Policy Influences on
Community Trail Development

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Abstract This study explores processes and policies that facilitate the development of community trails. With funding from Active Living Research and the research framework of the Physical Activity Policy Research Network (PAPRN), we conducted a multiple-site case study. A total of six trails in Hawaii, Massachusetts, Missouri,

North Carolina, South Carolina, and Washington were chosen for study. The goals of this case study were to identify the policy influences on trail development, explore the roles of key players in trail development, and compare and contrast findings from the different trails. Trail development can be a long process. Some of the trails took over a decade to complete because of funding, opposition, and roadblocks in the form of design standard policies. Work in trail development requires a team of many players, and it is necessary to balance their varied motives to accomplish a shared overall goal. Foresight through the master planning process is also a vital component of successful trail development. Finally, community involvement is key. Communities contemplating trail development should explore the effects of policy on the trail projects reported here to proactively identify potential influence.

Walking and bicycling are popular recreational activities and feasible transportation options (Bull et al. 2000; Eyler et al. 2003; Lee and Moudon 2006). Over the last few decades, many aspects of the built environment have made walking or cycling outdoors for pleasure or transportation difficult (Ewing et al. 2006; Pikora et al. 2006; Siegel, Brackbill, and Heath 1995; Troped et al. 2001). The transportation network too often favors automobile travel, and communities without safe and accessible places for recreation and transportation are common in the United States.

   Multiuse trail development is one example of an environmental and policy strategy that addresses these issues and has the potential to promote increased recreational physical activity and active transportation among community residents (Brownson, Haire-Joshu, and Luke 2006). Scientific literature indicates that a community trail can be part of a relatively low-cost intervention to facilitate physical activity by reducing barriers such as cost, inconvenience, and inaccessibility (Brownson et al. 2000, 2005; Evenson, Herring, and Huston 2005). However, a variety of factors, such as a lack of space or unfavorable zoning policies, may make it difficult to develop new multiuse trails. Despite three decades of experience building multiuse trails in the United States and more recently evaluation of the effects of such trails on physical activity, there remains a research gap in understanding the course of action or political process of trail development (Wiggs, Brownson, and Baker 2006). This multisite case study was designed to explore policies that affect the development process of multiuse community trails. The three main research questions for this study are: (1) how is the process of trail development influenced by existing federal, state, and local policies? (2) who are the key players? and what role do they play in the trail development process? and (3) do types of policies or key players differ among the various types of trails in diverse geographic areas across the United States?

Case Study Methodology

This study was conducted as part of the Physical Activity Policy Research Network (PAPRN). The Centers for Disease Control and Prevention began funding PAPRN in 2004. The goal of PAPRN is to foster understanding about the effectiveness of policies to increase physical activity in communities (see Saint Louis University School of Public Health Prevention Research Center 2005). Currently, ten universities and numerous other partners are part of this network. Six PAPRN research sites participated in this multisite case study.

Definitions

For the purposes of this study, we use the following definitions: "Policy" refers to a legislative or regulatory action, rule, or standard by federal, state, city, or local governments, governmental agencies, or nongovernmental agencies such as schools or corporations (Schmid, Pratt, and Witmer 2006). A "trail" is a path used for nonmotorized travel. Trails in this study fell into the following trail classifications: rail trails, trails defined by waterside, utility corridor trails, new rights-of-way, or conversion-of-land-use trails. "Process" refers to the course of action taken that leads to development and/or maintenance of trails.

Protocol and Data Collection

These case studies were informed by interviews with people who were directly or indirectly involved with trail development. Researchers at each site developed a list of people who would be appropriate to interview. Since each trail was unique, backgrounds and roles that interviewees played in the trail development process varied somewhat across sites (table 1). To allow for cross-site comparison, we developed a list of core questions for the interviews. Consistent questions helped to compare interviews at each site as well as between the sites in the study. However, site-specific questions were added to tailor the interviews to the specific trails being studied. The main questions were organized into four categories: planning and development, funding, management and maintenance, and perceptions and lessons learned (see table 2).

After the institutional review boards of the universities involved approved this study, we made contact with those we interviewed. We conducted the majority of the interviews in person (n = 43), but in cases in

Table 1 List of Interviewees by Type of Agency

Type of Agency	Interviewee
State	State parks and recreation representative
	Department of transportation project manager
	State growth management representative
	Transportation enhancements engineer for highway department
	Commissioner of state highway department
	State bicycle and pedestrian program manager
	Director of real estate for state transportation agency
City	City planner
	City clerk
	Public safety officer
	City manager
	Mayor
	Representative for mayor
	Engineer
	Bicycle program manager
	Parks and recreation representative
	City director
	Director of community development
Private organization	Utility project manager
	Utility company representative
	Project manager from transportation consulting firm
Community organization	Reverend
	Community coalition leader
	Pedestrian/bicyclist advocate
	Bicycle program manager
Community resident	Land owner
	Local resident

Note: More than one person with same title may have been interviewed.

which scheduling was difficult, we conducted the interviews via telephone (n = 3). Data were collected from January 2006 to May 2006. All interviews were digitally recorded and professionally transcribed.

Analysis

Once transcribed, the interviews were coded using a codebook developed a priori by the research team. The codes were parallel to the categories in

Table 2   Main Themes and Topics from the Community Trail Study Interview Guide

Main Theme	Topics
Planning and development	Interviewee involvement
	Trail history
	Trail timeline
	Perception of trail users
	Other people/entities involved
	Relationships among entities
	Land acquisition
	Land use planning
	Zoning issues
	Historical or environmental issues
	Design standards
Funding	Major sources
	Competing priorities
Management and maintenance	Responsible entities
	Liability issues
	Safety
Perceptions and lessons learned	Beneficial effects of trail
	Programming associated with trail
	Negative effects of trail
	Influential policies
	Challenges to trail development
	Advice

the interview guide, but new codes were added, and several were modified during the coding process. Each transcript was coded by at least two people to ensure accuracy. The coded quotations were synthesized into thematic categories. These themes formed the basis of the individual site reports. These reports highlighted the findings at each site and provided the basis for this aggregate report.

Trail Selection

Six trails were chosen for this study (table 3). To be considered for the study, at least one segment of the trail must have been completed within the last ten years and must have been accessible for study. The development process of each trail must also have been influenced by policy (e.g., zoning changes or funding policy changes). Investigators at each PAPRN site recommended several trails with which they had been involved in past

Table 3 Description of Trails Studied

Name/Location	Type of Trail	Population[a]	Percent Black, African American	Percent White	Percent Asian	Percent Hispanic	Percent below Poverty Level[b]	Trail Length	Trail Amenities	Year Construction Began
Ellerbe/South Ellerbe Creek Trail, Durham, NC	Paved, linear	187,183	44.6	46.8	4.1	8.6	11.3	3.4 miles with connections to other trails	Benches, lights, signage	1991–1992
McKenzie Creek Trail, Piedmont, MO	Paved, linear	1,992	0.2	98.1	0.4	0.6	24.3	1 mile	Pavilion, playgrounds, lights	1999
Assabet River Rail Trail, Marlborough, Hudson, Stow, Maynard, and Acton, MA	Paved, linear rail trail	18,113 Hudson	0.8	94.1	1.4	3.1	2.7	5.8 miles (first 2 towns)–April 30 2005 — slated to be 12.5 miles	Three dedicated parking facilities, benches, scenic overlook at high trestle, proximity to downtowns	2003
		36,250 Marlborough	2.2	87.7	3.8	6.1	4.7			
		5,902 Stow	0.4	95.5	2.0	1.4	1.5			
		10,433 Maynard	1.0	94.6	1.6	2.8	3.8			
		20,331	0.7	88.4	8.6	1.8	1.7			

Table 3 (*continued*)

Name/Location	Type of Trail	Population[a]	Percent Black, African American	Percent White	Percent Asian	Percent Hispanic	Percent below Poverty Level[b]	Trail Length	Trail Amenities	Year Construction Began
Three Rivers Greenway, Columbia, Cayce, and West Columbia, SC	Paved, linear multiuse	116,278 Columbia 12,150 Cayce 13,064 West Columbia	46.0 22.5 29.5	49.2 74.6 74.5	1.7 1.1 1.7	3.0 1.3 4.7	17.0 9.9 12.8	7 miles of linear park with trails (12 miles of linear park when complete)	Benches, bathrooms, picnic areas, amphitheater, parking, emergency call boxes, river access, Americans with Disabilities Act accessible	1998
Chief Sealth Trail, Seattle, WA	Paved, linear	65,083	26.0	41.0	21.0	8.0	18.0	3.6 miles	No lighting or other amenities	2004
Maka'eo Walking/Jogging Path, Old Kona Airport Park, West Hawaii, HI	Paved, figure-8	9,870 Kailua-Kona	0.5	38.7	18.3 13.2 Native Hawaiian/Pacific Islander 27.1 mixed race	10.2	6.5	1 mile	Benches, stretching posts, drinking fountain, restrooms	2002

[a] The population and race/ethnicity reported are based on the towns surrounding the trails. The data were acquired from U.S. Census 2000 American Factfinder (factfinder.census.gov). The data for race are reported from the "one race" category.

[b] The poverty data reported are from "families below poverty level" in U.S. Census Bureau (2002).

research projects. The final six trails were chosen to represent diversity in the overall sample. Diversity factors include the type of community setting (e.g., urban, suburban, or rural), policy variation, longevity, stage of development, and ethnic diversity of the population groups living near the trails.

Brief Description of Trails Studied and Policies Involved

The Ellerbe/South Ellerbe Creek Trail is located in Durham, North Carolina. In 1988, a subdivision ordinance was passed, which is now part of the Durham City-County Unified Development Ordinance. This policy required that any proposed residential development coinciding with the trails on Durham's 1988 Urban Trails and Greenway Master Plan should be dedicated to the city or give an easement to allow for a public trail to be put in place. This ordinance was enacted in order to facilitate greenway trails.

The McKenzie Creek Trail is located in Piedmont, Missouri. Piedmont is a rural town of about two thousand residents located in the southeastern part of the state. Recurrent flooding in Piedmont over the last twenty years resulted in damages to over two hundred residential and commercial properties, erosion, increases in local government service costs, and detrimental effects on water quality. To address these concerns, the "McKenzie Creek Watershed Plan and Environmental Assessment" was prepared by city, county, state, and federal agencies. The main policies involved with the conversion of this floodplain into a trail and recreation area were the voluntary acquisition and demolition of frequently flooded residential and commercial properties and zoning changes to allow for floodplain use. Trail development began as part of the watershed plan in 1998. The mayor of Piedmont was instrumental in getting the support and funding for the trail. As of 2006, one mile of the trail was completed. Additional trail segments are planned.

The Assabet River Rail Trail, located in Hudson, Massachusetts, will eventually traverse five communities in central Massachusetts. Several policies were influential in developing the trail. First, the Massachusetts Bay Transit Authority's previous policy on surplus land disposition was time consuming, resource intensive, and frequently led to fragmented land sales. In some instances, valuable state property was either lost because it was not used or it was not maintained, encouraging encroachment by abutters. The new policy allows the leasing of state land to municipali-

ties at no cost and without a vote by the state legislature. This policy was instrumental for the establishment of the Assabet River Rail Trail. Another policy that influenced development stated that an intermunicipal agreement is required by law before one community can jointly contract with another. Because five towns were involved, the process of formalizing this agreement was lengthy.

The Three Rivers Greenway Trail is located in the Columbia area of South Carolina. A public/private nonprofit organization called the River Alliance proposed this linear park with trails to link people to the rivers. The River Alliance recommended a regional strategy for funding the trail based on tax increment financing in addition to using federal and state grants. Tax increment financing is used to provide funding for public infrastructure improvement and enhancement in a defined area. As the area is improved, property taxes that accrue from increased property values in the area are used to repay improvement loans.

The Chief Sealth Trail is located in the Beacon Hill and Rainier Valley neighborhoods of southeast Seattle, Washington. Since this area currently has limited bike and pedestrian opportunities, the trail could be supported by the existing Seattle master-plan policy, which encourages the establishment of nonmotorized transportation. Local neighborhood plans and planning requirements for the adjacent city light-rail construction project also supported trail development in southeast Seattle. The trail development process was enhanced by support building within agencies, between agencies, in budgets, and in the surrounding community, as well as by the availability of surplus dirt from a contractor for the construction of the nearby light-rail system. This is a utility-owned trail (by Seattle City Light), so there are several other important issues in development. First, the trail is under high-tension wires, causing safety concerns about the influence of electromagnetic fields (EMFs). Also, the team developing the trail had to formulate a joint agreement with Seattle City Light that allowed the Department of Transportation to use the utility right-of-way transmission corridor. The 3.6-mile multiuse trail opened in late summer 2006. It is the newest addition to the regional trails system and connects to the Mountains to Sound Greenway (a linked network of green spaces, recreational opportunities, and historic towns in Washington) and to light-rail stations along Martin Luther King Jr. Way (a major thoroughfare running parallel to the trail).

The Maka'eo Walking/Jogging Path is located in West Hawaii, Hawaii. While known for the Kona Ironman race, West Hawaii has limited areas in which community members can walk safely. The rapidly growing com-

munity and a thriving tourist industry make traffic a major concern in this formerly rural community. When the Old Kona Airport closed in 1970, the state and county allocated the land for a multiuse recreational area, but plans for development were slow because of limited state funding. Two community volunteer groups attempted to continue development, but both lost interest and volunteers. The path became overgrown and unusable. Several years later, a community group called Friends for Fitness rallied interest and support and initiated a community-wide planning effort to revitalize the park. The policies to preserve the cultural and historical significance of the area were an important aspect of trail plans.

Federal Policy Influence

Federal policy influence was reported in two major categories, funding and design standards. Four of the trails studied made use of federal funding through the Transportation Enhancement Program from the Federal Highway Administration's Surface Transportation Program, either through the Inter-Modal Surface Transportation Efficiency Act (ISTEA) of 1991 and/or its successor, the Transportation Equity Act for the Twenty-First Century. According to a provision in the enhancement program, a percentage of funding for all federally funded transportation projects must be dedicated to enhancements such as pedestrian-oriented facilities and rail trails. This federal money gave the trail planners the start they needed to foster community support for the projects.

The federal government also influenced trail development by requiring compliance with mandates such as the Americans with Disabilities Act (ADA) and environmental protection policies. All trails had to comply with ADA requirements, but the extent of the necessary compliance varied by trail. The Maka'eo trail in Hawaii was required to put in a handicapped-accessible bench. Other trails had to construct ADA-specified ramps or use approved building materials. Despite cost and time involved with following these design requirements, a representative from one trail saw the ADA requirements as a way to open the trail to more user groups, because "once a trail is wheelchair accessible, it is also accessible to bicycles and baby strollers."

Four of the six trails studied are located near a river or creek, so planners had to deal with federal floodplain regulations when planning their trails. Federal policy states that a permit from the U.S. Army Corps of Engineers is required, because building along a floodplain may affect

surface water or stream/creek beds. These permits require inspection, soil and water testing, and federal involvement in planning and design. Planners also need approval for an erosion-control plan. Rail trails, such as the Assabet River trail, also have the challenge of dealing with the creation of wetlands that accrue after years of runoff from elevated rail beds. Encroachment into the wetlands can happen with even the slightest change in the rail-bed elevation during trail construction.

In the end, these federal standards make the trails fit better into their communities and with their environments, but permits, inspections, and meeting requirements add time to the already long process of trail development.

State Policy Influence

State funding and regulatory policies also affected each trail in this study. Two of the six trails used state policies to acquire land for the trail. Land for the Maka'eo Walking/Jogging Path was allocated by the state as land for a multiuse recreational area. In Missouri, the Missouri Flood Buyout Program, developed by the Federal Emergency Management Agency and the State of Missouri Emergency Management Agency, was the impetus for the McKenzie Creek Trail development.

While the state land-acquisition policies enabled trail development, several other state-level governmental factors delayed that development. State permits and requirements were reportedly frustrating. For example, the developers of the McKenzie Creek Trail in Missouri waited several months for an "air-space" permit from the Missouri Department of Transportation, because the trail was planned to go beneath a highway overpass. Several trail developers also had to comply with state-level environmental policies. State regulations varied, but trails around rivers and creeks were often required to complete water-quality certification and gain authorization from state departments of natural resources and departments of wildlife resources.

Local Policy Influences

The majority of the policy influences came from the local level. An example of local policy influence is master planning and development. A master plan can guide how and where future development will occur and how to provide public facilities to support this growth. Four of the trails studied

reported having a master plan for development. These plans all included some policies or provisions for trail or recreation development. In Seattle, an Open Spaces policy passed in 1990, with an Urban Trails Plan that provided a policy platform for adding the Chief Sealth Trail to several neighborhood growth plans. The River Alliance in South Carolina developed a master plan with the help of communities and local governments. The cities gave permission to the River Alliance to design the trail, request permits, get it engineered, and select contractors. The Ellerbe Creek Trail was part of the master greenway plan in Durham, North Carolina. In Piedmont, Missouri, the McKenzie Creek Watershed Protection Plan was the arrangement for development of the floodplain into greenway recreation areas such as walking/biking trails.

These local ordinances institutionalized the plans and provided an organized framework for trail development. Master plans seemed particularly important for trails in larger communities or for trails that crossed several legislative boundaries. However, in the more rural areas studied, there were no master plans or pedestrian provision policies, but the trails were still developed successfully.

Local policies also influenced funding. In 2000, Seattle passed a Pro Parks Levy. This policy provided funds to create forty parks in Seattle neighborhoods and helped preserve wooded green spaces, including the Chief Sealth Trail. To help fund the Three Rivers Greenway, the public/private nonprofit River Alliance proposed that municipalities use tax increment financing. As enacted by the municipalities, this policy provided that loans taken out to fund trail development be repaid using a portion of the property taxes generated by increased property values in areas around the trail. As property values increase, so does the available funding. Impact fee policies are another local funding example. Durham, North Carolina, passed a development impact fee policy in the late 1980s. This policy stated that developers should pay fees for things such as open-space recreation in order to build residential developments. Even though amounts needed for trail development take many years to accrue, policies such as these are an important part of community recreation and transportation planning for the future.

Local funding policies were an important part of development or operation of all the trails in the study. However, funding policies at the local level were vulnerable. In city budgets, trails can often be the first thing to be cut, because they are not considered essential.

Interactive Levels of Policy Influence

For the most part, policies affecting trail projects complemented each other. At times, policies at one level interfered with policies at other levels, making the process of trail development more difficult. Sometimes there was a conflicting mix of governmental powers, as with eminent domain, in which the state expropriates private property without the owner's consent, either for its own use or by delegating the taking power to third parties who will devote it to public uses (Federal Highway Administration 2003). Even though this was mentioned as a state-level policy, a federal provision takes precedence. The federally issued Safe, Accountable, Flexible, Efficient Transportation Equity Act of 2003: Legacy for Users prohibits the use of its funds for projects that seek to use the power of eminent domain, unless the power is employed only for a public use.

Sometimes the challenges or barriers posed by one level of governmental influence created opportunities for other levels of government to advance the trail-development process. Land for the Maka'eo Walking/Jogging Path was allocated by the state for a multiuse recreational area. Original plans for development were slowed because of lack of state funding, but local community groups took over to make the trail a reality. The land for the trail was transferred from the Hawaii State Department of Land and Natural Resources to the Hawaii County Department of Parks and Recreation in 2006.

In projects in which all levels of government had a vested interest, joint agreements were made. In Piedmont, Missouri, the McKenzie Creek Watershed Protection Plan was a joint law signed by the city, the county, and the state Natural Resource Conservation Service in 1997. Part of this agreement was the approval of voluntary acquisition and relocation along with the development of the floodplain into greenway recreation areas such as walking/biking trails.

People:
Political and Community Leadership

Policies influenced the process of trail development, but successfully managing the politics of the process was also a key factor in the success of greenway planning. Work by Kingdon (1995) helps to frame the political factor. Kingdon argues that policies move forward when three "streams" come together. The first of these streams is the definition of the problem (e.g., a need for a community trail). The second is the identification of pol-

icy measures that address the problem. The third is the role of politics and public opinion (e.g., interest groups supporting or opposing the policies). Policy change occurs when a "window of opportunity" opens and the three streams push policy change through (ibid.). This third element — the role of interest groups, including leaders — was especially important in the development of trails.

Government Representation

For four of the study sites, the project leader was an elected official or someone in a government position. These people not only initiated the trail idea but also championed efforts throughout the process. For example, the mayor of Piedmont, Missouri, wanted to make it one of the most walkable rural towns in the United States. His enthusiasm for and influence over the trail project made it happen. He is known for his passion for the trail, but also for the flood-land buyout and aesthetic improvements that might have given him a political boost. A key governmental official coordinating the development of the Assabet River Rail Trail was the assistant town manager in Hudson, Massachusetts. Although the trail had longtime support from local trail advocates, this official was instrumental in obtaining funding to build several sections of the trail. In every interview conducted for this study, she was mentioned as the key person driving the development of the trail.

Two other local government representatives (a city planner and a parks and recreation manager) were pivotal in their trail-project leadership. Citing both economic and health benefits of a community trail, the projects fit their personal as well as professional interests.

Advocacy and Community Groups

Support from government offices or elected officials was important to trail development, but the active participation and involvement of the champions got things done. In three of the sites, the trails were initiated by groups primarily interested in the public health advantages of active transportation (e.g., groups dedicated to bicycle/pedestrian advocacy) and community development. The leaders of these groups were all skilled at finding and capitalizing on opportunities for development, collaborating across groups, and locating funding sources. Experienced in community projects, the leaders knew how to get things done and to get others involved.

Local community groups were a part of all six trail projects. The rea-

sons for involvement varied, but each group had the overall goal of community improvement. For the trails that could be used for both walking and nonmotorized transportation, pedestrian and bicycle groups were involved. For trails that were primarily intended for exercise and recreation, community groups committed to health were involved. In one of the cases studied, it took three community groups, each with different priorities, to see the project through to completion. The first phase of the Maka'eo trail was initiated by a partially state-funded community group, the Farm Bureau. When they started to lose both funding and volunteers, another community group, the Kona Outdoor Circle, took over, but this group eventually lost interest, and the path became overgrown and unusable. In 2000, yet another group, Friends of Fitness, rallied to renew residents' interest in the path and completed the project.

In Cayce City, South Carolina, another community group rescued a stalled trail project. In the mid-1990s, the city was planning a park and trail project with ISTEA funds. The project never began because a provision required the construction of a costly road to accommodate owners of nearby private property. In 2000, the River Alliance took over and helped manage the project and identified ways to develop the trail and procure more funding for the project.

Since many community projects rely on unpaid helpers, resources and volunteers can be variable. Several cases in this study also show how community-group priorities can change, creating challenges for trail development and, at times, the end of progress.

In addition to leadership and community-group involvement, input from community residents is helpful. Involving community residents in the plans and making citizens aware of the policies that can facilitate or hinder trail development in their community helps to make the process an integrated initiative. As one community organizer commented, "Lots and lots of people said they wanted to have a place to walk, bike, baby carriage, wheelchairs, roller blades, skateboards, walk their dog, fish. And that they wanted to do it in a restful and beautiful environment somewhere near the rivers."

Partners

All trails involved teams that combined public/private entities, collaborating communities, or governmental departments. The Chief Sealth Trail project featured a working relationship between a utility company, the city department of transportation, and a bicycle/pedestrian advocacy group.

The trail took over a decade to complete, but the relationship among these groups remained collaborative and successful.

Sometimes formal agreements—for example, interagency or intermunicipal agreements—are necessary. Two of the trails in this study crossed municipal boundaries and members of affected communities had to establish working agreements. In Massachusetts, the intermunicipal agreement among the towns of Hudson, Marlborough, Stow, Maynard, and Acton was a key statutory requirement that had to be met before towns could jointly contract for funding from the state. However, the law stated that further permission by the community residents was needed to develop an intercommunity agreement for the trail. This meant presenting the information at one of the biannual town hall meetings, which delayed but also formalized the planning process.

In South Carolina, the River Alliance was signed in 1995 and is a collaboration between elected officials from three cities and two counties of the region, community leaders, and concerned citizens. This aggregate organization has helped the Three Rivers Greenway become a reality.

Challenges

Conflict

In this study, trail planning and development involved many individuals and organizations such as private funders; city, state, and federal organizations; advocacy organizations; community residents; engineers; planners; local businesses; utility companies; and others. This diversity of partnership added complexity to reaching compromises and understanding priorities. Successful collaboration required committed leaders, effectiveness in consensus building, many group meetings, and most important, perseverance.

Opposition

Land acquisition was one of the most commonly reported reasons for opposition. All of the trail projects needed to acquire parts or all of the land for the trail. Some land-acquisition policies required very detailed information from every landowner including signatures releasing trail developers and mortgage companies from liability. In one of the trail projects studied, some landowners were reluctant to sign these forms. In another trail project, home owners in a floodplain were encouraged to

accept a flooded-area buyout. While most home owners gladly left the floodplain, several residents refused to sell, and the trail plan had to be revised to snake around the remaining private homes.

Frequently, opposition to the trail projects involved funding. Even though most money for trails may come from federal grants, trail projects often rely on local sources, and there will always be competing demands for these funds. In four of the trail projects studied, people (e.g., other government representatives or business owners) voiced complaints about the development. These complaints stemmed from opponents' perceptions of funding priorities, with roads and other community projects taking precedence. "Trails are nice," a planner noted, "but they fall below the priority list when you're looking at aging infrastructure like water lines and sewer lines that need to be replaced and streets."

In four of the six projects studied, people were concerned about property valuation changes with trail development. The trail development leaders addressed the community concerns by educating the residents with research and reports from other trail developments and highlighted the positive changes that trails made to the community.

Some of the residents in communities in this study were opposed to the trail projects because of the potential safety issues caused by bringing strangers into the community via the trail. Many meetings with concerned citizens to educate them about the projects seemed to ease most concerns. Plans for safety were also presented. Strategies included lighting, call boxes, police presence, and community watch groups.

Concern about liability policies also caused opposition. In the case of the Chief Sealth Trail, a utility company owned the property and initially refused to grant usage rights to trail developers, citing potential liability due to EMF exposure. The project leader diligently and thoroughly researched the topic and presented evidence to the utility company, and the company agreed to the trail.

Local neighborhoods and organizations also sometimes opposed trail development due to liability concerns. In three of the trail communities, municipal "umbrella" liability policies eased local concerns. One mayor said that, "there is always liability if someone gets hurt, but the city carries a big umbrella liability policy. But we have never had to pay a claim yet for anybody stumbling or falling on the trail or anything of that nature."

Liability concerns about contaminated soil on leased land inhibited land acquisition along the Assabet River Rail Trail in Massachusetts, but a pending new state law would limit local liability. With the new law, communities would be able to purchase insurance from a fund to protect them

from liability associated with leasing the land from the Massachusetts Bay Transportation Authority.

The Seattle Department of Transportation accepts liability for safety and injury issues on the Chief Sealth Trail. The department reduces liability by posting trail speed limits on hilly parts of the trail, creating crosswalks where the trail meets the streets, and removing debris from the trail.

Maintenance issues were another source of opposition. For all of the trails studied, there was disagreement regarding who would be responsible for the upkeep of the trail and who would fund ongoing maintenance. Two of the trails studied are still working out maintenance issues, even though the trail project is completed. "Now it's costing $25,000 to maintain this trail," one city clerk said, "just to cut the grass."

Another conundrum faced by trail planners was how the trails should be maintained. At two sites, some community members wanted the grass around the trail mowed, and others wanted it grown into a natural habitat. Opponents of the natural grass cited safety reasons for keeping it short, while proponents wanted to preserve the natural plants.

Yet another maintenance issue was that of allocating funds for safety measures. Even though the trails and surrounding areas are maintained, some trails need lighting, police, call boxes, and other ways of making community residents feel safe when using the trail. Skeptics wanted to know who would pay for the safety measures. Several trails included provisions in the original plans to address these concerns, while for others they were an afterthought.

Outcome

The six trails have become places in which to enjoy the natural surroundings. The trails give the communities served by them a "real community kind of place" to be physically active, socialize, and in some cases, use nonmotorized transportation.

Some of the trails have become an asset to real-estate assessment and development. In one community, property values along the river trail increased substantially, netting higher tax revenues for the cities. One community uses the trail to tout recreational opportunities to prospective residents considering the area for retirement. In another, promotional brochures for new housing developments cite access to the trail as a benefit: "The amenities: high ceilings and access to the Greenway."

Moreover, many trails are their own destinations. They play host to

events, festivals, and fund-raisers. These events not only raise money for communities but also promote awareness of the trails by attracting people to them for the first time.

Conclusion

All of the trails in this study were affected by policies at federal, state, and local levels. The people interviewed about each trail project reported that dealing with policies at multiple governmental levels required a tremendous amount of coordination, leadership, and follow-up. Most often, the respondents reported that they made sure the trail plans fit into the existing policies or requirements. For example, it was essential to adhere to federal policies such as ADA, so trail planners made accommodations in their plans. In some cases, however, trail planners attempted to change existing policies in order to make the trails happen. In the Chief Sealth Trail project, planners proposed a change in the assignment of right-of-way for trail users and motorists. This amended existing policy in order to better fit the needs of those collaborating on the project. In a few instances, new policies were enacted. The planners of the Assabet River Rail Trail helped to facilitate a new policy allowing the leasing of state land to municipalities for no fee and without a vote of legislature. The Chief Sealth trail planners helped to get a new policy on signage for motorists enacted. Accepting existing policies, making amendments to current policies, or even creating or taking advantage of new policies were all influential in trail development.

Lessons Learned

Several lessons emerge from this case study. First, in politics of trail development, committed people and collaborative partnerships are necessary. This is consistent with other research on community-based projects (Economos et al. 2001). The backgrounds of these primary promoters differed across sites. In one case, for example, a mayor, an assistant town manager, an advocacy group leader, and a trail enthusiast who worked in the city planning department all championed trail efforts. These leaders surrounded themselves with a strong dedicated team that coordinated the transdisciplinary efforts. The team knew the policies, got the funding, and surmounted the barriers.

Strong partnerships are also instrumental, but they are not always easily built. In this study, policy influence involved individuals and organizations including private funders; city, state, and federal organizations;

advocacy organizations; community residents; engineers; planners; local businesses; utility companies; and others. The diversity of the partnerships complicated reaching compromises, keeping timelines, and understanding priorities. Trail development for a transportation planner may mean calming traffic. For a public health practitioner, a trail may mean more people becoming physically active. Despite their diverse motives, these groups can partner to support the trail development process.

A third lesson is that the politics of trail development requires perseverance. In many cases, trails took almost a decade from planning to completion. Negotiating funding, planning and designing the trail, acquiring land, waiting for permits, coping with personnel changes or changes in government, and getting community support before construction begins all take time and a great deal of patience.

Another lesson we learned about policy and trail development is that community involvement is valuable. Many of the trails began with community meetings to solicit input from residents on the trail and the process of development. This community building makes the project a vested community interest. Community dialogue informs the residents about the trail and gives trail planners a forum in which to respond to opposition. Concerns about land acquisition, the safety of having the trail near homes, and effects on property value were common across sites. Communicating openly and addressing concerns help to facilitate support for the trail. All sites in this study have maintained open communication between trail developers and the community.

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