepare the final presentation. The final presentation was presented to community members and stakeholders on Saturday afternoon. The final presentation can be found online, along with other details of the project at: <http://www.planning.org/communityassistance/teams/dubuque/>

BACKGROUND

Heritage Trail

Heritage Trail is a 26-mile multi-use recreation trail comprised of compacted crushed limestone that follows an abandoned railroad right-of-way connecting the City of Dubuque on the eastern edge of Dubuque County to the City of Dyersville on the western edge of the county (see *Map 1* below).



The Heritage Trail was constructed in the early 1980s by Heritage Trail Incorporated and was one of the first rails-to-trails projects in the country, whereby former railroad lines are converted to recreation trails. The trail was later acquired by the Dubuque County Conservation Board, who has managed it ever since. The trail is remarkably flat for the entire 26 miles. Several of the original railroad bridges, with structural and safety modifications, are still in use along the trail. The Little Maquoketa River parallels much of the trail and adds to the scenic beauty, but also creates a variety of flooding issues. In only four years, from 2008 to 2012, the area experienced three 100-year floods that devastated Heritage Trail. Many of the 100+ year-old bridges were compromised, areas of the trail with steep embankments collapsed, and the trail surface was destroyed in many places.

Since 2008, the County Conservation Board has worked to fix the trail's problems associated with flooding, working with the Federal Emergency Management Agency (FEMA) and engineers to resolve the issues. Several of the bridges were completely replaced and others redesigned to withstand the area's recurrent flooding. The aging infrastructure that Heritage Trail inherited from the railroad is now updated beyond current engineering standards and is prepared to last, by all accounts, another 100+ years.

The Conservation Board does collect modest user fees for the trail: \$2 per day or \$10.25 per year and \$0.60 per day or \$5.50 per year for persons 62 and older. Winter use of the trail includes snowmobiling with a minimum of four inches of snow required. Cross-country skiing is permitted on the full length of the trail. Snow biking also occurs, particularly during the Trip D Winter Race, a "winter endurance trail event that traverses Dubuque County Iowa in the dead of winter by bike, ski or foot."¹

The Community: Dubuque County

Dubuque County, Iowa is located along the Mississippi River at the point where three states meet: Iowa, Illinois and Wisconsin - often referred to as the Tri-State Area. According to the 2010 Census, Dubuque County has a population of 93,653.

In late 2010, the following entities came together to form the Dubuque Smart Planning Consortium:

- Dubuque County
- City of Dubuque (pop. 57,686)
- City of Asbury (pop. 4,170)
- City of Cascade (pop. 2,159)
- City of Dyersville (pop. 4,058)
- City of Epworth (pop. 1,860)
- City of Farley (pop. 1,537)
- City of Peosta (pop. 1,377)



Image 1: Flood mitigation project along a steep embankment of Heritage Trail. Photo by Ryan Scherzinger

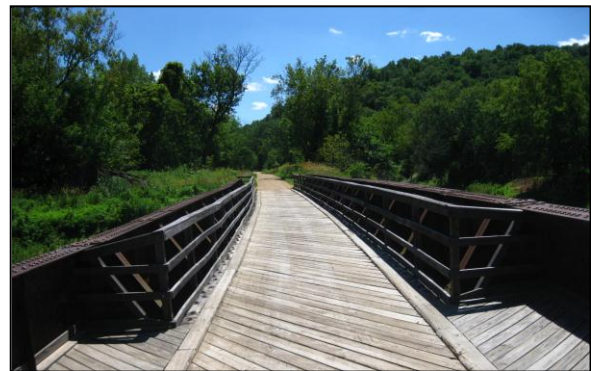


Image 2: One of the original railroad bridges modified for use along Heritage Trail. Photo by Ryan Scherzinger

¹ Quote taken from: <http://tripletrace.blogspot.com/2010/11/what-is-triple-d>

The Consortium ultimately seeks to develop a regional sustainability plan that includes the State of Iowa's Smart Planning principles, the City of Dubuque's sustainability principles and assistance from the Dubuque Soil and Water Conservation District on watershed planning, and then incorporate the smart planning elements of the regional plan into local comprehensive plans. The Consortium's application to CPAT stated that one of its goals is to "promote economic development in the region by connecting all seven cities in the Consortium to Heritage Trail." Also requested within the application was assistance to "make the trail more accessible and user friendly, to promote the sustainability of the trail and to expand the recreational and economic development opportunities of the entire region."



Image 3: The Field of Dreams movie site is located in Dyersville, a short distance from the Heritage Trail. *Photo by Ryan Scherzinger*

Some of the initial public input from the stakeholders and community representatives at the Consortium's smart planning workshop on March 3, 2011 included goals such as:

- Fostering cooperation instead of competition
- Promoting better regional collaboration that results in implementation of multijurisdictional projects
- Seeking community development that maximizes resources
- Using a regional approach to growth and planning
- Implementing plans for greener more sustainable communities
- Planning for long range projects instead of short range crisis management collaborating on transportation planning that promotes alternative modes of transportation
- Promoting environmental planning goals that foster a better quality of life, promote economic development, increase recreational opportunities and mitigate future hazards

The Consortium sees growing opportunities for Heritage Trail's future in light of new developments. A new trail system and a pedestrian bridge over Highway 52 North to the beginning of Heritage Trail (just north of the City of Dubuque) recently connected the riverfront development in the City of Dubuque. In addition, the Field of Dreams, just east of the City of Dyersville, may see a large youth baseball complex added near its vicinity. The planned facility will adopt major league standards, so they can host tournament-level baseball and softball games for teams 18 years old and under.

Consortium partners seek more recreational and commercial opportunities for tourists visiting the area. Heritage Trail ties the communities together and provides a mutual point for all of them to rally around. In their application to CPAT, the Consortium expressed their desire to create and utilize Heritage Trail as an economic development tool for the entire County.

IT'S NOT ABOUT THE TRAIL

At the onset of this feasibility study, the question: “to pave or not to pave?” seemed the most pressing issue to be considered in this assessment of the Heritage Trail. An inventory of the trail with past flooding events and subsequent bridge replacements and repairs combined with the history of infrastructure and operational improvements established the current and predicted future conditions for the physical trail’s alignment and infrastructure. The assimilation of stakeholder’s input and user groups’ needs and preferences revealed a comprehensive preference for a well-maintained stable and reliable surface.

The physical trail has a long history of past use, conversion to rail trail and the more recent intensive series of repairs due to aging infrastructure and flood events. The Chicago Great Western Railroad was built in 1886 and operated for close to 100 years prior to being purchased and converted to a rail trail. A quick look at land use pattern and the resultant surface hydrology from past natural landscape and impervious surface coverage would indicate that in the early operations of the rail line the existing bridges, culverts and stream crossings allowed water to flow relatively unimpeded beneath the railroad embankment. Many of the 32 bridge structures were built with creosote-treated timber pier supports placed tightly together to provide for weight-bearing strength for the rails and load-bearing train traffic. In 1979, railroad authorities declared the bridges unsafe for trains and ended the train service. Two years later, the railroad was officially abandoned. Over time, these bridges and their support structures grew more susceptible to failure as timbers rotted, broke or were displaced from forces of flood and shifting stream substrate. Concurrent to natural aging of built structures the surrounding land uses became increasingly developed from urbanization, residential development, expanded road systems and more intensive farming. Those land surface changes would have affected the surface hydrology of the landscape and contributed to changes in stream dynamics: more water runoff lasting for longer intervals. Streams will respond to greater flows by shifting their channels and banks and thus, putting more pressure on any immovable objects in their paths. So, the bridges got older and have been subject to strong flood forces which also were likely carrying more large woody materials during storm events.

Since 2008, the Conservation District has been working diligently to address this aging infrastructure and mitigate for the stream hydrology changes in the Little Maquoketa River watershed. Unprecedented flood events in 2008, 2009 and 2011 strained or destroyed the aging bridges repeated causing frequent closures of different sections of the trail (see *Images 4-9* below). The Conservation District has incurred over \$1.8 million in flood repairs and bridge replacements; much of this expense has been eligible for FEMA reimbursement. It should also be noted that the bridges had to be retrofitted for bicycle and pedestrian use since their original design was intended exclusively for trains. Safe railing systems have been added to existing bridges and incorporated into new (replacement) bridge designs. The numerous bridge repairs and replacements have sought to accommodate the stream hydrology and flooding events proactively through designs that allow unobstructed high water flow with little or no structures that might catch or block flood-borne debris. With these continual and calculated improvements to the trail’s infrastructure, flooding risks have been mitigated to the reasonable and sustainable degree.

The Conservation District has also purchased a road grader to aid in the maintenance of the trail’s crushed limestone surface. Regular topdressing of the trail surface, performed on an annual rotation along segments of the trail. The road grader also enhances the District’s ability to repair any surfaces damaged from storm events, harsh winters and mechanical damage. Concerns about unstable surfacing, low/wet and soft spots, and irregular or uneven surfacing should be largely addressed by this focused maintenance improvement. The District has been working hard to take good care of the trail, its crossings and surfacing.

Since the physical trail is being managed in an intentional and calculated process, the most valuable improvements to the Heritage Trail will be captured from implementing other improvements and enhancements. The assertion that “it’s not about the trail” infers that to the actual path and crossings and the progress towards a stable surface are not the issues to be resolved.



Images 4-9: Examples of the damage to Heritage Trail during recent epic rain events. The Dubuque County Conservation Board has worked to complete the repairs. *Photos courtesy of Dubuque County Conservation Board*

The Heritage Trail has a strong identity in the minds of local and regional users and in the history of the community. However, the identification of the physical trail is greatly understated. Trail signs, mileage markers, directional, informational, locational, and navigational information are limited and lack the visual traits that would enhance the trail's identity. Taking care of the trail must now expand beyond the physical trail.

Trail Identity Crisis

The Heritage Trail is suffering from an "identity crisis". The trail's infrastructure improvements and enhanced river and road crossings will soon allow the entire trail to open for use again. An enhanced identity for the trail system should be developed to improve "wayfinding" along the trail and to expand signage for finding the way to the trail. Current users on the trail develop their orientation to its connections, access and amenities mostly through experience. New users are left guessing where they are, what they can do, and where they can go. The trail should have a comprehensive sign system that defines the trail through a clear graphic identity and provides all the critical information to provide an enhanced experience for all trail users.

"Wayfinding" on the Trail

The trail has numerous layers of information that need to be readily available to enhance its use, increase the number of users and ensure positive experiences of users on the trail. A well-designed system of signs, symbols, markers and visual clues can provide both obvious and sometimes subtle information helping answer basic questions such as what is the trail; where is the trail; what is the trail like; how long is the trail; where am I on the trail; what is on the trail; what will I see; what can I do; how hard is it to walk, bike, or travel on; is it safe; how do I get there; where can I get off; and where's the restroom?

The Heritage Trail needs a defining visual character incorporated into a sign system that guides and informs the trail user. As part of the sign system, the visual graphic identity can use color, symbol, shape or other notable visible clue to link the signs through different types, messages and styles. A clear example of visual character integrated beyond trail signs is evident on the Monon Trail in Indianapolis, Indiana. The Monon Trail has a hierarchy of signs that guide people to the trail, along the trail and help orient the trail user to location and amenities both on and off the trail. In addition to the sign messages, the Monon has a logo and incorporates the color red in signs, bollards, benches, bridge railings, and other amenities to enhance the trail identity. The Heritage Trail has wonderful historical and cultural characteristics but needs a visual and graphic characteristic to create a stronger identity.



WAYFINDING:

Wayfinding is an essential ingredient for navigating through spaces from one location to an intended destination. A good wayfinding system allows a person to make correct directional decisions, acquire information about current location, continue smoothly along a route, and successfully reach a destination while at the same time the traveler can form mental images that make the journey memorable.

Wayfinding applies principles about how people interpret a physical environment to find clues and cues for orientation or navigation.

Successful wayfinding is more than just providing signs at critical decision points or intersections. Effective wayfinding involves a well-defined path; landmarks that help orient the traveler, spaces that have individual or unique identities (if everything looks alike how can you tell where you are); regions of differing visual character; and sight lines that can offer a distant prospective and show what's ahead.

A good “wayfinding” system will present levels of information through a sign hierarchy that determines how much information needs to be revealed at what places, how often and to what degree. The trail name would be the first level of base information followed by trailhead and access identity, then directional messages and mileage. Trail maps located at strategic trailhead locations should convey overall trail alignments and “you are here” indications. Trail maps are usually diagrammatic using just enough geographic representations to clearly show vicinity and relative location along the trail. The sign plan must also determine the specific locations on and off the trail for each type of sign conveying the appropriate level of needed information.

The comprehensive sign system should also consider the different types of physical signs. Coordinated selection of materials, shapes, sizes, posts, and other features should consider durability, ease of replacement, costs, and design compatibility.

Connections on and off the trail should be identified and incorporated into the sign system to provide links to services and enhance access to the trail. Sign messaging can provide supportive information about off-trail opportunities linking food, shopping, natural and historic attractions, parking alternatives, lodging, and other services.

WAYFINDING CASE STUDY: MONON TRAIL | INDIANAPOLIS, IN



Image 10: Monon Trail. Photo by Jean Akers, AICP

Red sign posts, red benches, red trash receptacles, red doors and trim on the restrooms all help identify the amenities at the trailhead as part of the Monon Trail system.



Image 11: Monon Trail. Photo by Jean Akers, AICP

Even the infrastructure of bridges and bridge railings use red to draw the eye and help direct trail traffic. Interpretive panels are incorporated into the directional and identification signs along the way.

WAYFINDING CASE STUDY: MONON TRAIL | INDIANAPOLIS, IN



Image 12: Monon Trail. Photo by Jean Akers, AICP

Underpasses and overpasses are identified as part of the trail system, reinforcing navigational information for trail users.



Image 13: Monon Trail. Photo by Jean Akers, AICP

With strong red color and naming on infrastructure, the need for additional directional signs can be reduced.



Image 14: Monon Trail. Photo by Jean Akers, AICP

Developing a simple logo graphic like the big red “M” for the Monon Trail can also reinforce the trail’s identity and link the variety of signage, mapping, and navigational information across the trail system.

Finding the way to the trail and enhancing the trail identity must go beyond the comprehensive sign system in Dubuque County. The current website offers basic information about the trail in a conventional (somewhat governmental) manner. Today's web user has a higher level of expectation for how information is conveyed in an interactive on-line format. The Heritage Trail could initiate its own unique website that follows on its new visual (sign graphic) identity. If a separate website is not feasible, the current webpages should at least be updated and enlivened with more engaging trail opportunities and navigational information. An interactive map can be created with hyperlinks to trailheads and photos of specific areas along the trail. Easy downloadable mapping that provides enough information to help trail users navigate and plan their trail journey would be helpful. Supportive services, local town centers, and nearby attractions could be included in the mapping and trail user trip planning to connect people to potential activities that expand trail experiences.

Spreading the Word: Finding the Trail's Identity

The Heritage Trail accommodates a broad range of trail users throughout the year. Walkers, runners, and cyclists use the trail except in the coldest parts of winter when deep snow might be prohibitive. Snowmobilers are engaged along the trail as a connector to their larger network of private snowmobile trails. Their activities include trail grooming that then facilitates use by cross country skiers, snowshoers, walkers, and even snow cyclists. All trail user groups would concur that the trail needs to maintain a solid, stable surface along its route to accommodate their use. Many of the users indicated a preference for the current crushed limestone surface. Both the snowmobilers and the marathon runners preferred the crushed stone surface and indicated that pavement would be detrimental to their activity. The Run4Troops Marathon organizers shared that many of their runner participants travel from out-of-state for the opportunity to run on a softer crushed limestone surface. Most marathon races follow road networks so a softer trail surface is a specialty for these active events. Snowmobile clubs indicated that a move to a paved surface, especially black asphalt, would shorten their season of use since the darker pavement would melt snow cover much sooner and cut off their connections to their other non-paved trails. All trails users expressed the need for a stable surface (no loose gravel) that withstands a variety of weather conditions.

If the trail surface offers an all-weather surface without being paved with asphalt or concrete, this condition of the Heritage Trail should be shared among potential users as an asset rather than a liability. The majority of existing users appear to be satisfied with the crushed limestone surface if the material is regularly top-dressed, graded, and in good stable condition. New trail users could be encouraged if this suitable surface condition is conveyed in a positive message. To expand trail use, promoters of the Heritage Trail and general tourism in Dubuque County need to convey the value and uniqueness of this surface condition and how easy it is to walk, run, bike and generally travel on.

The Heritage Trail offers the Dubuque region a wonderful outdoor recreational resource with a captivating historical background and a story to share about the landscapes the trail travels through and the communities that can be connected along the way. Information about the trail can be discovered through numerous websites. A concerted inventory of websites that contain Heritage Trail information could reveal additional opportunities to convey the story of the trail as well as the opportunities it offers to enjoy recreational activities, environmental education and tourism-related activities. American Trails is reputed to be the largest online trails resource and lists many types of trails in Iowa. Unfortunately, the Heritage Trail is not listed as a state trail resource. It should be included on the lists with information about its value and traits. There may be other website opportunities that can help link potential users to the actual trail and the related activities that are in the trail's vicinity.

New maps that help with wayfinding and connections to proximate towns and services could expand trail use by reaching audiences that enjoy trip planning through more conventional means. Mobile applications could incorporate trail maps and nearby services and attractions to provide convenient information to more trail users who apply mobile technology in their daily recreation choices and activities.

Trail Fees and Counting

The Heritage Trail currently operates a trail user fee program, intended to generate revenues that would help offset the operational costs for maintaining the trail. The fee program does not include an enforcement system using rangers, fee collectors, gated parking lots or other methods for encouraging compliance with the daily fees or annual pass. Across its 26-mile length with many points of access, it would be difficult to develop an effective enforcement program whose cost could be offset by collected

revenues. Other trail systems use parking fees that assess a charge for use of maintained parking trailheads. Even these programs can be difficult to effectively operate when revenues are limited availability of small parking areas across a long trail system. When fees are charged for use of public infrastructure, the users expect a certain level of accessibility and maintenance, since the fee is intended to help cover those costs. The Heritage Trail fee program should be re-examined with an assessment of how much the collected fees actually help offset or contribute to the annual maintenance costs. Suggestions from stakeholders posed a trail membership program in lieu of the trail user fee program. The membership program could promote the trail and trail membership as a way to support the trail's operation without the onus of user fee enforcement. If the membership was aligned to a 501.3c non-profit entity, such as a "Friends" group, payment for an annual pass could be tax-deductible.

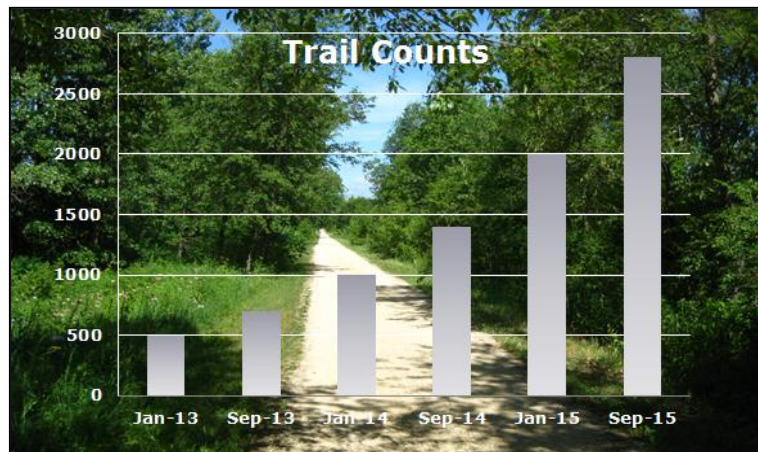


Image 15: Representational graph of trail counts. Created by Paula Reeves, AICP CTP

Based on numerous stakeholder comments regarding the infrequent enforcement of the trail user fee requirement, a summary of the trail fee program and pass sales is unlikely to provide an accurate reflection on the quantity of annual trail users. As the Conservation District and the County consider the relative importance of the Heritage Trail as public infrastructure when allocating budget support, the actual number, frequency and type of trail users would be valuable information. Just as traffic counts help direct transportation improvement dollars to more heavily traveled streets, trail counts help determine how many people would benefit by maintaining the trail.

Trail counts can be coordinated on an annual basis using the National Bicycle and Pedestrian Documentation Project (NBPDP), the largest and longest combined count and survey effort in the United States. NBPDP focuses on analyzing and identifying factors that influence bicycling and walking and could be coordinated with local jurisdictions assessing their active transportation (bicycle/pedestrian travel mode) needs. Starting a trail count now will provide a benchmark for tracking increased use and help determine connections and use across the regional system of trails, sidewalks and bike lanes. The NBPDP provides a recognized methodology for transportation planners to share data across the cities and counties.

The trail count could also include survey questions that investigate the patterns of use and level of user satisfaction for trail facilities and connections to other trails, amenities and destinations. More information about users and their needs can help direct future improvements and determine the ranking for prioritizing limited available funding.

Trail counting programs across the country often involve and rely on volunteer support for successful implementation. The Heritage Trail has a broad range of users and advocates that would likely be available to contribute manpower and organizational support for conducting an annual trail count and survey

program. If the “Friends” group that organizes the trail membership program also coordinated the trail count program (or assisted in the program coordination) the nexus for the need to count would be much clearer.²

Remote Trail Counters

Annual trail counts have provided valuable information to policy makers and public works managers to help direct appropriate levels of operational budget to trail systems. Annual counts can only be as specific as the resources that are available for staffing the counting locations. For the rest of the year and to provide user counts along specific segments of the trail to compare data and provide more information details, infrared trail counters can enhance user information for trail managers. While the typical battery-operated infrared trail counters cannot distinguish between a walker, runner, cyclist or snowmobiler, the counters can still provide a good quantitative value for trail use. Daily counts can be correlated to time of day, day of week, time of year and weather conditions to reveal patterns of trail use. These patterns may be helpful in directing timing for trail maintenance or programming as use continues to expand.

Expanding Trail Use: Long Term

As the trail finishes its major bridge repairs and replacements, an increase in users should naturally follow. The trail management and maintenance program has upgraded the surface treatments for keeping the crushed limestone in a stable and well-drained condition, conducive for accessibility to all users. With new and future connections to Dubuque and the smaller communities along the trail, more users will expect some future physical improvements. Parking, restrooms and drinking water are the three most important amenities that trail users hope to find along their travel route to support a good trail experience, particularly for recreational users. The Heritage Trail will need an assessment for addressing the need to add parking trailheads and to support connections into developed communities that could provide other parking options.

Outdoor recreation professionals recognize the need to provide a variety of activities to ensure expanded and long lasting recreational values. Activities adjacent to the trail or related to trail use such as camping, fishing, exploring, fossil-hunting, wildlife viewing, birding, disc-golf, picnicking and other traditional park enjoyment can support and enhance trail experiences. Linking to these recreational amenities will add value to the trail.

The Heritage Trail also has tremendous potential for further programmatic improvements due to its rich history and its associated cultural and natural environment.

² Additional resources for bicycle/pedestrian counting methods and techniques are available here:

-Transportation Research Record, Journal of the Transportation Research Board, No. 2140:

<http://www.trb.org/main/blurbs/163019.aspx>

-Transportation Research Board funded research project, report forthcoming (2014):

<http://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=3159>

NATURAL ASSETS

As part of the Iowa-Wisconsin-Illinois tri-state region, the Heritage Trail possesses unique characteristics that can enhance its utilization as both a local and regional asset. By highlighting these characteristics along the trail, you can leverage and educate users about the natural and cultural assets of the region as well as the adjacent communities. Based upon the CPAT team analysis and coordination with the stakeholders, four primary areas became evident:

- Geology
- History
- Natural – Uplands and Streams/Wetlands
- Community

Regional Assets of the Trail

Geology

The Heritage Trail is part of the Paleozoic Plateau Landform (Driftless Area) which is characterized by steep slopes and bluffs and sedimentary rock outcrops. The term “Driftless Area” refers to the lack of glacial drift from retreating glaciers. The lack of glaciation creates river valleys that are more deeply carved than other typical streams in Iowa. Along the Heritage Trail, the limestone bluffs along the Little Maquoketa should be emphasized for their beauty and uniqueness within the region.

In addition to the bluffs, portions of the trail occur adjacent to a world-renowned fossil bed just southwest of Graf, an exposed rock outcrop that provides a vast abundance of small cephalopods.³ These fossils generally range two to three inches long, and due to their abundance and interest, could provide opportunities for educational displays within Graf Park adjacent to the Heritage Trail.



Image 16: Split Rock area adjacent to trail.
Photo by Jason Epley, AICP



Image 17: Fossilized cephalopod found near Graf.
Photo by Jason Epley, AICP



Image 18:
Historical railroad
marker. Photo by
Jason Epley, AICP

History

The Heritage Trail encompasses a wide and diverse range of history dating from the retreating glaciers and rise of Native American settlements to European establishment in the mid-1800s. The Little Maquoketa River Mounds Park adjacent to the trail features ancient burial mounds of the Late Woodland culture (approximately AD 700 to 1200).

As one of Iowa's earliest rails-to-trails projects, the Heritage Trail offers the opportunity to highlight features and importance of transportation infrastructure within the region. For instance, along the alignment of the former old Chicago Great Western rail line which was a Class I railroad linking Chicago, Minneapolis, Omaha, and Kansas City, the trail can offer opportunities to the past and the development of the railroad industry in the Midwest. In addition, the relocation of the Phoenix Truss Bridge (1872) adjacent to the Heritage Trail is also an example of how the trail can be connected to other regional assets such as the Mississippi River and connections beyond the tri-state region.

³ See Steven D.J. Baumann's 2009 article, "Rock Outcrop of the Maquoketa: Graf Section and Highway D17 Section, Iowa." Access available through the Midwest Institute of Geosciences and Engineering website: <http://www.migeweb.org/>

Natural

From second growth forests to prairie remnants and wetlands, the Heritage Trail connects a wide array of natural vegetation communities. These communities provide habitat for a variety of plant and wildlife species. According to the Iowa Department of Natural Resources, Dubuque County contains 79 threatened and endangered species (state and/or federal) including 59 species of plants. Some of these species, including Prairie Dock and Leonard's Skipper, are found within the right-of-way of the Heritage Trail. Other species also are known to occur in the area, including the Bald Eagle, which currently (2012) has a nest within site distance of the trail. It should be noted that as future plans for the Heritage Trail are implemented, the Iowa Administrative Code 481A and 481B prevents a person from taking, possessing, killing, trapping or ensnaring, transporting, importing, exporting, processing, selling or offering for sale, buy or offer to buy, nor shall a common or contract carrier transport or receive for shipment, any species plant or animal on the state list. In addition, as planning efforts for the trail bed occur, impacts to threatened and endangered species must be considered.

Community

Several local communities occur adjacent to or in close proximity to the Heritage Trail: Dubuque, Durango, Dyersville, Epworth, Farley, and Graf. Each community offers a unique local history and amenities that can be accessed and utilized by the trail users.

- **Dubuque:** Heritage Trail will eventually extend into Dubuque. The city offers riverboat rides, museums, greyhound racing, and many choices for shopping, food and overnight stays.
- **Durango:** Durango occurs immediately adjacent to Heritage Trail and offers food, restrooms, and a canoe launch.
- **Dyersville:** The western terminus of the Heritage Trail, Dyersville provides food, shelter, parking, and restrooms for users.
- **Epworth:** Epworth is over one mile away from the Heritage Trail, but offers amenities such as food, and public restrooms.
- **Farley:** The town is less than a mile from the Heritage Trail and offers a variety of activities as well as restrooms and water.
- **Graf:** Graf Park provides a picnic shelter, parking area, and restrooms that are directly adjacent to the Heritage Trail.



Image 19: Phoenix truss bridge modified as a picnic area along trail. Photo by Jason Epley, AICP



Image 20: Prairie community alongside Heritage Trail. Photo by Paula Reeves, AICP CTP



Image 21: Existing signage for local communities along trail. Photo by Jason Epley, AICP

Regional Planning Efforts

As the planning efforts for the Heritage Trail continue to advance, several regional planning issues should be considered.

Watershed Management

Plagued by flooding of the Little Maquoketa River, the trail usage can be maximized by a regional watershed managing plan. Cooperative regional planning activities that discourage the amount of impervious land surfaces near the river and within the watershed will ultimately help avoid costly maintenance burden and amount of closure time of the Heritage Trail. Increasing impervious surfaces leads to increased water and contaminant runoff, and removing vegetation along drainage areas increased storm flows and leads to erosion.



Images 22-23: (On left) Flooding impacts on Heritage Trail; (on right) an example of watershed management in the City of Dubuque. *Photo on left, courtesy of Dubuque County Conservation Board; photo on right by Jason Epley, AICP*

Compatible Land Use

Developing a Land Use Plan for the Heritage Trail and surrounding areas to promote compatible uses will enhance the aesthetics of the area and help preserve the desired “feel” of the trail. Compatible uses could include agricultural, single family residential uses and open natural plant communities. Where possible, limiting the amount of commercial and light-industrial areas adjacent to the trail will help preserve the aesthetics and rural nature of the trail. Where commercial and light-industrial already exist next to the trail, promoting vegetative screenings or buffers will minimize the visual disruption caused by these uses. With a proper and appropriate trail signage plan, vegetative screenings should also be used at key roadway intersections or trailheads, where amenities (i.e. restrooms/parking facilities) are planned and desired.



Image 24: Promoting compatible uses adjacent to trail. Shown here is a local bar & grill, conveniently located at the trailhead in Durango, which offers food and refreshments and a place to rest for trail users. *Photo by Jason Epley, AICP*

Utilizing Native Species

Once introduced into an area, non-native plant species generally out-compete native plant species for resources such as light and space. According to the 2003 Iowa Noxious Weeds and the Iowa Weed Law, primary noxious weeds in the state include quack grass, perennial sow thistle, Canada thistle, bull thistle, field bindweed, horse nettle, leafy spurge, perennial pepper-grass, Russian knapweed, buckthorn, and all other species of thistles. Secondary noxious weeds include butterprint, cocklebur, wild mustard, wild carrot, sheep sorrel, sour dock, smooth dock, poison hemlock, multiflora rose, wild sunflower, puncture vine, teasel, and shattercane. As planning regional planning efforts emerge for the area, and for the Heritage Trail, utilizing efforts to eradicate non-native species, and including native species into revegetation plans after construction will promote the development of native ecosystems and plant communities.

Utilizing Regional and Trail Assets

Utilizing the regional and Heritage Trail assets will enhance the experience for the users. Have a user access the trail for a few hours or a day is great, but providing additional resources along the trail and within the communities to extent a visit to multiple days, will maximize the economic opportunities that exist for the area.

Interpretive Areas

Interpretive areas adjacent to the trail are currently limited near Dubuque around the Heritage Pond area. Extending the use of interpretive areas across the 26 miles may encourage local and non-local users to access greater portions of the trail. For instance, as the trail extends westward out of the more heavily wooded areas, interpretive areas for the limestone bluffs, prairie, endangered species and railroad history could be developed and implemented to provide users with experiences regarding the region's history and development. Utilizing the trail signage plan to identify the distance to the next interpretive area will promote access for the trail and nearby communities.



Image 25: Signage to an interpretive area near Heritage Pond. Photo by Jason Epley, AICP

Naturalists

In addition to interpretive areas, naturalists could play a key role in the sharing the story of the trail and the region's history. Naturalists, either volunteer or paid, could provide a person-to-person connection with the trail users. Naturalists can also be utilized through advertised walking tours or through the promotion of guides for school field trips. A naturalist's ability to educate the public about the natural community during these tours could promote "repeat" business for the trail users because the plant communities change throughout the year from spring to summer to fall to winter.

Plant Labels and Identification

Used in combination with interpretive areas and naturalists, plant identification labels in areas can promote knowledge of the region's native flora. Labeling plants will promote users to stay and learn about the species that are found along the trail.

Responsible Native Seed Harvesting

Once planting plans have been established using native species, responsible seed harvesting of these spaces could allow users to "take a piece of the trail home." Selling seed packets of native species harvested from the trail is a good way to emphasize and promote the use of natural vegetation.

commercial signs are illegally placed in the right-of-way, or public signs are lost amongst the clutter of a heavily signed roadway. In addition to warning signage, flashing warning signals may operate in conjunction as needed. New LED technology has led to the creation of a new generation of flashing warning signals called rectangular rapid flash beacons (RRFB). The RRFBs require state and federal approval for use, and may not be appropriate at this time along the trail; however, may become necessary in the more urban and higher use areas of the trail where significant conflicts exist or become an issue between motorists and trail users. Rectangular Rapid Flash Beacons (RRFB) can enhance safety by reducing crashes between vehicles and pedestrians at unsignalized intersections by increasing driver awareness of potential pedestrian and bicyclist conflicts. RRFBs are user-actuated amber LEDs that supplement warning signs at unsignalized intersections. They can be activated by trail users manually by a push button or passively by a pedestrian detection system. RRFBs use an irregular flash pattern that is similar to emergency flashers on police vehicles (see *Image 28*). Another new warning sign system is the variable messaging signs that also use LED technology. These signs alert trail users when a vehicle is approaching the trail crossing (see *Image 27*).



Image 27: Variable messaging sign. Photo by Paula Reeves, AICP CTP



Image 28: Rectangular Rapid Flashing Beacon (RRFB).
Source: Federal Highway Administration

Parking Improvements

Many of the trail users in Dubuque County access the trail by motorized vehicle. Currently, several areas along the trail have designated parking areas. However, the team observed many areas where trail users have established un-safe, make-shift parking areas along roadways at key intersections of the trail. Trail users will park their vehicles along the shoulders of the road, which creates an environment unsafe for the trail users and motorist as vehicles often impede site distance at trail crossings. One notable site location was along Clay Hill Road near US 52 that has become a very popular access point for the trail (see *Image 29*). This site presents an opportunity for improved parking areas. Any improved parking areas at this intersection or any new area along the trail should consider the use of low-impact methods to help insure a high level of water quality, especially where the potential parking areas are in close proximity to waterways/streams.



Image 29: Unsafe roadway shoulder parking at Clay Hill Road/Heritage Trail near US 52. Photo by Jason Epley, AICP

Lighting Improvements

The provision of adequate lighting along more urban trail facilities is crucial to ensuring the safety and security of those who travel along the trail. Along these more urban segments of the trail, it is important to place lighting fixtures in sufficient quantity that trail users are able to safely navigate in low light conditions, with sufficient illumination to observe potential trip hazards or obstructions. While general street lighting does often provide illumination for the trail in these areas, it may need to be supplemented to ensure that areas where sidewalks encounter unique situations, such as sudden changes in direction or paving materials, are identifiable from a sufficient distance. Supplemental lighting is also recommended for trail user crossing areas in order to ensure that trail users within the crosswalk are easily identified in low light conditions. Along trails, where no street lighting is present, consideration should be given to the provision of lighting to facilitate travel in low light conditions where high trail use is occurring. While this certainly encourages the use of greenway trails at night, when some places desire for them to be closed due to safety concerns, the provision of lighting in key areas or at intersections will ensure that the trails are usable year round, which can be troublesome for people who depend on walking on trails to get to or from work in winter when no lighting is provided, yet darkness comes early. Lighting trails in the evening/early morning in key, highly trafficked areas also allows authorities to more easily observe traffic on the trails at times when their use could indicate suspicious behavior. In addition to pole mounted lighting, low level lighting may also be provided as a supplement in areas where specific low level hazards need to be identified, or where pole mounted lighting would not be congruent with the surrounding area due to light pollution concerns. In more rural locations of the trail, low-cost, solar powered lighting may be an option at critical trail crossings with major roads.



Image 30: Existing conditions at an existing trail crossing along the Heritage Trail. *Photo by Jason Epley, AICP*

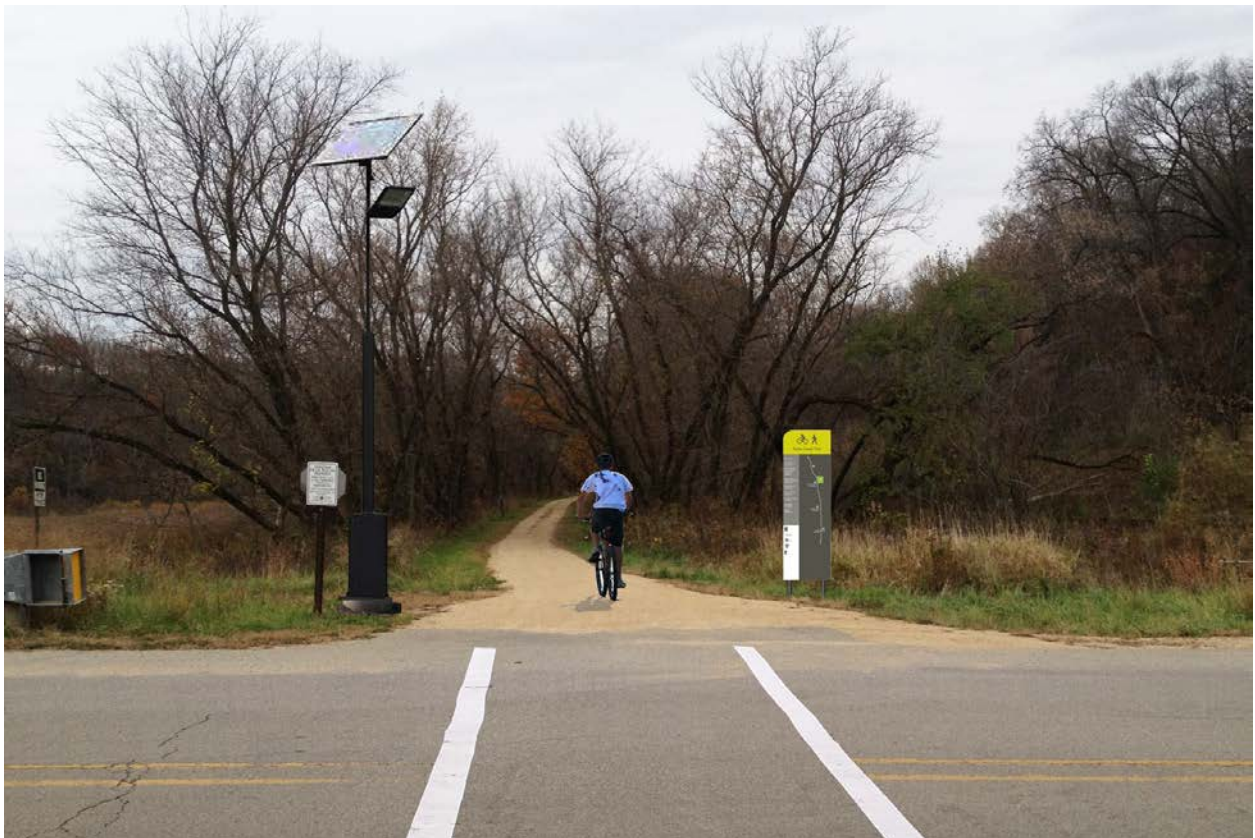


Image 31: Potential safety improvements including crosswalk, trail signage and low-cost, solar-powered lighting at the trail intersection/crossing. *Photo and visualization by Jason Epley, AICP*

Connecting the Trail

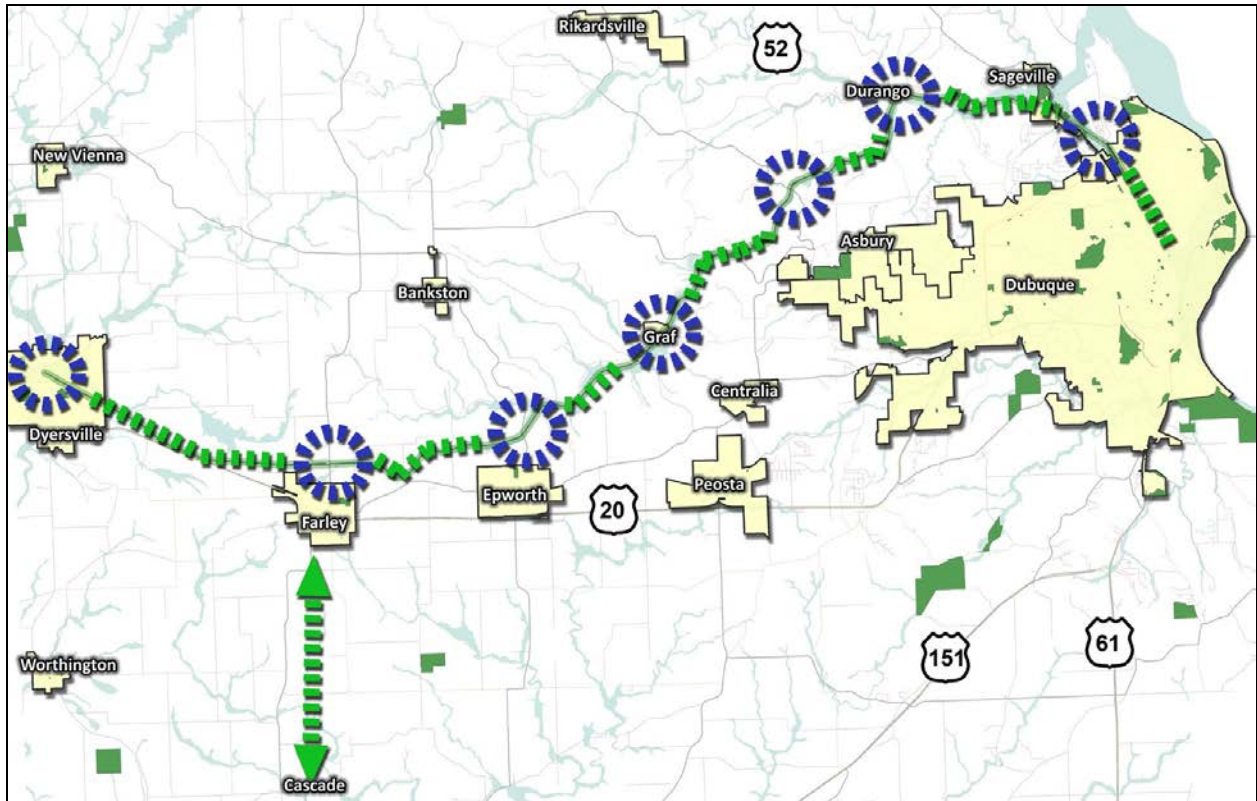
Dubuque County's many unique communities and places have important characteristics and qualities that are in and of themselves wonderful attractions and examples of the county's heritage, friendly people and strong communities. The Heritage Trail can be the common link, for this beautiful "strand of pearls." Each community along the trail should identify and inventory its own unique characteristics that can be integrated into a trail wide discovery system that informs locals and tourists of the many destinations along the trail and the collective communities it connects. In addition each community along the trail can examine ways it can better connect to the Heritage Trail from a physical connection by considering infrastructure improvements such as bike lanes, side paths or sidewalks that can complete safe connections from the local communities to key trailhead locations along the entire length of the Heritage Trail. By working together, the local communities can also reinforce the Heritage Trail as an important link to a shared and prosperous future. For example, small business development can be encouraged as a spin-off from connecting the trail. Opportunities exist to create more businesses that cater to trail users. Businesses such as retail goods and services, rental facilities (bikes, kayaks and canoes), restaurants and other business that may sell food items, water and drinks, have an opportunity to connect to the trail at key intersections providing services for trail users and the broader markets near them. During the public and stakeholder meetings, the need for another "Smitty's" was clearly demonstrated, as participants recalled the many memories made visiting that cherished local institution (see *Image 32* for an example of this public input).



Image 32: A citizen's comment on the trail map during the CPAT's first public meeting. Photo by Jason Epley, AICP



Images 33-34: Durango Depot Bar & Grill, an existing local business, located at the Durango trailhead along Heritage Trail. Photos by Jason Epley, AICP and Ryan Scherzinger



Map 2: The Heritage Trail, spanning the entire width of Dubuque County, potentially linking communities along the way. Created by Jason Epley, AICP

Improvements and Opportunities

The planning process also identified many opportunities for improvement along the Heritage Trail. Many of the improvements are short term, while some will take significant time to complete. Each of these potential improvements bring with them initial capital costs for making the improvements and plans for maintenance. Restrooms are an important consideration and improvement at trailheads and should be considered at other points where the trail segments are a great distance by using portable toilets or similar facilities. Water fill-up points were identified as important given the length of the trail segments, particularly in the more rural portions of the trail. Other considerations include picnic facilities and resting points with benches. Many of these facilities can be incorporated into private, small business ventures at these critical locations that were discussed earlier. Other safety improvement opportunities include the installation of security call boxes and good signage that can help trail users in emergency situations, providing key location information to emergency services personnel (see *Image 35* below). Also, active patrols can help deter any criminal activity and increase safety along the trail. Finally, installed signage should always be maintained, clearly posting trail rules, warnings, and highlight wildlife and other unique things for a trail user to observe along the way.

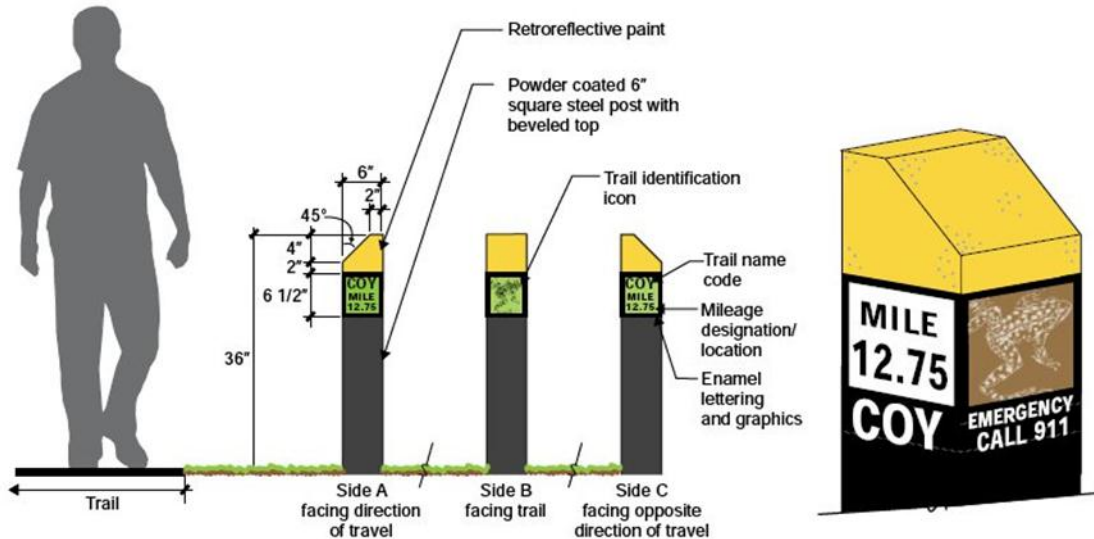


Image 35: Example of security call boxes with locational signage. *Created by Jason Epley, AICP*

Most greenways / multi use paths are separated from motorized vehicular traffic and in the case of the Heritage Trail, are typically constructed in natural settings. Although many surfaces can be utilized, concrete is the recommended surface treatment where a hard surface is desired, while paved asphalt or permeable paving can be used as alternatives. Concrete is used for its incredible durability and low maintenance requirements—especially in areas where frequent flooding occurs. A recommended concrete alternative is a paved asphalt trails which offers durability for the cost of installation and maintenance. Asphalt is also much easier to manipulate and install for trails with steep slopes. The CPAT offers this as guidance for potential areas of the trail that may require surfacing over time, not as a recommendation for any specific area of the trail as part of this study.

Trails do need a proper foundation to increase the longevity of the facility with at least two inches surfacing material over a minimum four inches base gravel course with geotextile fabric (see *Image 36*). Often times, soil borings are needed to determine adequate material depths; it should be designed to withstand the loading requirements of occasional maintenance and emergency vehicles. Typically 10' wide, 2% cross slope, with two-foot wide graded shoulders; the shoulders help prevent edges from crumbling and provide an alternate walking and jogging surface. Centerline stripes should be considered for trails that generate substantial amounts of traffic, and are particularly useful along curving sections of trail.

Trail landscaping and maintenance should enhance conditions for wildlife by planting only native species in the trail corridor, removing invasive species when possible, and avoiding harmful pesticides and herbicides.

The overall shape of protected natural landscapes along trail corridors also influences wildlife: single, large, contiguous natural areas are more beneficial to wildlife than the same acreage split into smaller segments.

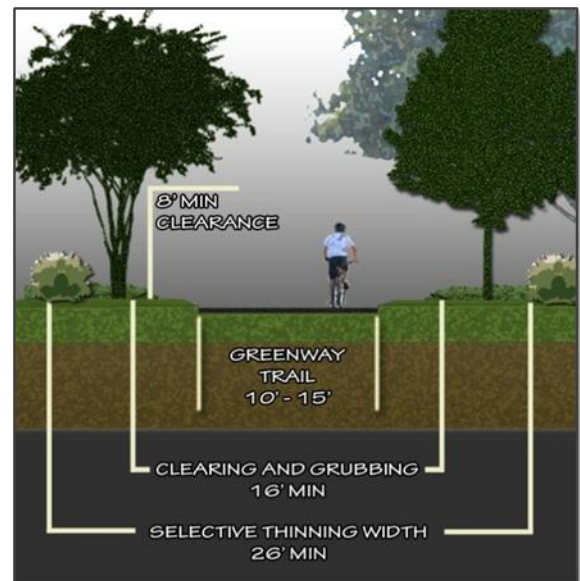


Image 36: Vegetative clearing practices for greenway trails. *Created by Jason Epley, AICP*

Highlighting Trail Destinations

Along the Heritage Trail, trail users have a tremendous opportunity to enjoy many scenic, natural and historic sites. Sites along the trail include split rock, the cephalopod fossil site, the Phoenix Truss Bridge and stone arched drainage ways. Many opportunities also exist for expanded activities immediately adjacent to the existing trail. The activities can include side hiking paths that explore the terrain and interesting geologic and natural features along the main trail, camping areas, rock climbing, kayaking/canoeing, and possible connections with the “Sundown” skiing facility. Each one of these potential destinations and activities should be explored further for their feasibility. The Team recognizes that many of the potential destinations may not be located on county property and will require extensive research, communication and coordination with property owners to identify where opportunities exist. Where appropriate, willing property owners may consider tax benefits of donating potential sites to the County. These potential sites should be identified and property owners should be contacted for their potential interest in participating in the transaction of land where purchase may be appropriate or where property owners may receive significant tax benefits by donating portions of their property next to the trail.



Image 37: Stone arched drainage way. Photo by Jason Epley, AICP



Image 38: Split Rock. Photo by Jason Epley, AICP



Image 39: Potential hiking area along trail. Photo by Jason Epley, AICP



Image 40-41: (On left) Scenic geologic features and potential rock climbing site; (on right) Little Maquoketa River Mounds State Preserve is located along Heritage Trail. *Photos by Jason Epley, AICP*

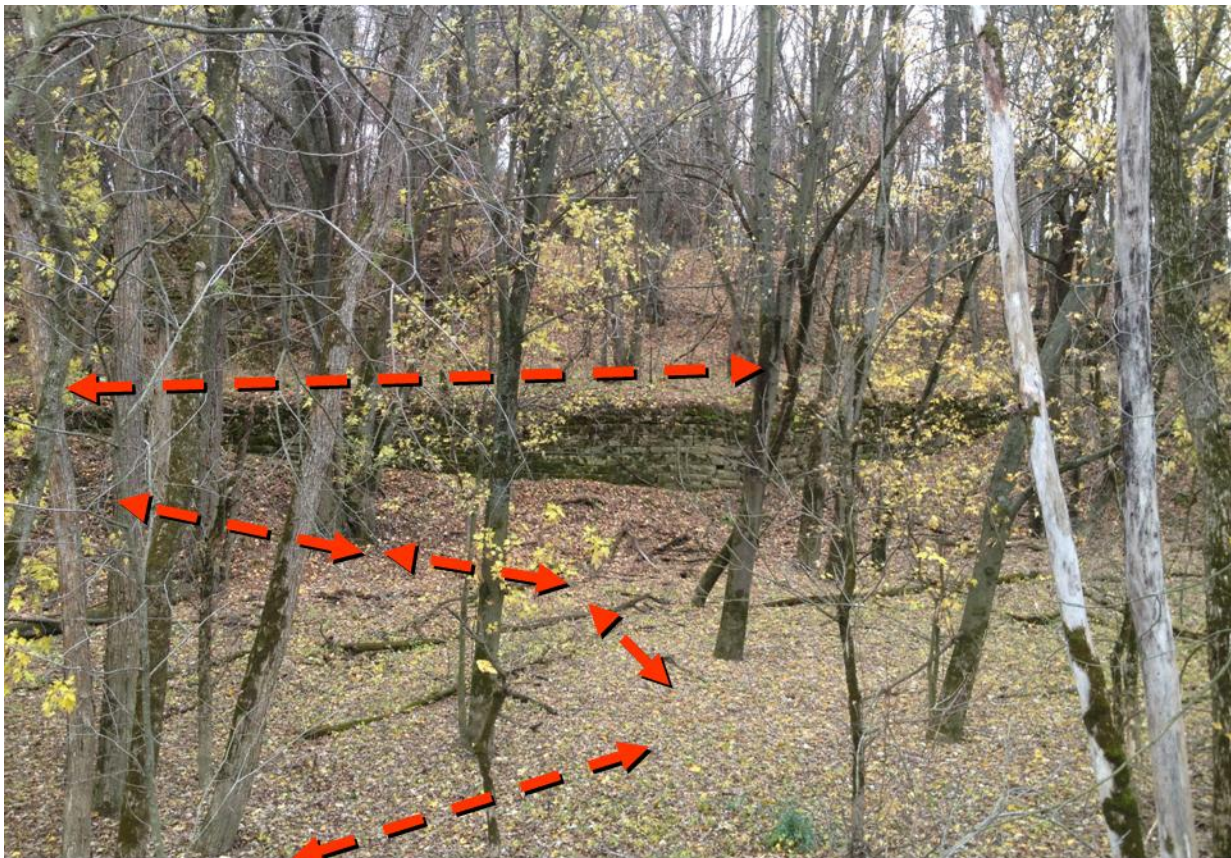


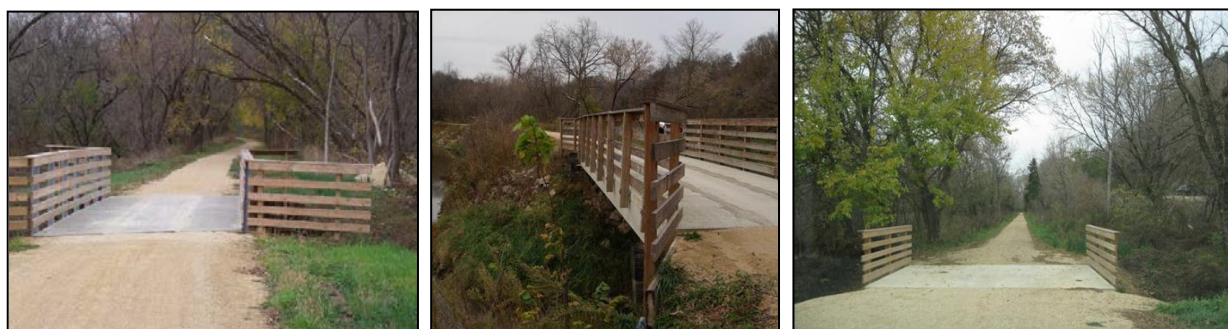
Image 42: Potential camping area on higher ground and hiking area. *Photo and visualization by Jason Epley, AICP*

MOVING FORWARD: CONNECTING TO YOUR HERITAGE

Gaining Perspective

Looking back over the past four years (2008-2012), significant improvements have been made to the Heritage Trail. The Conservation Board and its partners have replaced or significantly repaired eleven bridges and portions of the trail that were destroyed by flooding. It has been frustrating at times for both those making repairs to the trail and dealing with bureaucratic processes as well as the public trying to access the trail and finding closures and trail sections impacted by heavy equipment.

The time has come and repairs are nearly complete, it is time to celebrate the successes and cut the ribbon on a new trail with bridges that are expected to last a lifetime. It is time to talk about making new connections to the trail from nearby communities, developing low cost on road connections by installing bicycle markings and directional signage, and creating a website that highlights nearby events, recreational opportunities, points of interest and volunteer opportunities.



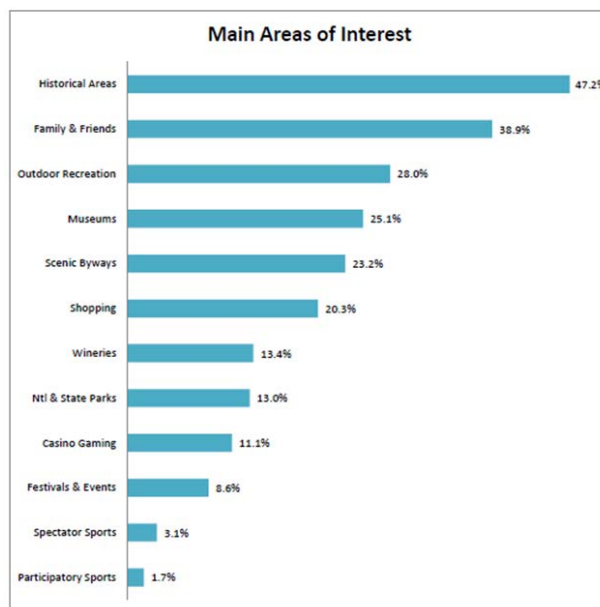
Images 43-45: A look at just a few of the new bridges along the trail. *Photos by Paula Reeves, AICP CTP*

Connecting To Your Heritage

Connecting to the past may literally be where the future is. Numerous recent tourism studies show that travelers want authentic experiences and want to learn about places they visit. A recent report, from the Iowa Tourism Office, shows that over 47% of tourists in 2011 visited Iowa's historical areas; and another 28% visited recreational areas (see *Graph 1*).

Connecting the Heritage Trail to other features that make this area special and unique, the native prairies and historic, natural and cultural sites, will be an important next step.

Building on sustainability will also help increase economic prosperity for communities along the trail and the region. For example, providing educational opportunities for visitors and non-farming families about traditional farming practices and local assets represents not only an economic opportunity, it is a vital role for farming communities to play. Agritourism (dubbed "Agventures" by Iowa State Fair organizers recently), agriculturally-based operations or activity that brings visitors to a farm or ranch, is on the rise in Iowa.



Graph 1: Main areas of interest for Iowa tourists in 2011.

Source: 2012 Iowa Economic Development Authority, Tourism Office



Images 46-47: Agritourism. Photo on left courtesy of Iowa State Fair Image Library. Photo on right courtesy of Chronicle Times.

Maintaining a Collaborative Spirit

The clear desire to accommodate all types of users of the Heritage Trail across the seasons was a strong theme that emerged during public meetings and stakeholder discussions throughout the CPAT. It is important to maintain this collaborative spirit and continue to develop new partnerships. A coalition or “Friends of the Trail” group should be formed to help secure funding for trail improvements, increase awareness about the trail and organize volunteers. The collaborative spirit around planning for the Heritage Trail can also help generate interest in other regional planning and coordination efforts, particularly those related to watershed and compatible land use planning.



Image 48: Breakout group discussions during a CPAT-led public meeting in Dyersville, October 17, 2012. Photo by Ryan Scherzinger

What Gets Measured Gets Managed

It is important to remember that what gets measured gets managed. Counting trail users consistently over time can help determine where to make investments and if those investments are having desired impacts. Without these measures, it will be difficult to gain public support and secure the funding needed for new projects and features of the trail.

Continued Consistent Careful and Calculated Investments

Growth and change will happen in the area, and possibly faster than anticipated. These changes will put pressure on the Heritage Trail and surrounding areas. It will be important to continue to make careful and calculated decisions for the long term and investments that will match the 100-year bridge repairs that have already been made.

This careful long-term decision making should be applied particularly to decisions related to paving or surfacing the trail as well as other investments in connections and features. While paving inside the urbanized or developed areas is feasible, it comes with a price tag that includes maintenance over time. The

primary desire for paving the trail that was expressed by some stakeholders during the CPAT was to generate more use of the trail. The CPAT team finds no research indicating that paved trails are more popular or get used more than trails with other types of surfaces, including semi-solid surfaces like crushed rock. There are many very popular, heavily used crushed rock trails across the U.S. More monitoring of trail maintenance activities, collection of user counts, and targeted user surveys may be needed to help inform decisions about paving trail sections.

You Are Entrepreneurs

During the CPAT, stakeholders and trail users discussed entrepreneurial efforts underway in every community in the area. There is also a strong commitment by community leaders to sustainability, preserving creating green space and providing recreational opportunities for everyone. The CPAT team believes that seizing this opportunity to connect the entrepreneurial activities and strong commitment to recreation and conservation in the area will boost economic activity and open the door for more productive regional planning and partnerships.

**“To be yourself in
a world that is
constantly trying
to make you
something else is
the greatest
accomplishment.”**

- Ralph Waldo Emerson

MEET THE TEAM



Team Leader

Paula Reeves, AICP CTP (Olympia, WA)

Paula Reeves has been developing transportation projects for the State, cities, counties, and transit agencies for twenty years. She currently manages the Community Design Office at Washington State Department of Transportation and serves on the Board of Directors for the American Planning Association Washington Chapter, chairing the Community Planning Assistance program. In both these roles, she provides a range of transportation planning and engineering services to cities, counties and transit agencies including: expert advice regarding transportation and sustainable, livable communities, pedestrian and bicycle facility design expertise, safe routes to schools, scenic byways, and transportation planning support relative to Washington's Growth Management Act. She has a broad transportation background that includes urban design, engineering, environmental experience, and is a practicing mediator in Thurston County. Paula also serves on the National Transportation Research Board's Pedestrian Committee and American Institute of Certified Planners' Community Planning Task Force. She earned her master's degree with engineering and law school course work in urban and regional planning from the University of Florida.



Jean K. Akers, AICP (Vancouver, WA)

As park planner and landscape architect for the Vancouver-Clark Parks and Recreation Department in Vancouver, Washington, Jean oversees the park acquisition, planning, capital development and asset management programs for the City of Vancouver's park and trail system and Clark County's urban and regional parks, trails, and open spaces. She works with numerous state, city, & county agencies, organizations and citizen groups to facilitate the overall planning, policy development, and acquisition of viable neighborhood, community and regional open spaces to improve the quality of life for residents while protecting the integrity of the natural environment that supports our human habitat. The design and implementation of capital improvements that she oversees range from regional park facilities and urban park amenities to trail building and capital repairs.

A registered landscape architect, certified planner, horticulturist and consulting arborist, Jean Akers has been working across these professional disciplines to create and foster ecological landscape design and planning for over thirty years. She has developed specialized design experience in creative stormwater

management, integrating rainwater resources into the landscape through planning, site design and land management techniques. Prior to the implementation of NPDES Phase II, she assisted design professionals and municipalities in proactive technologies for integrating stormwater treatments into the landscape. Her design projects have ranged in scale from small garden landscapes to regional public lands and state parks. Since 1976, Jean's work has taught community leaders, graduate students and fellow professionals in planning & design to effectively integrate human uses with the built environment using more ecologically-sensitive design.

Jean serves on the Board of the Society of Outdoor Recreation Professionals (formerly called National Association of Recreation Resource Planners) to promote the professional development of outdoor recreation planners and related professionals as they facilitate the appropriate recreational uses of land and water across public and private venues. She also serves on the Core Group of the Intertwine Alliance, a coalition of local and regional government agencies, NGOs, and business partners in the Portland-Vancouver region that is leveraging resources to connect people to the parks, trails and open spaces in the urban area.



Jason M. Epley, AICP (Kannapolis, NC)

Jason Epley is Executive Vice President of Benchmark CMR, Inc. Mr. Epley brings 17 years of experience in the planning profession to the consulting team. His past positions have included working with municipal, county, regional and state government planning programs throughout North and South Carolina. He specializes in comprehensive planning, development regulation, urban design, public involvement and meeting facilitation. Mr. Epley brings additional expertise and experience with downtown development and design where he serves as the Executive Director of the North Carolina Downtown Development Association. He has a wealth of experience helping communities develop meaningful plans and sound implementation strategies in over 100 communities across the Carolinas. A Certified Public Manager, Mr. Epley has managed a number of complex planning projects, including multi-jurisdictional projects and a recent comprehensive pedestrian and greenway plan for the City of Clinton, North Carolina. In addition to helping communities develop plans, he also served as the co-chair of the All American Trail development committee, overseeing the implementation of the 26 mile multi-use trail connecting three counties in southeastern North Carolina. Jason Epley holds a Master of City and Regional Planning from Clemson University and B.A. in Geography from UNC-Greensboro.



Steve Lane, AICP (Cincinnati, OH)

Steve Lane is a Senior Environmental Planner with Parsons Brinckerhoff in Cincinnati, Ohio and has broad experience in wetland ecology, National Environmental Policy Act (NEPA) documentation, and federal and state environmental permitting. Lane is responsible for preparing environmental permit documents, categorical exclusions and environmental assessments. He also has technical expertise in wetland identification and delineation, threatened and endangered species surveys and terrestrial ecology studies. Much of his current work involves transportation corridor studies.



Project Manager

Ryan Scherzinger (Washington, D.C.)

Senior Outreach Associate
American Planning Association

PICTURE GALLERY

The following are select photographs from the Heritage Trail CPAT project in Dubuque County, Iowa. Each picture is followed by a brief caption.



A before and after set of pictures of Bridge #3 on Heritage Trail, which is located at the Durango access point. It was repaired following a July 2011 storm, one of three epic rain events that the area endured in just four years. During the 2011 storm, some areas received as much as 15 inches of rain in 12 hours. Brian Preston, Executive Director of the Dubuque County Conservation Board, is seen on the left assessing the damage after the storm. *Photo on left by Mike Burley, courtesy of Telegraph Herald Online; photo on right by Ryan Scherzinger*



The Team is seen here busy preparing the order of their slides for the final presentation, which was conducted on Saturday, October 20, 2012 in the City of Dubuque. *Photo by Ryan Scherzinger*



Here are a couple of views of the City of Dubuque's riverfront. The scenic riverfront is connected with Heritage Trail through a series of bike and pedestrian paths. *Photo by Ryan Scherzinger*



Team leader, Paula Reeves, AICP CTP (on left), and team member Jason Epley, AICP (on right), presenting the team's recommendations on the final day of the team's visit. *Photo by Ryan Scherzinger*



Pictured above is the team touring the construction site of the new pedestrian bridge over Highway 52. The new bridge will allow safe passage over fast-moving traffic and create a much more seamless Heritage Trail. *Photos by Ryan Scherzinger*



CPAT member, Jean Akers, AICP, explored an area of cliffs along Heritage Trail near the City of Graf where many fossilized cephalopods are found. *Photo by Ryan Scherzinger*



The CPAT held many stakeholder meetings with a range of groups and individuals representing various interests. Seen here is the team getting ready to meet with the Dubuque County Conservation Board. *Photo by Ryan Scherzinger*



Dubuque County Zoning Administrator, Anna O'Shea (on right), with team members, Jean Akers, AICP (left) and Steve Lane, AICP. Anna O'Shea served as the CPAT's primary contact throughout the project. *Photo by Ryan Scherzinger*



For fun, team member, Jason Epley, AICP, took a quick time-out for a run around the bases at the Field of Dreams near Dyersville, IA, one of many potential destination sites for Heritage Trail users. *Photo by Ryan Scherzinger*

APPENDICES

APPENDIX A: Potential State and Federal Resources

APPENDIX B: Heritage Trail Survey Results

APPENDIX A: POTENTIAL STATE AND FEDERAL RESOURCES

The following is a list of possible Federal and State funding sources that could be used to support construction of future bicycle and pedestrian projects along the trail.

Department of Energy (DOE)

The Department of Energy's Energy Efficiency and Conservation Block Grants (EECBG) grants may be used to reduce energy use and fossil fuel emissions and for improvements in energy efficiency. Section 7 of the funding announcement states that these grants provide opportunities for the development and implementation of transportation programs to conserve energy used in transportation including development of infrastructure such as bike lanes and pathways and pedestrian walkways.

Community Development Block Grant Funds

Community Development Block Grant (CDBG) funds are available to local municipal or county governments for projects that enhance the viability of communities by providing decent housing and suitable living environments and by expanding economic opportunities, principally for persons of low- and moderate-income. Each year, CDBG provides funding to local governments for hundreds of critically-needed community improvement projects that can include such improvements as infrastructure in the more urban areas of the trail.

Land and Water Conservation Trust Fund

The Land and Water Conservation Fund (LWCF) has historically been a primary funding source of the US Department of the Interior for outdoor recreation development and land acquisition by local governments and state agencies.

The Robert Wood Johnson Foundation

The Robert Wood Johnson Foundation was established as a national philanthropy in 1972 and today it is the largest U.S. foundation devoted to improving the health and health care of all Americans. Grant making is concentrated in four areas:

- To assure that all Americans have access to basic health care at a reasonable cost
- To improve care and support for people with chronic health conditions
- To promote healthy communities and lifestyles
- To reduce the personal, social and economic harm caused by substance abuse: tobacco, alcohol, and illicit drugs.

For more specific information about what types of projects are funded and how to apply, visit <http://www.rwjf.org/applications/>.

Bank of America Charitable Foundation, Inc.

The Bank of America Charitable Foundation is one of the largest in the nation. The primary grants program is called Neighborhood Excellence, which seeks to identify critical issues in local communities. Another program that applies to greenways is the Community Development Programs, and specifically the Program Related Investments. This program targets low and moderate income communities and serves to encourage entrepreneurial business development. Visit the web site for more information: www.bankofamerica.com/foundation.

American Greenways Eastman Kodak Awards

The Conservation Fund's American Greenways Program has teamed with the Eastman Kodak Corporation and the National Geographic Society to award small grants (\$250 to \$2,000) to stimulate the planning, design and development of greenways. These grants can be used for activities such as mapping, conducting ecological assessments, surveying land, holding conferences, developing brochures, producing interpretive displays, incorporating land trusts, and building trails. Grants cannot be used for academic research, institutional support, lobbying or political activities. For more information visit The Conservation Fund's website at: www.conservationfund.org.

National Trails Fund

American Hiking Society created the National Trails Fund in 1998; the only privately supported national grants program providing funding to grassroots organizations working toward establishing, protecting and maintaining foot trails in America. 73 million people enjoy foot trails annually, yet many of our favorite trails need major repairs due to a \$200 million backlog of badly needed maintenance. National Trails Fund grants help give local organizations the resources they need to secure access, volunteers, tools and materials to protect America's cherished public trails. To date, American Hiking has granted more than \$240,000 to 56 different trail projects across the U.S. for land acquisition, constituency building campaigns, and traditional trail work projects. Awards range from \$500 to \$10,000 per project.

Projects the American Hiking Society will consider include:

- Securing trail lands, including acquisition of trails and trail corridors, and the costs associated with acquiring conservation easements.
- Building and maintaining trails which will result in visible and substantial ease of access, improved hiker safety, and/or avoidance of environmental damage.
- Constituency building surrounding specific trail projects - including volunteer recruitment and support.

Web site: www.americanhiking.org/alliance/fund.html.

The Conservation Alliance

The Conservation Alliance is a non-profit organization of outdoor businesses whose collective annual membership dues support grassroots citizen-action groups and their efforts to protect wild and natural areas. One hundred percent of its member companies' dues go directly to diverse, local community groups across the nation - groups like Southern Utah Wilderness Alliance, Alliance for the Wild Rockies, The Greater Yellowstone Coalition, the South Yuba River Citizens' League, RESTORE: The North Woods and the Sinkyone Wilderness Council (a Native American-owned/operated wilderness park). For these groups, who seek to protect the last great wild lands and waterways from resource extraction and commercial development, the Alliance's grants are substantial in size (about \$35,000 each), and have often made the difference between success and defeat. Since its inception in 1989, The Conservation Alliance has contributed \$4,775,059 to grassroots environmental groups across the nation, and its member companies are proud of the results: To date the groups funded have saved over 34 million acres of wild lands and 14 dams have been either prevented or removed-all through grassroots community efforts.

The Conservation Alliance is a unique funding source for grassroots environmental groups. It is the only environmental grant maker whose funds come from a potent yet largely untapped constituency for protection of ecosystems - the non-motorized outdoor recreation industry and its customers. This industry has great incentive to protect the places in which people use the clothing, hiking boots, tents and backpacks it sells. The industry is also uniquely positioned to educate outdoor enthusiasts about threats to wild places, and engage them to take action. Finally, when it comes to decision-makers - especially those in the Forest Service, National Park Service, and Bureau of Land Management, this industry has clout - an important tool that small advocacy groups can wield.

The Conservation Alliance Funding Criteria: The Project should be focused primarily on direct citizen action to protect and enhance our natural resources for recreation. We're not looking for mainstream education or scientific research projects, but rather for active campaigns. All projects should be quantifiable, with specific goals, objectives and action plans and should include a measure for evaluating success. The project should have a good chance for closure or significant measurable results over a fairly short term (one to two years). Funding emphasis may not be on general operating expenses or staff payroll.

Web site: www.conservationalliance.com/index.m. E-mail: john@conservationalliance.com.

National Fish and Wildlife Foundation (NFWF)

The National Fish and Wildlife Foundation (NFWF) is a private, nonprofit, tax-exempt organization chartered by Congress in 1984. The National Fish and Wildlife Foundation sustains, restores, and enhances the Nation's fish, wildlife, plants and habitats. Through leadership conservation investments with public and private partners, the Foundation is dedicated to achieving maximum conservation impact by developing and applying best practices and innovative methods for measurable outcomes.

The Foundation awards matching grants under its Keystone Initiatives to achieve measurable outcomes in the conservation of fish, wildlife, plants and the habitats on which they depend. Awards are made on a competitive basis to eligible grant recipients, including federal, tribal, state, and local governments, educational institutions, and non-profit conservation organizations. Project proposals are received on a year-round, revolving basis with two decision cycles per year. Grants generally range from \$50,000-\$300,000 and typically require a minimum 2:1 non-federal match.

Funding priorities include bird, fish, marine/coastal, and wildlife and habitat conservation. Other projects that are considered include controlling invasive species, enhancing delivery of ecosystem services in agricultural systems, minimizing the impact on wildlife of emerging energy sources, and developing future conservation leaders and professionals.

Website: <http://www.nfwf.org/AM/Template.cfm?Section=Grants> where additional grant programs are described.

The Trust for Public Land

Land conservation is central to the mission of the Trust for Public Land (TPL). Founded in 1972, the Trust for Public Land is the only national nonprofit working exclusively to protect land for human enjoyment and well-being. TPL helps conserve land for recreation and spiritual nourishment and to improve the health and quality of life of American communities. TPL's legal and real estate specialists work with landowners, government agencies, and community groups to:

- Create urban parks, gardens, greenways, and riverways
- Build livable communities by setting aside open space in the path of growth
- Conserve land for watershed protection, scenic beauty, and close-to home recreation safeguard the character of communities by preserving historic landmarks and landscapes.

The following are TPL's Conservation Services:

- **Conservation Vision:** TPL helps agencies and communities define conservation priorities, identify lands to be protected, and plan networks of conserved land that meet public need.
- **Conservation Finance:** TPL helps agencies and communities identify and raise funds for conservation from federal, state, local, and philanthropic sources.
- **Conservation Transactions:** TPL helps structure, negotiate, and complete land transactions that create parks, playgrounds, and protected natural areas.

- **Research and Education:** TPL acquires and shares knowledge of conservation issues and techniques to improve the practice of conservation and promote its public benefits.

Since 1972, TPL has worked with willing landowners, community groups, and national, state, and local agencies to complete more than 3,000 land conservation projects in 46 states, protecting more than 2 million acres. Since 1994, TPL has helped states and communities craft and pass over 330 ballot measures, generating almost \$25 billion in new conservation-related funding. For more information, visit <http://www.tpl.org/>.

Local Trail Sponsors

A sponsorship program for trail amenities allows smaller donations to be received from both individuals and businesses. Cash donations could be placed into a trust fund to be accessed for certain construction or acquisition projects associated with the greenways and open space system. Some recognition of the donors is appropriate and can be accomplished through the placement of a plaque, the naming of a trail segment, and/or special recognition at an opening ceremony. Types of gifts other than cash could include donations of services, equipment, labor, or reduced costs for supplies.

Volunteer Work

It is expected that many citizens will be excited about the development and improvement of a greenway corridor. Individual volunteers from the community can be brought together with groups of volunteers from church groups, civic groups, scout troops and environmental groups to work on greenway development on special community workdays. Volunteers can also be used for fund-raising, maintenance and programming needs.

Additional State and Federal Resources

Below is a list of additional State and Federal Resources:

- United States Department of Transportation Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations (March 2010) - http://www.fhwa.dot.gov/environment/bikeped/policy_accom.htm
- FHWA Policy for Mainstreaming Non-motorized Transportation (FHWA Guidance – Bicycling and Pedestrian Provision of Federal Transportation Legislation) - <http://www.fhwa.dot.gov/environment/bikeped/bp-guid.htm>
- Iowa in Motion – Planning Ahead 2040: Iowa State Transportation Plan - http://www.iowadot.gov/iowainmotion/files/iowaInMotion_final.pdf
- TND Guidelines - <http://www.ncdot.org/doh/preconstruct/altern/value/manuals/tnd.pdf>
- NCDOT Complete Streets Policy (<http://www.completestreetsnc.org/>)

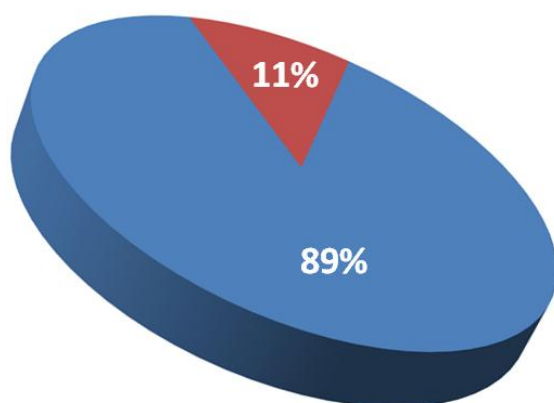
APPENDIX B: HERITAGE TRAIL SURVEY

Following the preliminary visit in June 2012 by the Team Leader, Paula Reeves, AICP CTP, and APA project manager, Ryan Scherzinger, Dubuque County with the help of Reeves and Scherzinger, administered a short survey to get a sense of how people use Heritage Trail and a few other questions pertaining to the future of the trail. The survey should not be considered statistically accurate and was primarily conducted to give the CPAT a glimpse into existing public opinions. Below are further details and a record of the survey results.

- *Dates survey open:* July 11, 2012 – September 4, 2012 (56 days)
- *Total number of respondents:* 912

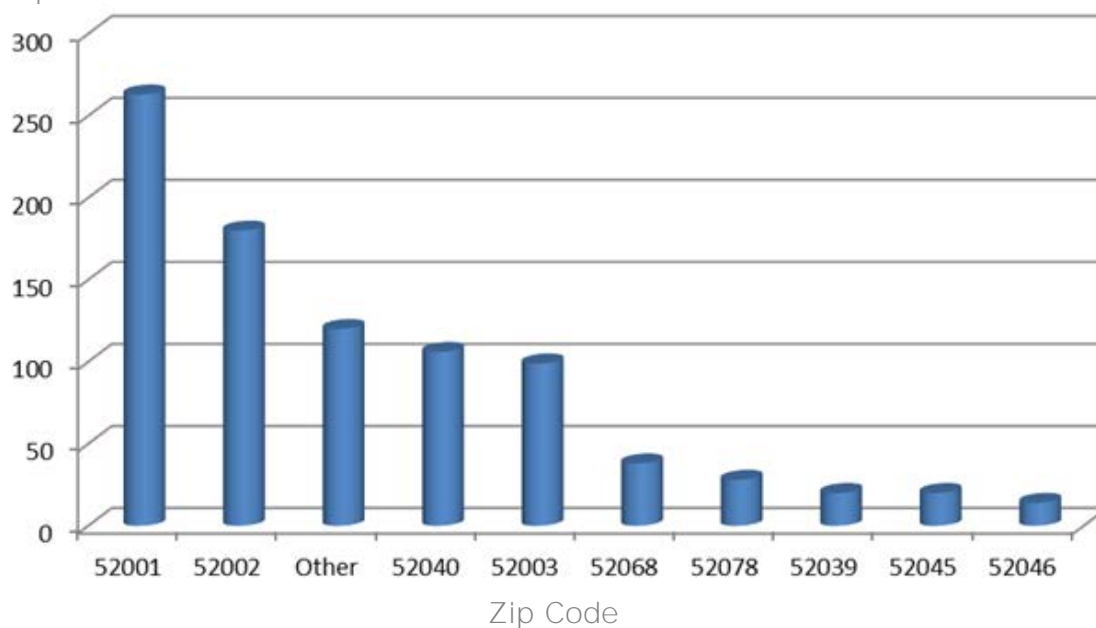
Question #1: Do you reside in Dubuque County?

- Yes = 810
- No = 102

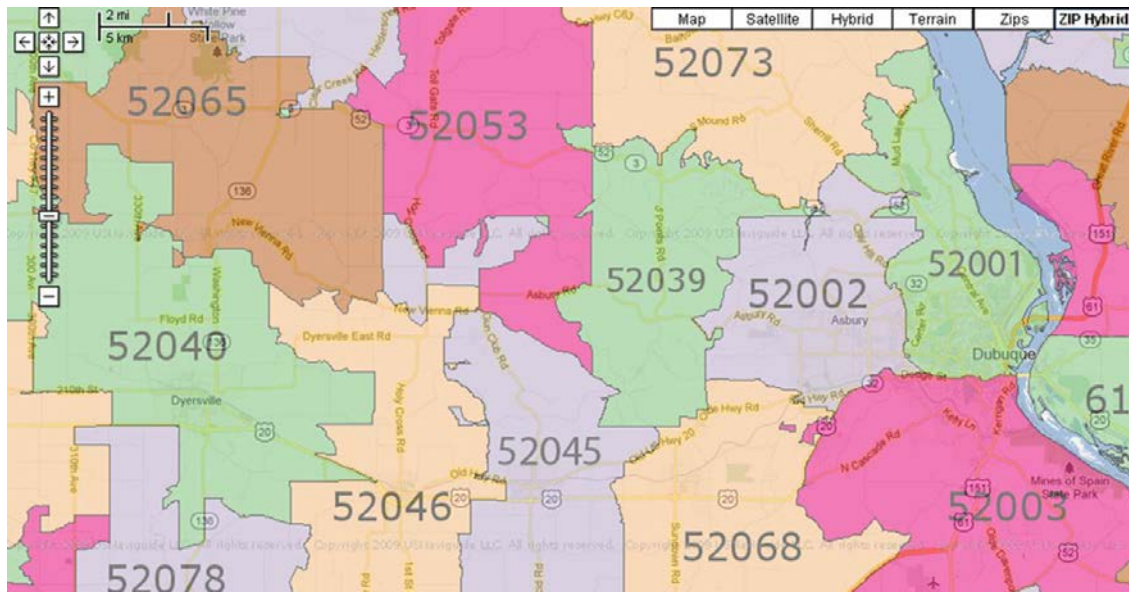


Question #2: What's your zip code?

No. of
People



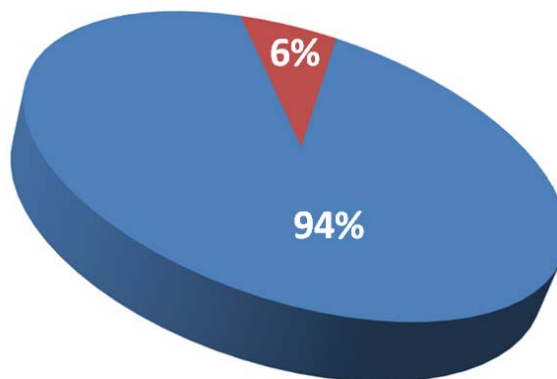
Zip Code Map for Reference to Question #2:



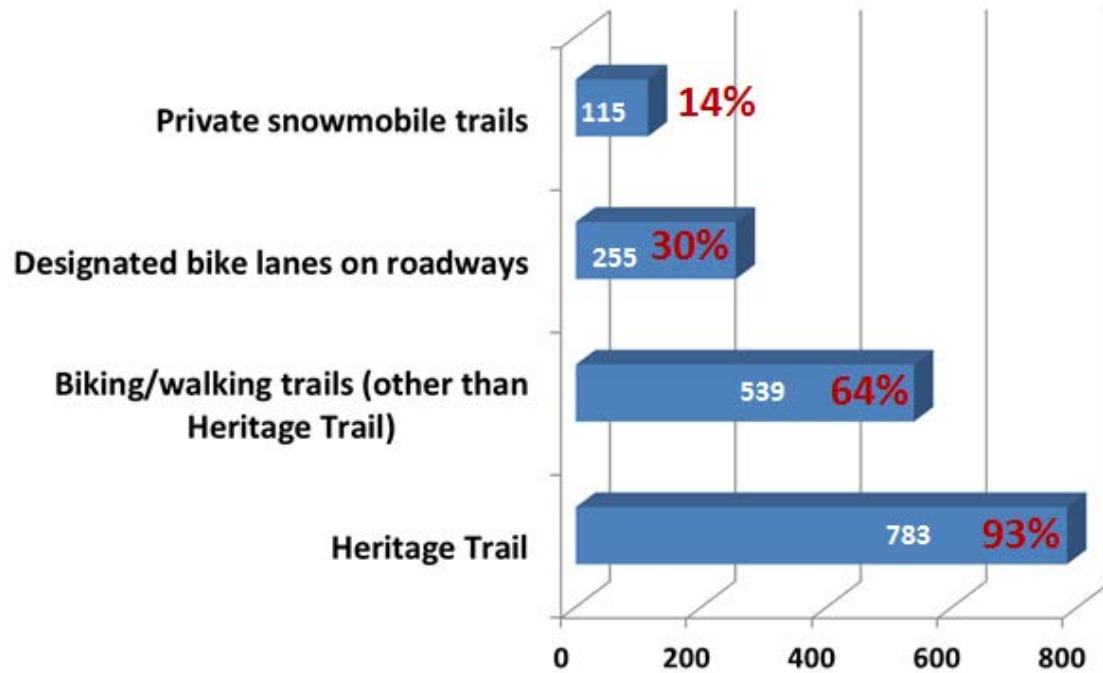
Question #3: Have you used Heritage Trail or other trails near your home in the past year?

■ Yes = 852

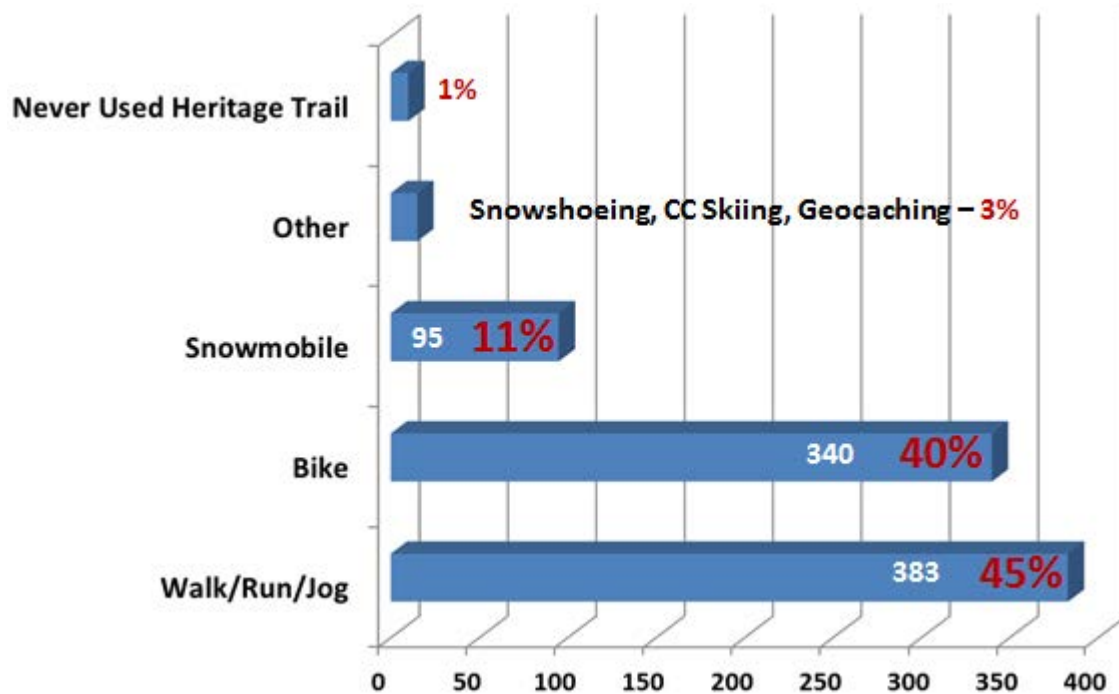
■ No = 60



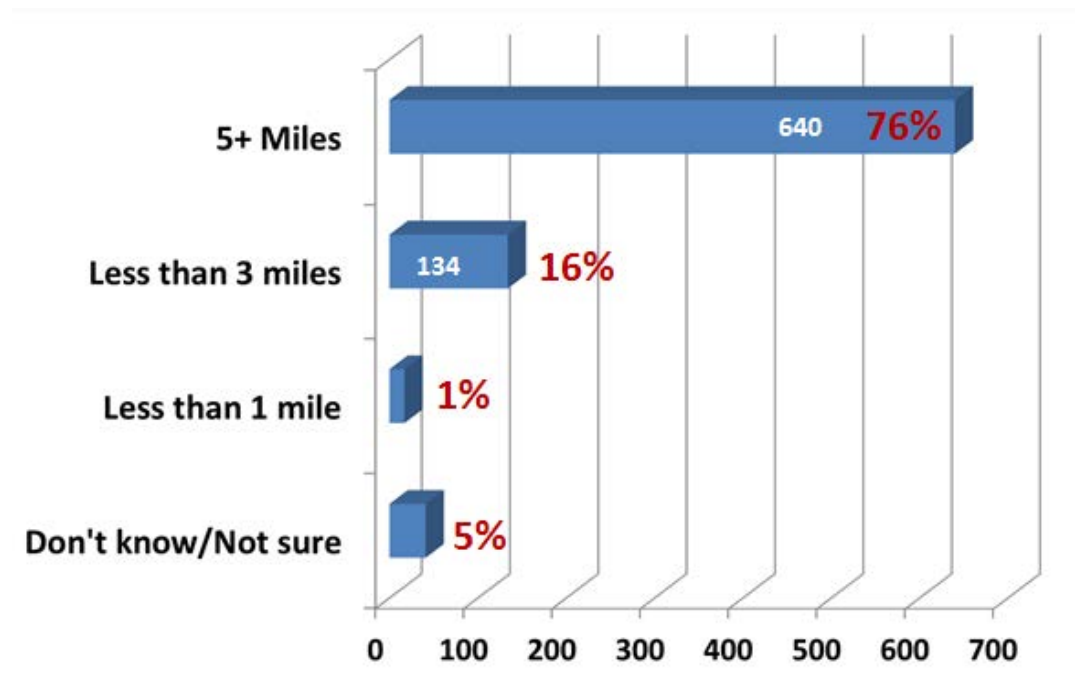
Question #4: Which of the following did you use in the past year (mark all that apply)?



Question #5: What activity do you use Heritage Trail for most often?



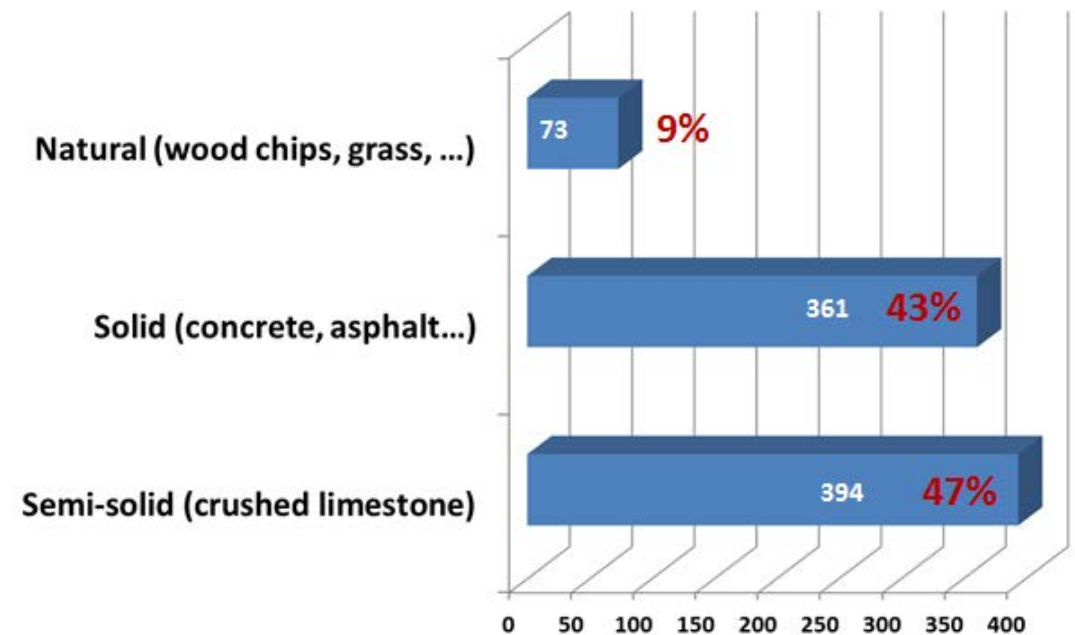
Question #6: What is the average length of a usual trip you take in miles on Heritage Trail?



*Less than 1 mile = 17 people

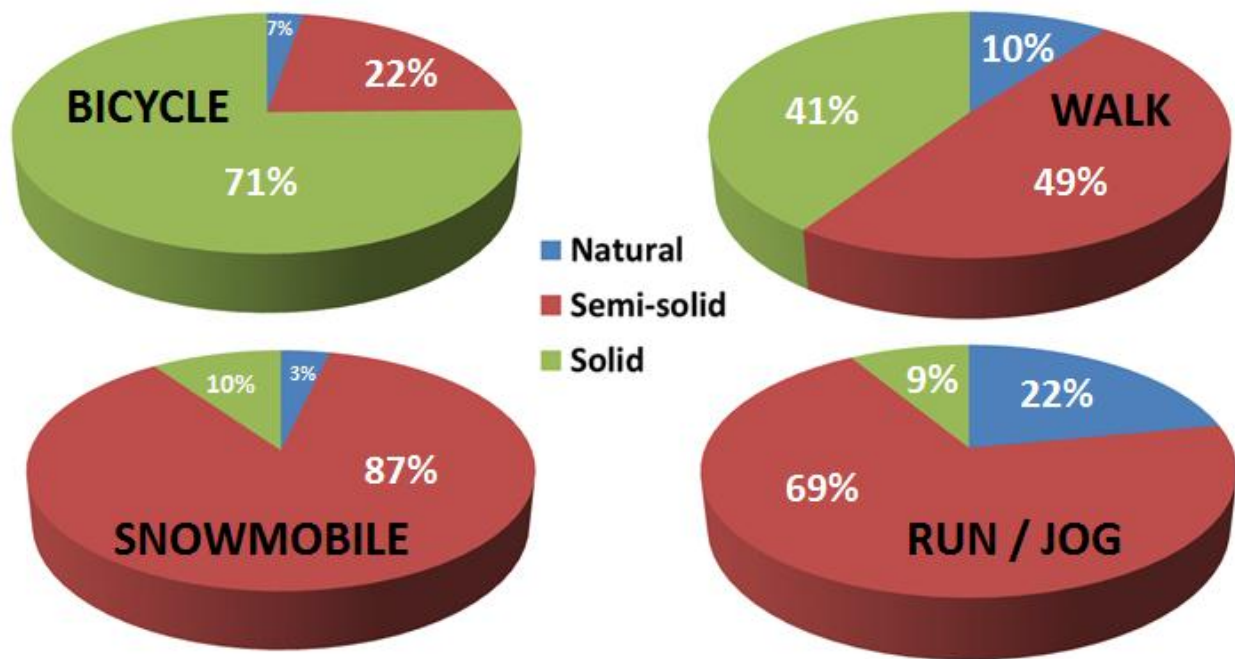
* Don't know/Not sure = 41 people

Question #7: What type of trail surface do you prefer?



*Heritage Trail currently has a semi-solid, crushed limestone surface.

Further Analysis of Question #7: Breakdown of Preferred Trail Surface by Primary Activity Use



Question #8 (for those who answered that they don't use Heritage Trail or other trails near their home): Why haven't you used the trail system in the past year?

Non-Users from Survey = 6% (59 people)

TOP ANSWERS:

Too Busy / No Opportunity: 43% (25 people)

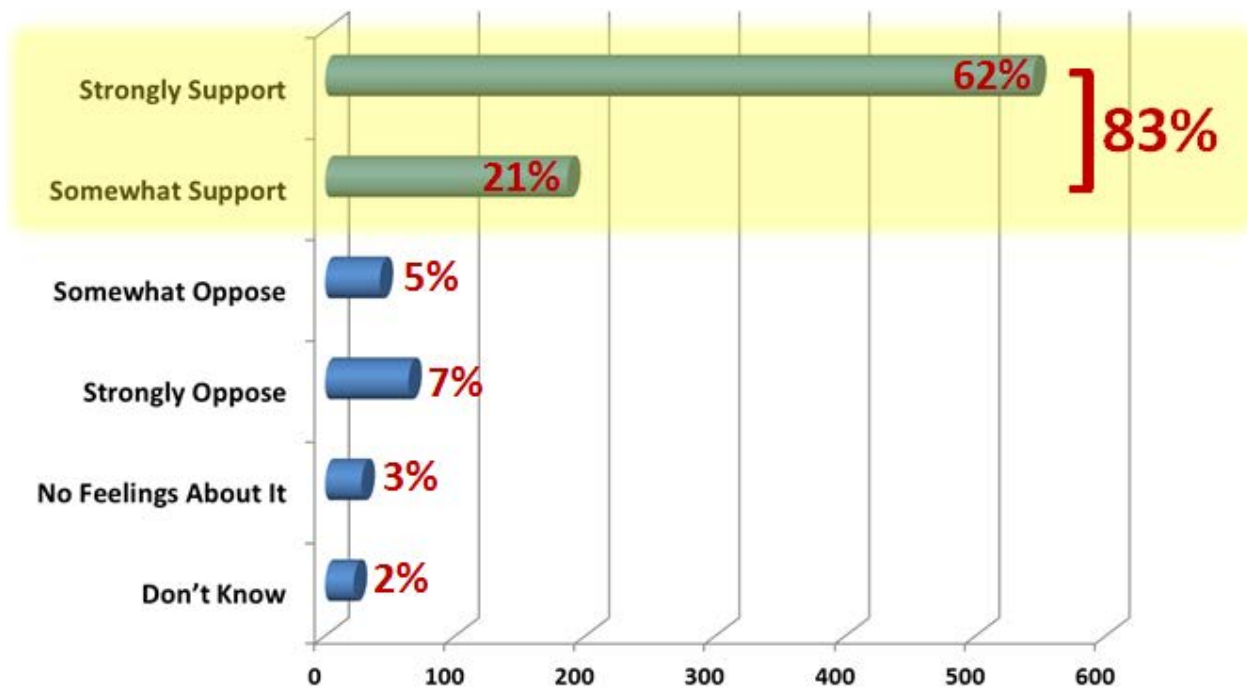
Don't want to / Don't enjoy it: 13% (8 people)

Not paved / Damages my Road bike: 10% (6 people)

Accessibility: 10% (6 people)

Question #9: On a statewide average, currently 2% of transportation funds are spent on improving conditions for walking and bicycling, including trails, sidewalks, crossings, etc.

If your taxes were kept the same, but the funds would be redistributed, do you support or oppose additional spending of transportation funds for improving walking and biking conditions, including trails?



Question #10: Other comments, questions, concerns, and/or ideas...

Below is a word cloud of the answers received:

