Tourism & Community Sustainability in the Hudson River Valley, New York:

Resident & Visitor Engagement in Three Communities

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Prepared by: Laura E. Sullivan, SUNY ESF, Rudy M. Schuster*, SUNY ESF, Diane M. Kuehn, SUNY ESF, Duarte Morais, Pennsylvania State University, Nordica Holochuck, New York Sea Grant

*Corresponding Author:
Rudy M. Schuster, Ph.D.
Branch Chief
Policy Analysis & Science Assistance
Fort Collins Science Center, U.S. Geological Survey
2150 Centre Ave., Building C
Fort Collins, CO 80526
Phone: 970.226.9165
This research was completed and report written while Dr. Schuster was an employee of SUNY ESF. He is currently employed by the United States Geological Survey. Please contact him with questions or comments.

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Summary

Project

This project, funded by New York Sea Grant, was designed to increase understanding of what makes Hudson River Valley (HRV) communities desirable places to live and visit. The goal was to provide HRV communities with information for tourism planning that enhances sustainability by maintaining the unique social, cultural, and environmental attributes of each community. We conducted written surveys of a random sample of visitors (892 completed visitor surveys) to three HRV communities: Beacon, Cold Spring and Kingston, from June to August 2007. The survey was adapted and sent by mail to a random sample of residents in November 2007 (642 completed resident surveys). The survey questions asked about participation in activities, community image, attachment to the communities, and future intentions with regard to visiting and recommending each community.

This research was intended to provide information to communities that can be used to facilitate sustainable community and tourism management. Providing detailed recommendations for applying the results was not in the scope of this project.

Findings

We found that visitors have a positive image of the communities. The majority of visitors are either *likely* or *very likely* to return within two years and to recommend the communities to others. Fifty percent of visitors are day visitors traveling no more than 50 miles from home to reach the destination, and others are passing through and visiting HRV communities as a secondary destination in a longer trip. While many visitors are drawn to the HRV for nature-based activities and water recreation opportunities, on average, cultural activities are most frequently participated in by visitors. Visitors clearly link the unique natural setting of the HRV with cultural activities, as exhibited by responses to image questions, where River viewing and access received high scores.

Residents' images of their communities are also positive. Residents engage in cultural activities more often than nature-based activities or water recreation activities. Increased participation in cultural activities leads to a more positive image of both cultural and nature offerings, suggesting that local natural resources are important to residents, regardless of whether they engage in outdoor recreation activities. A higher percentage of residents than tourists report receiving information about local activities and events from a range of sources. Participation in cultural activities and length of residency contribute to a stronger place identity among residents.

Key Points

Visitors
- One third of visitors were first-time visitors to the community.
  - Cold Spring had the highest percentage of repeat visitors (77%).
  - Beacon had the highest percentage of new visitors (45%).
- Half traveled 50 miles or less.
- Half were groups of two people.
- HRV communities were not visitors' primary destination for most trips.

Participation: Residents
- Cultural activities were more popular than nature-based and water recreation activities for all groups.
- Cold Spring residents were more likely to have visited the waterfront, hiked, and attended theater events.
- Kingston residents were more likely to have taken a boat tour or cruise.
- Beacon residents were more likely to have visited art galleries.

Participation: Visitors
- Almost all visitors to the three communities dined and shopped.
- Beacon visitors were less likely to visit the waterfront, but more likely to go to historical sites/museums, art events, and galleries.
- Kingston visitors more often took boat tours or cruises, went motor boating, and attended festivals.
- Cold Spring visitors predominantly visited the waterfront, shopped, and dined.

General Information Sources
- A higher percentage of residents received information from external sources than did visitors.
- Word-of-mouth, signs along the road, and previous experience were the top three information sources for residents.
- Word-of-mouth and previous experience were the top two information sources for visitors.
- Kingston visitors used brochures and booklets to gather information significantly more than visitors in Beacon and Cold Spring.
- Beacon visitors found information in magazines more often than in other communities.
- A significantly larger number of Cold Spring visitors relied on previous experience as an information source.

Tourism-Related Information Sources
- Local business and government reached more residents than county or state agencies.
- I ♥ NY Program and tourism attractions reached more visitors than other sources.
- Kingston was significantly more effective at disseminating information than Cold Spring or Beacon.

Community Image
- Residents held strong images of their communities in terms of cultural offerings, nature offerings, and river amenities.
- Residents held weaker images of their communities in terms of infrastructure and local character.
- Cold Spring residents consistently had the strongest community image, followed by Beacon residents, and finally Kingston.
- Visitor image was similar to residents; river amenities dominated visitor image.
- While visitors associated nature offerings with all three communities, visitors' image of nature was strongest in Cold Spring and was not significantly different in Beacon and Kingston.
- Visitors had a stronger image of the river amenities in Cold Spring and Kingston compared to Beacon.
- While development of infrastructure was not something that visitors strongly associated with their visit, Beacon's infrastructure image was significantly greater than Cold Spring's and Kingston's.

Place Attachment
- Residents were more dependent upon and identified more with the communities than visitors.
- While residents in all three communities identified with their home, the strength of relationships was significantly different in all three locations. Cold Spring residents were the strongest, followed by Beacon and Kingston.
- Cold Spring residents were significantly more dependent upon their community for specific amenities. Beacon and Kingston residents were dependent to a lesser extent and not significantly different from each other.
- Visitors to Beacon and Kingston did not differ significantly in how strongly they identified with those communities. Visitors to Cold Spring had a significantly stronger sense of identity with the community than visitors in either Beacon or Kingston.

Future Intentions
- Over 70 percent of visitors in each community planned to return within two years.
- Over 80 percent of visitors in each community said they would recommend it to others.
- The majority of Kingston residents would recommend Kingston to visitors. Higher proportions of Beacon and Cold Spring residents would recommend their communities to visitors.

Similar patterns in the relationships among information sources, participation in activities, community image, place attachment, and future intentions emerged in all three communities. The relationships were strongest, however, in Beacon and Kingston. This section highlights only those relationships with r^2 and sr^2 values greater than .300.

- For visitors in Beacon, experience/community information sources had the strongest influence; number of visits was the individual variable with the strongest influence on participation in cultural activities in Kingston.
- Participation in cultural activities was the best predictor of the image Beacon visitors had of the city's cultural offerings.
- In Kingston, the combined place attachment and community image factors influenced visitors' intentions to recommend Kingston to potential visitors.

- Information sources predicted participation in cultural activities for Beacon and Kingston residents.
- Increased participation in cultural activities in Beacon influenced residents' intention to recommend cultural activities and the image of the city's cultural offerings.
- Participation in cultural activities most strongly influenced both the image of Kingston's cultural offerings and how strongly residents identified with their community.
- Length of residency also influenced Kingston residents' feelings of identifying with the community.
- The combined place attachment and community image factors influenced residents' intentions to recommend Beacon and Kingston to potential visitors.
- Beacon residents' feelings of identifying with the community were the strongest individual variable influencing their intentions to recommend the City to others.

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Introduction and Objectives

The Hudson River Valley (HRV) is a tourist destination easily accessible from several population centers, most notably New York City and northern New Jersey. Tourism has economic, social, and environmental impacts on host communities that can be both beneficial and harmful. This study seeks to identify ways to enhance the benefits of tourism in three HRV communities and maintain the desirable aspects of the communities from residents' perspectives.

Planners must incorporate sustainable planning practices to build and maintain communities that are desirable places to live and visit. Sustainable communities balance environmental, social and economic values in a way that respects the constraints of limited natural resources. In order to achieve a balance of values, communities must structure an equitable framework that encourages all values to be expressed.   In tourism destinations such as the HRV, the tourism industry is increasingly relied on to replace manufacturing and other industries and support viable human communities. In addition, tourism in the HRV is dependent on natural resources, as well as the cultural and historical attributes of host communities. This study addresses the following three questions:
- How does tourism impact HRV communities situated on the River?
- What role do natural resources have in attracting visitors?
- Do each community's unique natural, cultural, and historic resources make residents want to stay and visitors want to return?

The City of Beacon, Village of Cold Spring, and City of Kingston were selected due to their proximity to the Hudson River in the Mid-Hudson Valley (See figure 1.). All three have riverfront areas accessible to the public. Visitors are drawn to their natural resources, historical sites, and cultural events. While the three communities share many characteristics common to the region, they represent the range of communities found along the River. Each community is situated in a different county: The City of Beacon is located in Dutchess County, the Village of Cold Spring is in Putnam County and on the west side of the Hudson, and Ulster County is home to the City of Kingston. Population sizes vary, with population ranging from 23,456 in Kingston to 13,808 in Beacon and 1,983 in Cold Spring (2000 Census figures).

This report addresses the following two objectives:
1. To provide HRV communities with information concerning the image that tourists hold of the destination.
2. To identify factors that likely influence tourist repeat visitation to HRV tourism destinations.
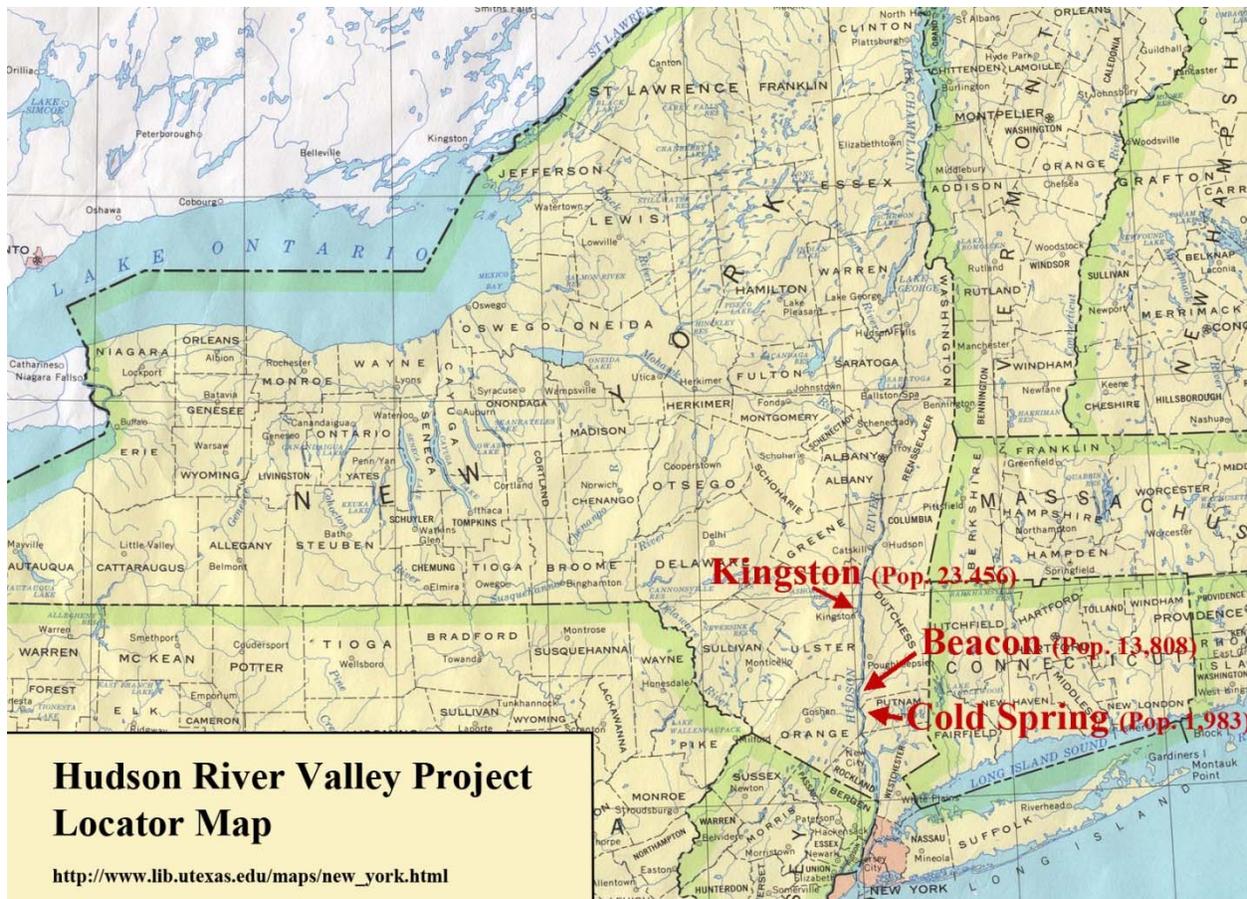
Figure 1. Hudson River Valley Project Locator Map

Methods

Data were collected using written questionnaires of visitors and residents in all three communities. On-site visitor surveys were administered between June 1 and August 17, 2007 on both weekdays and weekend days. Research assistants rotated between three to four selected sites in each community.[1] Visitor survey response rates are shown in Table 1. *Visitors* were defined as anyone not residing in the community.

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[1] On-site locations for the tourist survey are as follows: Beacon: Dia, the East End of Main St., Mount Beacon Park trailhead. Cold Spring: Constitution Marsh, Foundry Dock Park, Main St. (in front of the Village offices), the waterfront (near the Bandstand). Kingston: Kingston Dock, Kingston Point Beach (near boat launch), Rondout Kingston Heritage Area Visitor Center.

Table 1: Response Rates for On-Site Survey of HRV Visitors

	Visitors Approached	Completed Surveys	Response Rate (%)
Beacon	508	272	54
Cold Spring	625	346	55
Kingston	526	274	52
Overall	1659	892	54%

In November 2007, resident surveys were mailed to a sample of 517 residents (derived from voting records or utility bills) in each community. The sampling frame for Cold Spring and Beacon consisted of the entire community population. The sampling frame for Kingston was limited to residents in the Rondout area proximate to the River (specifically tax: ward 7 districts 2, 3; ward 8 districts 1, 2, 3; district 9 wards 1, 2, 3). The response rates for each community are shown in Table 2.

Table 2: Response Rates for Postal Survey of HRV Residents

	Surveys Mailed	Unusable Addresses	Completed Surveys	Response Rate (%)
Beacon	517	18	208	42
Cold Spring	517	21	262	53
Kingston	517	30	171	35
Overall	1551	69	642	43%

The data were analyzed using SPSS statistical software. In the Findings Section, descriptive statistics are reported. Analysis of Variance (ANOVA) and other statistical comparison techniques (e.g. t-tests) were used to test for significant differences between the aggregate means in Beacon, Cold Spring, and Kingston. Only significant findings with less than a 5% chance of error are reported (significance of $p \leq .05$).

The relationships between constructs were measured using standard ordinary least squares linear regressions. Again, only significant findings with less than a 5% chance of error are reported. Coefficients of determination (r^2) are included in the text where appropriate to show the percentage of variation explained by the predictor variables. In regressions with multiple independent variables, semi-partial correlations (sr^2) are reported as well. Semi-partial correlations show what amount of the total variation is attributable to a single predictor variable. In order to reduce the number of analyses some individual survey questions were grouped into factors based on previous research and using a statistical approach known as Principal Components Analysis. If a set of questions was grouped together to reduce the analyses, they were averaged. For example, each person was asked five questions about how strongly he/she identifies with the community. These five questions were averaged to create a single overall indicator of place identity.

Findings

Visitor Profile

Approximately one third of all respondents were visiting the community for the first time (Beacon 45%, Cold Spring 23%, Kingston 40%). Another third were regular visitors who had been to the community 5 or more times (Beacon 24%, Cold Spring 45%, Kingston 33%). A higher percentage of Cold Spring's visitors were repeat visitors. Beacon had a slightly higher percentage of new visitors than Kingston, but a lower percentage of regular visitors.

The visitors to these HRV communities were primarily traveling with family members or friends, as shown in Figure 2. Many were also traveling alone; they are categorized as *None* in Figure 2. Very few respondents were traveling with tour groups or were in the community for business reasons. Only 7% of visitors were traveling in groups of five or more people. Approximately half of respondents were traveling with one other person. The high numbers of family groups and groups of two suggest many married couples and partners. Visitor group sizes are shown in Figures 3a, 3b, and 3c. Fifty percent of respondents were between the ages of 39 and 60.

Figure 2. Type of Visitor Group
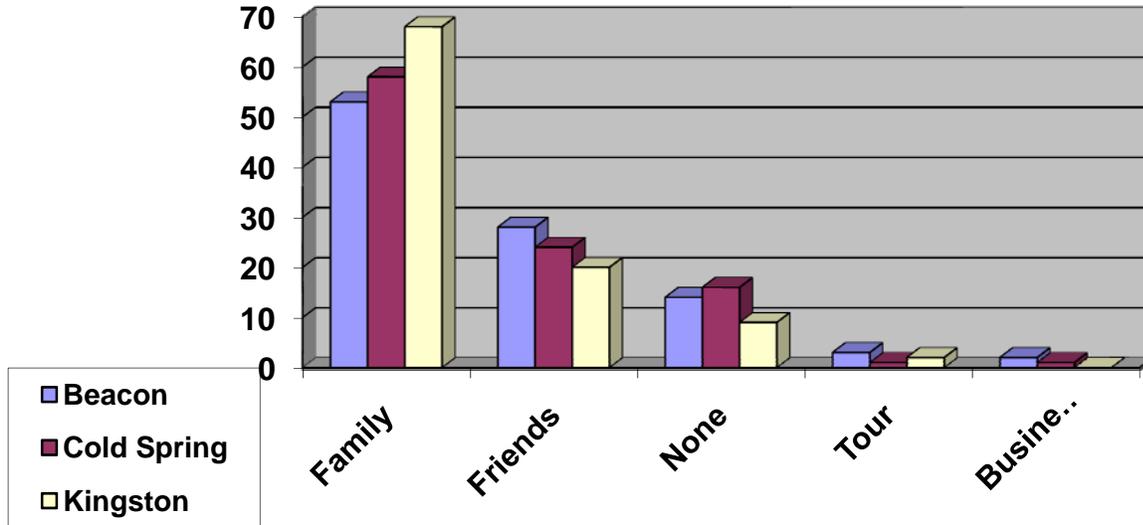
Figure 3a. Beacon Visitor Group Sizes

☐	1 Person
■	2 People
☐	3 People
☐	4 People
■	5+ People
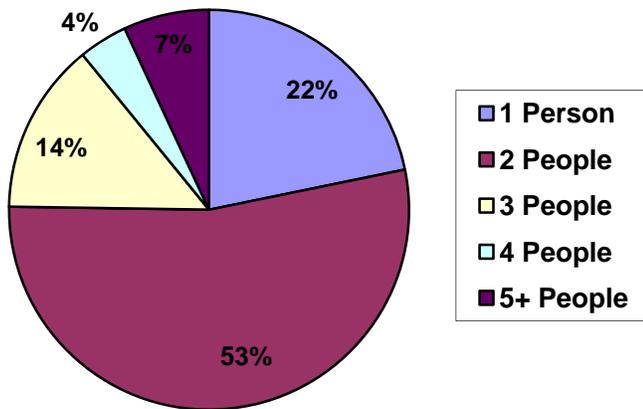
Figure 3b. Cold Spring Visitor Group Sizes

☐	1 Person
■	2 People
☐	3 People
☐	4 People
■	5+ People
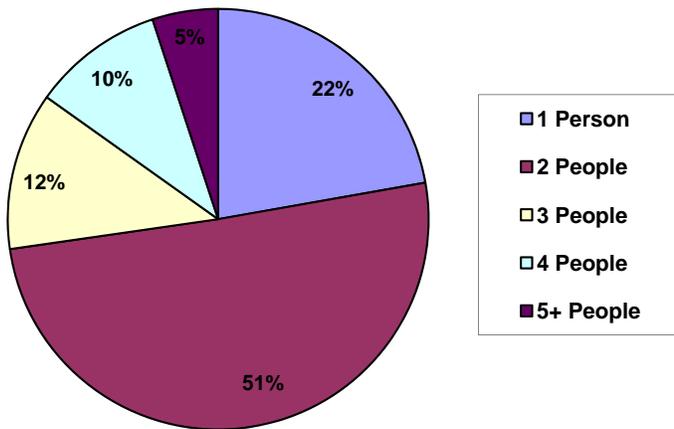
Figure 3c. Kingston Visitor Group Sizes
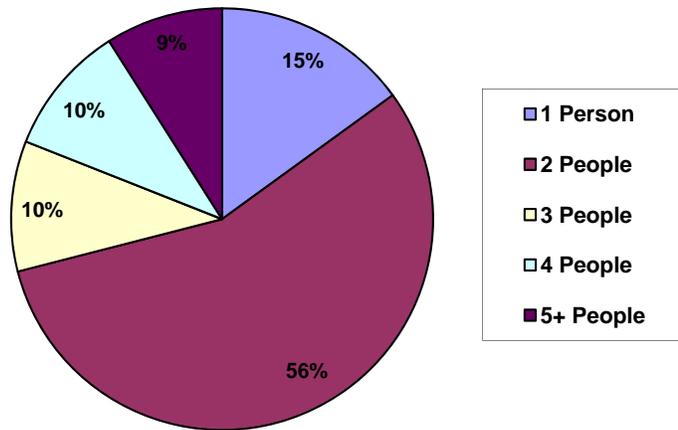
The majority (70%) of respondents listed New York State as their primary residence; other visitors most commonly hailed from neighboring states, and large, populous states. Overall, respondents came from 32 states, the District of Columbia, at least three Canadian provinces, and eight other nations. Half of the respondents travelled 50 miles or less to the HRV community they visited. Many of these visits were day trips for residents of neighboring counties. The median distance traveled by day trip visitors was 30 miles. Overnight visitors travelled a median distance of 165 miles from their homes.

Visitors were asked how many nights they were away from home. On average, just over a third had trips lasting one night or more. Less than one in five visitors stayed overnight in the community that they were visiting. (For individual community percentages, see Figure 4.) Sixty-three percent of respondents stopped in the communities on a day trip. Of the visitors on longer trips, only about half stayed in the study communities.

While it appears that HRV communities are not a primary destination for overnight travelers, visitors are incorporating a visit to HRV communities as a secondary destination as part of a larger trip. Given the central location of the HRV between New York City in the south and Albany and the Adirondacks to the north, this is not surprising. The HRV is also a short distance from the Catskills and the Shawangunk Mountains.

Figure 4. Length of Overnight Stay in Each Community
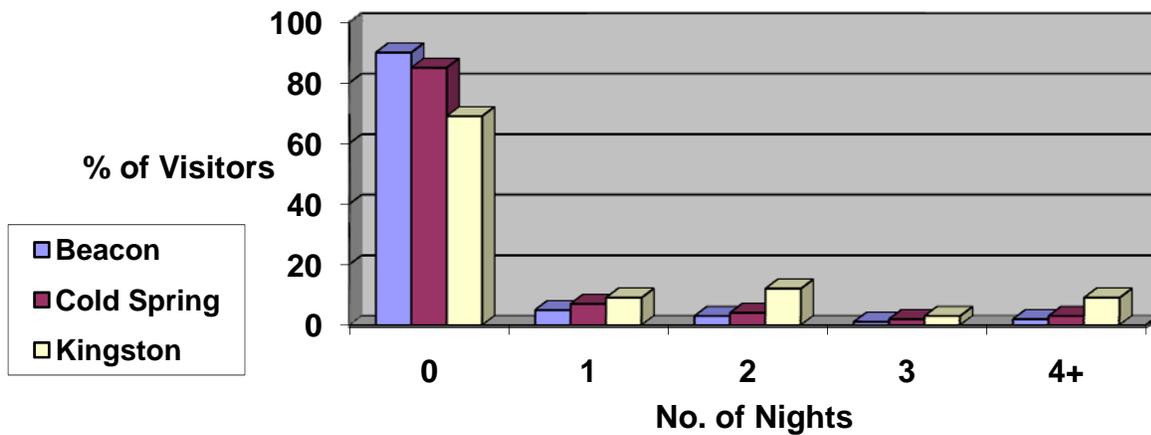
Resident Profile

Residents who completed the survey ranged from new to lifelong community members. Twenty percent had lived in the community five years or less. Another 20% were community residents for 50 years or more. Half of respondents were between the ages of 42 and 63. Men comprised 56% of the resident respondents; 44% were women. Just over a third of respondents (37%) had children living in their household. The majority of households (70%) had two adult members.

Participation in Activities

Both residents and visitors were asked how often they participated in nineteen different activities in the community. Residents were asked how often they participated in the last year, while visitors were asked how often they participated during all visits to the community. The list of activities was based on a review of flyers, brochures, and websites promoting the communities, and included cultural activities, nature-based activities, and water recreation activities. Each group of activities is listed in Appendix A. (Refer to Figures 5a, 5b, and 5c for a complete list of individual activities.) *Visiting the waterfront*, *shopping*, and *dining* were the top three activities favored by residents and visitors alike in each community, with one exception: The average visitor to Beacon was more likely to have visited art galleries and museums than the waterfront.

Residents

Beacon residents were more likely to have visited art galleries, but less likely to have visited the waterfront or attended theater events in their community than other community residents. Cold Spring residents, on the other hand, were more likely to have visited the waterfront, hiked, and attended theater events in their community. Not surprisingly (since a commercial tour boat business operates in the Rondout Area of Kingston), Kingston residents were much more likely

to have taken a boat tour or cruise in the past year. Although a ferry stops at the Beacon waterfront, no commercial boat tour operators stop in Beacon or Cold Spring.

Figure 5a. Frequency of Participation in Activities: Beacon Visitors
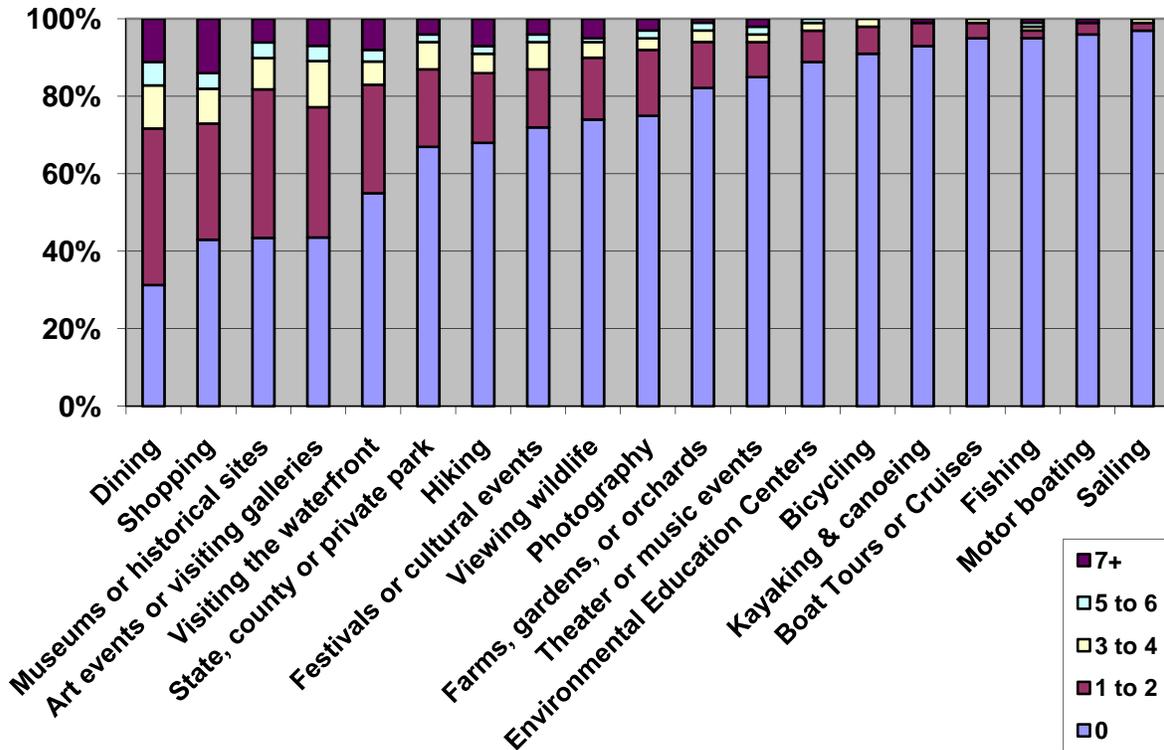
Note for Figures 5a, 5b, & 5c: The percentage of visitors to each community participating never, one to two times, three to four times, five to six times, and seven or more times in each activity is depicted in Figures 5a, 5b, and 5c. Activities are arranged from left to right by popularity. The most popular activities are on the left. Moving to the right, fewer respondents indicated they had participated in each activity, as shown by the short top sections of each bar. The light blue bottom section of each bar represents the percentage of visitors who have never participated in each activity.

Visitors

Among visitors, there was also substantial variation in the frequency of participation. Kingston visitors more often took boat tours or cruises, went motor boating, and attended festivals than Beacon and Cold Spring visitors. In Cold Spring, visitors were more likely to have visited the waterfront, shopped, taken photographs, and dined, but less likely to have taken boat tours or cruises. Their counterparts in Beacon had participated in many of the same activities, but less frequently.

The percentage of visitors to each community participating never, one to two times, three to four times, five to six times, and seven or more times in each activity is depicted in Figures 5a, 5b, and 5c. Activities are arranged from left to right by popularity. The most popular activities are on the left. Moving to the right, fewer respondents indicated they had participated in each

activity, as shown by the short top sections of each bar. The light blue bottom section of each bar represents the percentage of visitors who have never participated in each activity.

Figure 5b. Frequency of Participation in Activities: Cold Spring Visitors
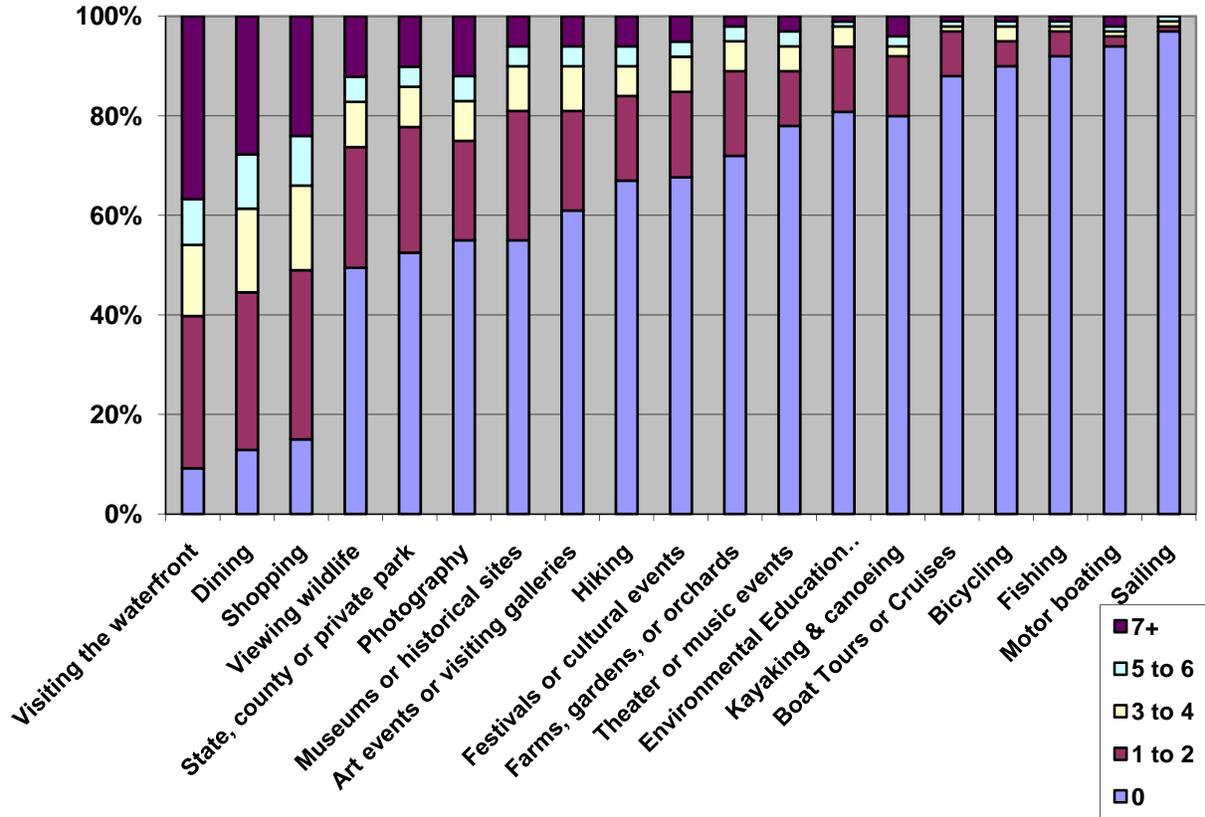
Figure 5c. Frequency of Participation in Activities: Kingston Visitors

Legend:
- 7+
- 5 to 6
- 3 to 4
- 1 to 2
- 0
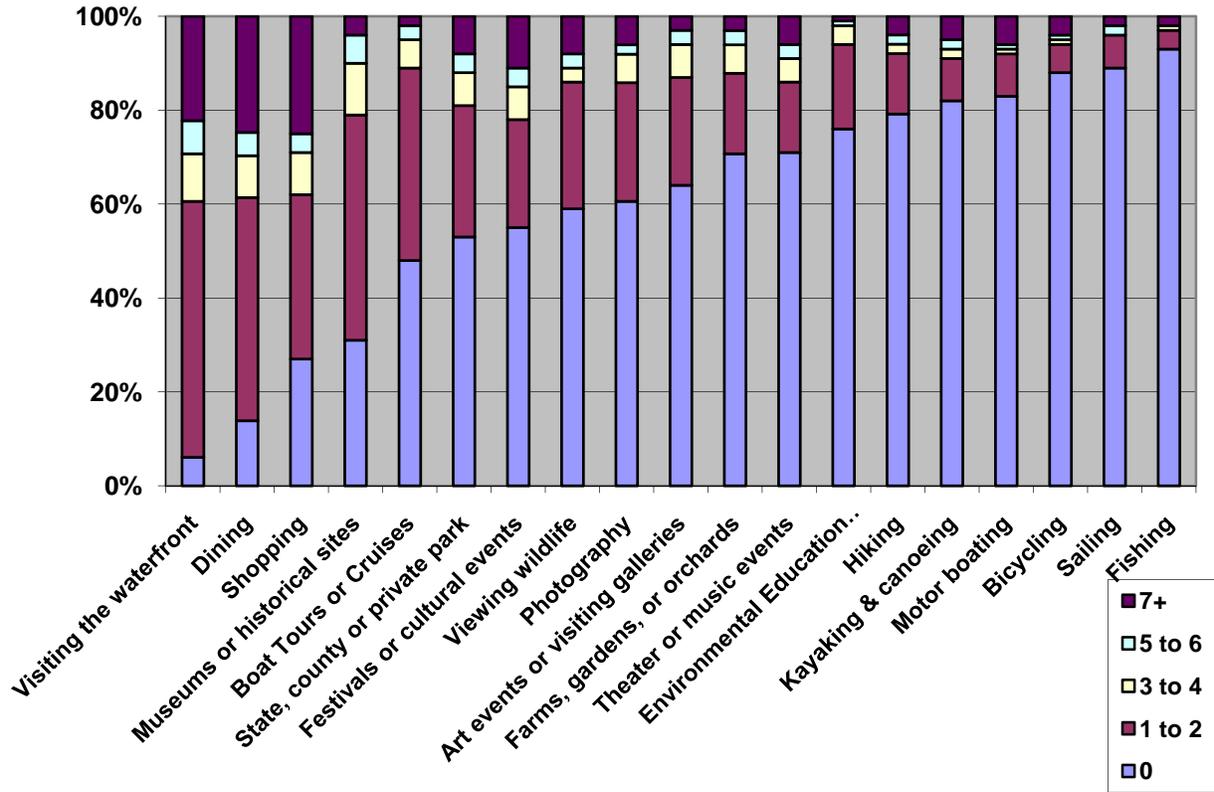
Information Sources

Respondents were asked how they learned about community events and activities. A larger percentage of residents selected each information source than visitors, reflecting their access to local information. Word-of-mouth and previous experience were rated highly by both groups in all communities. Signs along the road were more commonly listed as information sources for residents than visitors. The internet reached approximately 20% of all respondents. Respondents were also asked how frequently they saw or received information from several tourism-related sources. Overall, these sources reached relatively low percentages of visitors. In every category, more Kingston visitors reported having seen or received information from tourism-related sources than visitors to Beacon or Cold Spring.

Residents

Community information reached the greatest proportion of residents through word-of-mouth. Signs along the road and previous experience were the second and third most effective means of disseminating information to residents. Signs along the road were equally effective in all three communities. There was no significant difference in how often Kingston and Cold Spring residents reported previous experience. However, Beacon residents relied on previous experience to a significantly lesser extent. Many residents, especially in Cold Spring, selected *Other* as an information source. Next to *Other,* residents most commonly wrote in the names of local newspapers, but local radio and cable television stations also showed up repeatedly. The

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percentages of residents and visitors who saw or received information from each source are shown in Table 3.

When asked specifically about tourism-related sources of information (see Table 4), municipal sources, as well as local tourism businesses and attractions, had more success reaching residents than Ulster Dutchess or Putnam County or NY State tourism agencies. Over 90% of residents recalled seeing or receiving information from *Other media outlets* (primarily local newspapers, and local radio and cable television stations).

Visitors

Word-of-mouth was the most frequently noted method of receiving information among both residents and visitors in all three communities. Word-of-mouth was used significantly less in Kingston than the other communities; there was no difference between Beacon and Cold Spring. Kingston visitors used brochures and booklets to gather information significantly more than visitors in Beacon and Cold Spring. Beacon visitors found information in magazines more often than in other communities. Finally, a significantly larger number of Cold Spring visitors relied on previous experience as an information source. The previous experience factor is not surprising given that Cold Spring had the highest rate of repeat visitors (77%) compared to Beacon (55%) and Kingston (60%). In addition, 45% of Cold Spring visitors had visited five or more times compared to Beacon (24%) and Kingston (33%). Not more than 30% of visitors to the communities gathered information from publicly available sources. This suggests that many visitors are not planning their activities in advance. Instead, they choose a destination and rely on word-of-mouth and previous experience to guide their visit.

When asked specifically about tourism-related sources of information (see Table 4), other media outlets provided the most effective sources of information followed by tourism attractions and New York State. In general, visitors received more information about Kingston than about Cold Spring or Beacon.

Table 3: Percentage of Respondents Seeing/Receiving Information from General Sources

	Residents (%)			Visitors (%)		
	Beacon	Cold Spring	Kingston	Beacon	Cold Spring	Kingston
Brochures or booklets	35	30	31	15^b	13^a	30^{ab}
Community groups/Tour agency or group[1]	27^a	37^{ab}	28^b	1	2	2
Internet	23	24	21	20	14	19
Magazines	22^a	14^a	16	14^{ab}	7^a	9^b
Other	37^{ac}	63^{ab}	48^{bc}	14	12	19
Previous Experience	39^{ab}	53^a	52^b	24^a	42^{ab}	28^b
Signs along road	63	57	53	12^a	6^a	9
Word-of-mouth	80^a	89^a	83	60^b	65^a	44^{ab}

[1]Resident survey – Community groups. Visitor survey – Tour agency or group
[a]Same superscript in the same row indicates significant difference at .05

Table 4: Percentage of Respondents Seeing/Receiving Information from Tourism Related Sources

	Residents (%)			Visitors (%)		
	Beacon	Cold Spring	Kingston	Beacon	Cold Spring	Kingston
Municipality	71	73	60	11	13	20
Tourism Related Businesses	58	63	58	11[b]	15[a]	30[ab]
Tourism Attractions	58	66[a]	51[a]	24[b]	18[a]	39[ab]
County	29	37	26	12[b]	10[a]	26[ab]
New York State	29	30	30	16[bc]	22[ac]	36[ab]
Other Media Outlets	93	94	92	38[b]	35[a]	46[ab]

[a]Same superscript in the same row indicates significant difference at .05

Community Image

Respondents were asked about their home (or host) community image. Questions covered several topics, including cultural offerings, nature offerings, local character, river amenities and infrastructure.[2] These questions were designed to obtain information about what attributes residents and visitors believe each community has. Each question was phrased as a statement, with which respondents indicated their agreement or disagreement (-2 = strongly disagree to 2 = strongly agree, 0 = neutral).

Resident Image

Cold Spring residents' image of their community's nature offerings, river amenities, and local character was significantly stronger than the images Beacon and Kingston residents had of their respective communities. With regard to nature offerings, Beacon residents rated their community significantly higher than Kingston residents. Kingston residents had a significantly stronger image of local character than their counterparts in Beacon. There was no significant difference between Beacon and Kingston residents' image of the river amenities.

The image Beacon residents' had of their City's infrastructure was significantly higher than the image of both Cold Spring and Kingston residents. There was no significant difference in perception of infrastructure between Kingston and Cold Spring. Concerning cultural offerings, Cold Spring's score was higher than Beacon's and Kingston's respectively. Cold Spring residents' image of cultural offerings was significantly higher than Kingston's. Beacon was not significantly different than either community. Figure 6a shows residents' average scores for each series of image questions. The average score for each question was between -2 and 2.

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[2] Sample image questions.
   [Municipality] offers a lot in terms of natural scenic beauty.
   [Municipality] offers easy access to use the River for recreation.
   [Municipality] offers interesting architecture.
   [Municipality] offers good restaurants.
   [Municipality] is crowded.

Figure 6a. Residents' Community Image Ratings
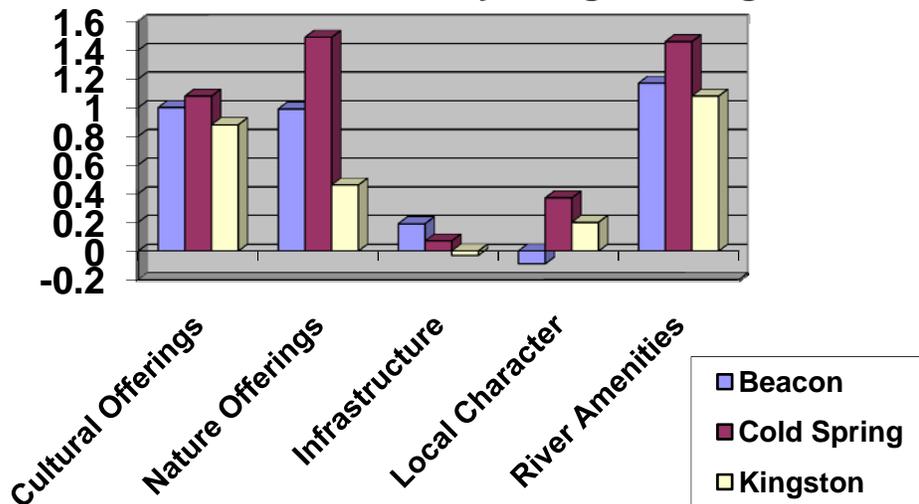
Visitor Image

Cold Spring visitors had a significantly stronger image of nature offerings than the visitors to Beacon and Kingston. Visitors' image of nature offerings was not significantly different in Beacon and Kingston. There was no significant difference between image of river amenities and local character for visitors to Cold Spring and Kingston. Beacon visitors' image of river amenities and local character was significantly weaker than visitors to the other two communities.

Visitor's perceptions of cultural offerings were significantly different in all three communities; Cold Spring scored the highest, followed by Kingston and finally Beacon. While visitors associated nature offerings with all three communities, visitors' image of nature was strongest in Cold Spring and was not significantly different in Beacon and Kingston. While development of infrastructure was not something that visitors strongly associated with their visit, Beacon's infrastructure image was significantly greater than that of Cold Spring and Kingston. Kingston was not significantly different from either Beacon or Cold Spring. Please refer to Figure 6b for visitors' image ratings.

Figure 6b. Visitors' Community Image Ratings
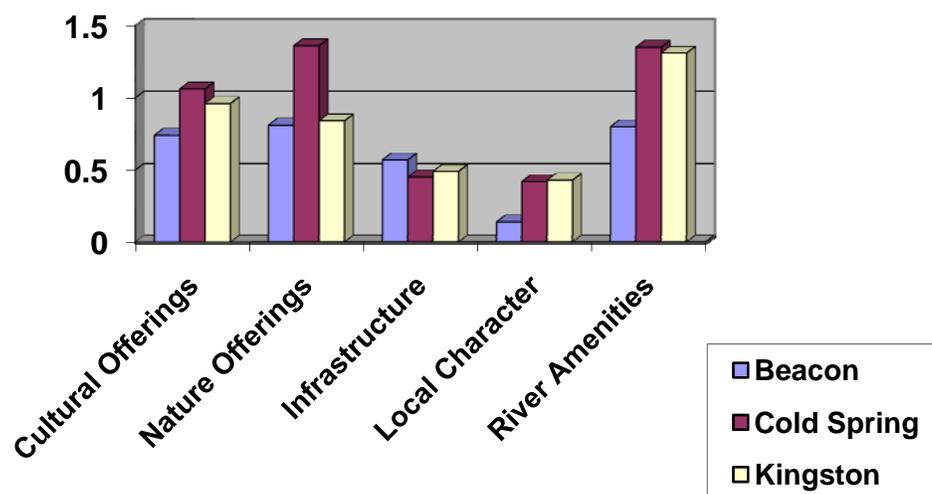
Place Attachment

Place attachment (or destination attachment) refers to how strongly a person connects with a specific geographic location. The surveys included twelve questions about place attachment.[3] The same questions were adapted for residents and visitors. They addressed two aspects of place attachment: place identity and place dependence. *Place identity* is linked to emotions and how a person defines himself or herself. For example, what makes one resident more likely to proudly say, "I'm a Beaconite" than another? *Place dependence* has to do with the tangible characteristics of a place. A person depends on a place when he or she relies on that place for specific activities, such as kayaking or antique shopping. "If we're going antiquing, we just have to stop in Cold Spring" is an example of a place dependent statement.

Both residents and visitors can form place attachments. Residents with strong place attachments would prefer not to move away from the community. Visitors attached to a place are likely to return again and again. Therefore, place attachment can be used to help predict how stable a community's resident population is, or how successful a tourism destination is at attracting repeat visitors.

Overall averages for place identity and place dependence factors are shown in Figure 7; residents' scores are on the left and visitors' scores are on the right. The twelve questions were grouped into place identity and place dependence factors based on previous research and a Principal Components Analysis of the data. The averages for residents and visitors in each community provide an indication of the level of place identity and place dependence.

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[3] Sample place attachment questions:
> [Municipality] is the best destination representing the Historic Hudson River Valley.
> I enjoy the outdoor recreational opportunities at [Municipality] more than any other destination along the Hudson River.
> The natural resources at [Municipality] are special to me.
> I am very attached to [Municipality].

Place attachment theory posits that the strength of emotional bonds with a place increases as the individual gains experience with that particular location. This can explain the higher place attachment and identity scores for residents compared to visitors. In addition, the consistently higher place attachment scores in Cold Spring may be due to the higher percentage of repeat visitors in Cold Spring relative to the other communities.

Figure 7. Place Attachment
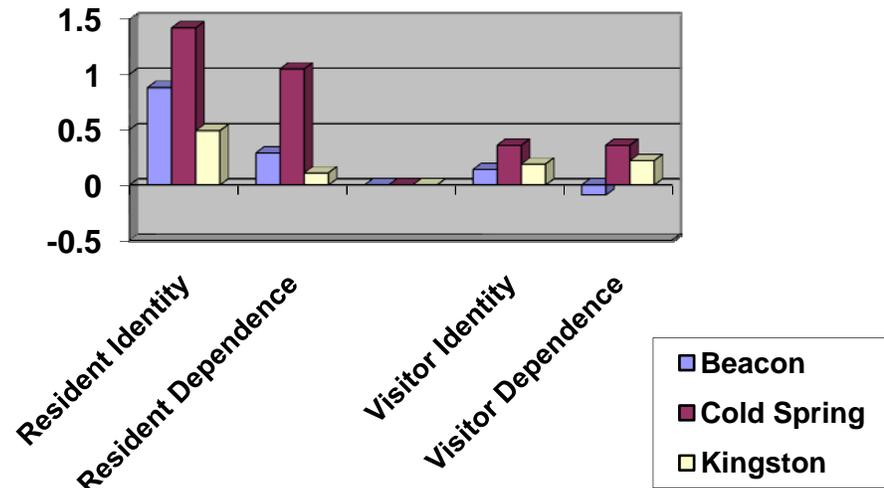
Residents

Residents' place attachment responses were consistent. Cold Spring residents were significantly more dependent upon their community for specific amenities. Beacon and Kingston residents were dependent to a lesser extent and not significantly different from each other. Tests for significant differences among the communities indicated that Cold Spring residents were more dependent on their community as a historic site, for recreational opportunities, and experiencing nature; Cold Spring residents were less willing to substitute another community when considering these attributes.

While residents in all three communities identified with their home, the strength of relationships was significantly different in all three locations. Cold Spring residents identified the most strongly followed by Beacon and then Kingston residents. In all three communities, the item *I plan to live in [Municipality] for a long time* was one of the top two highest mean scores.

Visitors

In general, the results indicate that visitors are less dependent on a single community for the Hudson Valley experience than residents. Tests for significant differences among the communities indicated that all three communities were different in terms of how dependent visitors were on that community as a historic site, for recreational opportunities, and experiencing nature. Visitors to Cold Spring showed the highest dependence followed by Kingston. Visitors to Beacon indicated that they were not highly dependent on the community (average of -.09). It should be noted that the dependence questions were general and did not

address detailed offerings such as art galleries. Thus, a visitor may depend on Beacon as a place to view art, but not depend on it for recreational opportunities or experiencing nature.

Visitors also identify less with the communities compared to residents. Visitors to Beacon and Kingston did not differ significantly in how strongly they identified with those communities. Visitors to Cold Spring had a significantly stronger sense of identity with the community than visitors in either Beacon or Kingston.

Future Intentions

Some final questions asked visitors how likely they were to return within two years. Both residents and visitors were asked how likely they were to recommend the community to others. Results are illustrated in Figures 8, 9, and 10.

Overall, visitors to all three communities were likely to return and likely to recommend the community they visited. While 71% of Kingston visitors intend to return, Kingston visitors were significantly less likely to return for another visit than their counterparts in Beacon and Cold Spring. There was no significant difference between Beacon and Cold Spring visitors' intentions to return. At least 85% of HRV visitors would recommend the community they visited. However, Cold Spring visitors were significantly more likely to recommend the community than Beacon visitors. Kingston was truly in the middle and not significantly different than either other community.

More than half of the residents in each of the communities were likely to recommend their community to potential tourists. All three communities were significantly different; Cold Spring residents were most likely, followed by Beacon and then Kingston (Cold Spring=86%, Beacon=74%, Kingston=53%; please refer to Figure 10).

Figure 8. Visitors' Intention to Return to the Community

Legend: ■ Beacon ■ Cold Spring □ Kingston
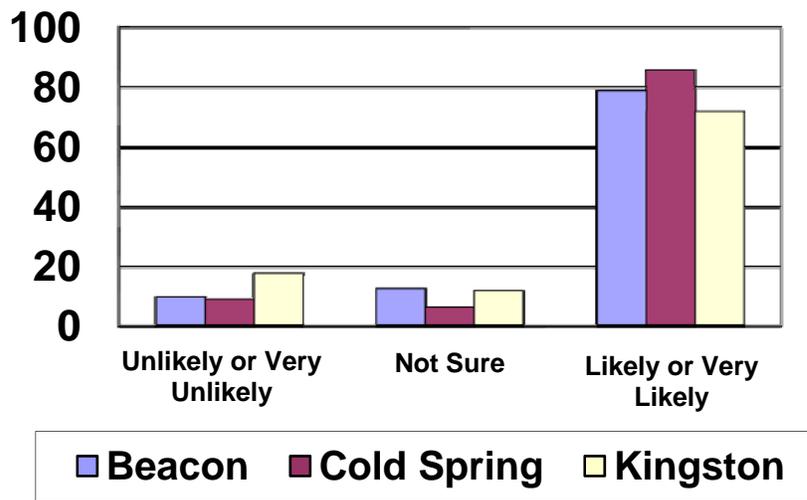
Figure 9. Visitors' Intention to Recommend the Community

Legend: ■ Beacon ■ Cold Spring □ Kingston
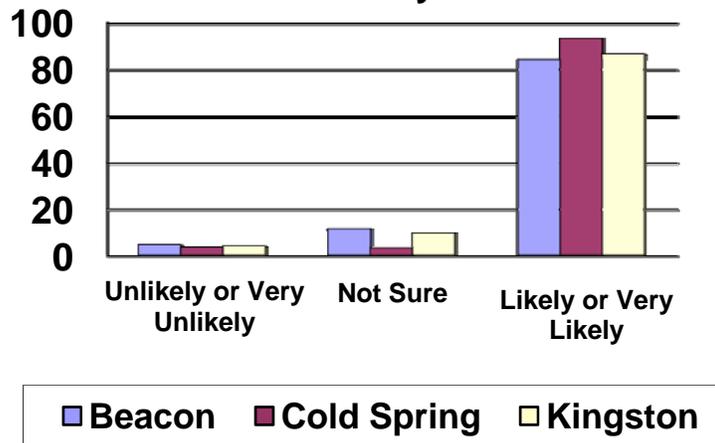
Figure 10. Residents' Intention to Recommend the Community
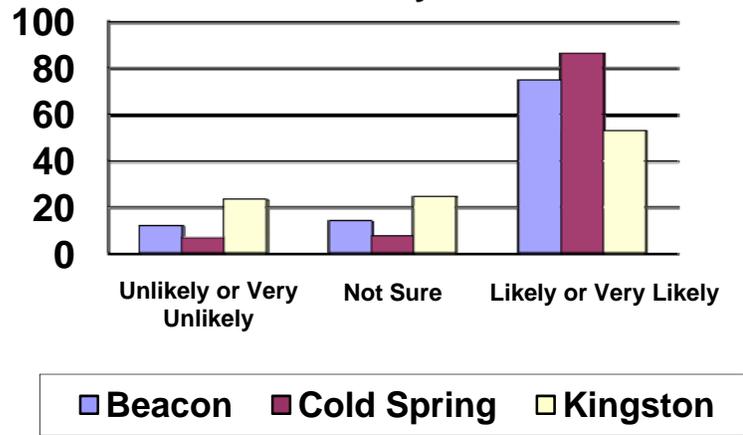
Relationships Among Concepts

The different sections of the surveys (discussed above) were also analyzed for the relationships among concepts. The following relationships were studied:
   A. Information sources and participation in activities,
   B. Participation in activities and community image,
   C. Participation in activities and place attachment,
   D. Participation in activities and intentions to recommend activities (residents) or return (visitors),
   E. Place attachment and image and intentions to recommend or return.

These relationships are shown in Figure 11. For clarity, a letter has been assigned to each arrow. The same letter marks sections that address that relationship. *Future Intentions* includes intentions to participate in activities, and recommend or return to the community.
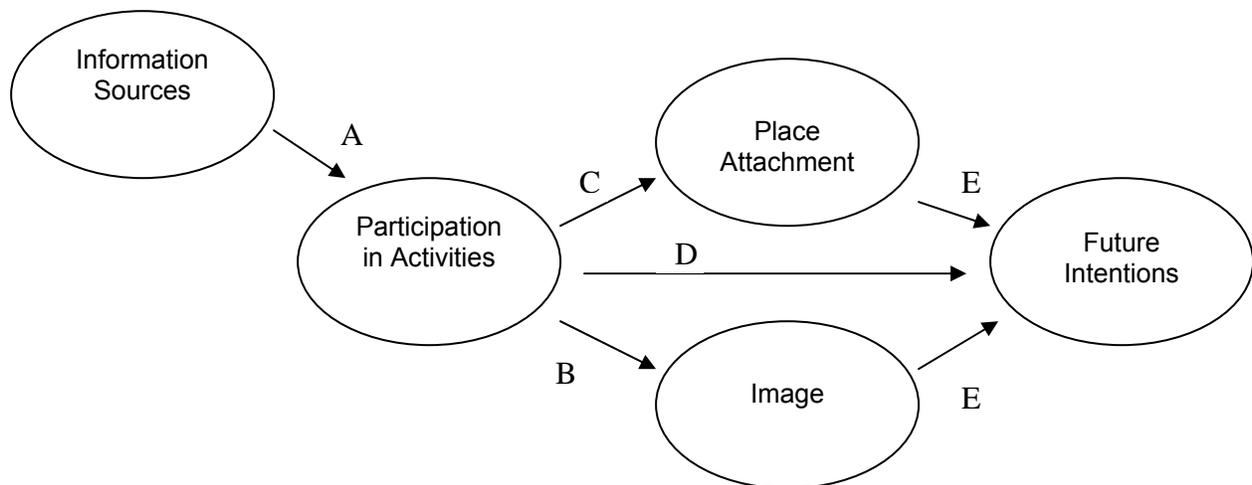
Figure 11. Model of Relationships among Concepts

In this section, data is displayed in two types of tables: Regression results tables (e.g. Table 5) and detailed regression results tables (e.g. Table 7). Regression results tables include data about the overall relationship. They show the dependent variable in the first column, community names in the second column, and the level of significance in the third column. Values greater than .05 in this column are not statistically significant; therefore, no further data is reported. Values below .05 have less than a 5% chance of error and are statistically significant. For significant relationships, the r^2 value is listed. The possible values of r^2 range from negative one to positive one. The closer the r^2 value to positive or negative one, the stronger the relationship; values close to zero indicate weaker relationships.

Detailed regression results tables include data about the relationship between individual predictor variables and the response variable. The first column in the detailed regression results tables list predictor variables. Like the other tables, community names and significance levels are shown. For significant relationships, the β (beta) value is listed in the fourth column. The beta value represents the amount of change in the dependent variable due to a one unit change in the predictor variable. The final column, sr^2, shows the amount of change in the

dependent variable attributable only to the single predictor variable. For both β and sr^2, values closer to positive or negative one signify stronger relationships than values closer to zero.

Residents

Which information sources best predict participation in activities? (A)

The list of information sources was separated into two indices for this analysis. The first, Print Sources included *Brochures or booklets, Internet,* and *Magazines.* The second, Experience/Community Sources included *Word-of-mouth, Previous Experience,* and *Community Groups.* Exposure to information sources was a significant predictor of participation in activities. The relationship with water recreation activities was the weakest of the three, as shown in Table 5.

Detailed analysis indicated that Experience/Community sources were the stronger predictor of resident participation, especially in cultural activities (Beacon sr^2 = .336, Cold Spring sr^2 = .271, Kingston sr^2 = .331). Previous experience, word-of-mouth advertising and community group involvement were more likely to result in participation than brochures, websites or magazines.

In Cold Spring and Kingston, length of residency was a negative predictor of participation in nature-based activities (Cold Spring sr^2 = -.434, Kingston sr^2 = -.230). Therefore, the longer people lived in those communities, the less frequently they participated in nature-based activities, such as hiking, biking and visiting Environmental Education Centers. This may be due to increased knowledge and use of sites outside the community for these activities, or declining participation due to age and health reasons.

In Kingston, exposure to more experience/community sources and other media outlets led to increased participation in water recreation. In contrast, increased exposure to print sources and longer length of residency led to more participation in water recreation activities in Beacon. The relationship between information sources and participation in water recreation activities was not significant in Cold Spring.

Table 5. Regression Results for Information Sources on Participation in Activities for Residents

Response Variable	Community	Sig.	r^2
Cultural Activities			
	Beacon	.000	.303
	Cold Spring	.000	.207
	Kingston	.000	.340
Nature-Based Activities			
	Beacon	.000	.130
	Cold Spring	.000	.243
	Kingston	.000	.179
Water Rec. Activities			
	Beacon	.000	.105
	Cold Spring	.800	
	Kingston	.017	.074

Does increased participation lead to a more positive community image? (B)

Table 6 shows the results for each component of image. As participation in cultural activities increased, residents' image of cultural offerings (Beacon sr^2 = .428, Cold Spring sr^2 = .250, Kingston sr^2 = .392) and nature offerings (Beacon sr^2 = .289, Cold Spring sr^2 = .212, Kingston sr^2 = .290) became more positive. The more frequently a resident shopped, dined, etc. in the community, the stronger his/her image of both the cultural and nature offerings was. The link between cultural activities and nature offerings suggests that residents do not have to be active in nature recreation to develop an image of their community's nature offerings. In these HRV communities, people cannot engage in cultural activities without being exposed to the natural scenic beauty of the area.

Participation in water recreation activities was only a significant predictor of river amenities in Kingston. It was not a significant predictor of other aspects of image in any of the communities. There was not a significant relationship between participation in nature-based activities and image. Length of residency did influence some aspects of community image; however, in Beacon and Kingston, participation in activities had a slight positive impact on affective image. The relationship between participation and affective image was not significant in Cold Spring.

Table 6. Regression Results for Participation in Activities on Community Image for Residents

Response Variable	Community	Sig.	r^2
Affective Image			
	Beacon	.000	.143
	Cold Spring	.171	
	Kingston	.002	.130
Cultural Offerings			
	Beacon	.000	.251
	Cold Spring	.000	.155
	Kingston	.000	.224
Nature Offerings			
	Beacon	.000	.209
	Cold Spring	.000	.115
	Kingston	.001	.134
Infrastructure			
	Beacon	.000	.112
	Cold Spring	.000	.149
	Kingston	.263	
Local Character			
	Beacon	.000	.138
	Cold Spring	.004	.074
	Kingston	.063	
River Amenities			
	Beacon	.000	.136
	Cold Spring	.070	
	Kingston	.002	.123

Does increased participation in activities contribute to residents' attachment to their community? (C)

Table 7 shows detailed regression results for place identity. Results for place dependence are shown in Table 8. Length of residency and participation in cultural activities were both significant, but weak predictors of attachment to the community. Both variables were better predictors of how strongly one identifies with the community (Beacon r^2 = .198, Cold Spring r^2 = .140, Kingston r^2 = .253) than how strongly one depends on it (Beacon r^2 = .136, Cold Spring r^2 = .121, Kingston r^2 = .174). The longer someone lived in the community, the more likely he/she was to be attached to it. Likewise, the more frequently a resident participated in cultural activities (shopping, dining, visiting the waterfront, etc.), the more attached he/she would be to the community. Cultural activities generally involve social interaction, which may be why they are more strongly linked to place identity than dependence. Participation in cultural activities consistently influenced both how people identify with the community and how much they depend on it. Participation in nature-based and water recreation activities did not significantly predict place attachment.

Table 7. Detailed Regression Results for Participation in Activities on Place Identity for Residents

Predictor Variables	Community	Sig.	β	sr^2
Cultural Activities				
	Beacon	.000	.329	.263
	Cold Spring	.000	.287	.235
	Kingston	.000	.465	.363
Length of Residency				
	Beacon	.013	.179	.170
	Cold Spring	.001	.257	.221
	Kingston	.000	.352	.330

Table 8. Detailed Regression Results for Participation in Activities on Place Dependence for Residents

Predictor Variables	Community	Sig.	β	sr^2
Cultural Activities				
	Beacon	.005	.250	.201
	Cold Spring	.000	.366	.297
	Kingston	.001	.351	.275
Length of Residency				
	Beacon	.047	.148	.141
	Cold Spring	.047	.154	.132
	Kingston	.000	.316	.298

Does increased participation make residents more likely to recommend those activities to others? (D)

Each of the three groups of activities (cultural, nature-based, and water recreation) were analyzed to see if participation predicted the likelihood of a resident recommending specific activities to potential visitors. Results of the three regressions are show in Table 9. In each group of activities, higher levels of participation slightly increased the likelihood that residents would recommend those activities to others. The relationship was strongest with cultural activities and weakest with water recreation. Residents were more likely to recommend cultural and nature-based activities than water recreation activities to potential visitors in Beacon and Cold Spring. In Kingston, residents were equally likely to recommend all activities, including water recreation.

Do place attachment and image predict residents' intentions to recommend their home community? (E)

Both place attachment and image predicted intentions (Beacon r^2 = .405, Cold Spring r^2 = .195, Kingston r^2 = .514). Place identity was the strongest predictor. Residents who identify more strongly with their home community were more likely to recommend it to potential visitors. Image related to infrastructure was also a significant individual predictor of intentions, but only in Cold Spring (sr^2 = .143). Table 10 shows results for the significant predictor variables. The following variables were not significant and are not included in Table 10: Cultural Offerings, Nature Offerings, Local Character, River Amenities, Affective Image, and Place Dependence. This suggests that tangible amenities are not a prominent concern when recommending the communities to potential visitors.

Table 9. Regression Results for Activity Factors on Residents' Matching Intentions to Recommend Activities

Response Variable & Predictor Variable	Community	Sig.	r^2
Cultural Activities & Intentions			
	Beacon	.000	.332
	Cold Spring	.000	.261
	Kingston	.000	.186
Nature-based Activities & Intentions			
	Beacon	.000	.245
	Cold Spring	.000	.290
	Kingston	.000	.147
Water Rec. Activities & Intentions			
	Beacon	.000	.083
	Cold Spring	.000	.080
	Kingston	.000	.152

Table 10. Detailed Regression Results for Place Attachment and Image on Residents' Intention to Recommend their Home Community

Predictor Variable	Community	Sig.	β	sr^2
Infrastructure				
	Beacon	.279		
	Cold Spring	.027	.161	.143
	Kingston	.079		
Place Identity				
	Beacon	.000	.442	.303
	Cold Spring	.000	.422	.289
	Kingston	.003	.365	.196

Visitors

Which information sources best predict participation in activities? (A)

Information sources varied by the type of activities and community. Overall, the more exposure to the range of information sources, the more likely visitors were to participate in cultural activities (Beacon r^2 = .317, Cold Spring r^2 = .250, Kingston r^2 = .359). The relationship between information sources and participation in activities was weaker for nature-based activities and water recreation activities, than for cultural activities, as shown in Table 11. The relationship between information sources and water recreation in Kingston was not significant.

In Beacon, Experience/Community Sources and Other Media Outlets (newspapers, radio, television) were significant predictors of participation in cultural, nature-based, and water recreation activities. Experience/Community Sources and Other Media Outlets also predicted participation in cultural activities in the other two communities, as shown in Table 12. In Cold Spring and Kingston, the more often people visited, the more likely they were to participate in cultural activities and nature-based activities. This relationship was not significant in Beacon, possibly because Beacon's visitors relied more heavily on Experience/Community Sources. Detailed regression results of information sources on nature-based activities and water recreation activities are shown in Tables 13 and 14, respectively.

Table 11. Regression Results for Information Sources on Participation in Nature-based and Water Recreation Activities for Visitors

Response Variable	Community	Sig.	r^2
Nature-Based Activities			
	Beacon	.000	.132
	Cold Spring	.000	.112
	Kingston	.000	.120
Water Rec. Activities			
	Beacon	.002	.078
	Cold Spring	.001	.067
	Kingston	.261	

Table 12. Detailed Regression Results for Information Sources on Participation in Cultural Activities for Visitors

Predictor Variable	Community	Sig.	β	sr^2
Experience/Community Sources				
	Beacon	.000	.355	.351
	Cold Spring	.007	.145	.145
	Kingston	.009	.163	.158
Number of Visits				
	Beacon	.173		
	Cold Spring	.000	.287	.278
	Kingston	.000	.380	.360
Other Media Outlets				
	Beacon	.000	.340	.311
	Cold Spring	.000	.303	.290
	Kingston	.000	.294	.276

Table 13. Detailed Regression Results for Information Sources on Participation in Nature-based Activities for Visitors

Predictor Variable	Community	Sig.	β	sr^2
Experience/Community Sources				
	Beacon	.000	.256	.253
	Cold Spring	.170		
	Kingston	.443		
Number of Visits				
	Beacon	.068		
	Cold Spring	.000	.224	.216
	Kingston	.000	.276	.259
Other Media Outlets				
	Beacon	.031	.154	.140
	Cold Spring	.018	.143	.136
	Kingston	.111		

Table 14. Detailed Regression Results for Information Sources on Participation in Water Recreation Activities for Visitors

Predictor Variable	Community	Sig.	β	sr^2
Print Sources				
	Beacon	.100		
	Cold Spring	.012	-.148	-.146
Experience/Community Sources				
	Beacon	.015	.163	.161
	Cold Spring	.656		
Other Media Outlets				
	Beacon	.003	.219	.199
	Cold Spring	.000	.229	.218

Does increased participation in activities lead to a more positive image of the destination? (B)

For visitors, participation in activities was a poor predictor of community image, although it had some ability to predict the image visitors had of cultural offerings and, to a lesser extent, nature offerings (Table 15). Repeated participation in cultural activities improved visitors' image of the cultural offerings in Beacon and Cold Spring. In general, the more frequently a visitor participated in a variety of activities, the more positive was his/her image of the cultural and nature offerings. See tables 16 and 17 for more detailed information. In Beacon and Cold Spring, participation in nature-based activities enhanced visitors' image of the nature offerings (Beacon sr^2 = .160, Cold Spring sr^2 = .197). The relationships between participation in activities and Infrastructure, Local Character, River Amenities, and Affective Image were not significant.

Three negative relationships were identified during these analyses. First, as participation in nature-based activities increased, the image of Cold Spring's cultural offerings decreased. In addition, the relationship between water recreation activities and cultural offerings was weak. These results suggest that people seeking participatory water and nature recreation experiences are distinct from those specifically seeking cultural activities in Cold Spring.

The other two negative relationships were found in Kingston. The more often a visitor had been to the City, the poorer his or her image of cultural and nature offerings became. In contrast, repeated participation in cultural activities improved visitors' image of Kingston's cultural offerings. As the number of visits to Kingston increases, visitors' perception of the City as a destination for interaction with nature and cultural offerings declines. This may be due to differences in visitor perceptions of the Rondout area and the City as a whole. The survey was conducted only in the Rondout section of Kingston, but survey questions referred to the entire city.

Table 15. Regression Results for Participation in Activities on Destination Image for Visitors

Response Variable	Community	Sig.	r^2
Image of Cultural Offerings			
	Beacon	.000	.148
	Cold Spring	.000	.171
	Kingston	.001	.109
Image of Nature Offerings			
	Beacon	.034	.057
	Cold Spring	.000	.098
	Kingston	.037	.061

Table 16. Detailed Regression Results for Participation in Activities on Cultural Offerings for Visitors

Predictor Variable	Community	Sig.	β	sr^2
Cultural Activities				
	Beacon	.000	.414	.363
	Cold Spring	.000	.347	.253
	Kingston	.000	.381	.277
Nature-based Activities				
	Beacon	.575		
	Cold Spring	.016	-.177	-.142
	Kingston	.963		
Water Rec. Activities				
	Beacon	.532		
	Cold Spring	.018	.161	.140
	Kingston	.173		
Number of Visits				
	Beacon	.051		
	Cold Spring	.080		
	Kingston	.001	-.296	-.260

Table 17. Detailed Regression Results for Participation in Activities on Nature Offerings for Visitors

Predictor Variable	Community	Sig.	β	sr^2
Nature-based Activities				
	Beacon	.029	.199	.160
	Cold Spring	.001	.247	.197
	Kingston	.864		
Number of Visits				
	Beacon	.221		
	Cold Spring	.272		
	Kingston	.005	-.247	-.217

How well do participation levels predict destination attachment? (C)

Overall, participation levels were poor predictors of visitors' destination attachment. In Beacon, no significant relationship existed. In Kingston, a weak relationship existed between participation in cultural activities and place identity (Table 18). Cold Spring visitors' attachment increased slightly with increasing participation in cultural activities (Tables 19 and 20). The more often visitors to Cold Spring attended festivals, dined out and visited the waterfront, the more they identified themselves with the Village and depended on it for those activities. Nature-based and water recreation activities were not significant predictors of either place identity or place dependence. It is surprising that participation in cultural activities, rather than nature-based or water recreation activities led to increased place dependence, because cultural activities are so widely available elsewhere. These results suggest that the experience of dining or shopping embodies the unique character associated with the communities.

Table 18. Regression Results for Participation in Activities on Destination Attachment for Visitors

Response Variable	Community	Sig.	r^2
Place Identity			
	Beacon	.063	
	Cold Spring	.000	.172
	Kingston	.008	.058
Place Dependence			
	Beacon	.876	
	Cold Spring	.000	.075
	Kingston	.120	

Table 19. Detailed Regression Results for Participation in Activities on Place Identity for Visitors

Predictor Variable	Community	Sig.	β	sr^2
Cultural Activities				
	Beacon	.930		
	Cold Spring	.000	.326	.253
	Kingston	.014	.225	.172

Table 20. Detailed Regression Results for Participation in Activities on Place Dependence for Visitors

Predictor Variable	Community	Sig.	β	sr^2
Cultural Activities				
	Beacon	.869		
	Cold Spring	.003	.225	.175
	Kingston	.107		

Does increased participation in activities influence visitors' plans to return? (D)
Visitors who had participated more frequently in activities were slightly more likely to return to the community than visitors who participated less frequently, as shown in Table 21. In Beacon, dining, museums, the waterfront, and art events were top future activities for returning visitors. The waterfront, dining, and shopping were the most likely activities for future visits to Cold Spring. Similarly, the waterfront, dining, shopping, festivals, and museums were all activities Kingston visitors intended to enjoy if they returned.

Table 21. Regression Results for Participation in Activities on Visitors' Intention to Return

Response Variable	Community	Sig.	r^2
Intention to Return			
	Beacon	.000	.103
	Cold Spring	.012	.048
	Kingston	.005	.086

Do destination attachment and image predict visitors' intentions to recommend the HRV community they visited? (E)

Place attachment and image were analyzed to determine the relationship on visitors' intention to recommend the community to others. The relationship was strongest in Kingston, as shown in Table 22. In Beacon, the more positive the visitors' image of nature offerings, the more likely he/she was to recommend Beacon to others (sr^2 = .198). In Cold Spring, stronger place dependence (sr^2 = .132) and image of cultural offerings (sr^2 = .182) were linked to a stronger likelihood to recommend the Village. Local character had a negative impact on likelihood to recommend (sr^2 = -.186). In Kingston, intention to recommend the community increased with more positive affective image (sr^2 = .149), and images of cultural offerings (sr^2 = .187) and river amenities (sr^2 = .181).

Table 22. Regression Results for Place Attachment and Image on Visitors' Intentions to Recommend

Response Variable	Community	Sig.	R^2
Intention to Recommend			
	Beacon	.000	.210
	Cold Spring	.000	.166
	Kingston	.000	.303

Conclusion

Tourism impacts HRV communities by bringing in many first time and repeat visitors. Visitors frequently participate in cultural activities, such as shopping, dining, visiting art galleries, and attending festivals. They engage in nature-based and water recreation activities as well. Many visitors are day trippers, and others are likely passing through the area. Half travel 50 miles or less, and few stayed overnight in the community. Visitors' answers indicate that they are likely to return to the Hudson Valley and the community in which they completed the survey. They have a positive affective image of all three communities.

Natural resources play a key role in attracting visitors to the region. The proximity of scenic vistas and public River access to cultural activities in village, town, and city centers attracts visitors with a variety of interests. While some visitors do interact with natural resources by hiking, biking, kayaking and viewing wildlife, many more come to shop, dine and visit the waterfront. Regardless of their activity choices, visitors are attached to the natural resources in Beacon, Cold Spring and Kingston. Furthermore, the image of each community is dominated by the Hudson River.

Residents and visitors, on average, are participating in cultural activities more frequently than nature-based or water recreation activities, despite the prevalence of nature-based activities and water recreation opportunities. There are several indications of a link between cultural activities and natural resources. Cultural activities are reliant on natural resources to provide scenic viewing and waterfront visits. The popularity of shopping, dining and visiting the waterfront suggests that proximity to the River plays a key role in attracting visitors and residents to local shops and eateries.

Different aspects of each community's image encourage visitors to return to the HRV. The image of Kingston is one of a city with excellent opportunities to view the River and enjoy River recreation opportunities. Visitor's images of Beacon and Cold Spring as excellent places to view the River and natural scenic beauty also indicate scenic vistas and public river access are critical tourism attributes in these HRV communities. Residents indicate that they plan to live in the communities for a long time. Participation in cultural activities increases residents' feelings of place attachment.

Survey responses emphasize the attraction of scenic vistas and public river access. It is important to recognize that scenic vistas do not conform to political boundaries. In riverfront communities, the most outstanding scenic vistas are often views of the communities on the opposite side of the River. Coordination between planning agencies will help the region preserve its natural resources and the Main Street atmosphere that make the HRV so appealing to residents and visitors.

Three market segments stood out in the survey responses. The first is active couples looking for a variety of entertainments. The communities are seen as romantic settings or getaways and are often visited by groups of two people. These visitors seem to find the variety of activities appealing. They are not looking for the typical dinner and movie outing, but the chance to engage in outdoor recreation and meander along Main Street and the waterfront. The second market segment is comprised of visitors traveling to other destinations in New York State who pass through the HRV. The third market segment consists of community residents. Encouraging local residents to participate in community events and activities will increase word-of-mouth advertising. Among residents, participation in activities has a positive impact on place identity, which in turn positively predicts intent to recommend. Word-of-mouth advertising reached the highest percentages of residents and visitors in each community. Therefore, maintaining a positive relationship with residents who do not directly benefit from the tourism industry is important.

Advertising by local information sources, especially in smaller communities with lower capacity attractions, reaches a smaller percentage of visitors, but more residents, than state or county agencies. More traditional media outlets, such as newspapers and local television and radio may be more effective venues for reaching residents.

Beacon, Cold Spring and Kingston are attractive tourism destinations that represent the range of Riverfront communities found in the HRV. Overall, visitor experiences are positive, and the majority of visitors intend to return. In each community, however, there are opportunities to make tourism more sustainable. We encourage HRV communities to use these study findings to enhance marketing efforts to selected tourist segments. In addition, we recommend coordination among governments in the region, specifically with regard to scenic vista and public river access protection. This two-part approach to tourism planning is designed to enhance the environmental, economic and social benefits of tourism for residents and visitors alike.

Appendix A

Results of Principal Components Analysis of Activities

Principal Components Analysis of combined resident and visitor data resulted in three factors: Cultural Activities, Nature-based Activities, and Water Recreation Activities. The items in each factor are listed below.
Cultural Activities
1. Visiting the Waterfront
2. Dining out
3. Shopping
4. Attending festivals or cultural events
5. Attending theater or music events
6. Attending art events or visiting galleries
7. Visiting museums or historical sites
8. Visiting farms, gardens, or orchards

Nature-based Activities
9. Bicycling
10. Hiking
11. Viewing wildlife
12. Kayaking or Canoeing
13. Visiting Environmental Education Centers
14. Visiting a state, county, or private park
15. Photography

Water Recreation Activities
16. Fishing
17. Motor boating
18. Sailing
19. Boat Tours or Cruises