Comparative Analysis of Web-based Surveys and Community Workshops as Participatory Techniques: The Views of Pittsburgh's Open Space, Parks, and Recreation Planners

Katie Stratmann
Chatham University
April 25, 2012

Thesis Defense Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Landscape Architecture
ACKNOWLEDGEMENTS

• COMMITTEE
  Thesis Advisor:
  Dr. Safei Hamed
  Committee Members:
  Joy Abbott, ASLA
  Dr. Kyle Beidler

• DEPARTMENT OF CITY PLANNING
INTRODUCTION
### DEFINING THE TERMS

#### PARTICIPATION

A set of behaviors and performed activities
(Stern et al, 2009, p. 1068)

#### PUBLIC INVOLVEMENT

Refers to an individual's participation in a given task and may be measured as a set of behaviors or activities that such an individual performs (Barki and Hartwick, 1989)

#### TECHNIQUES

Ways of using tools (Akoff, 1962)
ACCESS AND USAGE OF INTERNET RESOURCES

76% of Americans with Internet Access

58% Turn to the Web for information from government agencies or to communicate with them

SOURCE: http://www.cisco.com
OPPORTUNITIES AND CHALLENGES OF TECHNOLOGY USE

+ Providing Information
Promoting Discussion
Gathering Feedback
Anonymity
Free from Time Constraints
Potential to Attract Participants

− Ability to Utilize Websites
Digital Divide
inequalities between groups, in terms of access to, use of, or knowledge of information and communication technologies (Wikipedia)
Intimidation of Technology
Planners Availability of Resources (money, time, staff, data)

(Brabham, 2009, p. 4; Slotterback, 2011, p. 469-470)
• “One must also consider the participation outcomes that can be gained from technology, the potential information and insights to be gathered, and how they might inform the planning effort.” (Slotterback, 2011, p. 480-81).

• “research is needed to determine if digital public participation processes differ from traditional public participation processes” (Mandarano et al, 2010, p. 132).

• “The comparative usage and benefits of TPP and WPP practices in actual comprehensive planning remains underexamined” (Stern et al, 2009, p. 1067).
RESEARCH QUESTION

Based on a comparison of five criteria established in the literature, how do planners’ view web-based surveys and community workshops as participatory techniques for planning?
RESEARCH PROCESS
STUDY AREA
CITY: PITTSBURGH, PA
POPULATION: 305,704

SOURCES: US Census Bureau 2010, Google Maps
PLANPGH
OSPR PLAN
OPEN SPACE, PARKS, AND RECREATION
“PUBLIC INPUT IS THE CORNERSTONE OF PLANPGH.”

Noor Ismail, Director of City Planning
http://americancity.org/buzz/entry/2835/

- Pittsburgh
  55 SQUARE MILES

- Open Space System
  5,500 ACRES

- Publicly-owned Parks
  3,000 ACRES (54%)

< MAP SOURCE: Existing Parks and Open Space System Summary, 2010, p. 3
WEB-BASED SURVEY

• Advertised online and in city publications
  • Developed by MIG
  • July – September 2010

COMMUNITY WORKSHOPS

• Advertised online and in city publications
  • Developed by DCP
  • April – May 2011

IMAGE SOURCE:
https://www.facebook.com/planpgh
• DOMINANT RESEARCH PARADIGM
  CASE STUDY METHOD

• UNIT OF ANALYSIS
  PLANNERS’ PERSPECTIVES

• EVALUATION CRITERIA

• DATA COLLECTION
  INTERVIEWS WITH PLANNERS

• DATA ANALYSIS
• A process of empirical inquiry used to understand “contemporary phenomena within a real life context” (Yin, 2005).

• Applied to explore web-based and traditional participatory approaches (phenomenon) utilized for Pittsburgh’s OSPR Plan (context)
UNIT OF ANALYSIS
PLANNERS’ PERSPECTIVES

• Three DCP planners
  • Focused on the views of Pittsburgh’s internal city planners who are directly involved in the OSPR Plan.
  • Explores the perspectives of planners working within limitations of staff and budget.
  • “One of the key issues that planners face in taking on new approaches to planning practice is their own capacity and availability of resources to support such innovation” (Slotterback, 2011, p. 469).
DEVELOPMENT OF EVALUATION CRITERIA

STEP 1
- Criteria of participatory techniques were translated into goals of planning

STEP 2
- Patterns amongst the sets of goals were highlighted to identify regularities

STEP 3
- Patterns were synthesized and grouped under broad evaluation criteria developed for this study
<table>
<thead>
<tr>
<th><strong>Goal 1:</strong> Comprise a broadly representative sample of the population</th>
<th><strong>Goal 1:</strong> Increase public understanding of the planning process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal 2:</strong> Conduct the participation process in an independent and unbiased way</td>
<td><strong>Goal 2:</strong> Seek information about public values and include values in decision-making</td>
</tr>
<tr>
<td><strong>Goal 3:</strong> Involve the public in the process as early as possible</td>
<td><strong>Goal 3:</strong> Involve the public in early scoping</td>
</tr>
<tr>
<td><strong>Goal 4:</strong> Include the output of the procedure in the final plan</td>
<td><strong>Goal 4:</strong> Facilitate greater interaction among stakeholders</td>
</tr>
<tr>
<td><strong>Goal 5:</strong> Make the process transparent so that the public may see what is going on and how decisions are being made</td>
<td><strong>Goal 5:</strong> Make sure the process reduces time and cost</td>
</tr>
<tr>
<td><strong>Goal 6:</strong> Provide access to the appropriate resources to enable participation</td>
<td></td>
</tr>
<tr>
<td><strong>Goal 7:</strong> Clearly define the nature and scope of the participation task</td>
<td></td>
</tr>
<tr>
<td><strong>Goal 8:</strong> Provide appropriate mechanisms for displaying the decision-making process</td>
<td></td>
</tr>
<tr>
<td><strong>Goal 9:</strong> Make sure the approach is cost-effective</td>
<td></td>
</tr>
</tbody>
</table>
STEP 3

FINAL EVALUATION CRITERIA

- EARLY INVOLVEMENT
- INCLUSION OF PUBLIC VALUES
- TRANSPARENCY
- TIME-EFFICIENCY
- COST-EFFECTIVENESS
DATA COLLECTION

INTERVIEWS WITH PLANNERS

INTERVIEW PROCESS:

• Instrument review with thesis committee members,
• IRB approval of the instrument,
• Three 30-minute, face-to-face interviews scheduled and conducted,
• Interviews transcribed from audiotape recordings, and
• Analysis of interview data.
DATA ANALYSIS

- Transcriptions were read twice prior to beginning the analysis.
- Separate analyses of the interviews.
- Combined analysis of the interviews to gain understanding on the similarities & differences.
- Pattern matching was used to link the data and aid in interpreting, clarifying, and illustrating findings.
FINDINGS
<table>
<thead>
<tr>
<th>Criteria: Early Involvement</th>
<th>Web-Based Survey</th>
<th>Community Workshop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criteria Fulfilled  ●</td>
<td>Partially Fulfilled  ▼</td>
<td>Not Fulfilled  ○</td>
</tr>
</tbody>
</table>

“We used the (web-based) questionnaires early on in the process...to generate interest in the plan”

-Planner A
CRITERION 1
EARLY INVOLVEMENT

FOUR PHASE APPROACH

Phase 1
Understanding the Context

Phase 2
Assessing Community Needs

Phase 3
Developing a Plan of Action

Phase 4
Refining and Adopting the Plan

WEB-BASED SURVEY
July – September 2010

COMMUNITY WORKSHOPS
April (25, 27, 28)
May (3, 4) 2011
COMPARING RESPONSE RATES
Web-based Survey vs. Community Workshops

WEB-BASED SURVEY: 1,239 Returned Responses
COMMUNITY WORKSHOPS: 80 Returned Responses
Comparing Response Rates

Community Workshops

<table>
<thead>
<tr>
<th>Location</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allegheny Center</td>
<td>45</td>
</tr>
<tr>
<td>Greenfield</td>
<td>21</td>
</tr>
<tr>
<td>Brookline</td>
<td>15</td>
</tr>
<tr>
<td>Mt. Washington</td>
<td>14</td>
</tr>
<tr>
<td>Lawrenceville</td>
<td>10</td>
</tr>
<tr>
<td>Lawrenceville</td>
<td>8</td>
</tr>
</tbody>
</table>

Location abbreviations:
- Allegheny Center
- Greenfield
- Brookline
- Mt. Washington
- Lawrenceville
<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>WEB-BASED SURVEY</th>
<th>COMMUNITY WORKSHOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>EARLY INVOLVEMENT</td>
<td>●</td>
<td>☂</td>
</tr>
<tr>
<td>INCLUSION OF PUBLIC VALUES</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

Feedback “confirmed what the data was telling us about the (open space) system itself as far as what it was that people were using (and) why they were coming to parks and facilities”

-Planner A

“The web-based survey and the public meetings both provided significant public feedback.”

-Planner B
<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>WEB-BASED SURVEY</th>
<th>COMMUNITY WORKSHOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>EARLY INVOLVEMENT</td>
<td>●</td>
<td>⌂</td>
</tr>
<tr>
<td>INCLUSION OF PUBLIC VALUES</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>TRANSPARENCY</td>
<td>⌂</td>
<td>●</td>
</tr>
</tbody>
</table>

Criteria Fulfilled ●; Partially Fulfilled ⌂; Not Fulfilled ○
CRITERION 3
TRANSPARENCY

“I would say that probably just because of the depth that you can get into with the questionnaire versus the depth and the specific questions that you can answer with face-to-face or public meetings, you probably are able to still get more (transparency) in public meetings.”

-Planner A

“The public meetings all described the public process and how decisions were being made so that is probably the one that best described to the public the process.”

-Planner B
<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>WEB-BASED SURVEY</th>
<th>COMMUNITY WORKSHOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>EARLY INVOLVEMENT</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>INCLUSION OF PUBLIC VALUES</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>TRANSPARENCY</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>TIME-EFFICIENCY</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

Criteria Fulfilled ●; Partially Fulfilled ●; Not Fulfilled ○
CRITERION 4
TIME EFFICIENCY

MIG Hours @ Web-based Survey: 63
DCP Hours @ Community Workshops: 107
CRITERION 4
TIME EFFICIENCY

107 DCP Hours: Community Workshops
- Reviewing Drafts of Game: 6 hours
- Community Workshops: 8 hours
- Compiling Data: 3 hours
- Analysis: 90 hours
<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>WEB-BASED SURVEY</th>
<th>COMMUNITY WORKSHOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>EARLY INVOLVEMENT</td>
<td>●</td>
<td>❀</td>
</tr>
<tr>
<td>INCLUSION OF PUBLIC VALUES</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>TRANSPARENCY</td>
<td>❀</td>
<td>●</td>
</tr>
<tr>
<td>TIME-EFFICIENCY</td>
<td>●</td>
<td>❀</td>
</tr>
<tr>
<td>COST-EFFECTIVENESS</td>
<td>●</td>
<td>❀</td>
</tr>
</tbody>
</table>

Criteria Fulfilled ●; Partially Fulfilled ❀; Not Fulfilled ○
CRITERION 5
COST-EFFECTIVENESS

- Web-based Survey: $5,690
- Community Workshops: $8,780
SUMMARY OF FINDINGS

WEB-BASED SURVEY
PRO: cost, time-efficient, attracted participants
CON: limited by one-way communication

COMMUNITY WORKSHOPS
PRO: two-way communication
CON: extensive time commitments from both planners and individual citizens, low attendance
COMMUNITY WORKSHOPS

“people that show up to meetings typically will be more engaged in the long run.” Planner A

“community workshops...allow an interplay...an exchange between the public and the staff.” Planner B

“we get validation or we hear feedback immediately.” Planner C

WEB-BASED SURVEY

“we were very happy with our ability to address those demographics that we felt like we might not have reached if we just had traditional meetings.” Planner A

“I think our response is double than what we initially expected.” Planner C
The mix of challenges and opportunities, suggests that web-based participatory techniques can be successful, particularly in addition to traditional public involvement approaches.
Continued research is needed to explore how web-based approaches are leveraging the interactive potential of the web to achieve two-way communication between planners and their constituents.

Additional research should be conducted with real users in real life cases of planning to verify the evaluation results presented.


