Studies of Existing Trails and Shared Use Paths:

Overview on Shared-Use Paths and Safety

Trails and greenways implemented around the country over the past few decades have demonstrated positive impacts to the communities where they have been installed. Studies and surveys in multiple contexts have shown paths can benefit communities by providing exercise and recreation opportunities, transportation choices, a sense of community, increased property values, and lower crime. There are many misconceptions about the safety of bicycle paths/trails and their relationship to property values/the real estate market. Below is a collection of excerpts from various resources that provide information on the often-misunderstood nature of bicycle paths/trails and their effect on the community.

Misconceptions over Trail Security[1]

In their article, *Rail-Trails and Safe Communities: The Experience on 372 Trails* (1998), Tammy Tracy and Hugh Morris address many misconceptions concerning trail security. Their research revealed that crime rates are lower on trail networks than the overall crime rate for the region in which they are located, whether urban, suburban, or rural. The authors also discovered that in many cases the trail networks reduced minor crimes such as graffiti and vandalism. Worth noting, however, was that although there were differences among urban, suburban, and rural trails in terms of graffiti (26 percent reported in urban areas compared to 17 percent in suburban and 12 percent in rural areas) there was virtually no difference between urban, suburban, and rural related to incidents of littering and sign damage.

Facilities with More Users Have Fewer Security Issues[2]

An important component of security is "eyes," in other words, the more people present, the less likelihood of criminal activity. To that end, the design of sidewalks and multi-use paths should create a pleasant environment where people want to spend time. Interviewees found that heavily used facilities experience less crime.

Burke-Gilman Trail Study[3]

Another study examining a trail's effect on property values is outlined in evaluation of the Burke-Gilman trail's effect On Property Values and Crime** in Seattle metropolitan area. The Burke-Gilman trail is an 8 to 10 foot wide, 12.1 mile, multipurpose trail that follows an abandoned railroad right of way and passes through residential neighborhoods. Data was collected via telephone by interviewing, residents near and adjacent to the trail, real estate agents who buy and sell homes near the trail, and police officers who patrol neighborhoods adjacent to the trail. According to real estate agents, property near but not immediately adjacent to the trail is significantly easier to sell, and on average sells for six percent or more. Property immediately adjacent to the trail, however, is only slightly easier to sell. Almost two thirds of the residents felt the trail increased the quality of life in the neighborhood and there is a very high level of public acceptance and support for the trail. The study concluded that concerns about decreased property values, increased crime, and a lower quality of life due to the trails was unfounded, and in fact the opposite was true, that multi-use trails are an amenity that help sell homes, increase property values and improve the quality of life.

Rails To Trails Conservancy[4]

The Rails To Trails Conservancy conducted a survey of 372 trails representing a diverse set of trail types, lengths, and geographic locations from 38 states. The motivation for the study was to address the wide range of safety concerns that local residents often voice during the development phase of a trail's introduction. The study sites how often trail opponents refer to stories of trails attracting drug dealers, murderers, and rapists with only a handful of newspaper headlines to back up their assertions rather than empirical research. While referencing many studies that have shown that trails have not caused any increase in crime, the study goes much further by providing incident statistics for years 1995 and 1996 and comparing these to national crime rates. The study shows that occurrence of major crimes committed affecting the estimated 5 million trail users across the country, is vastly below national rates for those crimes. For somewhere between 10 to 15% of the trails surveyed, the types of problems that were most often associated with
trails are litter, illegal motor vehicle use, and disruptive noise (almost half of the users surveyed said these were not problems at all.) Figure 1 shows statistics for major crimes. This study concludes that crime on rail-trails is minimal and must be

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[1] Tracy, Tammy and Hugh Morris. Rail-Trails and Safe Communities: The Experience on 372 Trails. Rails to Trails Conservancy and National Park Service, 1998.

[2] Woodcock, Bill, Manager of Planning & Construction, South Suburban Parks and Recreation, Colorado, telephone interview, November 21, 2006.

[3] "Evaluation Of The Burke-Gilman Trail's Effect on Property Values and Crime" , Seattle Engineering Department and Office of Planning, Gary Zarker, james M. Bourey, May 1987

[4] The Impacts of Rail-Trails: A Study of the Users and Property Owners From Three Trails, by Rivers, Trails, and Conservation Assistance Program, National Park Service, Washington, D.C. February 1992

considered in perspective with risks associated with other activities. The way to minimize crime on trails is to ensure that users exercise proper safety precautions, keep the trail well maintained, and boost trail use.

Figure 1, Comparison of Major Crime Rates between Rail Trails and the Nation (rates per 100,000 population), Source: Rails To Trails Conservancy.

CRIME	URBAN		SUBURBAN		RURAL	
	1995 National[1]	Rails-Trails[2]	1995 National[1]	Rails-Trails[2]	1995 National[1]	Rails-Trails[2]
Mugging	335	0.53	102	0.00	19	0.0
Assault	531	0.58	293	0.02	203	0.01
Forcible Rape	43	.04	29	0.00	26	0.01
Murder	11	.04	4	0.01	5	9.01

1. Rates per 100,000 Population. FBI Uniform Crime Reports for 1995
2. Rates per 100,000 users, RTC survey results 1995

For more evidence and information on trail design and safety issues, visit the following resources:

Edward O'Donnell, Andrew Knab, and Lorene Athey. 2007. "Sidewalks and Shared-Use Paths: Safety, Security, and Maintenance", Institute for Public Administration College of Human Services, Education & Public Policy University of Delaware. http://www.ipa.udel.edu/publications/SidewalksSharedUsePaths.pdf

Rails-to-Trails Conservancy. Urban Pathways to Healthy Neighborhoods Focus on: Personal Safety. http://www.railstotrails.org/resourcehandler.ashx?id=5038

Statistics Library/Safety Statistics
http://www.peopleforbikes.org/statistics/category/safety-statistics

The Correlation of Nature Trails and Crime
http://www.parkpride.org/get-involved/community-programs/park-visioning/content/correlationbetweennaturetrailsandcrime.pdf
Bike Path Phobia:
http://www.michigantrails.org/sites/default/files/bike-path-phobia.pdf
Neighborhoods and Trails: Why Trails?
http://www.sfct.org/trails/neighborhoods
Trail Effects on Neighborhoods: Home Value, Safety, Quality of Life:
http://www.americantrails.org/resources/adjacent/sumadjacent.html

Active Transportation Beyond Urban Centers: Walking and Bicycling in Small Towns and Rural America
Tracy Hadden Loh, et al., Rails to Trails Conservancy, January 2012
Recent data from the US Department of Transportation shows active transportation, biking and walking, is alive and well in rural America. Federal investment in rural areas is critical since small towns have a difficult time funding improvement projects. http://www.railstotrails.org/resourcehandler.ashx?id=4141

Research Finds that Homeowners and City Planners Should 'Hit the Trail' When Considering Property Values *Ranier vom Hofe and Olivier Parent, University of Cincinnati, October 11, 2011* University of Cincinnati research suggests that location near nature trails could hold a financial benefit for homeowners and ultimately neighboring communities. Housing prices went up by nine dollars for every foot closer to the trail entrance. Ultimately, the study concluded that for the average home, homeowners were willing to pay a $9,000 premium to be located one thousand feet closer to the trail. Read the complete article here
The Impact of Trails on Communities *Jim Wood, Florida Department of Environmental Protection, 2010.* This powerpoint presentation examines the positive impacts of trails on homeowner associations, businesses, personal health, and tourism. **Download PDF**

The Impact of the Little Miami Scenic Trail on Single Family Property Values *Duygu Karadeniz, University*

of Cincinnati, April 14, 2008 This 92-page Masters thesis carries out a statistical pricing technique to measure the impact of the rail trail on single-family residential property values in southwest Ohio. The analysis suggests that each foot increase in distance to the trail decreases the sale price of a sample property by $7.05. In other words, being closer to the Little Miami Scenic Trail adds value to the single family residential properties. http://www.americantrails.org/resources/economics/littlemiamipropvalue.html

Cutting Edge Research in Trails and Greenways - Michigan's project *Dr. Christine Vogt, et al., Michigan State University, Mid America Trails & Greenspace Conference, December, 2007 Chicago, IL.* This presentation describes research on six of Michigan's rail trails. Included are data on the number and type of trails users, opinions of adjacent residents, and their use of the trail. Economic benefits and the opinions of adjacent businesses are also described. Download PDF (934K)

Bicycle Paths: Safety Concerns and Property Values *Los Angeles County, Metropolitan Transport Authority August 20, 2007* There are many misconceptions about the safety of bicycle paths/trails and their relationship to property values/the real estate market. The LA MTA assembled a collection of excerpts from various websites, journals and other online resources that provide information on the often misunderstood nature of bicycle paths/trails and their effect on the community. Download PDF (96K)

Property Value/ Desirability Effects of Bike Paths Adjacent to Residential Areas *David Racca and Amardeep Dhanju University of Delaware, November 2006* The authors do an exhaustive review of literature and examine the effects of property values in Delaware. http://www.railstotrails.org/resourcehandler.ashx?id=4482

Two Approaches to Valuing Some of Bicycle Facilities' Presumed Benefits *Kevin J. Krizek, University of Minnesota Journal of the American Planning Association, Vol. 72, No. 3 Summer 2006* The author examines both on-road bicycle facilities (bike lanes) and off-road facilities (shared-use paths including rail to trails) in the twin cities area. One approach utilizes a statistical model that relates property values to a large number of variables and then looks for positive and negative indicators. The author finds that proximity to off-road facilities in urban areas increases property values while the opposite appears to be the case in suburban areas. The author suggests that the results for suburban trails may be influenced by other phenomena. In particular, he suggests that lower home values in suburban areas may be a legacy effect of the reduced value of residential property near active railroads. http://atfiles.org/files/pdf/krizek-valuing-bicycle%20facilities-benefits.pdf

Public Choices and Property Values, Evidence from Greenways in Indianapolis *Center for Urban Policy and the Environment, Indiana University-Purdue University, December 2003.* This study examines the MLS database of sales of about 10,000 homes. The study relates the selling price to a long list of variables, including proximity to rail trails. A sophisticated analysis shows that this proximity is statistically insignificant except for the Monon Rail Trail. The Indianapolis Star noted, "It may not have sand and crashing waves, but the Monon Trail is the equivalent of beachfront property in the Indianapolis area." Download PDF

Home Sales near Two Massachusetts Rail Trails *Craig Della Penna, The Murphys Realtors, Inc., January 2006.* Homes sales were examined in the seven Massachusetts towns through which the Minuteman Bikeway and Nashua River Rail Trail run. Statistics on list and selling prices and on days on the market show that homes near these rail trails sold at closer to the list price and much faster than other homes in the area. Download Home Sales near Two Massachusetts Rail Trails (PDF)

Salem-Concord Bikeway Demand Estimate *Alta Planning + Design and Rizzo Associates, Nov. 2003* This study gathered usage statistics for three New England shared-use paths as a basis for projecting usage of a proposed rail trail. The usage is strongly dependent on the number of residents within two miles of the trail. The average number of daily trips averages one trip per 33 residents with usage being about three times higher on weekends than on weekdays. http://www.nh.gov/dot/nhbikeped/pdf/Salem-ConcordDemandReport.pdf

Indiana Trails Study The 2001 study done by the University of Indiana is the country's most up to date study on rail trails and the associated issues. Six Indiana projects (including two rail trails) are covered. The “Final Trail Reports" includes detailed reports on each of the six trails plus a 45 page overall summary report. In the summary report, there is very interesting reading covering the opinions of trail neighbors, property values, crime, etc. Download PDF

Midland County Nearby Businesses and Adjacent Landowners' Attitudes Towards and Use of the Pere Marquette Rail-Trail in Michigan *Christine Vogt, et al., Michigan State University, January 2002.* Questionnaires were mailed to nearby businesses and adjacent residents. Support for the rail trail increased after it was constructed. Only 2% of businesses and 12% or residents felt that the rail trail was a worse use of land than the abandoned railroad right-of-way. Approximately 80% of residences had at least one member who used the rail trail. https://www.railstotrails.org/resourcehandler.ashx?id=4765

Nebraska Rural Trails: Three Studies of Rail Impact *Donald L. Greer, University of Nebraska at Omaha, October 2001.* This 98-page study looks at the impact of rural rail trails for three trails in Nebraska and one in Iowa. The responses are broken down into three groups: residents, businesses and rural property owners. Overall, the first two groups are positive concerning the impact of the trails. The opinions of the property owners are more mixed. http://www.unomaha.edu/recadmin/trails/nebtrails.pdf

Pinellas Trail Community Impact Study *Pinellas County Metropolitan Planning Organization, September 2001.* This study was carried out of a trail near St. Petersburg, FL. A homeowners survey indicates a high percentage of those living near the trail perceive it as an asset. Property values are increasing at a rate faster than for homes not near the trail. 90% of realtors said that home sales near the trail had increased "somewhat" or "significantly". Crime rates are the same as elsewhere in the county. Executive summary (PDF)

Rail Trails and Safe Communities, The Experience on 372 Trails
by Tammy Trace & Hugh Morris, Rails-to-Trails Conservancy, January 1998.
This 28-page study surveyed law-enforcement officials and crime statistics. The report shows that crime on rail-trails is not a common occurrence and that they remain much safer than many other environments.
The research suggests that converting an abandoned rail corridor to a trail tends to reduce crime.
http://safety.fhwa.dot.gov/ped_bike/docs/rt_safecomm.pdf

Economic Impacts of Protecting Rivers, Trails and Greenway Corridors
Rivers Trails and Conservation Assistance, National Park Service 1995.
http://www.nps.gov/pwro/rtca/econindx.htm
This extensive resource book covers many aspects of the positive values of greenways. There is extensive quantitative information included. A chapter of particular interest which addresses the concerns of abutters, especially property values, is in http://www.nps.gov/pwro/rtca/propval.htm The chapter contains extensive quantitative information.