Transdisciplinary University Engagement for Sustainable Tourism Planning

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Chapter Summary

Sustainable tourism literature reveals an increasing understanding of the complexity of tourism development and the need for a holistic approach to sustainable tourism planning. This includes mixed-methods approaches that draw from multiple perspectives, and participatory planning processes that strengthen partnerships between community members, visitors, and tourism development stakeholders. This study describes transdisciplinary planning and design activities developed and implemented by the West Virginia University Rural Tourism Design Team (RTDT) to support the development of a cultural tourism performance agenda for the Tucker County, WV Cultural District Authority (CDA). We demonstrate how a transdisciplinary approach successfully engages the community and scaffolds outputs to create synergies between researchers and research outputs. Local ownership and stewardship of actionable items is enhanced through this scaffolded process leading to implementation.

Learning Objectives:

1. Understand how multiple research approaches can be successfully integrated into a sustainable tourism planning process.
2. Understand the importance of triangulation in the tourism research and planning process, and how mixed methods approaches enhance and validate research findings.
3. Differentiate between multi-disciplinary and transdisciplinary approaches and understand how transdisciplinary approaches collaboratively engage researchers, the community, and stakeholder groups in the tourism development process.
4. Reflect on current research and outreach processes, and identify how mixed methods and/or transdisciplinary approaches could enhance their work and deepen community engagement.
The Issue, Opportunity or Trend

Sustainable rural tourism is recognized for its potential to improve communities’ economic viability, preserve and enhance cultural and natural assets, and benefit both host communities and tourists (Bramwell, 1994; Lane & Kastenholz, 2015). Successful rural tourism development requires that communities understand their development potential; generate local support; secure public and private investment; manage natural, human, and financial resources; and build an image for their community (Brown, 2002). However, in many cases inadequate planning, poor alignment of tourism and community economic development goals, and limited participation by residents and stakeholders hamper tourism development (Keogh, 1990; McKercher, Wang, & Park, 2015).

Participatory planning can offset unintended impacts of tourism development including anger, apathy, or mistrust of tourists by locals and generate more successful outcomes for the community and visitors (Gursoy, Jurowski, & Uysal, 2002). However, to be successful the planning process must creatively and thoroughly address the breadth of interests, opinions, and real and perceived challenges felt by residents, visitors, and local stakeholders. This may be most effectively accomplished through a mixed-methods approach that draws from multiple perspectives (Hollinshead & Jamal, 2007; Lane, 2009; McGehee, Lee, O'Bannon, & Perdue, 2010).

Using multiple methods of inquiry offers several benefits to researchers and the community at large: First, the diversity of methods encourages participation from a larger audience thereby increasing engagement. Second, it recognizes tourism’s inherently interdisciplinary nature and encourages cross-disciplinary teamwork, facilitated reflection, and the advancement of ideas (Cole, 2014; McGehee et al., 2013). Finally, it allows for triangulation and increased data robustness, thereby enhancing the validity of inferences and better linking causes and consequences (Molina-Azorin & Font, 2016).

The West Virginia University (WVU) Rural Tourism Design Team (RTDT) implemented a mixed-methods, transdisciplinary planning and design process to support the development of a cultural tourism performance agenda for the Tucker County, West Virginia Cultural District Authority (CDA). Transdisciplinary partnerships improved upon interdisciplinary experiences by immersing faculty, students, and local stakeholders in one another’s work. In the process, partners shared assets, expertise, and experiences generating richer outputs and strengthening communication and trust.

Although the project relied on methods well-documented in tourism literature, there are few examples of how the components have been successfully integrated in part or whole, to broadly address communities’ tourism planning and community development needs. When applied together, the process identified gaps in product offerings for development, places and cultural elements that could be leveraged for tourism development, and sacred places and cultural elements that should be preserved for the community.
The Innovation
Case Context

Tucker County is a rural county located in West Virginia’s Potomac Highlands. The county is geographically and culturally divided: The county seat of Parsons, Hambleton, Hendricks, and St. George lie in the Cheat River valley at elevations of ~1,500 feet above sea level. Several miles and hundreds of feet higher are the communities of Thomas and Davis (~3,100 feet above sea level) which are situated near parks, ski resorts, and recreational assets. The county’s economy was traditionally dependent on natural resource extraction, specifically coal and timber. By the mid-1950s resources were largely exhausted uprooting industries and residents. With a population of 6,966 in 2015, Tucker County is West Virginia’s second-least populous county; median household income in the county was $40,533, nearly 30% below the national average (U.S. Census Bureau, 2018). Tucker County is classified as ‘transitional’ by the Appalachian Regional Commission, indicating that it ranks between the worst 25 percent and the best 25 percent of the nation’s counties on economic measures including unemployment, per capita income, and the poverty rate.

Today, due to improved land management practices and a changing environmental ethos, Tucker County is positioning itself as a four-season tourism destination. Visitors contributed $42 million in direct spending to the county’s economy in 2013, supporting an estimated 700 jobs (Dean Runyan Associates, 2015). The county’s many and varied outdoor recreational activities are key to both the region and the state’s “Wild and Wonderful” image. More than half of the county is comprised of public lands including two state parks and large swaths of the Monongahela National Forest; outdoor recreational activities are enhanced by a growing rural creative class of artists, artisans and patrons of the performing arts. Moreover, there is strong community-based support to develop and enhance these outdoor and cultural tourism components. Identifying and preserving these local assets has become of increased importance following the completion of Appalachian Development Highway System, Corridor H, a four-lane highway that puts the once isolated county within less than 2.5 hours of metropolitan centers in Washington D.C. and Northern Virginia (Figures 1 and 2).

Stakeholders Involved

Recognizing the economic potential of the region’s cultural and natural resources, the West Virginia State Legislature created the Tucker County CDA in 2013 to preserve and enhance the county’s unique artistic, cultural, historical and recreational assets to promote culture, education and tourism in Tucker County. In 2016, the CDA received funding from the Claude Worthington Benedum Foundation to develop a common vision for cultural tourism, link assets, develop a leadership network, and create a performance agenda for the county and organization. To fully address the complexities of the project the CDA engaged the WVU RTDT, a transdisciplinary group comprised of Extension Service specialists and faculty and students from the Recreation, Parks, and Tourism Resources; Landscape Architecture; and Graphic Design programs. The project engaged a breadth of local tourism and economic development stakeholders (Table 1) including the local Chamber of Commerce, Economic Development Authority, County Commission, and Convention and Visitors Bureau representatives; county and municipal government leaders; and businesses and non-profit organizations.
Figure 1. Context Map Situating Davis, West Virginia in the United States

Figure 2. Corridor H Connecting Davis, West Virginia, Tucker County, and Major Metro Areas
Table 1. Tucker County and State Tourism and Economic Development Stakeholders and Their Activities

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<th>Activity/Area of Focus</th>
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Approach Used and the Impact

The RTDT employs a mixed-methods and multi-perspective approach to tourism development planning which intrinsically acknowledges the field’s interdisciplinary nature. The use of multiple distinct methods of both qualitative and quantitative evidence establish confidence and confirm research findings and stakeholders’ perspectives. It also provides a breadth of techniques to engage a diversity of stakeholders, a core tenant of sustainable tourism. The transdisciplinary approach expands the traditional “community of practice” beyond the research team to include residents, visitors, and stakeholders, allowing each group to learn from one another’s perspectives and research findings. The result is a richer understanding of the context for planning, more relevant and vigorous outputs, and ultimately increased citizen control of the planning process.

In Tucker County, planning activities acquired information from three groups of primary stakeholders (leadership, residents, and visitors), and uncovered and emphasized assets, successes, and strengths which were employed to develop place-specific action strategies. The RTDT Asset-Based Community Development (ABCD) approach included eight primary research phases conducted over a one-year period: key informant interviews, resident attitudes toward tourism survey, visitor preferences survey, economic impact analysis (current and development options), community asset inventory and mapping, service-learning landscape design/visualization of opportunities and sites targeted for development, and social design. The research initiated in the first four phases provided the team with a thorough understanding of research problems and complex phenomena. Findings in the initial stages informed design activities at latter stages helping the destination take sequential steps toward achieving their goals and objectives.

Phase 1: Key informant interviews

Identifying the perceptions and attitudes of stakeholders toward the development of tourism in a community should be a first step in tourism planning to ensure trust, cooperation, harmony and mutual benefit for all those involved. This is especially true regarding the engagement of destination leaders or “key informants” who exert significant influence over local promotion, development, and management planning decisions.

To collect information on specific tourism opportunities and challenges, in-depth semi-structured individual interviews were conducted with 30 key informants representing a range of tourism-related organizations. Stakeholders were selected to cover a diversity of perspectives throughout the County utilizing a traditional snowball technique based on recommendations by board members of the Tucker County CDA.

Common themes identified in the key informant interviews included maintaining authenticity and sense of place, economic diversification, seasonality and low wage jobs, consistent hours of operation, finding and retaining employees, employee awareness of tourism assets, affordable housing, developing infrastructure and public services, signage, resorts being more engaged with community activities and attractions, creating a common identity, and coordination of activities. Maintaining a sense of place, especially considering the development of Corridor H and the commercialization that has followed improved access in other destinations was also of high concern.
The importance of attracting the right kind of visitor was also apparent. According to one stakeholder, “the type of tourists I personally want to encourage are the stewards of the outdoors, people who are concerned about what they leave behind and what sort of footprint they’re making”. In addition to attracting this type of visitor, key informants saw an opportunity to develop a quality of life that would encourage visitors to ultimately become permanent residents.

Important challenges to providing services to visitors and managing sustainable tourism growth were also identified. These included seasonality, finding and retaining qualified employees, sustaining volunteers, and the need for a common vision to guide local tourism development.

Phase 2: Resident attitudes toward tourism survey

Supportive residents are a key ingredient to high quality visitor experiences (Fick & Ritchie, 1991). Additionally, community relationships and a comprehension of a community’s social capital is vital to understanding whether it is ready to undertake tourism development in a significant way (Macbeth, Carson, and Northcote, 2004). According to Grootaert (1998), social capital facilitates three key activities which contribute to the general economic success of a community: information sharing, coordination of activities, and collective decision-making. All three activities can also be considered key to successful tourism development. Information sharing is vital for those involved in tourism, as information is important to the success of such a rapidly changing industry; an understanding of the tourism destination as a package of accommodations, restaurants, and attractions that requires coordination and collaboration is also vital to success; finally, collective decision making depends heavily on the conflict management capabilities of a community and its ability to addresses emerging issues. The most successful destinations have found ways to engage in collective decision-making about the goals of the community and how they can be met through the development of a cohesive tourism product that leverages assets and integrates the breadth of stakeholders’ self-interests (McGehee et al., 2010).

The RTDT’s survey instrument for this study included Likert scale items designed to measure residents’ perceptions toward tourism development, support for tourism, and social capital in the county (Gursoy, Jurowski, & Uysal, 2002; Gursoy & Rutherford, 2004; Lankford & Howard, 1994; Nunkoo & Ramkissoon, 2010; Jones, 2005; Flora, 2004; Onyx & Bullen, 2000; and Park, Nunkoo, & Yoon, 2015). The instrument also included an importance-performance analysis of tourism attributes, ranking of tourism development opportunities, open-ended questions, and demographics. The methodology followed the Dillman, Smyth, & Christian’s (2014) “tailored design method.” 637 resident surveys were completed and returned for a 17.6% return rate.

An overwhelming majority agreed that Tucker County was rich in outdoor recreation resources, but significantly fewer felt these assets were marketed effectively. Residents were less likely to recognize historic or cultural assets as contributing to the regions tourism base. Respondents were supportive of tourism as an economic development strategy with more than two-thirds agreeing or strongly agreeing that tourism development could provide additional economic opportunity. When asked about tourism development opportunities the highest ranked included nature tourism, unique local shopping, local restaurants, festivals/events, and accommodations. The lowest ranked were casinos, theme parks, and chain/big box shopping. Open-ended questions, such as “What does tourism mean to you?” revealed mixed opinions about tourism as an economic development strategy. Positive comments were related to economic development, jobs, and sharing the community with outsiders. Others saw little or no benefit, or expressed negative comments related to problems such as low paying, seasonal jobs.
There was an acknowledgement that tourism was not well developed, and that the community should do more to promote its assets to visitors. Like stakeholder responses, residents recognized a need to balance tourism development with the protection of community values and long-term planning. Unfortunately, when asked about social capital (networks, acceptance, and cooperation) less than one-third of respondents felt there were strong social networks between the county’s communities/municipalities. Fewer felt that individuals and organizations cooperate to achieve collective goals. These feelings were also reflected in other answers. For example, less than half of respondents felt the county had a collective identity, and less than one-third agreed that the county was working toward a common vision.

Phase 3: Visitor preferences survey

Tourism market research on the motives, behaviors, interests, information sources used, and demographic characteristics is essential to effectively market destination attributes and ensure a quality visitor experience (Dolnicar & Leisch, 2008; Hassan, 2000). A better understanding of current visitors can help ensure quality experiences and may encourage additional visitor expenditures or longer visits to a destination (McGehee et al., 2013).

A survey to assess visitor preferences was designed by the research team, and administered by faculty and students at varying events and attractions in the County. The survey included Likert scale items designed to measure visitor’s perceptions of tourism development, purpose of visit, main attractions visited, trip size and duration, demographic information, and visitor comments. A total of 266 surveys were completed. Respondents’ ages varied; however, most respondents were well-educated (45% had a graduate degree), and affluent (42% of respondents had an annual family income of more than $100,000). Over 80% of visitors resided in-state or in border states.

Nearly all respondents (95%) identified nature-based attractions as a primary draw to the county. Most visitors indicated visiting Blackwater Falls State Park followed by Canaan Valley State Park/Resort. Cultural and historic attractions were less likely to be recognized. Satisfaction with the visitor experience was high: 64% strongly agreed that they were satisfied with their experience visiting the destination, 72% strongly agreed that they would recommend the destination to their family or friends, and 79% strongly agreed that they would revisit the destination in the future.

Nearly two-thirds stated that the area had potential for additional tourism development. However, like stakeholders and residents, nearly 60% of respondents agreed or strongly agreed that the quality of tourism in this destination would be negatively impacted without long-term planning and managed growth.

Phase 4: Economic impact analysis

There is a breadth of literature on the economic potential of tourism activities and methods for quantifying the sector’s impact on both large and small economies (Dwyer, Forsyth, & Spurr, 2004; Song, Dwyer, Li, & Cao, 2012). This element of the project included quantifying the tourism sector’s economic contribution to the county’s economy; better understanding business’s needs, motivations, and expectations; and establishing a baseline to quantify the impact of tourism related policy decisions on local businesses.

The industry’s economic contribution was quantified using a hybrid input-output model based on county specific 2015 IMPLAN data supplemented with employment and earnings data from survey respondents, the
most current data from federal and state employment agencies (Bureau of Labor Statistics, Quarterly Census of Employment and Wages; Workforce West Virginia), and private data sources. The total economic contribution of the tourism sector was estimated at 970 jobs and $44 million in income.

Most businesses were well established in the community. Many owners identified quality of life factors as key reasons for establishing their business in the county citing a simple way of life, natural beauty, recreation opportunities, and the low-costs of doing business. Businesses’ outlook for the future of the County’s tourism industry was overwhelmingly positive. However, concerns were expressed regarding seasonality, especially for outdoor outfitters and retail establishments, and low wage rates which averaged just over $18,000 per worker; few businesses (35%) could offer employees benefits.

Qualitative data pointed to both opportunities and threats facing the industry. For example, respondents noted the positive impact on visitation from the completion of Corridor H; however, many businesses have already noticed a different type of tourist, one focused less on outdoor adventure and more on sightseeing, entertainment, and amenities. Anticipated growth and the changing nature of tourism has encouraged business owners to advocate for increased planning to protect assets which define tourism in the traditional mountain communities, and consciously diversify and develop amenities desired by new and returning visitors. This includes deliberate efforts to identify new opportunities and markets in Tucker County’s valley communities which have not traditionally benefited from tourism development.

Phase 5: Participatory Asset Identification and Mapping

Participatory Geographic Information Systems (PGIS) integrates the use of GIS and mapping at local levels to engage and empower community-based resource assessment, planning, and decision making. The participatory approaches of PGIS have evolved since its inception in the 1990s from paper map-based and internet-based, to interactive interface-based, including the use of tools like Google Maps and ArcGIS Flex Viewer (Brown, 2012). When integrated with location-based service applications, research has shown that GIS can assist tourists in the discovery or identification of previously unknown destinations and their businesses, recreational opportunities, cultural/historic amenities and government/information centers (Dye & Shaw, 2007; Poslad et al., 2001). GIS also provides valuable information to business owners, government leaders and other local stakeholders through the identification of tourism assets, site selection and location analysis, the development of tourism planning scenarios and the identification of existing or potential tourism visitor flow patterns (Chen, 2007; McAdam, 1999).

Working with residents and stakeholders, the RTDT developed a comprehensive inventory and mapped representation of available tourism and recreation resources that could be promoted or enhanced for both visitors and residents. The analysis began with existing statewide datasets and spatial data layers which were supplemented with local data collected by a CDA Americorps volunteer. Identified assets included local, state and federally managed recreational facilities (parks, trails, recreational sites, other specially designated areas), cultural venues, and historic sites; and business locations of interest to visitors including restaurants, accommodations, specialty retail establishments, grocery stores, convenience stores, agri-tourism sites, etc. Community involvement in the asset mapping process included identification of data gaps, information collection on additional assets, and the status classification for each asset (i.e. “visitor ready”).
Data were combined into an ARC GIS online map (see figure 3) which was embedded into the Tucker Culture website to be utilized by residents and visitors to identify and locate identified assets (https://www.tuckerculture.com/interactive-asset-map/).

Figure 3. GIS-Based Map of Tucker County Assets

Phase 6: Mapping of opportunities and priorities for tourism development and landscape design/visualization of sites targeted for development

Participatory planning and design includes work with disenfranchised and underserved populations (Hester 2006, Thering 2007, Sanoff, 2010) through service-learning (Angotti, Doble & Horrigan, 2012; Bose, Horrigan, Doble, & Shipp, 2014) designed to increases citizen control, delegated power, and partnership (Arnstein’s “Ladder of Citizen Participation,” 1969). The RTDT’s Landscape Architecture Extension Specialist developed methods that provided viable products to the County and communities and satisfied many of the desired goals of service-learning: building capacity for student learning and leadership; providing experiences that highlight and strengthen inclusive communities; creating authentic experiences for community members and students in collaborative projects; and promoting principles of democracy, compassion and cultural diversity through civic engagement (adapted from West Virginia University, 2017). Specific activities included focus groups to identify opportunities for site development, corridor management, and district wide proposals; workshops with stakeholder groups to generate designs and visualizations for the opportunities; and community workshops for participatory spatial analysis of local and countywide resources (Figure 4).
Results of these exercises were entered into the growing GIS database. Follow-up work with the CDA used the mapped information to rank projects. For example, sites identified as assets, but which were undeveloped for community and touristic needs, were considered high-priority. Many of the identified assets were undeveloped corridors, especially those already used locally for hiking and biking, but which were not readily signed or accessible for the tourist.

The site development priorities were designed by a landscape architecture graduate student and students in design studio courses as participatory charrettes and service-learning experiences. Students worked in the studio and with community members, creating over twenty alternative design scenarios. The graduate student then worked with local stakeholders to create a single vision for the designs.

In addition to designs focused specifically on tourism assets, projects also included design changes to enhance the local quality of life. For example, students designed plans for enhanced multimodal circulation, affordable housing (Figure 5), a community centre, and the design of a waterfront park on the Blackwater River (Figure 6); projects in Canaan Valley emphasized affordable housing and a health care centre; projects in Thomas focused on neighbourhood revitalization and affordable housing. The designs expressed goals and objectives derived from surveys and workshops.
Figure 5. Davis Streetscape with Proposed Affordable Housing

Figure 6: Davis Waterfront Park with Mixed Use Building in Background
Phase 7: Social design to create a cultural identity

Transdisciplinary Design is characterized by both collaboration of specialists in varying fields and the integration of community members who are given equal power and voice in the process. Listening to these community partners is critical for generating products that fit with the local culture and are embraced by residents. A key component in human-centered design involves “creating the conversation” to uncover the purpose and need for an identity to facilitate the goals of the community. In creating the identity or community brand, it became necessary to distinguish the role of the communities’ shared “Tucker Culture” from the narrower goals of tourism development entities. The brand in this case was about creating solidarity for residents countywide in all their diversity, while simultaneously allowing them to protect, enhance, and promote the assets of the area. Residents, visitors, summer home owners all become stakeholders in the message that becomes the cultural brand.

Using participatory design methods, the WVU graphic design team, local stakeholders, and residents co-created a connecting visual message to engage residents and visitors in Tucker County culture. Five workshops were held across the county to generate and prioritize important descriptive words and visual representations that reflected residents’ beliefs about what their community held dear. This information was translated into visual communications which included new branding motifs and integration into existing state, county, and local branding to assess both cultural relevancy and style preferences. Three sets of proposed identities with applications for signage, apparel, and print materials were presented to communities. Information collected from follow-up events led the graphic design team in new directions and created trust and buy-in from the residents and board who attended.

Discoveries through the workshops revealed both common beliefs and divisions which ranged from historic memory of painful events including school consolidation and the hostile moving of the county seat (over 100 years earlier); a generational divide between entrepreneurs; and a geographic divide between the valley and mountain towns who have differences in visitor/tourism relationships to their economies. The charge of the design team was to acknowledge these differences and reframe them as important community history, opportunities to learn from one another’s experiences, and valuable lessons for addressing the coming changes and need for planning associated with increased visitation from Corridor H. The common ground was reframed as advantages that connect experiences of shared resilience and create a tapestry of culture rooted in tenacity in surviving harsh winters, and loving nature and rural wilderness.

The final moniker of Tucker Culture was a hexagon divided into segments that held linear patterns of icons representing wilderness, mountains, hiking, skiing, biking, rivers, farming, arts, music, and industry that included railroads, lumber and mining. These patterns overlapped the segments, as did the color set, showing that independence and each towns’ unique features are unified by a common culture, which like a quilt, combine to make a singular Tucker Culture. The color palette reflects the autumn deciduous forest and evening skies that define the elevated wilderness region. The new symbol set offered the ability for some icons to be selected over others to personalize the mark for individual towns or organizations in the Tucker Culture domain. The variations can be seen on the front of the original brochures—Arts, History, and Recreation (Figure 7). A kit was developed that can be used at meetings to explain branding possibilities, signage ideas, buttons,
and post cards for hypothetical events that might bring people together for activities that involve storytelling, work parties, and other events that help increase community collaboration.

Figure 7: Tucker Culture Brochures

Implications & Lessons learned

The RTDT’s methods of triangulation provided increased understanding of research problems and complex phenomena, incorporated a diversity of perspectives, and encouraged broader and deeper stakeholder engagement. Through the process, common opportunities and challenges were identified, including maintaining authenticity and a sense of place, economic diversification, seasonality and low wage jobs, finding and retaining employees, affordable employee housing options, the need for improved infrastructure and public services, long term planning and managed growth, protecting community values, promoting existing assets, and promoting identified but underutilized assets.

Design faculty used participatory design including cultural asset mapping, identification of gaps in attractions and services, site design of prioritized development sites, and the visualization of a cultural identity through branding to further visualize and address key findings from the initial research phases. These follow-up activities leveraged information gained in earlier stages and breathed life into follow-up activities that are enhancing Tucker County as a rural tourism destination.

The county translated research outputs and recommendations into community impacts including establishing a destination management framework (Figure 8), hiring a full-time county planner, and signage improvements that incorporate a unified branding strategy. Although community capacity and resource development remain a challenge, new partners have been engaged to maintain momentum. The CDA and RTDT faculty are
partnering with the US Forest Service to extend the RTDT model to other counties and gateway communities in the Monongahela National Forest, leveraging new grant resources for asset mapping, and planting the seeds for larger regional efforts in the state.

The RTDT’s activities demonstrate the value of generating a knowledge base through varied research methods and how outputs can be scaffolded to generate richer and more useful information. The disciplinary walls between faculty researchers and between researchers and the community break down as opinions from a resident survey becomes tangible, spatially explicit maps of assets created through participatory GIS workshops. These visuals later become the basis for community plans to preserve and enhance assets which enrich residents’ quality of life and the visitor experience, and contribute to a more robust and resilient tourism economy. Faculty and student experiences are enhanced by modeling an authentic multi-disciplinary professional environment; community members not only receive, but have a hand in creating relevant and rigorous research products that inform development efforts and enhance citizen control of the planning process (Arnstein, 1969).

Developing partnerships that build capacity for positive change is at the core of the land grant mission. This includes better engaging and including stakeholders in the decision making and development process, and enhancing the exchange of knowledge between fields to provide context-sensitive solutions to community development problems. Undertaking similar community engagement projects requires faculty dedicated to the process, community willingness to take ownership of development decisions, and visionary leaders to guide the process. Though challenging to coordinate and execute, the benefits of longitudinal collaboration demonstrated by this project outweigh the costs in providing a robust, comprehensive, coherent, living product to stakeholders. Stakeholders understand clearly the issues uncovered in the inventory and data collection stage and see how their participatory voices are integrated as issues are addressed through design and visualization. The level of local ownership and stewardship of actionable items is enhanced through this scaffolded process leading to not only implementation, but control and ownership of the community's tourism and community development process.
Discussion Questions

1. How did the research activities engage the community in the action research process? How does this type of engagement increase ownership of ideas and outcomes?
2. What benefits and challenges do you see, or have you experienced, in the participatory research process?
3. How would you define transdisciplinary research and engagement? How does it differ from traditional outreach and action research?
4. What faculty at your institution could be included in similar transdisciplinary engagement? Does your institution provide support for creating these transdisciplinary teams? How can this type of work be incentivized?
5. How can we as community and/or tourism development professionals measure the impact of programs with such diverse approaches, outputs, and impacts? How can these lessons and practices be better incorporated into discipline specific research publications?
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