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Samantha Stewart
samantha.stewart@uconn.edu

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Evaluating the Success of Making Equitable, Predictable, and Transparent Development Decisions by Encouraging Community and Stakeholder Collaboration Through Two Participatory Design Case Studies

Samantha Anne Stewart

B.S., University of Connecticut, 2017

A Thesis

Submitted in Partial Fulfillment of the

Requirements for the Degree of

Master of Science

At the

University of Connecticut

2017

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APPROVAL PAGE

Master of Science

Evaluating the Success of Making Equitable, Predictable, and Transparent Development Decisions by Encouraging Community and Stakeholder Collaboration Through Two Participatory Design Case Studies

Presented by

Samantha Anne Stewart, B.S.

Major Advisor_____

Peter Miniutti

Advisor_____

John Alexopoulos

Advisor_____

Miriah Russo Kelly

University of Connecticut

2017

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Introduction & Context

The University of Connecticut's Community Research and Design Collaborative (CRDC) is an organization consisting of the landscape architecture faculty, graduate, and undergraduate students. Our mission is to do sustainable, equitable, and affordable outreach work with communities. We promote using participatory design strategies throughout the design process in order to make fair, transparent, and successful design outcomes. Participatory design is an approach that encourages actively involving all stakeholders, clients, community members, and site users to make sure the solution meets their desires and needs.

Through CRDC, I used this approach throughout two community based projects; Ecological Screen in Fairfield, CT and Wolcott Park in West Hartford, CT. For my research I completed a series of public and client meetings, public workshops, and surveys in order to educate the public and build a strong consensus not only for the final design result, but also at every step throughout the process. This thesis provides case studies of the Ecological Screen and Wolcott Park project in order to fully evaluate the effectiveness of its participatory design component. I used different evaluating methods for each case study. For the Ecological Screen project, I used simple data collection methods that mostly resulted in qualitative information. Explained in more detail later on, we found this evaluative method to be questionable, especially in the science community. After teaming up with a social scientist (my associate advisor Miriah Russo Kelly), I was able to develop a more thorough evaluative method. We created a blended data collection strategy through the use of surveys in order to evaluate the success of the participatory design component for the Wolcott Park Project.

This thesis will explain the participatory design process as a fully integrated component of the design process throughout each case study. These processes will be evaluated through the

separate methods as explained above. This thesis will show how using blended research methods, instead of single/intuitive methods, when it comes to evaluating the success of a participatory design component, will lead to a more concrete and thorough assessment of the process as well as help develop new and appropriate criteria to create improved models to use in future projects.

Chapter 1 explains the approach of participatory design and its relationship to community projects, landscape architecture, and the design process. Chapter 2 introduces the idea of using blended vs. single methods when it comes to evaluating the success of participatory design components. It justifies why incorporating blended research into your project/study can greatly enhance its credibility not only in the science community but as a practicing landscape architect as well. Chapter 3 provides an overview of the Ecological Screen project, as well as explains the participatory design process, the solution, and the evaluation of the process. Chapter 4 consists of the background, participatory design process, project solution, and process evaluation for the Wolcott Park Project in West Hartford, CT. Chapter 5 is a comparative analysis of the two case studies, which includes comparing and contrasting both processes, evaluation methods, and evaluation findings. In Chapter 6, I begin to make judgements on what makes a successful participatory design process and evaluation method based off of what I had discovered in Chapter 5. Lastly, in this chapter, an improved model is created from the successful parts and pieces from both case studies' processes as well as evaluation methods. This model is explained and detailed so it can be used in future projects for both towns as well as other community based projects.

CHAPTER 1: Participatory Design

What is Participatory Design?

Participatory design is a method used during the design process to engage the community as well as the client, municipal members, and stakeholders in order to come up with an appropriate design solution. Most participatory design methods use meetings, workshops, surveys, and other collaborative tools in order to investigate the needs, desires, and concerns of each user type. According to Joseph Valacich (2015):

> …Participatory design (originally known as 'Co-operative Design') is an approach to design that attempts to actively involve all stakeholders (e.g. employees, partners, customers, citizens, end users) in the design process to help ensure that the product designed meets their needs and is usable. The term is used in a variety of fields e.g. software design, urban design, architecture, landscape architecture, product design, sustainability, project design, planning or even medicine as a way of creating environments that are more responsive and appropriate to their inhabitants' and users' cultural, emotional, spiritual and practical needs. (p. 9)

An important component to participatory design is that its process engages all users as well as uses collaborative design efforts, which in turn results in a solution that works for everyone. (Figure 1.1) This means that in order for the outcome of any community based project to be a successful one, then participatory methods and tools need to be implemented early in the

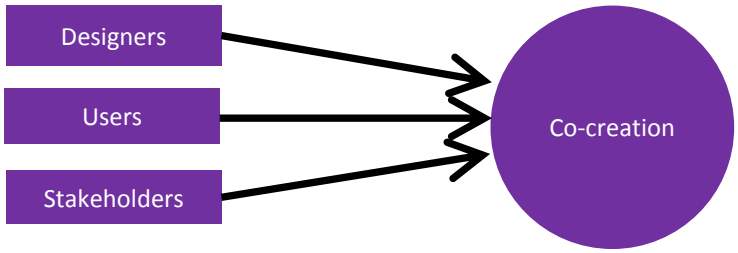


Figure 1.1: A diagram showing the collaborative design process used in participatory design.

design process. It is vital that all voices are heard in conjunction with the ideas and plans of the designer.

History of the Participatory Design Movement:

Landscape Architect, Karl Linn, coined the term "Urban Barnraising," which describes the old American tradition of settlers working together to build each barn on their new land. His book, *Urban Barnraising: Building Community Through Environment*, discussed how the way we build our cities and towns these days has negatively affected our sense of place in the communities in which we live. He believes that the act of Urban Barnraising helps create a sense of community by using democratic processes and collaborative efforts to construct our homes, downtowns, and open spaces. Linn expressed the importance of participatory design and how it can become the modern day movement. In his book he conveyed (1990):

> …To encourage active involvement of residents in the restoration of the private and public spaces in their neighborhoods, participatory planning and self-help management and construction methods have been developed, this is to ensure that peoples' active participation, their "sweat equity" will produce material equity and growing control over the habitat they restore. (pg. 5)

From the 1960s – 1980s, Linn used this theory to inspire his idea of "Neighborhood Commons," which used community involvement to turn vacant, inner city lots, into beautiful public open spaces.

Karl Linn was not the only pioneer during the start of the participatory design movement in the 1960s. Paul Davidoff's Advocacy Planning, Lawrence Halprin's Collective Creativity, and John Friedmann's Transactive Planning are several of the leading participatory methods at the

time. These methods have been used as models for writing participatory design programs even to this day. However, as a designer or community advocate, it can be easy to just go through the motions of citizen participation instead of actually giving the public a say in the matter. Sherry R. Arnstein created the Ladder of Citizen Participation in order to help analyze how much power the people actually have during the participation process. (Figure 1.2) Each rung of the ladder corresponds to the degree of participation (or power) the citizens have in determining the end product of a project. Higher on the ladder, shown in green, is where citizens have more decision-making powers. The middle rungs are levels of tokenism, where voices are heard and the people are well informed. The bottom rungs, is complete nonparticipation or even falsie methods that only educate the public on what will happen, yet give them no ability to change the outcome.

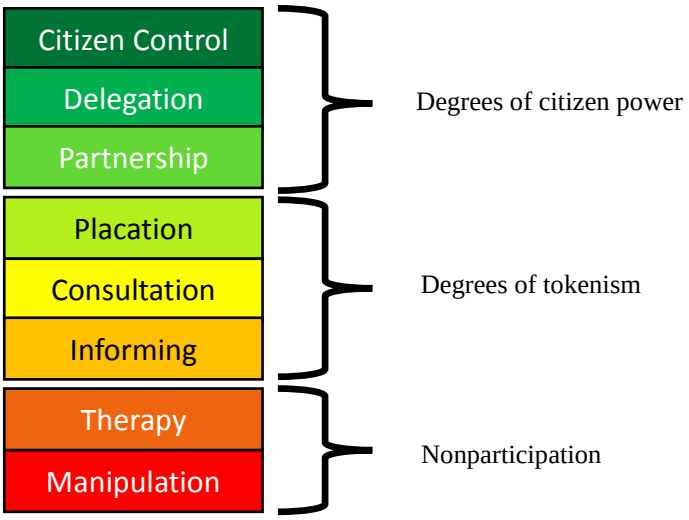


Figure 1.2: The eight rungs of the Ladder of Citizen Participation

1. **Citizen Control:** Community handles the entire job of planning, policy making and managing a program
2. **Delegation:** Citizens hold a clear majority of seats on committees with delegated powers to make decisions.

3. **Partnership:** Power is in fact redistributed through negotiation between citizens and power holders. Planning and decision-making responsibilities are shared.
4. **Placation:** (or Compromise) For example, co-option of hand-picked members onto committees. It allows citizens to advise or plan but retains for power holders the right to judge the legitimacy or feasibility of the advice.
5. **Consultation:** Attitude surveys, neighborhood meetings and public enquiries.
6. **Informing:** A most important first step to legitimate participation. But too frequently the emphasis is on a one way flow of information. No channel for feedback.

7./8.Therapy: (or Control) **and Manipulation:** Both are non-participative. The aim is to cure or educate the participants. The proposed plan is best and the job of participation is to achieve public support through public relations.

Arnstein's ladder shows that it is important to evaluate the methods you are using during citizen participation. You must ask yourself: *Who is holding all the decision making power? Are all voices, including minorities, being heard? Are we working to not only inform the public on what the outcomes are, but to also educate them on what this all means?* When creating a participatory design program, often it is not enough to just mimic historical methods. The designer needs to act as advocate of the community and evaluate the success of their program throughout and at the end of the process to make certain that he/she is giving the power back in the hands of the people.

Benefits & Challenges

Even the best professionals may skip steps unwillingly due to the fact that they have a contract to fulfil that is given to them by the client. Usually, these contracts specify little to no post-

evaluation or validity of the process. Professionals do the best they can to satisfy both the client and site users, while staying within the programmatic requirements. A successful participatory design component, which includes an intensive process evaluation, comes with many challenges, making it very difficult to achieve.

Benefits: (if done correctly)

- *Has clear and fair procedure*
- *Engages broad public*
- *Provides voice for all*
- *Helps poor communities*
- *Ensures freedom of information*
- *Meets the needs of people*
- *Enhances a sense of community*
- *Protects ecosystems and biological diversity*
- *Encourages environmental stewardship*
- *Awakens lay creativity*
- *Improves everyday environments*
- *Stimulates creative design*
- *Improves design in practical ways*
- *Shares form making with public*
- *Creates places for civicness*

Challenges:

- *Takes a lot of time.* Professionals creating, facilitating, and analyzing the process, and often time this is not a focus of the project contract. Clients participating and facilitating process. Participants engaging their free time into the project meetings.

- *Can be very costly.* Costs for additional work hours for designers and professionals working on creating the process as well as evaluation. Materials, meeting spaces, snacks for participants are also factored in.

- *The process may be leaving some people out.* Even if the public meeting facilitator opens the meetings to the public (through flyers, posting on the town website, email invitations) there will most likely be some group(s) excluded. This can include marginalized populations, youth, those with language barriers, and technology divides.

- *Lack of skills.* Not only is creating and facilitating a participatory design component difficult for untrained professionals to do, but writing, implementation, and analysis of surveys and feedback data also takes a certain training and expertise to be done accurately. In-person interviewing takes time, expenses, and can lead to overwhelming qualitative data that is difficult to digest without guidance from a social scientist.

- *Loss of control.* Typically, in projects without a participatory component, professionals have full control over the design decisions (with approval of client). However, when the floor is opened up to collect the feedback, concerns, and desires of the public, the professionals lose their full control on these development decisions. This makes consensus building difficult and time consuming, due to the fact that designers have to meet the demands of more people in their design solution.

As you can see, the benefits of participatory design significantly outweigh its challenges. However, these benefits only come with a successful and thoughtful process. In order to have a seamless process and successful outcome, the designer, client, and participants must be willing to work with these challenges.

Participatory Design in Landscape Architecture

The approach of participatory design is used in various fields including: product design, software design, graphic design, urban design, planning, architecture, and landscape architecture. In the field of landscape architecture, citizen participation is used during the design and planning phases of the built environment. This can range from town greens and plazas, downtown streetscapes, neighborhood parks, schools, and other public open spaces. As landscape architects, we are trained with a code of ethics, one being to positively affect the community and the environment around them. The ALSA Policy Statement on Participatory Design states: (2008)

> …The American Society of Landscape Architects believes that an open, participatory design process can create better communities and a healthier environment. Public involvement will help identify the issues important to the community and develop the most appropriate planning, design, and management solutions. The quality of a community's culture, buildings, monuments, infrastructure, and parks reflects on its civic pride and values. Projects that contribute to the public realm should have a lasting positive effect on both the community and the environment. (pg. 1)

A vital step for that outcome is to engage the public, client, and all stakeholders to make equitable and transparent development decisions.

UConn's Design Process & Participatory Design Process Integrated

As explained above, some participatory design components fall short in reaching its full potential mainly because designers and planners will only use this method during part of the design process verses using it at every step of the project. This is important due to the fact that in order for citizens/participants to get full say in the decision making process, understand the process

and outcomes they are participating in, and feel a sense of trust and ease to move forward, they need to be educated throughout the process.

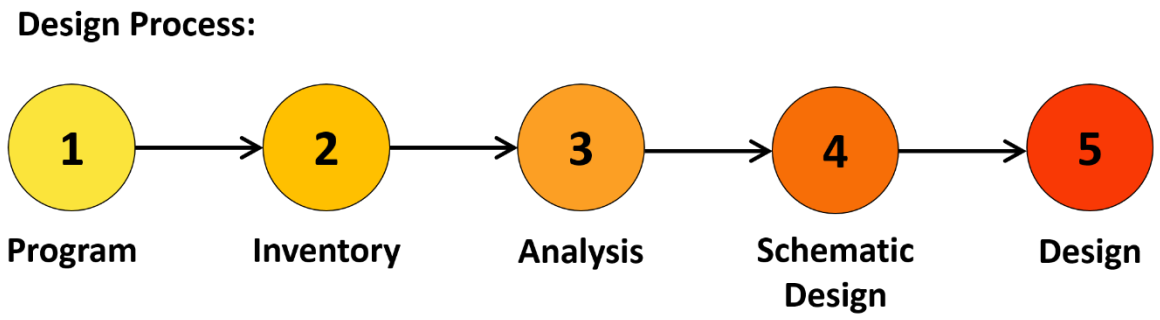


Figure 1.3: Diagram showing the Design Process typically followed by most practicing landscape architects.

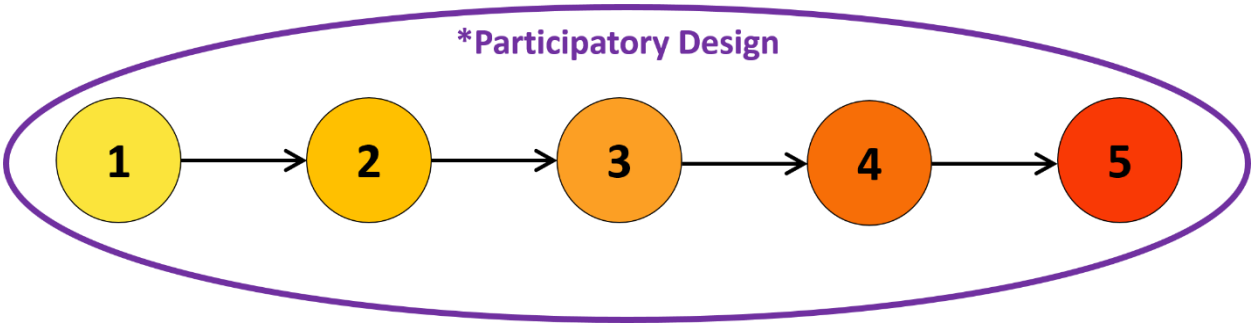


Figure 1.4: Diagram showing the integration of the participatory design component throughout the entire design process.

UConn's design process prides itself in fully integrating our participatory design component into our design process in order to reap the full benefits for the community and the outcome of the project. (Figure 1.3-1.4) This means that we communicate and collaborate with clients, stakeholders, and community participants before we begin the project to gain data on everyone's unbiased opinions on the site as well as fully explain the process in which they will be participating in. We then continue to hold follow up meetings with all user groups as the

project's decisions are underway in order to build consensus and make for a seamless process. Lastly, we will hold a final meeting with the public to showcase the masterplan. Upon approval from the client, stakeholders, and community, the masterplan is used to guide the future implementation and construction of the project. Unlike our process, most designers will save the participatory component for either the beginning or (worse) end of the project. At the beginning they lose the ability to keep the participants trust as more detailed decisions are made. Most of the time, when this happens, the end product will be far different than what was planned during the initial project meetings, thus defeating the purpose of asking the opinions of the citizens in the first place. Contrasting this, only showing the public what the design solution is after everything has been decided, will result in a solution that only benefits the client and designer. An example of this are the highway projects during the 1950's done by the Department of Transportation, in which the DOT used the strategy of "decide-announce-defend" when presenting their plans to the public. This meant that the DOT did not ask for feedback on the project from the community that they were directly impacting. Therefore, the DOT had already made the development decisions, which resulted in one of the largest government mistakes in the last century. If the DOT had engaged the public before and during the planning process, they would find that these communities did not want to outwardly destroy their city with the implantation of the highway system.

CHAPTER 2: Evaluating the Participatory Design Process

How do you measure success?

What makes a successful participatory design program? The answer is actually in the name. Where a lot of public based projects fall short, is the planner or designer forgets to include the opinions, desires, and concerns of the users of the site. Most of the time the designer will only focus on what the client wants and the data they collect from the existing site. In order for a participatory design program to be successful, it needs to actively involve all users, which will lead to an applicable and fair solution for everyone. However, what I have learned, there are many ways in which you can evaluate its success. At the beginning of my research I discovered that many landscape architects and designers use intuitive ways to test the success of their programs. One profound evaluative method that I came across was a table created by Randolph T. Hester, who is a sociologist as well as a landscape architect. He is known for his community participation strategies and methods. Figure 2.1 shows his table, *Evaluating Different Approaches to Participatory Landscape Architecture and Environmental Planning,* which is an expansive matrix of historical participatory design methods that I had studied for my thesis. Below was a list of 42 criteria in which he used to evaluate that particular method. The criteria was broken into seven categories: democratic process, community considerations, environmental justice, learning opportunities, power distribution, ecological considerations, and design outcomes. For each criteria he rated the method with a black dot meaning it was a central focus of the method, a grey dot meaning it was a secondary concern, or a white dot meaning the approach did not use that criteria. Hester's table is used to inspire my evaluative criteria in both case studies.

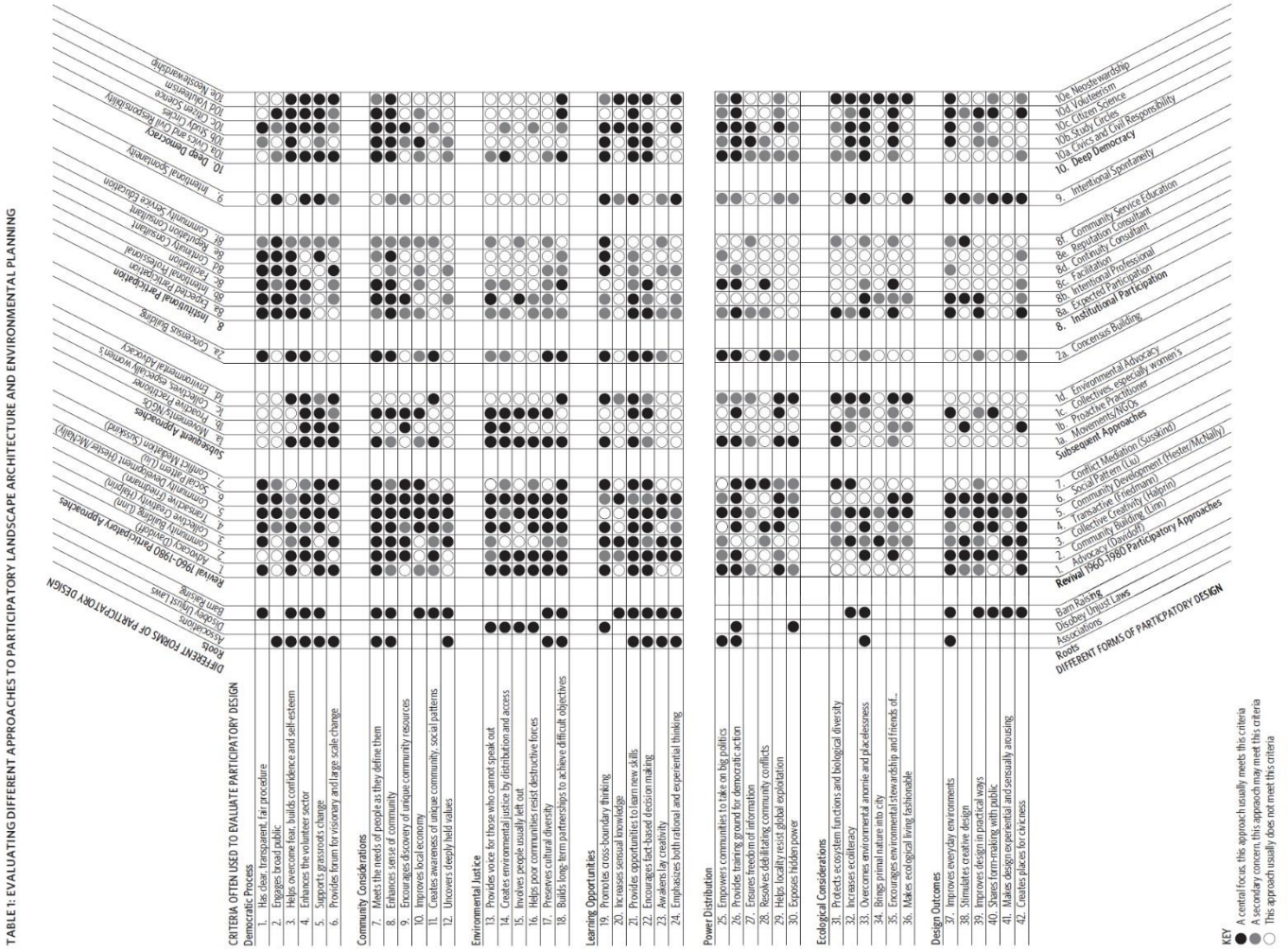


Figure 2.1: Table showing evaluative criteria for participatory design approaches from Randolph T. Hester's Scoring Collective Creativity and Legitimizing Participatory Design.

Process Evaluations

The first main research objective of this thesis is to conduct process evaluations on both case studies to see whether its participatory design process is successful. According to the *Program Evaluation Theory and Practice*, "Process evaluation, sometimes called implementation evaluation, focuses on the appropriateness and quality of the project's implementation." The methods in which I preform these process evaluations defers between the Ecological Screen Project and the Wolcott Park Project. The second main research objective of this thesis is to

compare and contrast the two methods of evaluation. Case study 1 (Ecological Screen) uses single method research strategies, specifically qualitative approaches, being the typical evaluative methods used in my field explained in the beginning of this chapter, while case study 2 (Wolcott Park) uses blended methods in order to evaluate the success of its participatory design component, which will be explained below.

Single vs. Blended Research Methods:

Blended or mixed methods (MM) is a type of research strategy that combines both quantitative and qualitative approaches, which I use as the evaluation method in my second case study. Quantitative research is an approach that measures numerical and statistical data that is collected through closed-ended questionnaires and surveys. Contrasting this, qualitative research is an approach that measures more descriptive and exploratory data that is collected by open-ended interviews and recorded meetings/discussions. Focusing on qualitative data can help a researcher gain more understanding on certain theories or subjects in a more flexible and instinctual way, however, it can be difficult to draw conclusions from. By using blended methods of evaluation, the researcher can easily analyze both the qualitative and quantitative data in unison, which will lead to more in-depth and comprehensive conclusions. Contrasting this, single method research is a strategy that uses only one type of research approach (qualitative or quantitative). For the first case study, I am focusing on single method research that uses only qualitative methods. Using qualitative research as a single method of evaluation generates the similar meaningful and in-depth data that comes with using blended methods, however retains the natural and flexible structure that many designers hold true to. Most often, using exclusively qualitative methods allows for a simple and effective way to tell the story of a certain matter or problem.

Types of Evaluation Methods:

In the field of social research there are many methods used in process evaluations. These methods are typically categorized by whether they are qualitative (in-person interview) or quantitative (multiple-choice survey). In some fields, quantitative methods are regarded as more valid and are far more respected than qualitative methods, however this is not truly the case. In his book *The Basics of Social Research,* Earl Babbie wrote, "Both qualitative and quantitative methods are useful and legitimate in social research; we need both." (pg. 21) Hence, many methods use a mixed method approach, which combines qualitative and quantitative research. Below is a list of evaluation methods that I will be discussing in this thesis as well as an explanation on each.

Evaluation Methods Discussed in Thesis:

1. Surveys (online or print)
    a. Close-ended questions (Quantitative)
    b. Open-ended questions (Qualitative)
2. In-Person Interviews (Qualitative)
3. Observation (Qualitative)
4. Self-Review (Qualitative)

The primary method that is discussed in my second case study is survey research, which combines qualitative and quantitative methods as a blended approach. According to *The Basics of Social Research* by Earl Babbie, "Survey research is probably the best method available to the social researcher who is interested in collecting original data for describing a population too large to observe directly." With participant, client, and stakeholder populations being well over 40 people for some projects, surveys make it easier to get feedback from everyone. This group is

also known as the survey sample, which is typically compiled from the meeting attendance list. Surveys most of the time consist of questions, that are typically open-ended or close-ended. Open-ended questions act as qualitative research and give the researcher more descriptive and thoughtful answers. On the other hand close-ended questions act as quantitative research (multiple-choice, scale answers) and give more numerical or specific data. It is important to include both types of questions in surveys in order to receive more in-depth data.

Other Important Things to Consider When Creating a Survey: (Babbie, pg. 242-246)

- Make items clear
- Avoid double-barreled questions
- Respondents must be competent to answer
- Respondents must be willing to answer
- Questions should be relevant
- Short items are best
- Avoid negative items
- Avoid biased items or terms

The next three evaluation methods are specifically qualitative forms of research and are used in my first case study. The first method is observation, which is when a researcher observes ongoing behavior of a group within a specific setting. This is often an inexpensive method to perform since there are not many materials needed. Yet, the number of hours spent observing a process in action as well as quantifying the notes and data can be time consuming. It is also vital that the observer is remains neutral while making observations in order to avoid biased or dishonest inferences. In *Program Evaluation Theory and Practice: A Comprehensive Guide*, Mertens and Wilson lists possible things an observer should take into account: (pg. 379)

1. Program Setting

2. Human and social environment
3. Program activities and behaviors
4. Informal interactions and unplanned activities
5. Native language or terminology
6. Nonverbal communications
7. Unobtrusive measures
8. Observing what does not happen

The next qualitative method used is in-person interviewing, which a research method in which the researcher and participants are asked a series of questions on a given subject in the same location. According to Carter McNamara, author of *General Guidelines for Conducting Interviews* (1999):

> "Interviews are particularly useful for getting the story behind a participant's experiences. The interviewer can pursue in-depth information around the topic. Interviews may be useful as follow-up to certain respondents to questionnaire, to further investigate their responses."

In-person interviews allow for more personal responses than surveys and are an effective way for a researcher to read into the emotions and body-language of the participant. However, performing individual interviews with each participant can become time consuming if the sample size is large. If the participant group is large, it is important to understand who would be vital respondents to include in this method. This method as well as participant observation are both forms of ethnography, which is a type of research that studies a group of people within an uncontrolled environment and is widely used in social science research.

The last method is self-evaluation or post professional review. This method is usually the most overlooked evaluation method due to the fact that it can be viewed as a biased and dishonest form of assessment. However, self-evaluations allow for the researcher to be reflective in the process that they created and implemented during a project. This is done by a researcher investigating all the data collected from other methods during the process evaluation and making inferences as to why certain outcomes were shown. This can help drive improvements for future projects, which in turn creates a more successful product. (Figure 2.2) Additionally, as trained professionals in their given fields, they are able to explore challenging and probing questions that general participants from the given study could not understand.

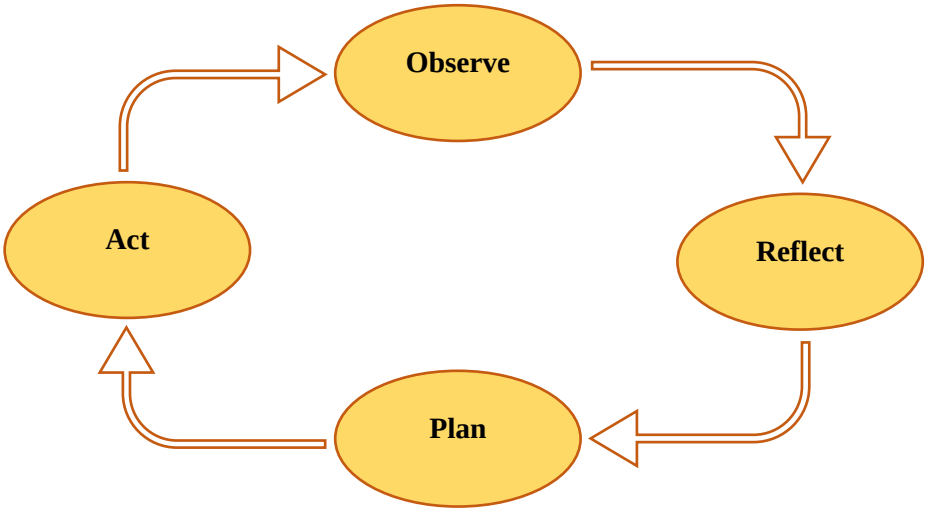


Figure 2.2: Data for Self-Evaluation Diagram. From the National Foundation for Educational Research (NFER)

The strategy of using three evaluation methods to measure the same subject is known as triangulation. Triangulation is used as an approach to corroborate data that is found from qualitative research. It can be used to verify the validity of the collected data as well as create an in-depth assortment of results, which can lead to a deeper understanding of a concept. There are

four types of triangulation. This thesis focuses on two types, which are listed below, as explained by Denzin (1978) and Patton (1999):

1. **Methods triangulation** - checking out the consistency of findings generated by different data collection methods.

    - It is common to have qualitative and quantitative data in a study
    - These elucidate complementary aspects of the same phenomenon
    - Often the points were these data diverge are of great interest to the qualitative researcher and provide the most insights
    - As seen in the Ecological Screen Project (Chapter 3), the Wolcott Park Project (Chapter 4), and Ideal Participatory Design Process Evaluation (Chapter 6)

2. **Triangulation of sources** - examining the consistency of different data sources from within the same method.

    - For example:
        - at different points in time
        - in public vs. private settings
        - comparing people with different view points
    - As seen in the Ecological Screen Project (Chapter 3)
        - Public
        - Clients
        - Project Team

<u>Creating a Process Evaluation:</u>

When deciding what evaluation methods to use in a process evaluation, the researcher or investigator must ask themselves what the purpose is of the evaluation. According to the book,

Program Evaluation Theory and Practice (Mertens and Wilson, pg. 348), there are various evaluation purposes depending on the goals and outcomes that the researcher wants to get out of the evaluations. Listed below are two examples that fit with the intent of my study:

Purpose: To gain insight or to determine necessary inputs

Design and Choice Criteria

Surveys – use mail, email, and web-based surveys when information is needed from a large number of participants; data needs to be interpreted cautiously because of the lack of personal connection with participants. Personal interviews can be used when more detailed information is required from a smaller number of participants.

Any mixed methods design – use when both quantitative and qualitative data are needed; be cognizant of the limitations of quantitative and qualitative approaches.

Purpose: To assess program effectiveness

Design and Choice Criteria

Surveys – use as explained above; be aware of biases due to self-reporting.

Any mixed methods design – use as explained above when the focus of the evaluation is on process and effectiveness.

Figure 2.3: Table showing part of Box 9.8 "Evaluation Purposes, Designs, and Criteria for Choices" from Program Evaluation Theory and Practice, pg. 348.

The next step is decide who to involve in the evaluation. Mertens and Wilson (pg. 364) believe in the importance of using multiple data sources. Their book states, "Qualitative evaluators recommend the use of multiple data sources (different people in different positions) and different data collection strategies: observation, interviews, and document reviews to

strengthen the credibility of their findings. This was formally known as triangulation." For participatory/community design projects those data sources can include:

1. Community Participants
2. Stakeholders & Community Groups
3. Clients
4. Municipal Members
5. Design Team

The list can be even more in-depth than that, which can strengthen the research feedback even more. The book, *Evaluation: A Systematic Approach* (Rossi, Lipsey, and Freeman, pg. 48-49) believes that, "Every program is necessarily a social structure in which various individuals and groups engage in the roles and activities that constitute the program." Listed below are some of the individuals or groups that are recommended to involve:

1. *Policymakers and Decision Makers*: persons responsible for deciding whether the program is to be started, continued, discontinued, expanded, restructured, or curtailed.

2. *Program Sponsors:* Organizations that initiate and fund the program. They may also overlap with policymakers and decision makers.

3. *Evaluation Sponsors:* organizations that initiate and fund the evaluation (some-times the evaluation sponsors and the program sponsors are the same)

4. *Target Participants:* persons, households, or other units that receive the intervention or services being evaluated.

5. *Program Managers:* Personal responsible for overseeing and administering the intervention program.

6. *Program Staff:* Personnel responsible for delivering the program services or in supporting roles.

7. *Program Competitors:* organizations or groups that compete with the program for available resources. For instance, an educational program providing alternative schools will attract the attention of the public schools because the new schools are seen as competitors.

8. *Contextual Stakeholders:* organizations, groups, and individuals in the immediate environment of a program with interests in what the program is doing or what happens to it (e.g. other agencies or programs, public officials, or citizens' groups in the jurisdiction in which the program operates).

9. *Evaluation and Research Community:* evaluation professionals who read evaluations and pass judgement on their technical quality and credibly and researchers who work in areas related to a program.

CHAPTER 3: Case Study 1 – Ecological Screen, Fairfield, CT

Background

This first case study of my thesis uses a participatory design strategy in order to promote a smooth process and relationship between the client group and residents. Located on Richard White Way in Fairfield, Connecticut, the Department of Public Works (DPW) facility is adjacent to a sanitary landfill, tidal marsh, and Pine Creek, which opens to a pond on the western side of the site. Residential homes are located on the north and south sides of the site. (Figure 3.1) The

Figure 3.1: Existing aerial photo of site with resident location markers of each public meeting participant.

main issue that has stemmed from these adjacent land uses is that the DPW facility has an ongoing fill operation, which has left a pile that is over 60' in height. (Figure 3.2) Furthermore,

there is a tree operation as well as large trucks coming in and out of the site, which has created a lot of noise. The surrounding residents (mainly from the southern side across the marsh, Figure 3.3) have complained to the Town and DPW about the unsightly views, loud noises, and unpleasant smells that the facility has caused. The community's concerns are understandable since the adjacent land use is not compatible with the existing residential area. Due to unresolved citizen complaints, it was decided to get outside help from UConn in order to fix the issue in a feasible manor that will not only preserve the existing functions of the site, but to also leave the community happy with the results.

Figure 3.2: Existing site photo of sight-line to pile from resident's property.

Figure 3.3: Existing photo of sight-line to residents' properties from site.

The Ecological Screen case study was chosen to be used in my thesis due to several factors. One being that the client (Town of Fairfield) was dealing with growing issues with the residents and specified an interest in using community engagement and participatory strategies in order to mitigate these issues. Therefore, the program and contract of this project allowed UConn to fully integrate a participatory design component into the design process. This case study was also used to not only test the success of the design solution, but to measure the overall satisfaction of the community at the end of the process. Lastly, this project came at a convenient time, just as I was beginning my graduate studies.

The Players -

UConn's CRDC Team:

1. Peter Miniutti, Associate Professor and Director of CRDC
    - Responsible for overall project management
2. Samantha Stewart, Graduate Student
    - Responsible for research, public meeting facilitation, and presentation graphics
3. Natalie Miniutti, Adjunct Professor
    - Responsible for all architectural project elements

Client team: (Figure 3.4)

1. First Selectman of Fairfield, CT
2. Director of Public Works of Fairfield, CT
3. Superintendent of Public Works of Fairfield, CT

Stakeholders:

1. Sand and Gravel Group
2. Fire Chief of Fairfield, CT
3. Conservation Director of Fairfield, CT

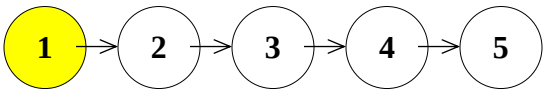
Figure 3.4: Peter, Superintendent, First Selectman, and Director of Public Works

Public Participants:

1. Residents of Fairfield, CT who voluntarily attended public meetings
    - The majority of whom were directly affected by the view, noise, and smells from the facilities.

Process

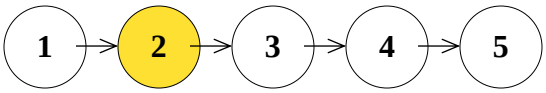
The Design Process was integrated with numerous client, stakeholder, and public meetings (13 in total). Below describes the meetings step-by-step within this design process to further explain our participatory design process.

Program: 

Facilitate communication between the public and town officials and coordinate work efforts to mitigate public exposure to essential activities at the Fairfield, CT Town Facility:

1. Visual impact of fill operation and tree operation
2. Sound control
3. Wildlife concerns

The project's overall objective was to develop a design to fulfill the programmatic requirements from the client as well as engage the public through participatory design in order to meet the needs and desires of the community. During this phase, UConn was invited down to discuss qualifications and the project program. We met with the site users and town officials, including the Director of Public Works, Superintendent of Public Works, Fire Chief, and Conservation Officer. We were hired for the job and began negotiations for the contract over the phone with the client group.

Inventory: 

UConn began the inventory phase by touring the facilities with the client team to study the existing site uses and meeting with the town's GIS expert. To build a better understanding of the site, UConn visited two more times to collect existing data on the site and adjacent land uses. (Figure 3.5) View sheds were studied, site photos were documented, and conversations were shared between UConn and the client team. The next meeting was held with UConn and the

clients to share preliminary design ideas for the proposed solution. The group discussed the first public meeting date and agenda. The first public meeting was held on June 23, 2016 at 7:00 PM at Sherman Elementary School. News of the meeting had been spread through several neighborhood groups including: Fairfield Beach Road Association, Fairfield Beach Peninsula Association, Fair Acres Association and four local members from the Representative Town Meeting Government. The client posted notices of the public meetings on the town website and in the Town Clerk's Office as well. UConn presented our past projects and qualifications, base information and site inventory to the public with an extensive question and answer session. Participants were asked to give their feedback through surveys that were handed out as well as marking their residence on an aerial map (Figure 3.6 & 3.7)

Figure 3.5: Inventory Map of existing site uses

Figure 3.6: Participants give their feedback at the first public meeting.

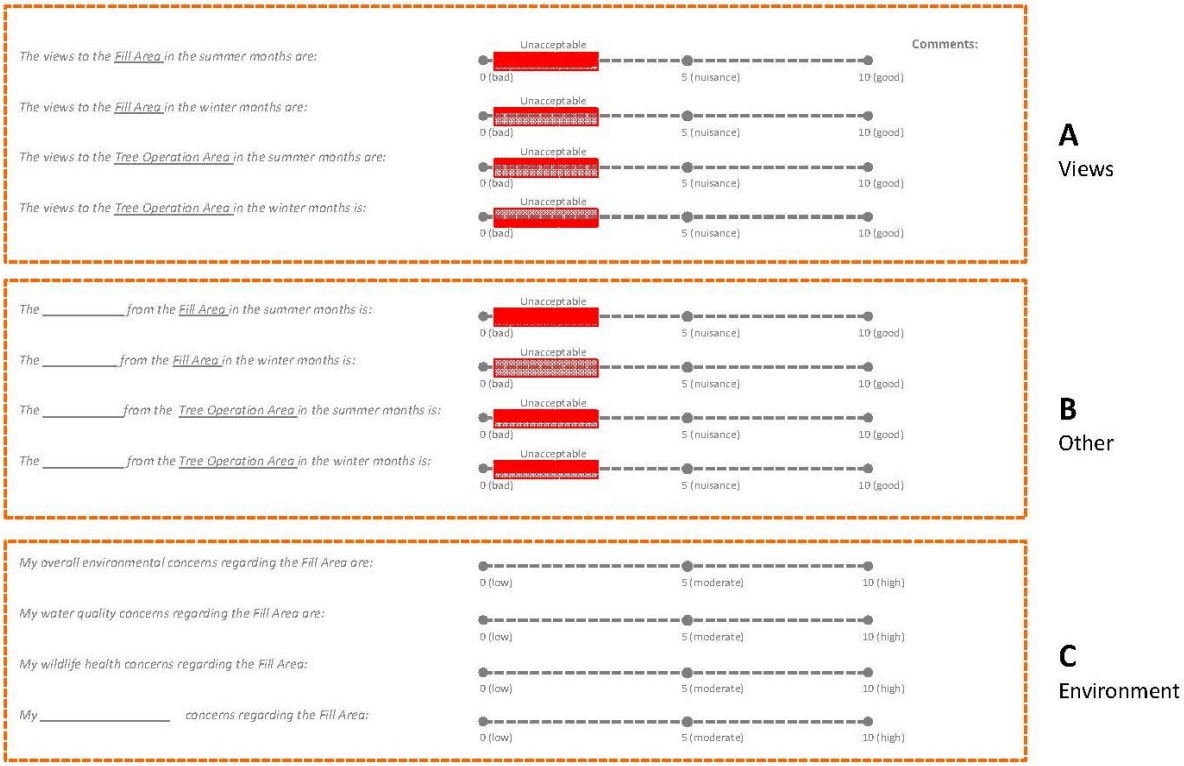
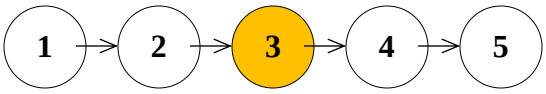
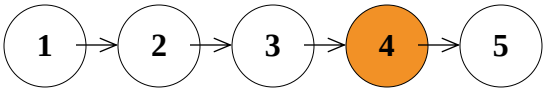


Figure 3.7: Sample survey given to residents at the first public meeting.

<u>Analysis:</u> 

After collecting all the surveys that were given to participants at the first public meeting, UConn began the analysis phase. (Figure 3.8) I graphically showed what issues were of the most concern to the participants by placing a yellow dot to represent each response given. The yellow dots on the side of the survey represented a blank response (which there happened to be quite a few). This analysis showed that the highest concern to the residents was the view of the fill area both in the summer and winter months. These concerns would be used to drive our design decisions during the schematic design phase.

Figure 3.9: Results from initial participant survey.

Schematic Design: 

After learning what the town and public wanted, UConn was able to start the conceptual design phase. Interaction within the UConn team became the priority in order to create multiple design alternatives and evolve them into a final design that fit the programmatic needs. Next, UConn presented work to the client group to debrief them on our preliminary design ideas, models, and products that would be shown in the second public meeting. UConn then met with the sand and

gravel group, who is the main user of the site. After sharing our design ideas, they supported our direction for the project. Several weeks later, UConn had a conference call with town officials and the master facilitator to get a general direction on how to approach the next public meeting. The second public meeting was held on Wednesday, October 5, 2016 at 7:00 PM at Roger Sherman Elementary School, which provided a close location for the participants. UConn presented the preliminary design, which was well received by the client group, stakeholders, and residents. UConn receives go-ahead to begin the final design process. (Figure 3.10)

Figure 3.10: Public meeting with town officials facilitated by UConn's team to seek approval for schematic design.

<u>Design:</u> **1** → **2** → **3** → **4** → **5**

UConn formalized the approved design into schematic construction documents that would be used to guide the implementation of the design. During this phase, UConn coordinated with town officials and GIS expert as the project moved into the construction phase.

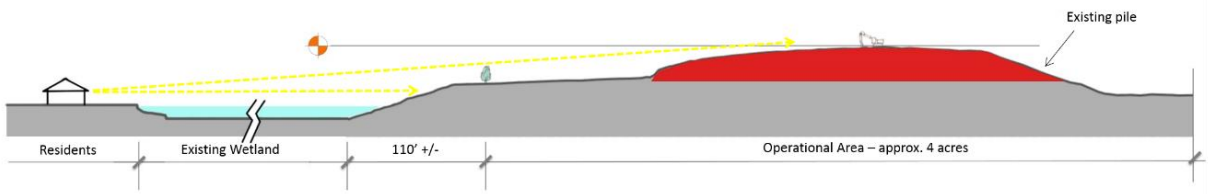
Solution

The final design consists of a 45' berm and 10' retaining wall that will visually and acoustically block out the Town's Department of Public Works Facility to the neighboring residents. Proposed upland buffer plantings will be used along with the existing riparian buffer to act as a screen. An access road is proposed through the site to allow for maintenance and active

recreation. Perching poles and bird houses are proposed to incorporate more biodiversity into the site. (Figures 3.11-3.14)

Figure 3.11: Final schematic master plan construction drawing. Drawing set includes grading and layout plan. Set sent to client for construction.

Figure 3.12: Perspective and bird's eye view of proposed pedestrian walking path. The proposed berm not only solves the client's problem, yet also functions as an asset to the Town of Fairfield and its residents.



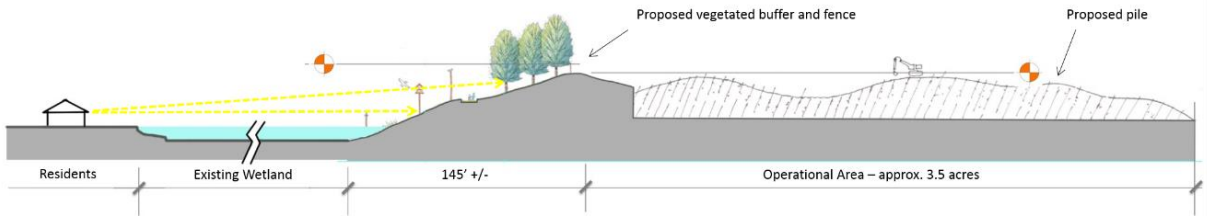


Figure 3.13: Existing cross section shows relationship between residents and the site. Existing pile is within sight lines at 65'.

Figure 3.14: Typical cross section of proposed berm and vegetated buffer to visually and acoustically block the operational area. The pile is not to exceed 45'.

Evaluation

<u>Evaluation Methods:</u>

Fairfield's Ecological Screen project was the first of two case studies for my thesis. As explained in Chapter 2, we used qualitative research methods to evaluate the success of its participatory design component. The methods were broken into three types:

1. Feedback interviews from the client group
2. Public Evaluative Criteria (verbal observation during final meeting)
3. Self-Evaluative Criteria (professional judgement)

These evaluative methods were used for this case study because they were what I initially found most prevalent in other similar landscape architecture and planning projects according to my research and it is what I was taught during my undergraduate and graduate career at UConn. This is due to the fact that these evaluation methods are instinctual, quick, and easy to perform. After

more research into social science and process evaluations I found that these are in fact valid forms of research. Typically, in order to help prove the validity of qualitative data, researchers will use a method called triangulation. This is a strategy that uses three different research methods to test a single concept in order to compare the results. If the results from all three methods are similar then the data is justified. (See Chapter 2 for more information)

The first evaluation method was an open-ended interview that was sent to the three members of the client group (First Selectman, Director of Public Works, and Superintendent of Public Works). This was used in order to get an honest and in-depth review on our process. (Figures 3.15-3.16) The Interview was broken into four parts: Project Inception, Public Outreach, Project Performance, and Service Learning. Project Inception was to get a sense on why the project was being done as well as why UConn was chosen for the facilitation of the community involvement and design. Public Outreach was used to discover the initial/after-thoughts and concerns of the clients when it comes to engaging the public during the design process. Project Performance gave us feedback on UConn's success during the participatory design and public meeting process. Service Learning gave perspective on their views when it came to using students during the project. As explained in Chapter 2, in-person interviewing is an effective way to get direct feedback from a participant. They are much more personable than individual surveys due to the fact that the interviewer is able to read body language of the interviewee, which makes it easier to infer emotion that they are portraying. The interviewee also feels as though their voice is strongly valued in the evaluation process since the researcher is taking the time to meet with them one-on-one. In turn the interviewee may give far more in-depth responses to make it worth your time.

Public Outreach and the Ecological Screen at Fairfield's DPW Facility

Project Inception:

1. What was the motivation to create a berm to the south side of the DPW facility?
2. Did you consider doing the work 'in-house'? If yes, why did you reconsider?
3. Why did you contact Peter Miniutti and Community Research and Design Collaborative (CRDC) vs. others? How did you know about us?

Public Outreach:

1. How important do you find involving the public on a project like this? Why?
2. Do you feel obligated to involve the public, or do you personally enjoy the process?
3. What are some concerns that come with working with the public?

Project Performance:

1. How do you feel the public outreach went in regards to UConn's work?
2. Do you think that using visual aids when explaining the project design to the public was helpful or confusing? (i.e. our graphics, maps, models)
3. How could we improve our interaction with the public?

Service Learning:

Service learning is a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities.

1. Do you support the idea of service learning?
2. Do you feel the public reacts positively or negatively to having students involved?

Others comments?

Figure 3.15: Interview Questions that were sent to all three members of the client group for the Ecological Screen project. See full responses in the Appendix.

The second evaluation method is a Self-Evaluative Criteria Chart (Figure 3.16) for our participatory design program, which is inspired by the *Evaluating Different Approaches to Participatory Landscape Architecture and Environmental Planning* table that was created by Randolph T. Hester, as explained further in Chapter 2. I broke it down into three categories and

limited it to 15 criteria in order to make it easier to comprehend and analyze. From there I gave the matrix five scores: extremely successful, somewhat successful, neutral, somewhat unsuccessful, and extremely unsuccessful. If the professional evaluator is honest and unbiased in their answer when filling out this chart, it can be an invaluable piece of qualitative data. Not only do professional reviews allow for the researcher to be self-reflective, but they also acquire a thorough assessment on the process from and expert who is extremely knowledgeable on the subject. This means the researcher can answer far more challenging questions on the structure and theories behind the process than a client or community member ever can.

Self Evaluative Criteria for Participatory Design	Extremely Successful	Somewhat Successful	Neutral	Somewhat Unsuccessful	Extremely Unsuccessful
Democratic Process & Environmental Justice					
1. Has clear and fair procedure					
2. Engages broad public					
3. Provides voice for all					
4. Helps poor communities					
5. Ensures freedom of information					
Community and Ecological Considerations					
6. Meets the needs of people					
7. Enhances a sense of community					
8. Protects ecosystems and biological diversity					
9. Encourages environmental stewardship					
10. Awakens lay creativity					
Design Outcomes					
11. Improves everyday environments					
12. Stimulates creative design					
13. Improves design in practical ways					
14. Shares form making with public					
15. Creates places for civicness					

Figure 3.16: Table showing UConn's self-evaluative criteria for analyzing success for the participatory design process adapted from Hester's criteria shown in Figure 2.1 in Chapter 2.

The third evaluation method was a Public Evaluative Criteria for our participatory design process, which was collected through observation of the community participants during the two public meetings. (Figure 3.17) This chart is composed with similar public evaluative criteria as the Self-Evaluative Criteria Table (Figure 3.16), however focuses on the engagement, understanding, and approval of the community based on what was presented. The categories ask the questions: *Were the procedures used clear and fair? Did the process involve and engage everyone? Were all comments and concerns heard? Was a clear consensus met? Were the client to public relations transparent? Was there overall support for the project?* Based on participant physical feedback and reactions during the final meeting (i.e. nodding of heads, smiling, verbal agreement, lack of concern, and positive feedback) each of these questions was given a score. This evaluation method was used for this project because it is an effective way to assess the process in action. Many methods tend to look at pre-collected data and make inferences on what has already happened. Yet, by observing the public meetings directly, the researcher is able to catch small details that may have been missed if they were to only evaluate the bigger picture.

Public Evaluative Criteria for Participatory Design Process	Extremely Successful	Somewhat Successful	Neutral	Somewhat Unsuccessful	Extremely Unsuccessful
Public Meetings and Workshops					
1. Procedure is clear and fair					
2. Involvement/Engagement of everyone					
3. All comments and concerns were heard					
4. Clear consensus was met					
5. Transparency of client to public relations					
6. Overall support of project					

Figure 3.17: Table showing UConn's public-evaluative criteria for analyzing success for the participatory design process used in the Ecological Screen Project. Participant observation is used to complete table.

Evaluation Findings:

Figures 3.16-3.18 are sample responses from each member of the client group during the in-person interviews. Since the open-ended responses are considered to qualitative data, inferences were made from the positive or negative feedback that was mentioned the most among the client group. These open-ended responses also gave light to the opinions of each client member regarding the project outcome and UConn's process that would not result from a similar multiple choice survey.

"Reputation, previous successes, and compromise vs. win all mentality."

- Superintendent of Public Works

Figure 3.16: Interview Feedback on choosing UConn CRDC for the Project.

"We needed to involve them. They will be the main beneficiaries of the future improvements."

"We were obligated to include them, because they were the main customers. I did enjoy the project, it is something that was desired by the residents, as opposed to some projects where they are objectors."

- Director of Public Works

Figure 3.17 Interview Feedback on the importance of using Participatory Design.

"I thought it was excellent. We had two public hearings and we are still continuing to use the diagrams and graphics developed and I think the public understands as well as they can what we are up to. At some point they won't know until we actually do it but they got as a good of an education and understanding as they can get."

"You did an excellent job. I know you met with myself and other key people on the town's side before to understand the issue. I know we had the two different meetings with the public we defined the issues and the process so the public knew what to expect. That is everything I would expect in a good communication process and design process."

-First Selectman of Fairfield

Figure 3.18: Interview Feedback on UConn's Participatory Design Process.

After collecting all the observation records from both public meetings, I interpreted the notes and gave each category a score (highly successful, somewhat successful, neutral, somewhat unsuccessful, or extremely unsuccessful). The finished public feedback chart had all but one category scoring a "great." The only category to score below this was #5: Transparency of client to public relations. However, it was not specifically UConn's participatory process that was given this score, meaning that it would not impact its success. The reason for this was that the town/client had received backlash from the public during the meetings due to lack of trust. This was concluded because the participant audience was cooperative and supportive during UConn's presentation, yet defensive and irritated while the town officials were discussing the

Public Evaluative Criteria for Participatory Design Process	Extremely Successful	Somewhat Successful	Neutral	Somewhat Unsuccessful	Extremely Unsuccessful
Public Meetings and Workshops					
1. Procedure is clear and fair	X				
2. Involvement/Engagement of everyone		X			
3. All comments and concerns were heard	X				
4. Clear consensus was met	X				
5. Transparency of client to public relations				X	
6. Overall support of project	X				

Figure 3.17: Verbal Feedback Chart as observed from final public meeting.

project timeline and budget. This category's negative feedback was further validated several months after UConn left the project at the end of the design phase. Polluted substances were left/stored on site which was found when an environmentalist tested the soils on the site. This put a halt on construction, which left the public outraged at the town.

Out of the 15 total criteria, 12 were rated highly successful. The three categories to receive below that were: 2. Engages broader public, 4. Helps poor communities, and 10. Awakens lay creativity. UConn's process scored not successful in "helps poor communities" not because the process was hurting poor communities, but because the process was not doing anything additional to aid those in need. The second category "engages broader public" received moderately successful due to the fact that the meetings were open to the public, however, specifically only affected those who lived within a close proximity to the DPW Facility and not

Self Evaluative Criteria for Participatory Design	Extremely Successful	Somewhat Successful	Neutral	Moderately Unsuccessful	Extremely Unsuccessful
Democratic Process & Environmental Justice					
1. Has clear and fair procedure	X				
2. Engages broad public				X	
3. Provides voice for all		X			
4. Helps poor communities					X
5. Ensures freedom of information	X				
Community and Ecological Considerations					
6. Meets the needs of people	X				
7. Enhances a sense of community	X				
8. Protects ecosystems and biological diversity	X				
9. Encourages environmental stewardship	X				
10. Awakens lay creativity				X	
Design Outcomes					
11. Improves everyday environments	X				
12. Stimulates creative design	X				
13. Improves design in practical ways	X				
14. Shares form making with public	X				
15. Creates places for civicness	X				

Figure 3.18: Professional judgement chart.

the entire town of Fairfield (even though anyone was able to come if desired). Lastly, “awakens lay creativity” received moderately successful as well, due to the fact that there were not any design specific activities during the workshops and meetings. The participants were given full power to voice their opinions and concerns through discussion, surveys, and questions, yet did not aid in form giving during the design process.

Discussion:

Overall, UConn’s participatory process used for the Ecological Screen project was viewed as successful from the data derived from the single, qualitative research methods. This included detailed responses from all members of the client group, observation of participant responses and reactions from both public meetings, and a professional-review modeled from proven participatory criteria done by the UConn team. Not only was the feedback from the client interviews positive, but the majority of the categories for both the public and professional feedback scored “extremely successful”. Chapter 5 will compare this process, evaluation method, and evaluation findings in the second case study: Wolcott Park (Read about the second case study in Chapter 4). Chapter 6 will then discuss the comparisons in order to conclude which project has a successful participatory process as well as evaluation method.

CHAPTER 4: Case Study 2 – Wolcott Park, West Hartford, CT

Background

The second case study that uses a similar participatory design approach is the Wolcott Park Project, which is the re-design of a neighborhood park located in the town of West Hartford, Connecticut. Wolcott Park is surrounded by three roads, one being a major arterial road, New Britain Ave or Route 71. On the South side of the park is Wolcott Elementary School, which is separated by the children's forest. The existing park includes a little league sized baseball field, soccer field, basketball courts, tennis courts, picnic tables, playground, splash pad, concession/bathroom facilities building, and a small pond. (Figure 4.1) The park used to be a

Figure 4.1: Birds Eye View of Wolcott Park.

farm owned by Henry A. Wolcott, which gave the park and school its name when it was sold in 1957. In the 1960's the firm Johnson & Richter gave the park its unique land forms and design that can be seen today. While keeping the overall integrity of the park, the Town of West

Hartford wanted to update the park and its facilities as a part of its overall parks master plan for the town. Previously, UConn had worked with the organization Friends of Fern on another neighborhood park called Fernridge Park. UConn had used a similar participatory design component for this project, which had led to a successful end product. The next park on the list to be re-designed was Wolcott so UConn was hired a second time. The Wolcott Park project was chosen to be the second case study of this thesis because UConn had used a similar and effective participatory design component while working on Fernridge Park and the client (Director of Leisure Services) wanted to continue these strategies with Wolcott Park. This thesis measures the success of the participatory design process in order to promote stewardship and trust among the community, create a design solution that meets the needs of the neighborhood, and makes improvements on the existing model that can be used in future projects in West Hartford.

The Players -

UConn's Team:

1. Samantha Stewart, Graduate Student
2. Peter Miniutti, Associate Professor
3. Natalie Miniutti, Adjunct Professor

Client:

1. Director of Leisure Services and lead client contact for project

Secondary Town Officials:

1. Supervisor of Leisure Services
2. Town Planner
3. Town Manager's Office
4. Department of Public Works

Stakeholders:

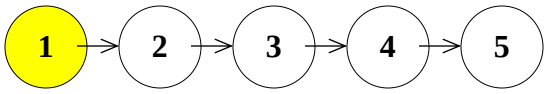
(See Process – Inventory for List)

Public Participants:

1. Residents of Wolcott, CT who voluntarily attended public meetings
    - The majority of whom was within a 10 minute walk of Wolcott Park or visit the park on a weekly basis.
2. Any other citizen interested in attending the public meetings

Process

We began this project by meeting with our client, to discuss and write the Program for the Wolcott Park Project. It was vital that we defined the program with both the client and community in mind, due to the fact that one of the main objectives was to fully engage the public during the design process.

<u>Program:</u> 

The development of a substantive park renovation plan includes an assessment of the park as it is today, community outreach, drafting and tweaking a plan, setting a timeline and budget, and, finally, implementing the plan over a period of time.

Objectives -

1. Create an inspirational, affordable, and equitable design that fulfills the programmatic requirements given by the client.

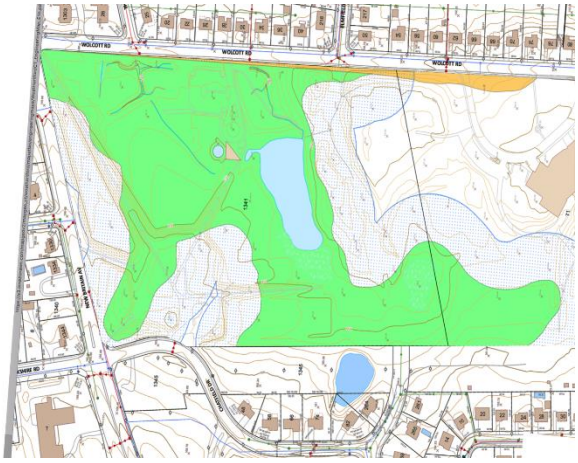
2. Use a participatory design component throughout the design process to satisfy the needs and desires of the community and client.

Inventory: *Site* 1 → 2 → 3 → 4 → 5

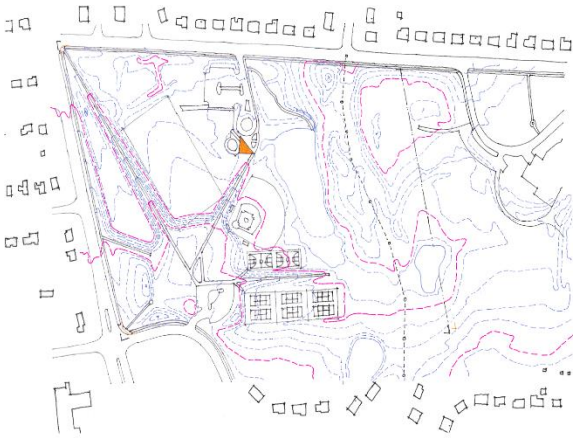
Once the Program was written the next phase was to begin inventory of the site. UConn's team visited the site on numerous occasions in order to collect enough data on all the existing conditions of the park. Some of the inventory collection methods we used were: aerial photographs, ground-level photographs, GIS mapping, and creating existing sections throughout the site. (Figures 4.2-4.5) In conjunction with the data collected from the public workshops and client meeting, this information would be used to analyze the issues and guide our design decisions to find the appropriate solution for everyone.

Figure 4.2: Aerial of Wolcott Park.

Site Engineering



Wetlands



Topography

Vegetation

Figure 4.3: Sample of several site inventory maps using West Hartford's GIS Website. From left to right, top to bottom: Site Engineering, Wetlands, Topography, and Vegetation.

Figure 4.4: Sample of existing site inventory photos.

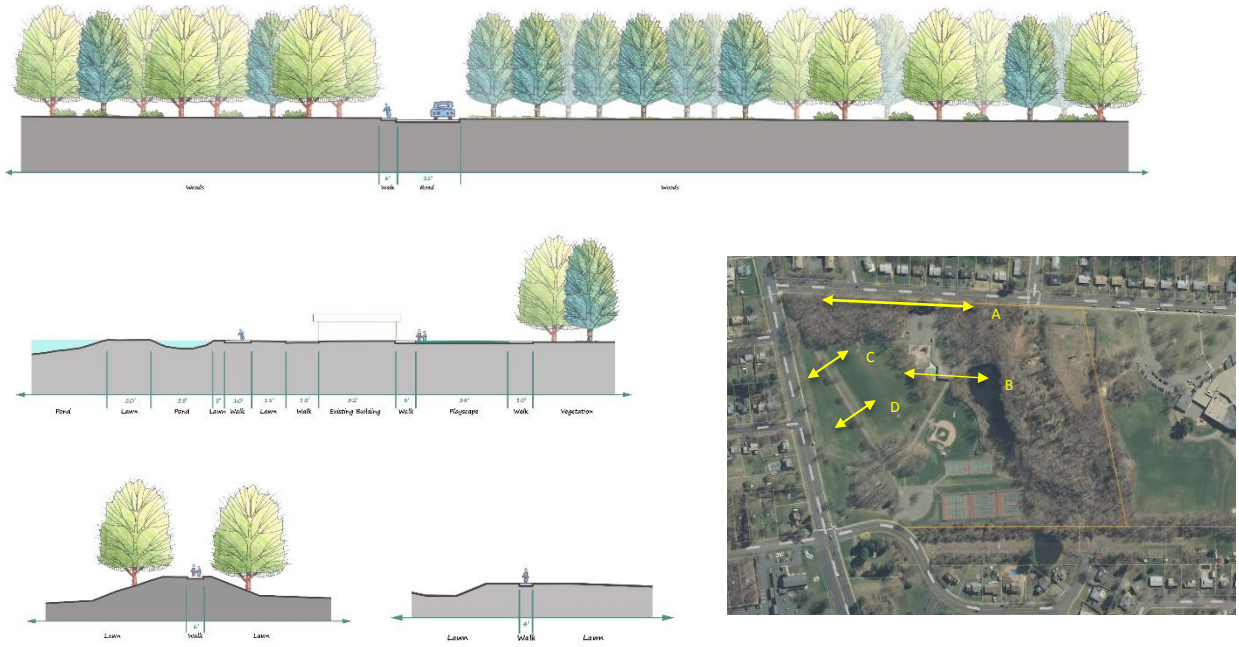
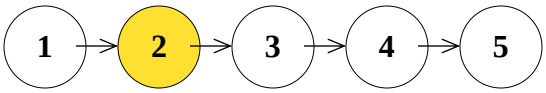


Figure 4.5: Sample of existing section cut lines used to study the lay of the land as well as land use relationships.

Inventory: *Client, Public, and Stakeholder*



Equally as important as site inventory is the data collected from the client, stakeholders, and the community. Using participatory design strategies throughout the design process (especially during the inventory and analysis phases) are crucial to unlocking all the information needed to create the best solution. In order to do this, UConn first began by holding multiple meetings with the clients and stakeholders. The complete package of meetings notes can be found in the appendix. Listed below are the list of client and stakeholder meetings held thus far:

Client and Stakeholder Meetings with UConn:

- Town officials of West Hartford
    - Department of Leisure Services
    - Planning Office
    - Community Services
- Public Works Department
- Retired Principle of Wolcott Elementary School
- Parent Teacher Organization (PTO)
- Baseball Commission

The next step was to facilitate several initial public workshops/meetings to hear what the community had to say. One of our main goals for the participatory design component was to make sure the public meetings engaged as many people as possible and allowed all voices to be heard. This meant that we needed to hold more than one first public meeting. UConn decided on Meeting 1A to be held during the day (12:00PM) so those with night shifts, children, or elderly could easily attend. Meeting 1B would be held in the evening (7:00PM) for those who worked during the day. Both meetings were held at the community center, making it an easy and neutral location for the participants and clients. Next step was to figure out how to invite important

stakeholder groups as well as spread the word to everyone else who was interested in attending. Ultimately, we reached out to all the residents within a 10 minute walk to the park and numerous stakeholder groups that we found would be of interest. (See list below) Furthermore, there was a flyer posted to the town's website for both meetings to attract any additional participants.

Stakeholders:

- Wolcott Elementary School
    - both administration – present and past, and PTO
- Parents of young children (Mom's and More)
- Cyclists (WH Bike Alliance)
- Seniors (WH Senior Citizen Advisory Board)
- Sports leagues (All Sports Council: WH Youth Baseball, WH Youth Soccer)
- Neighboring businesses (Chatfield Retirement Community)
- Resident with special needs (WH Citizens With Disabilities Commission)
- High School Athletic Director
- Parks & Recreation Advisory Board
- Leisure Services staff
- Public Works staff
- WH Police Department

To further create a positive and cooperative environment for collaboration, UConn created a set of rules that must be followed. We have found that these rules aid in conflict mediation as well as consensus building.

Rules for the Meeting:

1. All questions/comments will be directed to the moderator. The moderator will either answer questions/respond to the comments or solicit additional information from other meeting attendees.

2. Only one person speaks at a time so all comments can be addressed in an appropriate fashion. Under no circumstances will there be direct communication between meeting attendees. *The exception to this rule is during the work sessions.*

3. If interested in asking a question or making a comment, please raise your hand and the moderator will select speakers one at a time. Once selected, please

   - State your name, address and any official affiliation with West Hartford

   - Questions/comments to be limited to 90 seconds in duration

4. Limit of one question per person until all individuals have been given an opportunity to comment. If time allows, additional questions/comments will be entertained.

5. If you would like to ask a question or have a comment and would prefer not to speak at the meeting, please send an email to peter.miniutti@uconn.edu

The agenda for Public Meeting 1A & 1B began with a presentation from UConn on the project, why we were there, and the role of the participants. The client and Director of Leisure Services also spoke on goals for the project. During our presentation, we made sure not to influence any of participants preexisting thoughts and feelings on the site through any site analysis or by even voicing our concerns. This way, when it came down to the workshop, everything that was recorded would be unbiased and truthful. The second part of these meetings

Figure 4.6: (Left) Initial Presentation from UConn at Meeting 1A (Right) Participant Workshop Table Setup.

had a hands-on activity for the participants in order for us to better understand their needs, concerns, and desires. (Figure 4.6) After the presentation we led the participants to the back of the room where 6 round tables were set up with printed aerial maps and tool kits. Everyone had the opportunity to sit where they pleased, though we encouraged them to sit with strangers. On the aerial map given to each team, the purple hatched zones represented the "no-touch areas," (Figure 4.7) which meant the participants could not take them away due to the fact that they are well used amenities of the park. Inside the toolkits were foam pieces representing different amenities or physical elements that could be added to the park. Teams were also given glue, scissors, and markers to help them create their dream park. The two red X's in each tool kit gave

Figure 4.7: Aerial map given to each team. Purple hatching represents "no touch zones."

each team the power to get rid of specific amenities in the park (i.e. the concessions building) or even question the “no touch zones” if the majority of the teams felt the same. (Figure 4.8) Furthermore, each team was encouraged to list every comment and concern on their map in order to easily document everything. For both meetings, the work session lasted for 30 minutes. (Figure 4.9) UConn’s Team, along with the client roamed the room asking the teams thoughtful questions and guiding collaboration. Once time was up, each team was given 5 minutes to share their finished map to everyone, which gave them a sense of importance and power. (Figure 4.10) Both meetings ended with closing comments, Q&A, and discussion of next steps.

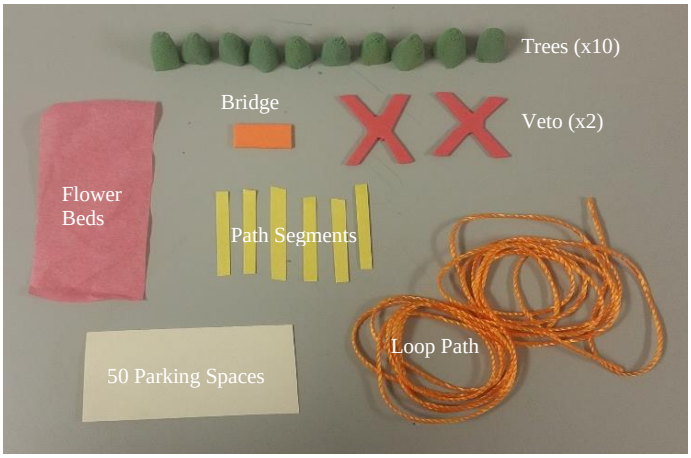


Figure 4.8: Tool kit given to each team.

Figure 4.9: (Left) Team collaboration from Meeting 1A. (Right) Team collaboration from Meeting 1B.

Figure 4.10: (Left) Team Presentation from Meeting 1B. (Right) Team's finished map.

<u>Analysis:</u> *Client, Stakeholder, and Public* **1 → 2 → 3 → 4 → 5**

After all the data had been collected from the first set of public meetings, it was time to begin the analysis phase, where I evaluated and digested the hundreds of comments, questions, and contributions from each team. To do this, I graphically reproduced each teams' maps in order to easily read and compare the data. (Figure 4.11) I condensed the maps into 4 major categories including: Recreation, Amenities, Circulation, and Green Space. I gave each category a color code and listed each comment under its appropriate category. From there I created a combined map for each category, in order to show what subjects were most important per category. (Figures 4.12-4.15) Furthermore, I created a veto map, which combined all the places of concern. (Figure 4.16) The veto map would help drive our design decisions and let us know if any of the areas that are meant to stay ("no touch zones") are actually the areas of most concern to the public. Lastly, I took the data that appeared on the majority of the team maps and created a Public Summary Analysis Map to create a graphic to fully represent what the community was asking for. (Figure 4.17)

Team 2

Comments

A. Recreation:
1. Tennis courts – spring use.

B. Amenities:
1. Renovate restroom/concession building.
2. More bike parking – check inventory
3. Increase lighting.
4. Signage – entrances, wayfinding.

C. Circulation:
1. Trails from community gardens to park.
2. HC accessible (building, playground, paths).
3. Bike lanes to park.
4. Repave / repair sidewalks
5. Where do community gardeners park?
6. Remove drop off circle by restrooms – unused space.
7. Need more parking – east lot into forest? Too wet?
8. Ask CL&P for use of corner for parking.
9. Reconfigure western parking lot.
10. Repave parking lots / curbs.

D. Green Space:
1. Continue trees on walkway.
2. More flowers.

Other:
1. Conard students – science class?
2. (Bad) dog clean up compliance – not enough space for dog park.

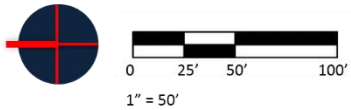


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Figure 4.11: Example of graphically digitalized team map and categorized comments.

Recreation

Comments

A. Fields & Courts:

1. Spectator stands for baseball.
2. Soccer field: Improve southern edge against trees/playground.
3. Lights for soccer field.
4. Basketball courts – renewed.
5. Repavement of tennis and basketball
6. Timer on court lights.
7. Tennis courts – spring use.
8. Resurface tennis courts.
9. Tennis court renovations/ fix lights.
10. Retain pickleball courts on the property
11. No additional fields for play; no room.

B. Playground:

1. Keep/improve playground. Good nest to parking lot. Fence is good but need to be fixed.
2. Playground needs updating!
3. Playground- Rubber surface instead of wood chips.
4. Parent/child swings in playground.
5. Area for toddlers and 5+ in playground.
6. Playground - Make it accessible.
7. Fix the gates.
8. Add swings.
9. Add playscape for older kids – if no room get rid of sandbox.
10. Expand playground.
11. Add turf to replace mulch.
12. Add all age rides.
13. Consider playground options that would appeal to older children – add more not eliminate current.
14. Agrees to eliminate sandbox.
15. Bigger playground.

C. Other:

1. Volleyball court.
2. Add adventure park.
3. Skate park.
4. Ice skating rink.
5. Ice skating in park.
6. Hockey.
7. Ice skating.
8. Ice skating rink on existing tennis courts during winter months.
9. Preserve sledding hill.
10. More lights.
11. Volleyball nets.
12. Tetherball.
13. Climbing wall.
14. Bocce/horse shoe courts.

0 25' 50' 100'

1" = 50'

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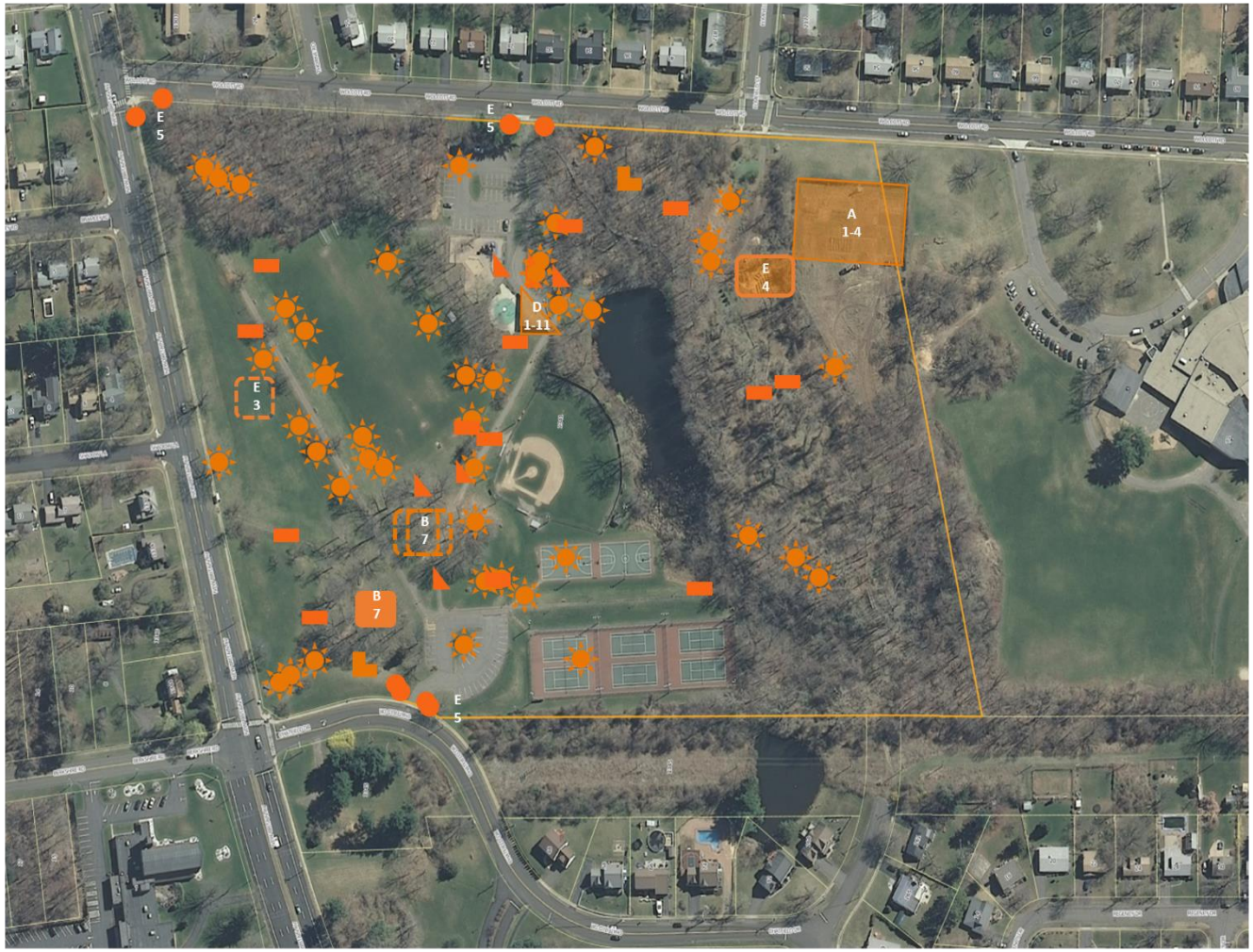
Figure 4.12: Map representing all comments and concerns related to recreation.

Amenities



Comments

A. Community Garden:

1. More garden space.
2. Victory garden fence – surrounds the gardens concern if removed: the garden would be wide open so not good for gardeners for many reasons. Keep as fence!
3. Garden area – better efforts to promote/advertise (signage?) to gardens.
4. Please revamp Louise's garden.

B. Furnishings:

1. Water fountains!
2. Water fountains.
3. Water fountains that work.
4. Water fountains.
5. Get rid of broken water fountains.
6. Park benches.
7. New picnic tables
8. Add park benches around newly created walking trails for rest.
9. More benches and seating near splash pad.
10. Benches throughout – trex like.
11. Keep trash cans out during winter.
12. Trex picnic tables.
13. Add more trash and recycling bins but eliminate dumpster.

C. Lighting:

1. Lighting after dark.
2. Increase lighting.
3. Lights on court on late.
4. Outdoor lighting for skating.
5. Better lighting.
6. LED lighting.
7. Better lighting in parking lots.
8. More lights along walkways.
9. Upgrade existing lights.

D. Bathrooms and Concession:

1. Update bathrooms.
2. Demolish restroom building and build new bathrooms.
3. Move snack shack.
4. Renovate bathrooms.
5. Renovate restroom/concession building.
6. More bike parking – check inventory
7. Clean, unlocked bathrooms.
8. New concession and bath house and better lighting.
9. Access to restrooms all day (x7 days and early evening until dusk. In summer during baseball stay open).
10. Fix up bathrooms.
11. Solar panels for baths.

E. Other:

1. Signage – entrances, wayfinding.
2. More and better signage (map of park, mileage markers on loop).
3. Senior Center activities and weather proof shelter; tai chi, dancing, yoga.
4. Use of amphitheater.
5. Entry markers / gates.
6. Bird boxes / houses.

0 25′ 50′ 100′

1″ = 50′

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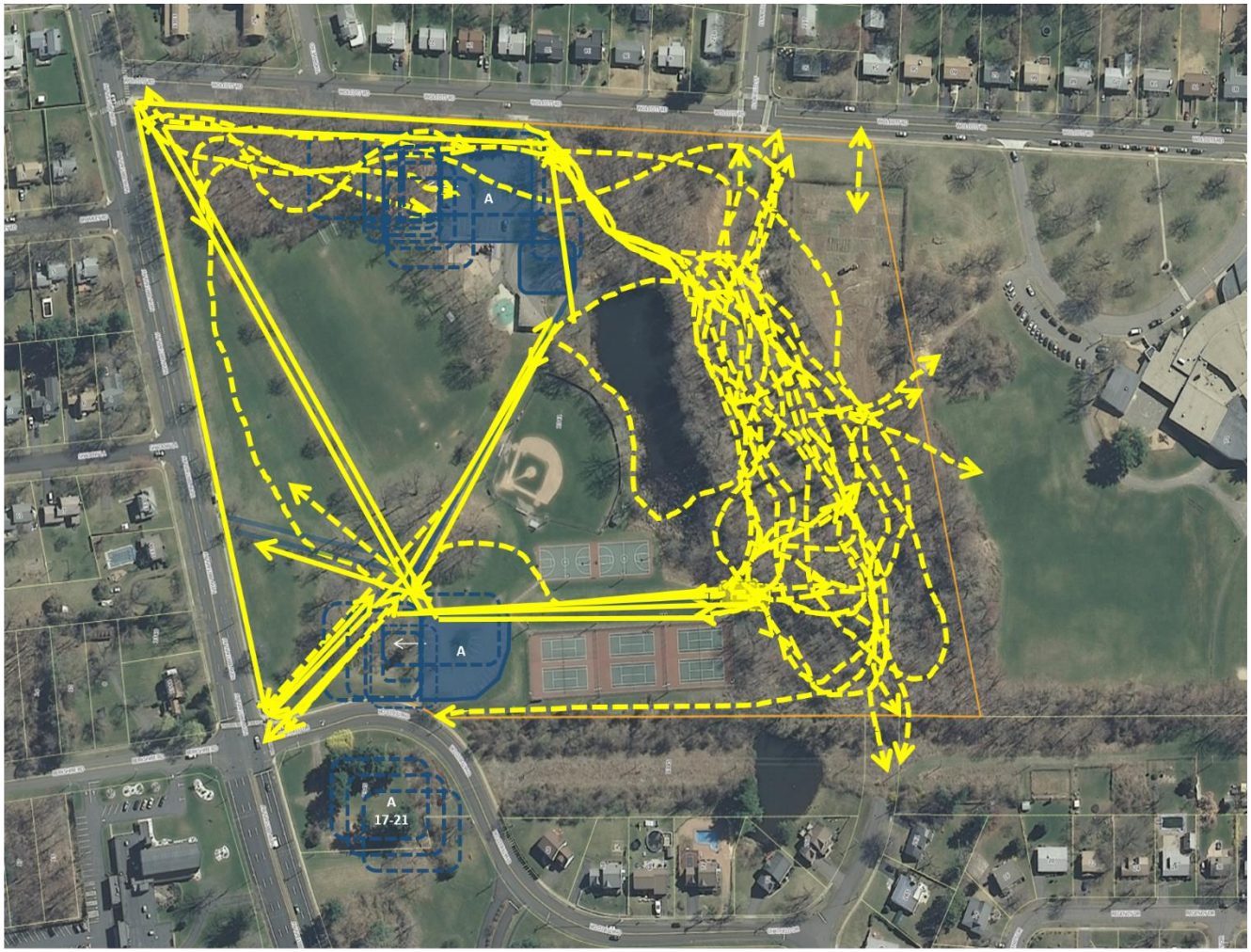
UNIVERSITY OF CONNECTICUT

Figure 4.13: Map representing all comments and concerns relating to amenities.

Circulation



Comments

A. Vehicular Circulation:

1. More parking.
2. Extend parking lots.
3. Additional parking on Wolcott Road.
4. More parking.
5. Where do community gardeners park?
6. Remove drop off circle by restrooms – unused space.
7. Need more parking – east lot into forest? Too wet?
8. Reconfigure western parking lot.
9. Repave parking lots / curbs.
10. More parking.
11. Add 30 parking spots (west).
12. Repave / replace parking lots.
13. Parking – expand, configure east and west.
14. Add 30 parking spots (west).
15. Repave / replace parking lots.
16. Parking – expand, configure east and west.
17. Ask CL&P for use of corner for parking/property.
18. Ask CL&P for use of corner for parking/property.
19. Ask CL&P for use of corner for parking/property.
20. Ask CL&P for use of corner for parking.
21. Ask CL&P for use of corner for parking/property.

B. Pedestrian Circulation:

1. Improve walkways.
2. Remove unused path at N.B.A
3. Multi-generational walkway; exercise area, stations.
4. Trails not on street.
5. Put a bridge over stream.
6. Trails from community gardens to park.
7. HC accessible (building, playground, paths).
8. Bike lanes to park.
9. Repave / repair sidewalks
10. Retain sidewalks – not safe accessibility.
11. Enhance the pond and add path.
12. Repave / replace sidewalks.
13. Add walk path signage.
14. Stairs or ramp up to community garden from Wolcott Road.
15. Replace both long walkways.
16. Remove path near N.B.A.
17. Repave / replace sidewalks.
18. Add walk path signage.
19. Stairs or ramp up to community garden from Wolcott Road.
20. Replace both long walkways.
21. Remove path near N.B.A.
22. Replace sidewalks.
23. Extend walkway to loop (connect to New Britain Ave.
24. Paths – increase ADA accessible paths.

0 25′ 50′ 100′

1″ = 50′

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Figure 4.14: Map representing all comments and concerns relating to pedestrian and vehicular circulation.

Green Space

Comments

Vegetation and Shade:

1. Trees near the benches if there were not any near by.
2. Shade near splash pad.
3. Keep existing trees as much as possible.
4. Continue trees on walkway.
5. Replace trees as needed.
6. More flowers.
7. Beautification.
8. More flowers and vegetation.

Pond:

1. Clean up pond.
2. Pond needs attention/clean.
3. Larger pond for fishing location.
4. Clean up pond and bring fountain back!
5. Dredge the pond.
6. Clean up pond and bring fountain back!
7. Landscape Pond.

Forest and Boardwalk:

1. Maintain diverse ecosystems.
2. Add shade tolerant ground cover.
3. Repair existing boardwalk with trex.
4. Repair boardwalk.
5. Boardwalk through.
6. Keep existing bridge in forest.
7. We like the pathway and the pink puff trees.
8. Maintain paths in Wolcott Forest.
9. Pathway in forest defined.
10. Protect forest – Greenspace! Encourage Town to maintain Landscapes in forest/trails. Wolcott Parents currently do landscaping in forest to keep useful.
11. Open up forest.
12. Overgrown trees/roots (tripping hazard) need to be corrected. Invasive plants – gone. Poison Ivy control – its everywhere making space unusable
13. I'd love the "raised pathway" in the forest to be updated.

Other:

1. Clean (eliminate growth) and make better greenspace in trees on Wolcott/New Britain Ave corner = entrance!
2. Signs on trees (tree species)
3. Add tree labels to forest.
4. We like the park but want improvements.
5. Signage for flora and fauna.

0 25′ 50′ 100′

1″ = 50′

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Figure 4.15: Map representing all comments and concerns relating to green space.

Public Veto Map

1" = 50'

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Figure 4.16: Map representing all vetoes used.

Public's Summary Analysis

1" = 50'

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*Figure 4.17: Public Participant Summary Analysis Map. *Note: Map only shows majority of comments and concerns.*

Subjects:	Recreation	Amenities	Circulation	Green Space
Fields & Courts	11			
Playground	15			
Ice Skating	5			
Volleyball	2			
Other	7			
Community Garden		4		
Furnishings		13		
Lighting		9		
Bathroom & Concession Building		11		
Signage & Entrance		3		
Other		3		
Vehicle			21	
Pedestrian			24	
Vegetation				8
Pond				7
Forest				13
Other				5

Figure 4.18: Public Participant Comment Chart. Shows what specific subjects under each category are the most important for the participants.

The importance of compiling all 10 team's data into the four category maps allowed me to analyze which subjects are the most and least important to the participants. From there, I created a Public Participant Comment Chart (Figure 4.18) to easily compare and contrast each subject. This chart showed me that, to the public, the most important category was circulation. A majority of their comments and concerns (45 total comments out of 10 team maps) were related to either pedestrian or vehicular circulation. The most common issues for this category were:

Pedestrian Circulation:

1. Repave walkways
2. Widen walkways
3. Get rid of unneeded walkways (some were in the direct path of a sledding hill)

4. Create more walking trails
5. Clear and clean out trails in the forest

Vehicular Circulation:

1. More parking on east and west sides of park
2. Take away unneeded roundabout
3. Repave parking lots

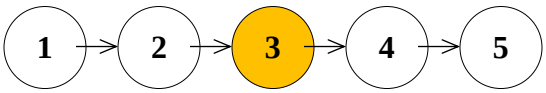
The next category that had the most comments was amenities, which had 43 total comments. In that category, the subjects that were the most important were site furnishings (benches, water fountains, and picnic tables), new bathroom facilities and concessions building, and lighting (more lighting around park, on fields and courts, and at night). The least important subjects from this category were for the community garden, signage, and entrances. There were also several miscellaneous comments.

Recreation was the third most concern, receiving 40 comments. The participants mainly asked for expansion of the existing playground, specifically, an area for older children, safety concerns of adjacent parking lot, shade, and more areas to sit. The participants also asked for updates and fixes to the fields and courts (especially repaving of the tennis courts as well as updating the dimensions of the baseball field to fit little league standards). Also in recreation, there were several people who wanted a volleyball court to be added as well as ice skating on the pond in the winter. Several mixed comments included things like: tetherball, climbing wall, bocce ball courts, and senior specific exercise areas.

The category with the least amount of responses was Green Space, with 33 total comments. From this category the most concern was for the forest. Participants wanted more

trails, to update the existing bridge, and to clear out all invasive or dangerous plants. Other concerns for this category were for the pond, which needed to be cleaned out. Furthermore, participants wanted to beautify the park with more aesthetic vegetation as well as spruce up each entrance.

During this process, a concern of CRDC's was to make sure our final design would fulfill everyone's desires and needs. But in reality, it is very difficult to answer all the desires that the participants listed. Therefore, the best way to approach this is to meet the needs of the comments and concerns that the majority of the public has. An example of this would be compromising with the one participant who wanted a climbing wall by giving them a volleyball court instead, which the majority of recreation comments addressed. Our process is structured to document all of their concerns and desires in order to make them to feel as though they've been heard, ultimately making them happy with the final plan.

<u>Analysis:</u> *Site* 

Once analysis was completed from the data collected from the public, client, and stakeholder meetings, CRDC began to professionally analyze the existing site conditions. I created two summary analysis maps: one showing all the opportunities of the site in which the design was going to enhance and on showing all the constraints of the site in which the design was going to mitigate. (Figures 4.19-4.20) The design solution would be derived from both the public summary analysis and our professional summary analysis as well as be matched to the program that was written with the client.

Site Analysis: Opportunities

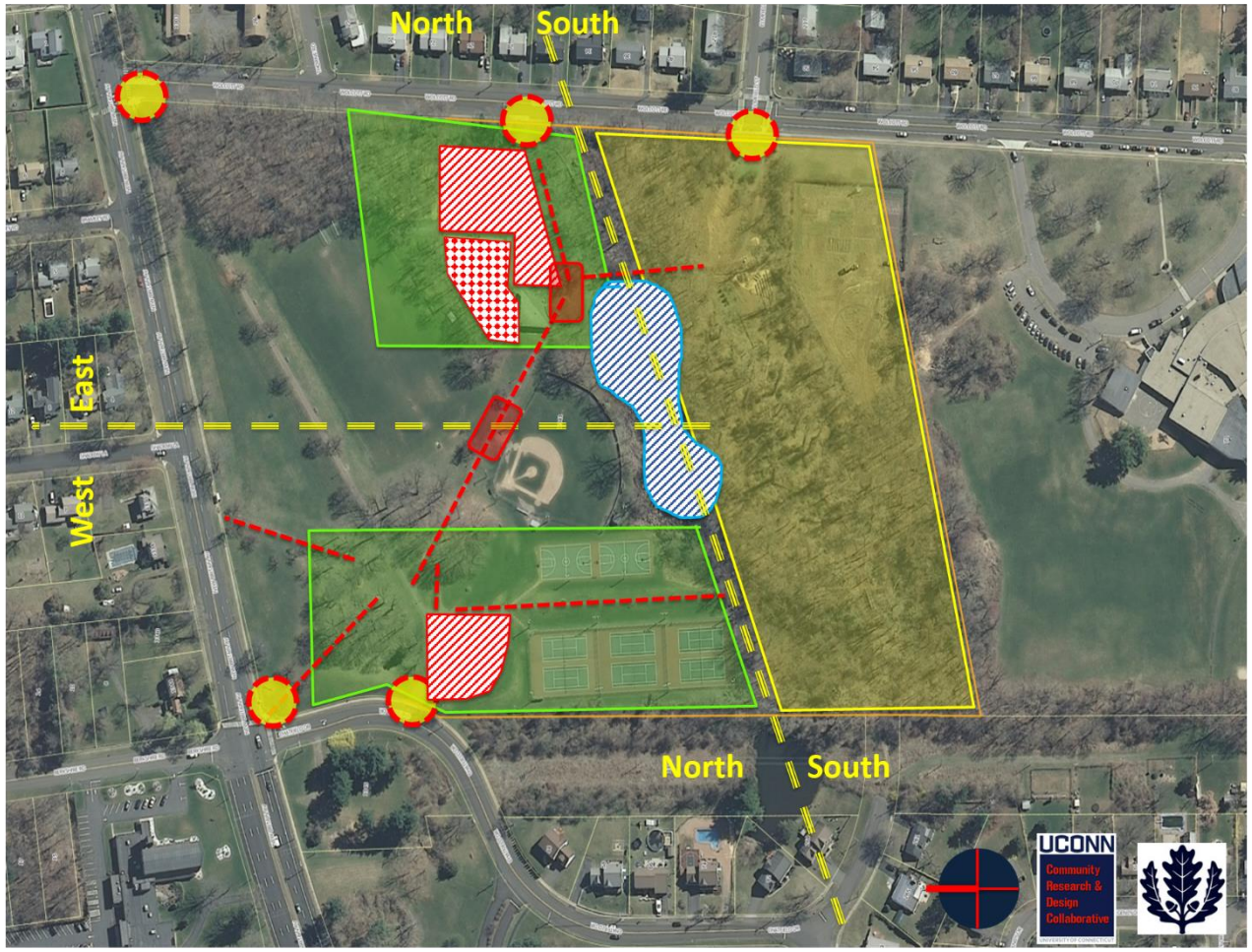
General Legend and Notes:

- Pond and stream ecosystem
- Forest habitat
- Mature trees
- Location of two parking areas
- Playground
- Park entries
- Perimeter sidewalks and interior walkway
- Active recreation
- Community gardens*

* Beyond the gardens, the users of the overall park show extraordinary passion and care for Wolcott Park.

Figure 4.19: Professional Summary Analysis of Opportunities. Shows all positive aspects of the site and what should be enhanced through the design.

Site Analysis: Constraints



General Legend and Notes:

Entries are understated and/or dominated by the auto. Weak sense of arrival.

Pedestrian circulation lacks hierarchy, is incomplete, is not ADA compliant and is under scaled.

Overall park lacks continuity north to south and east to west.

Playground is wedged in-between the parking lot and building.

Parking lots are inefficient and lack needed capacity.

Pond is not integrated into overall park, is underutilized and has poor water quality.

Planting Notes:

Park lacks "winter structure" due to lack of evergreen trees and/or heavily branched deciduous trees.

Little to no understory /shrub/herbaceous planting in main park area.

Figure 4.20: Professional Summary Analysis of Constraints. Shows all negative aspects of the site and what should be mitigated through the design.

Schematic Design: 1 → 2 → 3 → 4 → 5

UConn began to create an initial design scheme that combined all the data collected from the inventory and analysis phases and solved the programmatic requirements. Our goal was to use our design expertise to create a function, affordable, and memorable solution but we needed to make sure that we kept the public's comments and concerns in mind with every decision we made. Figures 4.21 – 4.31 show all the design graphics I created that were shown at the second public meeting.

The first graphics include the Existing and Proposed Parking Diagrams, since vehicular circulation was of high concern for most participants. Specifically, most people wanted more parking on both sides of the park, which was incorporated in the schematic design. Shown in Figures 4.21 & 4.22, we have added a total of 72 parking spaces. Furthermore, we removed the existing roundabout on the eastern side, since many participants and stakeholders exclaimed that it was not used and was just a waste of space. With the removal of the roundabout, our design was able to expand the existing playground.

Figure 4.21: Schematic Design Diagram for the East Parking Lot showing 30 additional spaces.

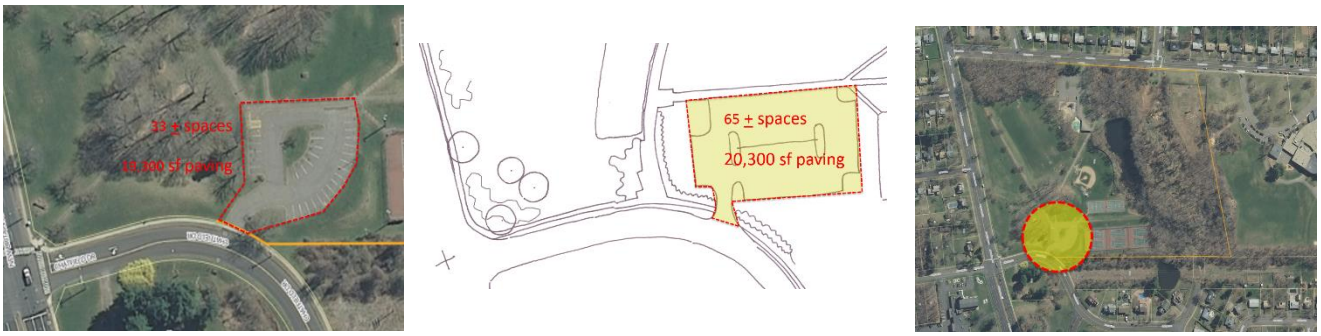


Figure 4.22: Schematic Design Diagram for the West Parking Lot showing 32 additional spaces.

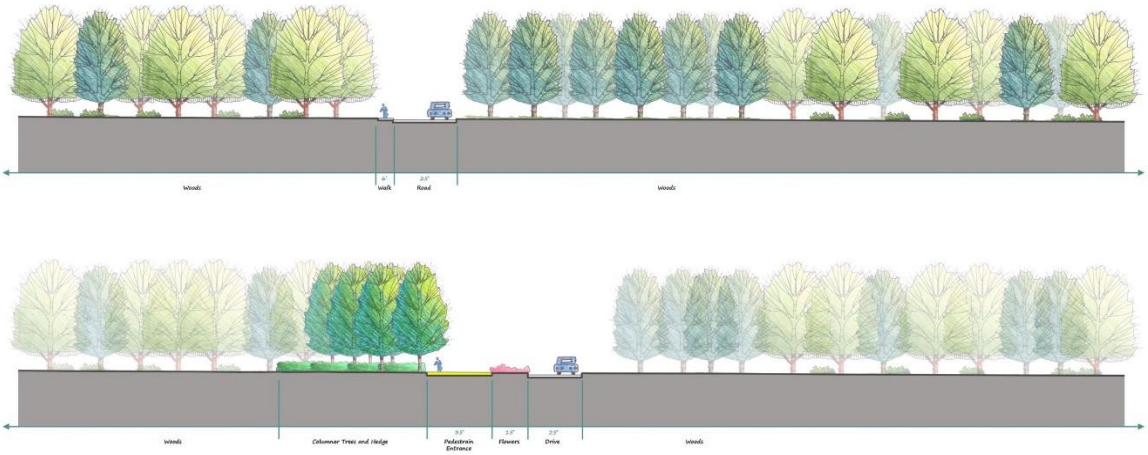


Figure 4.23: (Top) Existing Section of East Parking Lot Entrance. (Bottom) Proposed Section of East Parking Lot Entrance.

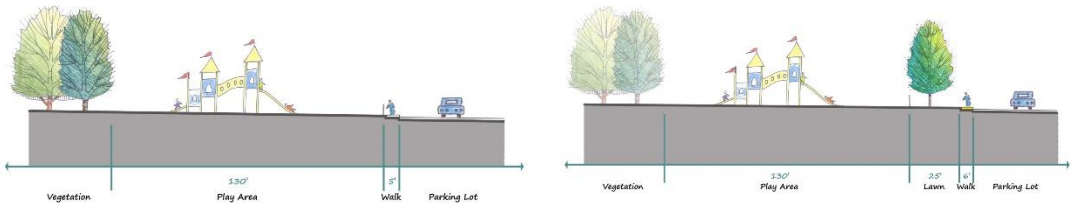


Figure 4.24: (Top) Existing Section of East Parking Lot in Relation to Existing Playground. (Bottom) Proposed Section of East Parking Lot in Relation to Existing Playground.

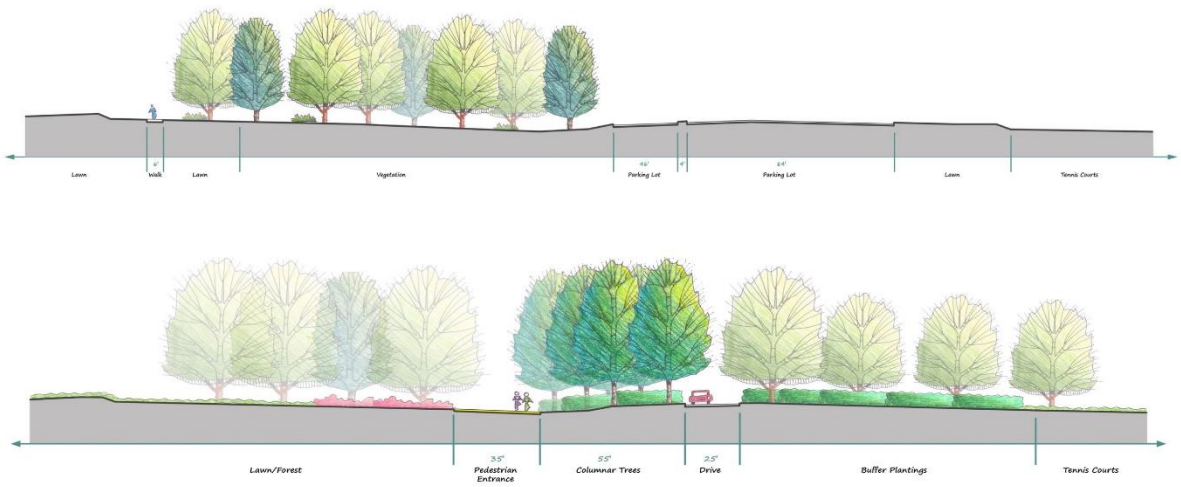


Figure 4.25: (Top) Existing Section of West Parking Lot Entrance. (Bottom) Proposed Section of East Parking Lot Entrance. Screen is added to vehicles from street. Pedestrian Entrance is enhanced.

Also shown above, I created numerous proposed sections of the east and west parking lots and entrances that were used to compare with the existing sections shown at the first meetings. Figure 4.23 shows existing and proposed sections of the east parking lot entrance from Wolcott Road. Pedestrian Entrance is enhanced by widening the walkway, adding stronger entry markers, and planting perennials for visual interest. Figure 4.24 shows existing and proposed sections of the east parking lot in relation to the existing playground. A buffer is added to create a safer environment for small children. This is done by moving the lot closer to the street, adding 25’ of distance as well as adding some trees to add more separation. Figure 4.25 shows existing and proposed sections of the west parking lot entrance from Chatfield Drive. A screen is added to block the vehicles from the street by planting hedges along the parking lot. The pedestrian entrance is also enhanced by widening the walkway, adding entry markers, and planting perennials.

Pedestrian circulation was another main concern from the participants, therefore we made this a main organizing factor in our schematic design. The existing pedestrian circulation layout appeared to be unfinished with many walkways randomly ending in certain places. The proposed layout would consist of a main curved spine that would be the main organizer of the site. This spine would be widened to 12’ in order to occupy multiple walkers at a time. Along this spine would be an array of columnar evergreen trees that would be used to guide the user throughout the park. (Figure 4.26) The layout keeps the existing path that leads from the corner of New Britain Ave and Wolcott Road to the center of the park since it was said to be well used by the participants and was a very iconic part of the original park’s design. The two walks leading from the western New Britain entrance were removed in order to clear the sledding hill area and create a more connected green space. The simple trail system in the existing children’s forest was expanded with the addition of new trails and pull-offs along the pond. Lastly, a new trail was added to the forested area on the eastern side of the park to allow for walkers to remain away from the road. (Figure 4.27)

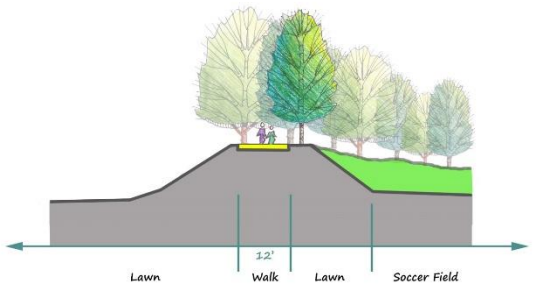


Figure 4.26: Proposed Pedestrian Walk.

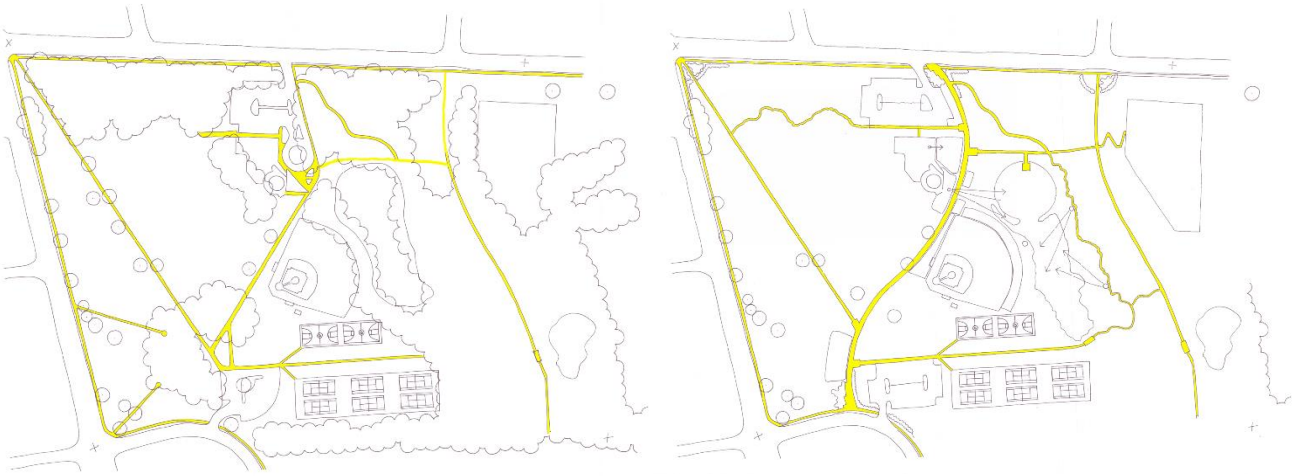


Figure 4.27: (Left) Existing Pedestrian Circulation Plan Diagram. (Right) Proposed Pedestrian Circulation Plan Diagram.

Figure 4.30 below shows a proposed use zones map, which portrays possible areas for concession and facilities, play areas, and other park structures that can be built. This map shows how the schematic design plans to expand the existing play area to accommodate older children and more areas for parents to sit. Adjacent to this is the proposed concession and bathroom facilities building zone, which would be in the same convenient location near the pond and baseball field. (Figure 4.29) Along the baseball field would be terraced seating within the existing slope to give spectators a place to sit, without being in the adjacent walkway. (Figure 4.28) On the western side of the park would be other proposed park structures such as picnic pavilions or senior recreation areas. Figure 4.31 shows existing and proposed vegetation.

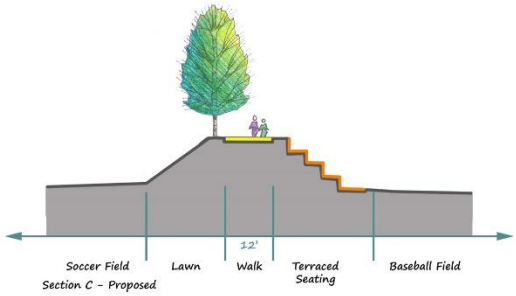


Figure 4.28: Proposed Section of Pedestrian Walk and Terraced Seating Area.

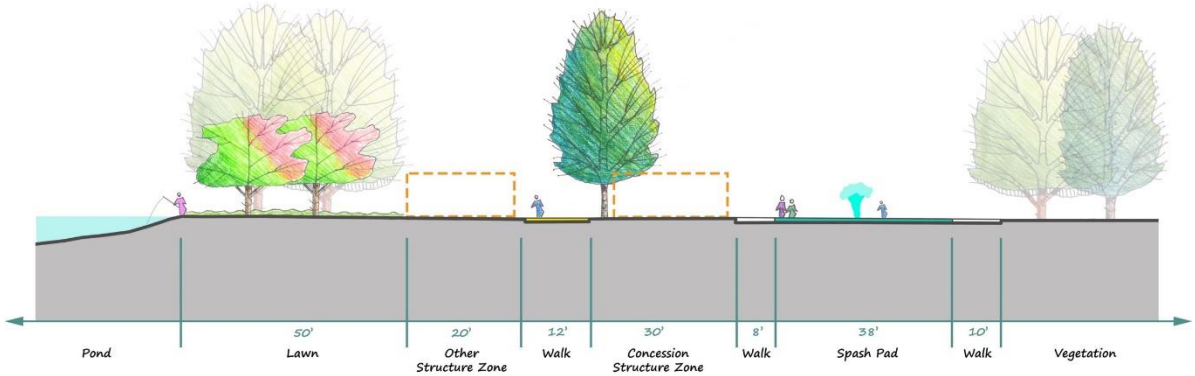


Figure 4.29: Proposed Section of High Density Use Zone. Shows relationship of potential concession building and other structure with existing splash pad and pond. Flowering trees are added near pond, walk is widened to 12', and columnar evergreen is added along walk.

Figure 4.30: Proposed Use Zones Plan Diagram in Relation to Proposed Pedestrian Circulation

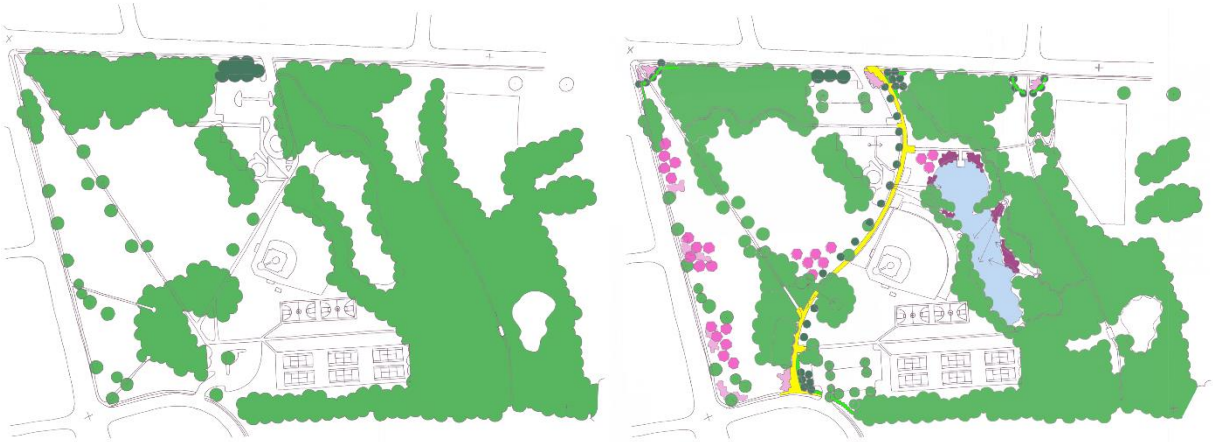


Figure 4.31: (Left) Existing Vegetation. (Right) Proposed Vegetation. Wolcott Park's natural aesthetics are enhanced with a native plant palette including: flowering trees, columnar evergreen trees, facultative wetland plants, perennials, and hedges.

Public Meeting 2: 1 → 2 → 3 → 4 → 5

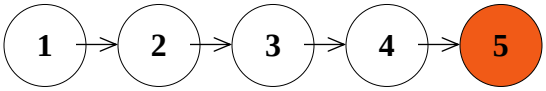
Figures 4.21-4.31 (including many more similar graphics) were shared at the second public meeting that was held several months later. The goal of this public meeting was to invite all the participants who were at the previous meetings back in order to get their opinions on the schematic design. (Figure 4.32) The meeting began with a discussion of the agenda by the client, which was followed by a presentation from UConn. However, before we shared the design concepts, I began by presenting all the photos, maps, and data that we collected from Public Meetings 1A and 1B. This also included all the public participant analysis mapping as well as our professional mapping. The purpose of this was to prove to them that we not only heard what they had to say, but that we also processed all of their concerns and transformed it into the design

Figure 4.32: Public Meeting 2. Schematic Design is shared with public in order to build consensus.

that we were about to show to them. Throughout the meeting we allowed for any questions or comments to be voiced. The meeting also ended with a period for Q&A and discussion of the schematic design. Throughout the presentation and discussion period, no strong concerns were

brought up and nearly all of the attendees were extremely happy with the solution. The only area of concern was for the proposed architecture styles for the new concession/bathroom building. Several of the younger participants wanted to have a more sustainable concept (like the re-purposed storage containers we suggested), the older participants wanted more traditional New England architectural styles. Once all of the comments and concerns were discussed, the meeting ended with some discussion on the next steps. Following the meeting, several weeks later, UConn held a similar meeting in house with town municipal members to get approval on the concept. With the strong consensus from the public, stakeholders, client, and town officials, UConn was able to begin the design phase.

Next Steps: *Design & Implementation*



The beginning phases of this project have taken a lot longer than expected due to our client's busy schedule with budget season and the difficultly with holding public meetings during the summer months. Currently, UConn is working to refine and develop the schematic design to better fit all the concerns brought up in the public and town meetings. From there, we will begin to create a preliminary master plan to show to the public at a third public meeting. The next steps will be to make revisions from the third public meeting as well as any other concerns from the town and public to create the final Wolcott Park Master Plan. This final master plan will be shared at a final public meeting and, if all goes well, it will be implemented in the following year. Figure 4.33 shows the current timeline we are hoping to achieve for the Wolcott Park Project.

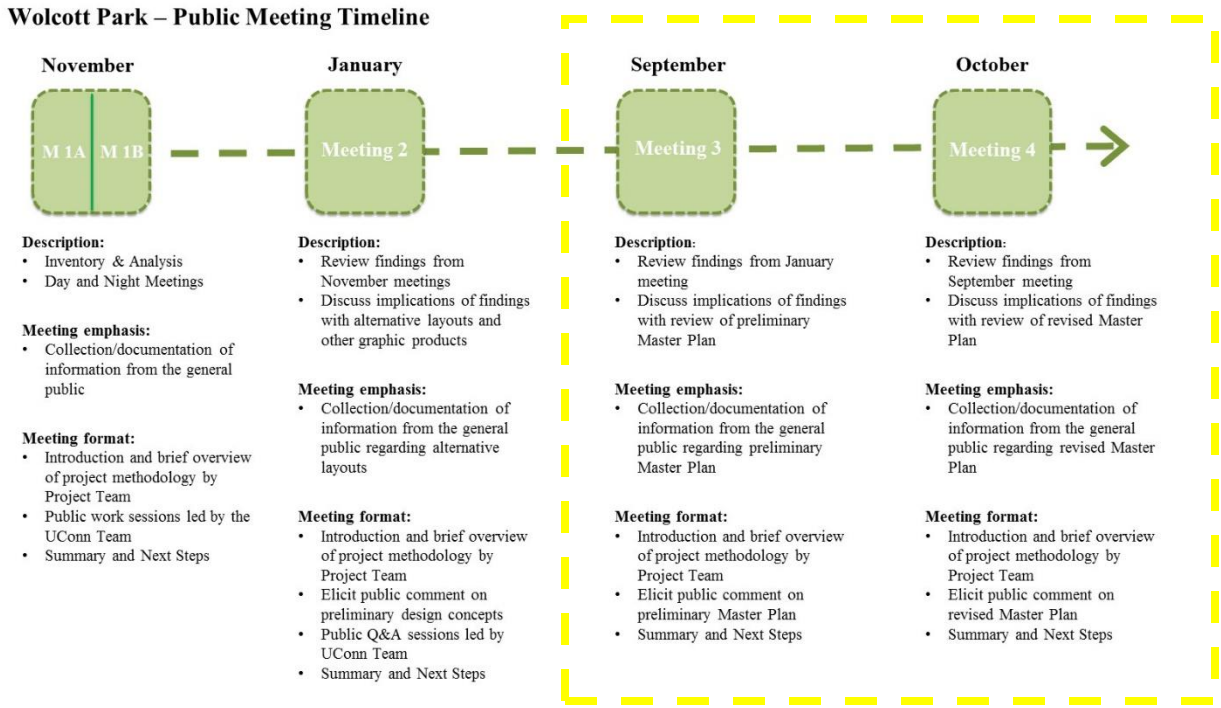


Figure 4.33: Public Meeting Timeline. Yellow dashed line shows next steps.

Evaluation

<u>Evaluation Methods:</u>

In the beginning of Chapter 2, I discussed what methods, to a typical landscape architect, are best to measure success for a participatory design program. This evaluative method focused on intuitive assessments, instinctive observation, and an honest professional self-review, which was used to judge the success of the participatory design component of the Fairfield Ecological Screen. Although this evaluative method is widely used in the field of landscape architecture, to many scientists, it comes across as irrational or inconclusive. I found this to be true after taking a graduate seminar course through the Department of Plant Science and Landscape Architecture that focused on professional and scientific presentations. This course was run by a professor in

the Turf Management Department, who similar to the rest of the group, was a scientist. Landscape Architects pride themselves as being both scientists and artists, however, by being the only art-minded people in the department, our theories and beliefs tended to clash from time to time. During this course, I was the only landscape architecture student, so as expected, my seminar contrasted amongst the others. My seminar was based on the Wolcott Park Project and at first I had used the same qualitative methods as were used in the Ecological Screen Project. To my major advisor, Peter, the logic and conclusions were sound, however, all the scientists in the room questioned my evaluation methods. How can this be the case? My work included three client interviews, professional evaluative tables, and strict observations of the meetings; all of which proved that my process was successful. According to the scientists, they would only be able to believe my finding if I had shown them the numbers. Long story short, they believed that my work was missing the quantitative data. After the course, I spoke with my major advisor and the department head on how I could salvage my thesis and was recommended to contact Dr. Miriah Russo Kelly, who is an Evaluation Specialist with the College of Agriculture, Health and Natural Resources. She specializes in mixed methods research, with a focus on collaboration and communication, especially with the community. She believes:

> My approach is community-based, responding to stakeholder interests, the concerns people have, and helping to understand what they want to know and how to best get them the information they need to achieve their goals. Extension is described as tying research to real life, and that's the intersection where I belong. My passion is getting people good information in the way they want it…

I was skeptical at first due to the fact that I wanted to retain some of our intuitive styles of evaluation, of which I'd been taught throughout my undergraduate career and learned during

extensive research while preparing for this thesis. Peter, Miriah, and I held an initial meeting where I explained the Wolcott Park Project and how we had gone about the first two public meetings. Miriah was extremely supportive of our process thus far and agreed to collaborate with us for creating a process evaluation. The first step was for Peter and I to take the Human Subjects – Social and Behavioral Science CITI Training Course, which was the UConn's Institutional Review Board (IRB) required training. This course was to teach anyone conducting research as investigators on any living human beings, the history and ethical principles, risk assessment, privacy and confidentiality, conflicts of interest, and regulations needed to perform the research. Together we wrote an evaluation protocol that would be sent to the IRB to approve our proposed survey. The survey is a mix of open-ended (typically qualitative) and close-ended questions (typically quantitative) meant to collect an in-depth review on the participatory design process used in the first two public meetings for the Wolcott Park Project. There are two separate surveys: one for the clients and town municipal members and another for the community and stakeholder participants. Both surveys have the same questions, the one for the clients and town members being slightly more in-depth, in order to make the comparison between the two groups easier. The survey is written on a program called Qualtrics that acts as an online distributor of the survey to all of the participants on the email list (collected from the meeting sign in sheets). The program works to collect and code all of the feedback received into easy to read stats and tables, which made evaluating the success of the participatory design component extremely simple.

Evaluation Findings:

The survey was sent out on Thursday, July 27, 2017 to all of the participants and municipal members that were on the project sign in sheet. In the email was a message explaining the survey

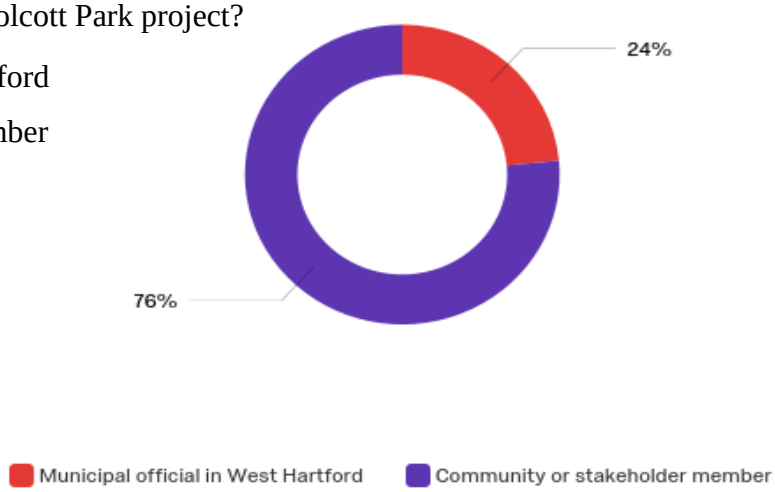
and expressing the importance of hearing their feedback (See Appendix for full survey and email sent to participants). Within this email was an embedded link that was tailored to each participant and only allowed them to complete the survey once. A reminder email was sent the following week on Thursday, August 3, 2017 in order to bump up the response rates. The survey was closed two weeks after it was opened on Thursday, August 10, 2017 in order to begin the data analysis.

Out of the 74 participants on the email list, 17 completed the survey after the two week period, which comes out to a 23% response rate and 77% nonresponse rate. According to the articles: *The Adequacy of Response Rates to Online and Paper Surveys* by Duncan D. Nulty and *Does Response Rate Matter? Journal Editors Use of Survey Quality Measures in Manuscript Publication Decisions* by Carley-Baxter, Hill, Roe, Twiddy, Baxter, and Ruppenkamp; this is a low response rate given less than 25% of participants completed the survey. Reasons for this are explained further in Chapter 5. The survey is broken into two types of survey questions: close ended and open ended. Both types of questions were used in this survey in order to collect a variety of responses. As explained in Chapter 2, the close ended questions gather concrete, single answers (also known as quantitative data). From these questions I can easily analyze the success of the participatory process through numerical tables, statistics, and charts. On the other hand, the open ended questions generated qualitative data, meaning full sentence responses that revealed more in-depth feedback and can even help expand on the responses given in the close ended questions. These detailed responses gave me a deeper understanding on the feelings of the participants. Nevertheless, in order to analyze this qualitative data it must be quantified into statistical figures. This process is explained further later in this chapter.

Figure 4.34 shows the first close ended question of the survey, which asks for the participants to categorize themselves into one of the major groups: municipal official of West Hartford or community/stakeholder member. Depending on which participant group the respondent falls in, determines what questions they will be asked later in the survey. From the 17 respondents, 4 were a municipal official and 13 were a either a community or stakeholder member.

Q1 What is your affiliation with the Wolcott Park project?

- Municipal official in West Hartford
- Community or stakeholder member



#	Answer	%	Count
1	Municipal official in West Hartford	23.53%	4
2	Community or stakeholder member	76.47%	13
	Total	100%	17

Figure 4.34: Question #1 from survey. Analysis of question included pie chart visual with percentages as well as numerical table.

Questions 2 – 4 from the survey were open ended. Analysis of these responses included quantifying the qualitative data into numbers that can be easily read and understood. This was done through Qualtrics by creating topics that are coded with every response per each open-ended question. For example, a response that says, "Invitation by Director of Human and Leisure Service and board member of Fernridge Park advocacy group," would have both "Invitation" and "Stakeholder" topics tagged to it. From there, Qualtrics counts each time a topic is mentioned in all of the responses and generates a list of all the topics and how many times they were mentioned. I then can use this data to find out what topics were mentioned the most frequently for each question asked, thus turning the qualitative data into quantitative data. (Note: Full survey responses can be found in the Appendix) Question 2 asked, "What motivated you to participate in the meetings for the re-design of Wolcott Park?" This gave me more context on the intrinsic motivations of the participants. Figure 4.35 shows the list of all mentioned topics from this question. Of the 20 total topics mentioned, the topic "Use Park Often" had the most mentions (8 total mentions). Pertaining to this, one of the respondents stated,

"I have lived at Wolcott townhouses across from the park since 1995, walking daily thru the park now but having used it and the fields for activities when my daughter was growing up."

The topic with the second most mentions is "Live Nearby," which had 6. A response with this topic voiced,

"We live directly across from the park and enjoy it immensely."

The topic "Park Improvements" had 4 mentions, making it the third most subject brought up.

"I was concerned about the condition of the tennis courts."

And tied for the 4th and 5th most mentioned topic (with 3 each) were "Care About Park" and "Use Fields / Courts / Playground." One of the participant's responses had included both of these topics. It stated,

"My family has utilized Wolcott Park for many years and we have created cherished memories there. I used to play basketball regularly both during the day and night. Our baby daughters loved the enclosed swings and they cooled off as toddlers in the spray park. They loved to play hide and seek in the playground and their climbing skills developed as they got older. As students in Wolcott elementary, they explored the Children's Forest and we participated in school events that were held in the park, such as the Haunted Forest. Both of my daughters played soccer there for their respective travel teams. Wolcott Park will always hold a special place for my family."

Q2: What motivated you to participate in the meetings for the re-design of Wolcott Park?

Topic	*Mentions*
Use Park Often	8
Live Nearby	6
Park Improvements	4
Care About Park	3
Use Fields / Courts/ Playground	3
Children / Family	2
Interested in Project Progression	2
Invitation	2
Stakeholder	2
Walk in Park	2
Wanting Change in Community	2
Children went to Wolcott Elementary	1
Help in Planning Process	1
Improve Property Value	1
Involved in Past Town Park Project	1
Making Improvements for Youth	1
Organizer of Park Planning Process	1
Represent Community Interests	1
Share Concerns / Desires	1
Use Children's Forest	1

Figure 4.35: Table of all mentioned topics for Question #2. In order from most to least mentioned.

Question 3 began to examine the participatory meetings by asking participants what they liked most about the public meetings. Figure 4.36 shows the list of all mentioned topics from this question. The topic "Community Input" had the 10 mentions, which was the most out of the 21 total topics listed. One of the responses that mentioned this stated,

"The thoughtfulness of UConn listening to the residents. The fact that they wanted to get the communities input before design."

"Ideas" had the second most with 9 mentions. A sample response of this would be,
"I liked hearing the various ideas of how to improve parking, planting, etc. to make full use of the property."

"Community Participation" had 7 mentions, making it the third most common topic. As stated in this response,

"I liked seeing the number of people that participated in the meeting."

"Collaborative Work Sessions" had 5 mentions, one of the responses stating,

"I liked seeing residents engaged in the park planning process. The structure of the collaborative work sessions empowered residents to participate. The rules protected each participant's voice so that no one person drowned out other opinions. The results truly were a reflection of the collaborative work."

And the 5th most mentioned topic (with 5 mentions) was "Use of Maps / Graphics / Models," which two participants voiced that they liked,

"The hands on props…" and "*The slide presentation."*

Q3: What did you like most about the meetings for the re-design of Wolcott Park?

Topic	*Mentions*
Community Input	10
Ideas	9
Community Participation	7
Collaborative Work Sessions	5
Use of Maps / Graphics / Models	5
Open Discussions	4
Design & Park Improvements	3
Listening to What Participants Have to Say	3
Other	2
UConn's Services	2
Small Group Conversation	2
Stewardship	2
Structure	2
Thoughtfulness	2
Empowerment of Residents	1
Fun	1
Inclusiveness	1
Inviting Atmosphere	1
Resident Engagement	1
Rules	1
Voice of Participants	1

Figure 4.36: Table of all mentioned topics for Question #3. In order from most to least mentioned.

Contrasting the last question, #4 asked what participants liked the least about the public meetings. Figure 4.37 shows the list of all mentioned topics from this question. By quantifying this data through this method, I was able to easily discover that most of the responses had no negative thoughts on the public meetings. This is due to the fact that the topic "Nothing" had 6 mentions, which was the most by far out of the 10 total topics. A sample participant response of this would be,

"Not much, I thought the meeting were productive and informative."

Five topics were all tied with 2 mentions each. The first being “Engage Broader Public” which is explained further in this response,

“It would have been great to have a larger turnout from the community.”

The next is “Meeting Scheduling Conflict” as explained by,

“I could only go to the first one as the second meeting was at a time I could not come.”

Another topic with 2 mentions was “Spring Meeting Not Held” meaning that a lot of time has passed since the last public meeting, which happened back in January of 2017. This means that is has been nearly 8 months since participants have been actively involved in the Wolcott Park Project. One the these responses stated,

“I haven't heard any follow up from the meetings.”

Another topic was “Unhelpful Proposals / Discussions.” A participant mentioned,

“The open process did allow some proposals/discussion that I felt were not helpful.”

The last topic for the question that has 2 mentions is “Budget.” Technically, this is not a park of UConn’s participatory design process since the client and town is in charge of the budgeting for the project. However, this was still a concern in at least two responses. One being,

“The challenge of how to pay for improvements!”

Q4: What did you like least about the meetings for the re-design of Wolcott Park?

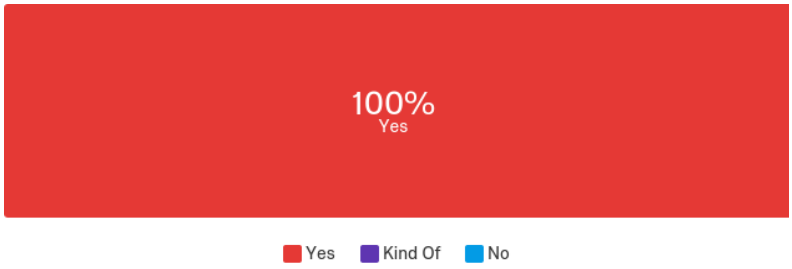
Topic	*Mentions*
Nothing	6
Budget	2
Engage Broader Public	2
Meeting Scheduling Conflict	2
Spring Meeting Not Held	2
Unhelpful Proposals / Discussions	2
Close-Minded Participant	1
Cutting Down Trees in Wetland Area	1
Not Enough Meeting Publication	1
Overwhelming	1

Figure 4.37: Table of all mentioned topics for Question #3. In order from most to least mentioned.

Questions 5 – 11 are close ended multiple choice with likert scale choices, meaning that the responses are scored along a range (i.e. extremely successful, somewhat successful, neutral, somewhat unsuccessful, and extremely unsuccessful). This helps express the intensity of the respondent's feelings towards a given topic, thus making it simple to determine what a participant liked and didn't like. All except for question 5 are typical five level likert scales, which give enough of a range of responses without being overwhelming for participants. Qualtrics created bar charts for each question and gave each scale item a response percentage. These charts give a quick comparison of responses with the wider color blocks representing the most common responses. Both questions 5 and 6 had 100% of the participants choosing the same response. Question 5 stating that all participants agreed that the meetings met their expectations and question 6 showing that all participants thought that the public meeting process was extremely fair.

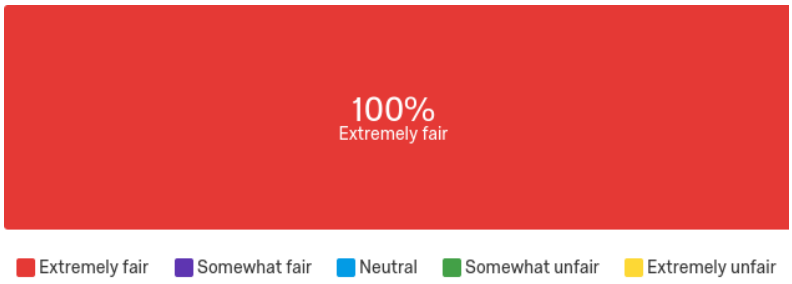
Q5 Did the meetings for the re-design of Wolcott Park meet your expectations?

- Yes
- Kind Of
- No



Q6 How fair or unfair do you believe the public meeting process was?

- Extremely fair
- Somewhat fair
- Neutral
- Somewhat unfair
- Extremely unfair

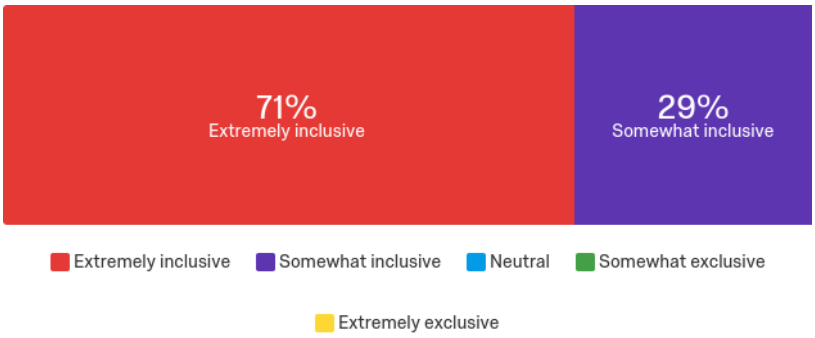


Question 7 asks, "How inclusive or exclusive do you believe the public meeting process was?" 71% of respondents said that the process was extremely inclusive and 29% said it was somewhat inclusive. This means that participants believed our process was successful in engaging the broader public and did not exclude anyone from participating in the meetings. Question 8 asked whether they believe that their voice was valued in the public meeting process. 65% of participants felt that their voice was extremely valued and 24% felt that it was somewhat valued. 12% chose neutral, which means the participants have neither positive nor negative strong feelings on this subject. Ultimately, this entails that 88% of participants generally felt that their voice was valued during the public meeting process. Question 9 asked how easy or difficult they felt the public meeting process was. 76% felt it was extremely easy and 24% felt it was

somewhat easy, meaning all of the respondents scored on the positive side of the scale (i.e. the process was easy).

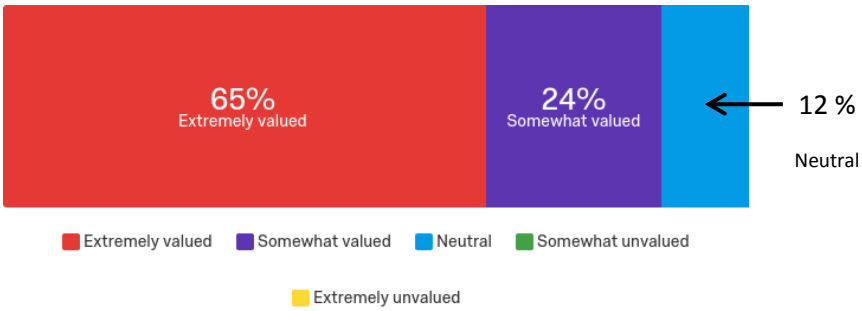
Q7 How inclusive or exclusive do you believe the public meeting process was?

- Extremely inclusive
- Somewhat inclusive
- Neutral
- Somewhat exclusive
- Extremely exclusive



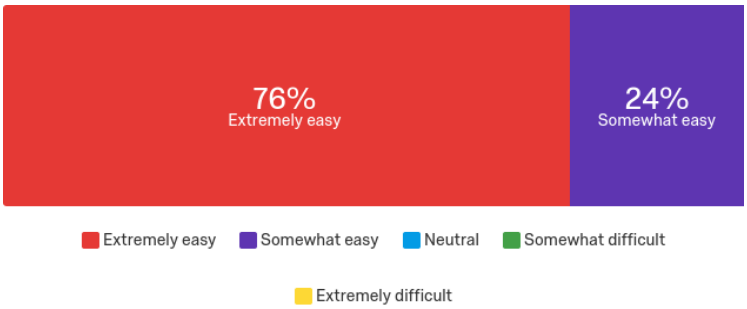
Q8 How valued or unvalued do you believe your voice was in the public meeting process?

- Extremely valued
- Somewhat valued
- Neutral
- Somewhat unvalued
- Extremely unvalued



Q9 How easy or difficult did you find participating in this public meeting process to be?

- Extremely easy
- Somewhat easy
- Neutral
- Somewhat difficult
- Extremely difficult

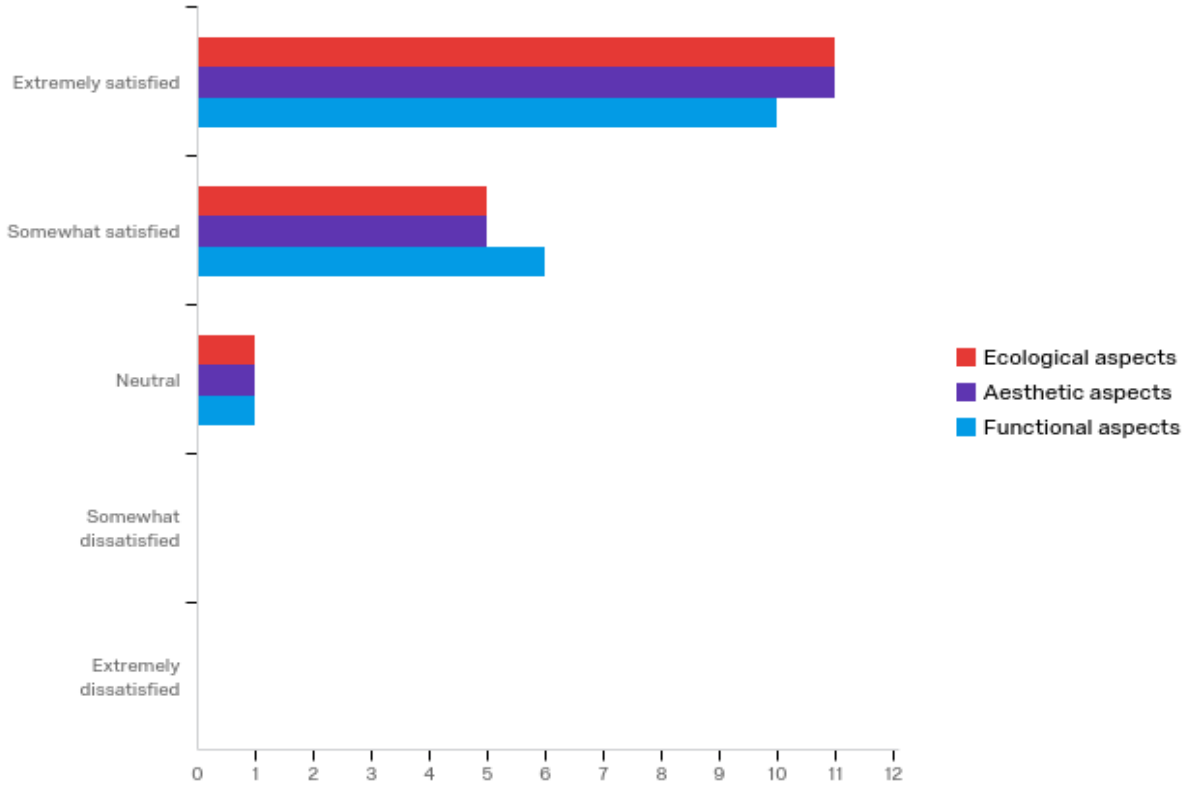


Question 10 asked respondents to evaluate three components that, to a landscape architect, make for a successful design. The first component is the ecological aspect of the re-design conceptual plan, which can include enhancing and cleaning up the existing pond, clearing the forest of invasive species, or planting more native vegetation throughout the park. The majority of the participants (65%) felt extremely satisfied with the ecological aspect of the proposed concept design, while 29% felt somewhat satisfied and 6% felt neutral. The second component is the aesthetics of the concept. Similar to the first, 65% of respondents felt satisfied with the overall creativity and design of the plan, 29% felt somewhat satisfied, and 6% felt neutral. The last aspect is the functionality of the concept. Even though the majority was still extremely satisfied (59%), slight more felt only somewhat satisfied with the functional aspects (35%) and 6% felt neutral. Overall, this shows that the majority of the participants felt extremely satisfied with these three important design aspects shown in the concept plan.

Q10 How satisfied are you with the following aspects of the re-design conceptual plan?

	Extremely satisfied	Somewhat satisfied	Neutral	Somewhat dissatisfied	Extremely dissatisfied
Ecological aspects	○	○	○	○	○
Aesthetic aspects	○	○	○	○	○
Functional aspects	○	○	○	○	○

#	Question	Extremely satisfied		Somewhat satisfied		Neutral		Somewhat dissatisfied		Extremely dissatisfied		Total
1	Ecological aspects	64.71%	11	29.41%	5	5.88%	1	0.00%	0	0.00%	0	17
2	Aesthetic aspects	64.71%	11	29.41%	5	5.88%	1	0.00%	0	0.00%	0	17
3	Functional aspects	58.82%	10	35.29%	6	5.88%	1	0.00%	0	0.00%	0	17

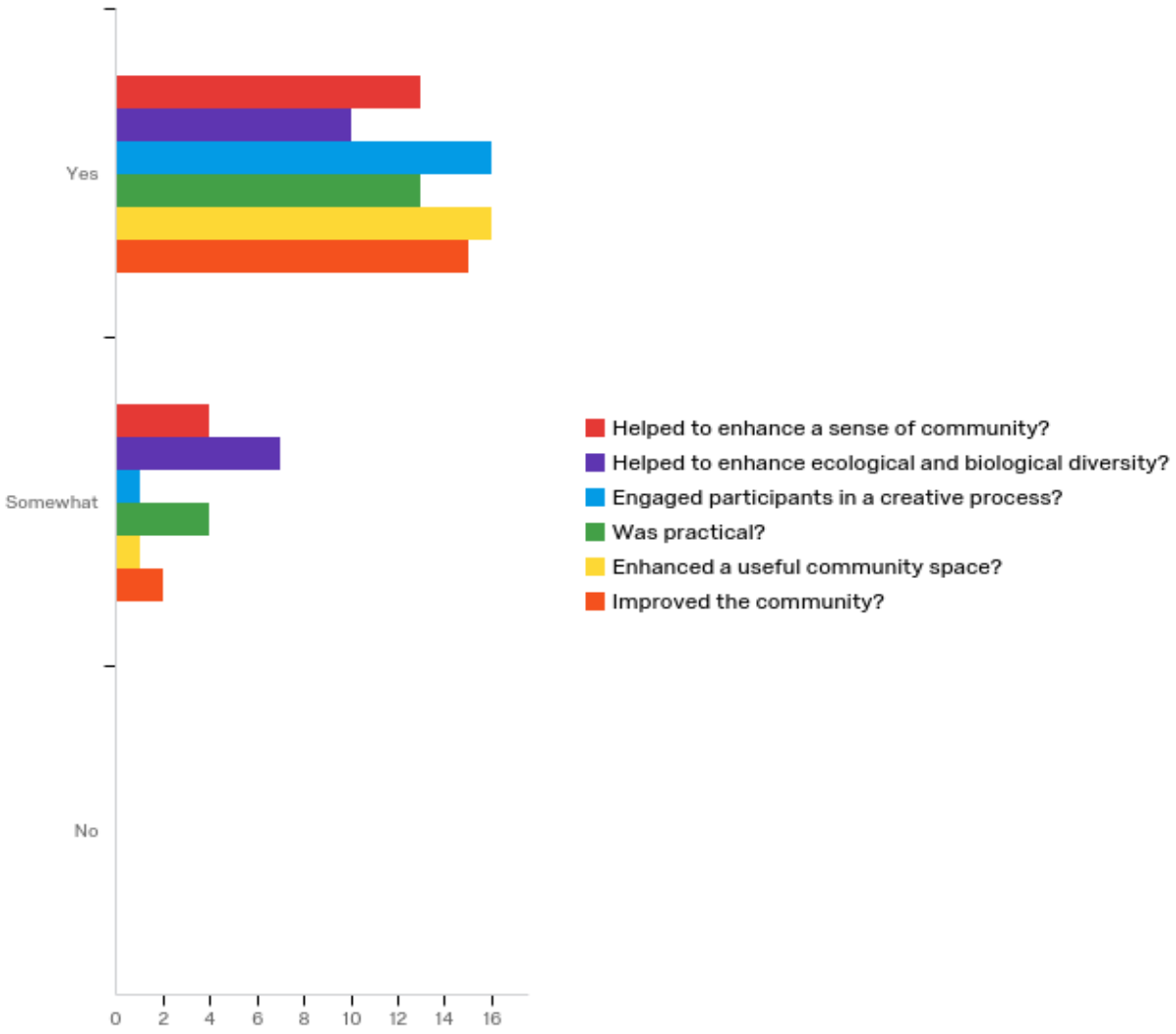


Question 11 is broken into 6 individual questions with the same three level likert scale. The majority of the participants answered “yes” for each of the questions (83 total “yes’s”, 19 total “somewhat’s”, and 0 “no’s” in total). The highest majority of “yes’s” was for engaging participants in the creative process as well as an enhanced, useful community space. However, there was one question where the “yes” and “somewhat” percentages for helping to enhance ecological and biological diversity were close, meaning that the conceptual re-design needed to value this more.

Q11 Do you believe the Wolcott Park conceptual re-design...

	Yes	Somewhat	No
Helped to enhance a sense of community?	○	○	○
Helped to enhance ecological and biological diversity?	○	○	○
Engaged participants in a creative process?	○	○	○
Was practical?	○	○	○
Enhanced a useful community space?	○	○	○
Improved the community?	○	○	○

#	Question	Yes		Somewhat		No	
1	Helped to enhance a sense of community?	76.47%	13	23.53%	4	0.00%	0
2	Helped to enhance ecological and biological diversity?	58.82%	10	41.18%	7	0.00%	0
3	Engaged participants in a creative process?	94.12%	16	5.88%	1	0.00%	0
4	Was practical?	76.47%	13	23.53%	4	0.00%	0
5	Enhanced a useful community space?	94.12%	16	5.88%	1	0.00%	0
6	Improved the community?	88.24%	15	11.76%	2	0.00%	0
	Total	Total	83	Total	19	Total	0



Question 12 asked participants if the re-design will impact the community. Figure 4.37 lists all of the topics mentioned for this question. Of the 15 total topics for this question, "Increase Park Usage" had the most mentions (6 in total). A sample response stated,

"Hopefully the park will be used more frequently."

Both the topics "Aesthetic Park Improvements" and "Functional Park Improvements" had 3 mentions. One response given, mentioned both topics,

"I think the re-design will allow different types of residents to access the park and will improve the enjoyment of the park for those who already frequent it. The functionality will be improved as well as aesthetics. As said above, it may also improve property values."

"Community Happiness" also has 3 mentions. Below is a response that discusses this topic.

"I think the community will be happy with renovations and feel a sense of pride in what the park can do for the community."

The topic "Stewardship" had 3 mentions as well. A respondent revealed,

"By involving the community that lives a five minute walk from the park as well as important stakeholders of the park, such as sports leagues, bicyclists, parents of young children, residents with disabilities, local businesses, public school students and administrators, and elderly residents, we hope we ignited their interest in this neighborhood park. The goal is to encourage local stewardship of this neighborhood park, perhaps spawning a "Friends of Wolcott Park" neighborhood group."

Among these topics, "Positive Community Impacts" had 3 mentions, which meant that participants agreed that the re-design will indeed positively impact their community and West

Hartford as a whole. Furthermore, “Other” had 3 mentions, all of which expressed a concern for funding in one way or another. These were presented as “other” because they did not answer the question directly, however it is interesting that they all mentioned budget issues. One of these responses stated,

“I also wonder if there is funding to actually execute such a plan given the current financial situation of the Town of West Hartford.”

Q12: How do you think this re-design will impact the community?

Topic	*Mentions*
Increase Park Usage	6
Aesthetic Park Improvements	3
Functional Park Improvements	3
Community Happiness	3
Other	3
Positive Community Impacts	3
Stewardship	3
Benefit Users	2
Multi-Stakeholder Use	2
Community Pride	1
Families / Children	1
Improve Local Community & Town	1
Improve Property Value	1
Safety	1
Satisfy Needs	1

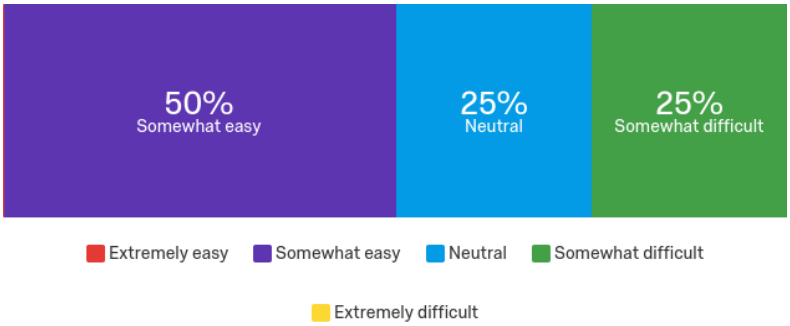
Figure 4.37: Table of all mentioned topics for Question #3. In order from most to least mentioned.

As explained previously, the first question of the survey asked the participants what user group they were in. If the respondent had chosen municipal official of West Hartford, they would be directed to an additional question (#13). This question was asked in order to receive more feedback on the implementation of the re-design, which could only accurately be answered by those who are working directly with the project. The question asked, “How easy or difficult will

it be for the town of West Hartford to implement the design that was created for Wolcott Park?" Of all the municipal officials that participated, 50% felt it would be somewhat easy to implement the design, while 25% felt neutral. On the other hand, 25% felt it would be somewhat difficult to implement. Question 14 asks those who expressed that it would be difficult to implement the project to explain why, however there was no response given.

Q13 How easy or difficult will it be for the town of West Hartford to implement the design that was created for Wolcott Park?

- Extremely easy
- Somewhat easy
- Neutral
- Somewhat difficult
- Extremely difficult



Q14 Why do you think it will not be easy for the town of West Hartford to implement the design that was created for Wolcott Park?

(No response was given to this question)

Discussion:

Overall, the participatory design process used for the Wolcott Park project was viewed as successful from the community participants, stakeholders, clients, and municipal officials. This was determined by using blended research methods to evaluate this process, which included an in-depth online survey that generated both quantitative and qualitative feedback. This survey concluded that all of the participants:

1. **100%** felt that the meetings for the re-design met their expectations

2. **100%** felt it had a fair public meeting process

3. **71%** felt the public meeting process was extremely inclusive
   29% felt the public meeting process was somewhat inclusive

4. **65%** felt their voices were extremely valued
   24% felt their voices were somewhat valued
   12% felt neutral

5. **76%** felt participating was extremely easy
   24% felt participating was somewhat easy

6. **65%** were extremely satisfied with the ecological aspects of the re-design
   29% were somewhat satisfied with the ecological aspects of the re-design
   6% were neutral

7. **65%** were extremely satisfied with the aesthetic aspects of the re-design
8. **29%** were somewhat satisfied with the aesthetic aspects of the re-design
   6% were neutral

9. **59%** were extremely satisfied with the functional aspects of the re-design
   35% were somewhat satisfied with the functional aspects of the re-design
   6% were neutral

10. **76%** felt the re-design enhanced a sense of community
    24% felt the re-design somewhat enhanced a sense of community

11. **59%** felt the re-design enhanced ecological and biological diversity
    41% felt the re-design somewhat enhanced ecological and biological diversity

12. **94%** felt the re-design engaged participants in a creative process
    6% felt the re-design somewhat engaged participants in a creative process

13. **76%** felt the re-design was practical
    24% felt the re-design was somewhat practical

14. **94%** felt the re-design enhanced a useful community space
    6% felt the re-design somewhat enhanced a useful community space

15. **88%** felt the re-design improved the community
    12% felt the re-design somewhat improved the community

16. **100%** believed the re-design impacted the community in a positive way

17. **50%** of municipal members believed the re-design would be somewhat easy to implement
    25% of municipal members were neutral
    25% of municipal members believed the re-design would be somewhat difficult to implement

CHAPTER 5: Discussion – Comparative Analysis

Reflection - Process

So far, this thesis has discussed using a participatory design component throughout two case studies. Tailoring a participatory design process for a specific project depends on several factors, to name a few; type of project, program, client, community, users, site, budget, timeline, contract, and power distribution. Understanding and explaining that process is pretty straight forward. Nevertheless, comparing the participatory design processes of *two* different projects can be extremely difficult. In order to do this effectively, I've created a matrix (Figure 5.1) mapping out the various characteristics of both processes and laid them side by side, which will ultimately help me in deciding what is or is not successful in Chapter 6.

Ecological Screen Process Summary:

To summarize Chapter 3, the first case study of my thesis is the Ecological Screen in Fairfield, Connecticut. The project type is a vegetated screen and graded to mitigate the view, smell, and sounds from the Fairfield Department of Public Works Facility (8 acre site) to the residents that lived nearby. Another part of this project's program was for UConn to facilitate communication between the public and the town in order to coordinate the work efforts and come up with a solution that would satisfy everyone's needs and desires. Our clients were the town officials who needed our help with how to gain the public's trust and approval. UConn created and facilitated a participatory design process to help ease the relationship between the town and community as well as come up with an aesthetic and ecologically sound design solution. Overall, the project included five client meetings and three stakeholder meetings. The public meeting timeline

included two public meetings, one to collect pre-schematic design inventory and one to show the finished design. There was about 5 months between these two meetings, which is a long time, however, UConn stayed in contact and held multiple meetings with the client and stakeholders during the design phase to insure the plans were going in the right direction. There was a similar turnout in the two public meetings, both of which had about 25 participants. The public meetings were open invitation, however the 25 participants were made up of mostly concerned residents. Notice of these meetings were posted on the town's website and in the Town Clerk's Office. Word of mouth was also used within several neighborhood groups that lived within the affected area. The 1st public meeting was held at 7:00 PM in June at the local Elementary school in town. The agenda of this meeting included; a brief introduction of the project and UConn's role, PowerPoint presentation on the project, program, and site, open group discussion, question and answer session, as well as an in-meeting pre-project survey in order to gather the initial thoughts and feelings of the participants. This meeting ended with a clear consensus of the meeting content, meaning UConn had the go ahead to begin the analysis and schematic design phases. After a design was created and approved by the clients and stakeholder, a second public meeting was held in October at 7:30PM at the same location. This meeting included: an introduction of the project by UConn, explanation of design using 3D model, open group discussion, and a question and answer session. A formal PowerPoint presentation was created for this meeting but we decided at the last minute to make it informal. The residents and other participants approved of the design and were excited for construction and implementation to begin. As far as meeting preparation, UConn spent about 25 hours on inventory and analysis, 20 hours purely on design and form giving, 40 hours on presentation graphics and models, and another 5 hours on gathering and creating meeting materials needed. This does not include time spent in the meetings.

Wolcott Park Process Summary:

The second case study (as explained further in Chapter 4) is the Wolcott Park Project in West Hartford, CT. Wolcott Park is a 20 acre neighborhood park that is next on the list to be re-designed and renovated as part of the town's overall parks masterplan. Hence, the client was a municipal town member, specifically the Director of Leisure Services. So far there has been four client meetings, three stakeholder meetings, and two public meetings. The project is currently halfway through the design process, but has finished the majority of its participatory data collection needed to create an appropriate and widely supported plan. Unfortunately, the project had to be put on hold for six months due to budgeting and the summer season, which conflicted with my upcoming graduation data. Therefore, this thesis focuses on the first half the participatory design process for Wolcott, which has a timeline of 10 months and counting. To this point, there has been 74 total participants, which includes community members, various stakeholder groups, and municipal officials. The first public meeting was announced with a posting on the town's website, emails sent to residents within a 10 minute walk to the park, and invitations given to relevant stakeholder groups. This meeting had two sessions (12:00 PM & 7:00 PM) in order to allow those who are not as flexible to participate and was held at the local community center in November. This meeting was used in order to listen to what the community and stakeholder groups had to say about the project and site before any decisions had been made. The content for this meeting included an introduction of the project and UConn's role, PowerPoint presentation of the project and site inventory, open group discussion, question and answer session, small group discussion, and small group workshop. The participants built a clear consensus that they were confident with the direction the project was moving in. Concurrently through this process, the client and other municipal members were consulted on any changes to

the plans and helped facilitate the second public meeting, which was held in the same location as the first, and was at 7:00 PM three two months later in January. This meeting was announced through email to the participants who were on the email list from the first public meeting. Since this was still open to the public, a flyer was posted on the town website as well. Out of the 74 total participants from the two sessions of the first meeting, only 25 showed up. The purpose of this meeting was to share UConn's schematic design concept with the public to gain their approval and begin to develop the plan. During this meeting, UConn reintroduced the project and gave a formal PowerPoint presentation on our findings from the last meeting as well as how those comments and ideas drove our design decisions. This PowerPoint presentation included graphics, which portrayed the re-design concept. This was followed by an open discussion and question and answer session, which revealed that everyone was on board with the design. Two more public meetings are scheduled to occur in the next several months to get approval on the revised masterplan as well as the final masterplan from the community. Furthermore, more client and stakeholder meetings will occur to discuss the plans in closer detail and talk implementation.

Comparing Participatory Design Processes:

Project Context	**Ecological Screen**	**Wolcott Park**
Project Type	Vegetated screen and berm	Neighborhood Park
Project Program	Mitigate view, smell, and sound from DPW Facility to resident homes	Make functional and aesthetic improvements to existing park
Site Size (Acres)	8 Acres	20 Acres
Client Type	Municipal	Municipal
Contract & Reimbursements (Yes or No)	Yes	Yes
Meetings - Overall		
Participatory Timeline Length	5 Months	10 Months +
# Client Meetings	5	4
# Stakeholder Meetings	3	3
# Public Meetings	2	2
Total # Participants	25	74

Method of Public Meeting Notice/Advertisement	Posting on Town Website, Word of Meetings were spread through several neighborhood groups	Posting on Town Website, Invitation to Residents within 10 min. walk & relevant stakeholders
Meeting Prep (Hours Spent)		
Inventory & Analysis	25	40
Design	20	25
Presentation Graphics/Models	40	60
Meeting Materials	5	10
1st Public Meeting - Context		
Location	Sherman Elementary School	West Hartford Community Center
Time Held	7:00 PM	12:00 PM & 7:00 PM
# Participants	25	64
Clear Consensus on Meeting Content	Yes	Yes
2nd Public Meeting - Context		
Location	Sherman Elementary School	West Hartford Community Center
Time Held	7:30 PM	6:30 PM
# Participants	25	30
Clear Consensus on Meeting Content	Yes	Yes
1st Public Meeting – Content		
Introduction of Project and UConn	X	X
PP Presentation	X	X
Open Group Discussion	X	X
Question and Answer	X	X
Small Group Discussion		X
Small Group Workshop		X
In Meeting Pre-Project Survey	X	
3D Model		
2nd Public Meeting – Content		
Introduction of Project and UConn	X	X
PP Presentation		X
Open Group Discussion	X	X
Question and Answer	X	X
Small Group Discussion		
Small Group Workshop		
3D Model	X	

Figure 5.1: Matrix comparing the Ecological Screen participatory process and the Wolcott Park participatory process.

Although both case studies are very different projects, which ultimately lead to changes in the participatory process, there are many apparent similarities as well. First off, what makes these projects so different is not only the site, but the overall project motivation. Fairfield's

Ecological Screen project had conflicting adjacent land uses, thus creating a problem between the town and its residents. The Wolcott Park project was desire for improvements to the existing neighborhood park, which would be implemented in the future as part of the town's overall parks masterplan. In short, the Ecological Screen project is using participatory design to fix an existing problem, while the Wolcott Park project is using it for future planning. In the long run, these motivations for getting the public involved in the planning process not only builds the trust between the town and its community, but it makes for a solution that meets the needs and desires of everyone.

The public meeting processes had several noticeable differences between the two case studies. First of all, the Wolcott Park Project had a much larger participant group with 74 total community, stakeholder, client, and municipal members as compared to 25 resident participants and 3 client group members for the Ecological Screen Project. That being said, Wolcott's participant group was far more diverse and had a process that engaged more of the community, whereas the Ecological Screen's meetings engaged only a specified group of residents. Furthermore, the first public meeting for Wolcott had two sessions (one in the afternoon and one in the evening) in order to be flexible around the various schedules of the public. From both sessions, 64 participants showed up. The Ecological Screen's first meeting only had one session, which was held at night. During this meeting 25 residents attended, in which the same number of residents returned to the second public meeting. On the other hand, at the second public meeting for Wolcott only 30 participants attended, making the return rate less than 50%. This may have been due to participants having other conflicts during the scheduled meeting time or loss of interest due to too much time between meetings. This became more apparent as the project moved along and evaluation surveys were sent out. The response rate was only 17, which cut the

attendance from the second meeting by nearly another 50%. The public meeting timeline for Wolcott Park is currently at 10 months (and still continuing due to budget reasons). This is the time from the first public meeting, through the second, and presently. Looking at the initial timeline, the project should have been in the post-design phase with the last two public meetings finished. The Ecological Screen Project only called for two public meetings which were completed under five months.

The content in the public meetings had some differences between the two case studies as well. Typically, the more content the better. This is because participants feel more comfortable approving certain decisions when they are given a sufficient amount of analysis and description through 3D models and PowerPoint presentations. The designer also benefits by being able to collect more feedback from the participants through open group discussions, workshops and surveys. The Ecological Screen Project could have allowed participants to get more creative by implementing small group workshop activities or charrettes in the first meeting. Also, the first public meeting did not have small group discussion, which often helps calm individuals who are very opinionated and may be looking to cause trouble. Wolcott Park's first public meeting adopted these strategies to its advantage, however missed out on collecting more inventory through a pre-project survey similar to the one seen in the Ecological Screen Project. Lastly, in the last public meeting for the Ecological Screen Project, UConn did not present the prepared PowerPoint presentation of the proposed design. Luckily, the participants were happy with the design ideas because instead, we presented the in front of a 3D model, which made understanding the functional and aesthetic aspects of the design very simple. During Wolcott's second public meeting, UConn presented the design concept with a PowerPoint presentation through a series of informative and illustrative slides. This was very convincing to the public,

though many participants get disheveled and confused looking at design ideas in plan view. By providing a 3D model as well as a PowerPoint presentation, the public are more likely to understand the design.

Reflection - Evaluation Methods

Thus far, creating and implementing a participatory design component into a public project is only the first step. The second goal of this thesis is to judge the success of each of these processes. In order to achieve this, each case study's participatory design process was evaluated with either a single evaluative method (qualitative) or mixed evaluative method (qualitative and quantitative). Although the single evaluative method used in the Fairfield Ecological Screen project may be viewed as cursory or abstract in comparison to using a blended method (like what was used in the Wolcott Park project), it is in fact a valid method of evaluation. As explained in Chapter 2, qualitative research methods help the researcher uncover concepts, meanings, feelings, and descriptions, which can lead to a deeper understanding on a certain phenomenon. Typically, qualitative research can get a bad rap in the science community where quantitative research generally has more respect. When I first started this thesis I was unfamiliar with this stigma until I received criticism by the science faculty during one of my seminars. This then reverted my thinking that qualitative research is completely invalid when it comes to evaluating the success of a program or process. However, upon working with my advisor, Miriah Kelly, she assured me that qualitative research is as equally valid as quantitative research, as long as it is done correctly. Therefore, I can begin to compare and contrast both case studies' evaluation methods on an equal platform instead of completely disregarding all my work done for Fairfield's Ecological Screen project. Where this comparison gets interesting, is the fact that I am

not comparing qualitative vs. quantitative, but I'm comparing using qualitative research as a singular method vs. using both qualitative and quantitative research in a blended methodology. You could argue that this would automatically make blended research methods more successful, however, this is not the case. Both evaluation methods have their strengths and weaknesses, which I will go into detail later in this section (similarly to the process comparison shown above). I will then take what I discover from the comparative analysis in order to decide what makes a successful process evaluation in Chapter 6.

Ecological Screen:

The Ecological Screen Project used a single research method in order to evaluate the success of its participatory design process. The method it focused on was qualitative research, which is an intuitive and flexible way to measure a certain subject. This process evaluation included three qualitative research methods, which is also known as triangulation (See Chapter 2 for description). Using triangulation gave me a further understanding of the process and helped me demonstrate the validity of my data. The three methods used were; in-person interviews with the client group (three separate interviews, one for each member), observation of participant reactions and commentaries during public meetings, and professional judgement based on participatory design criteria inspired by Randolph T. Hester's evaluative table. These methods also allowed for direct feedback from each member of the client group, observation and evaluation of the process in action and how the participants responded as well as gave me the chance to be self-reflective on UConn's process. Although, by using this single method approach, I was forced to make inferences on the qualitative data (interview responses, observation notes, and professional judgement from a list of criteria), which may be viewed as unsound without factual numbers, to support my conclusions.

Wolcott Park:

The Wolcott Park Project used a blended research method in order to evaluate the success of its participatory design process. This process evaluation utilized both qualitative and quantitative research methods in order to gather more concrete and comprehensive data. In creating this process evaluation, I worked with social scientist, Miriah Kelly, who guided me through the process of university regulations and approval, constructing a survey, distribution among participants, data collection, and analysis. This survey had a mix of open-ended questions that would result in qualitative data and close-ended questions that would produce quantitative data. This method gave me the ability to hear feedback from a large group of participants (although there was a lower response rate than hoped) in a quick and effective manner. I was then able to translate the quantitative data into easy to read tables, charts, and statistics, which would then be analyzed to develop inferences. Furthermore, the qualitative data was quantified (see Chapter 4 for full description) into numerical figures and thus analyzed in a similar manner as the quantitative data.

Comparing Evaluation Methods:

Evaluation Methods - Overall	**Ecological Screen**	**Wolcott Park**
Research Type	Qualitative	Mixed (Qualitative & Quantitative)
Evaluation Participant Groups Used	Client, Municipal, Residents	Client, Municipal, Community, Stakeholders
Qualitative Research Types		
In-person client interview	X	
Participant observation during public meetings	X	
Professional Judgement from researched criteria	X	
Open-ended survey questions		X
Quantitative Research Types		
Close-ended/multiple choice survey questions		X
Data analysis of close-ended survey responses		X

Quantification of open-ended survey responses		X
Analysis of quantified open-ended survey data		X

Figure 5.2: Matrix comparing the Ecological Screen evaluation method (single) and the Wolcott Park evaluation method (blended).

Figure 5.2 shows the comparison between the single evaluative method used in the Ecological Screen project and the blended evaluative method used in the Wolcott Park project. As explained previously, the Ecological Screen Project used only qualitative research methods in order to evaluate the success of its participatory design process, while the Wolcott Park Project used both qualitative and quantitative research methods. The findings from both process evaluations can be found in Chapter 3 and 4, with a summary found in the next section of this chapter. The specific qualitative research types used for the Ecological Screen Project included in-person interviews, professional review, and participation observation from the last public meeting. These methods of qualitative produced nonfigurative data (open-ended responses, notes, and scoring on a list of criteria from self-reflection and observation) lead me to a deeper understanding of the participatory process used for this project. However, some of the issues for this method included time spent for each interview and processing the written notes and comments from the meetings, having to remain honest and unbiased during the scoring of these tables, and validating the conclusions that derived from these findings. For Wolcott Park, qualitative and quantitative research techniques were used through open and close-ended questions distributed in an online survey. Not only did the quantitative data provide us with statistical information that made drawing conclusions simple, but it also validated what we found in the quantitative data. Nevertheless, even with the large sample size, we struggled to get a decent response rate due to the lag of time from the last meeting, which caused participants to forget about what they were

showed or even loss interest in the project entirely. Below lists the advantages and disadvantages to using both evaluation methods.

Evaluation Methods Comparison:

Ecological Screen: *Qualitative*

Pros:

- Preparation was relatively quick, cheap, and easy
- Intuitive, natural, instinctual
- Allowed for deeper understanding
- Triangulation demonstrated validity of methods used
- Observation allowed for viewing and evaluating the process in action
- In-person interviewing gave more in-depth, honest, and detailed responses
- Self-evaluation allows for an thorough review from a professionally educated source

Cons:

- Application was time consuming - Observation and in-person interviews
- Hard to form valid conclusions
- Not as formalized – less data collected
- Manual data entry and analysis was time consuming
- Observation can be invalid if the researcher interprets the observed behaviors in the wrong way or if the researcher does not have a neutral/unbiased stance
- In-person interviewing had limited sample size
- Self-evaluation could be invalid if I was not completely honest

Wolcott Park: *Qualitative & Quantitative*

Pros:

- Using qualitative research was intuitive, natural, instinctual
- Using qualitative research allowed for deeper understanding
- Open-ended survey questions gave in-depth, descriptive, and detailed responses
- Using quantitative research produced concrete, tangible, and numerical data
- Quantitative data was easily comprehensible

- Close-ended survey questions gave straight forward and statistical feedback
- Feedback from close-ended survey questions made it easy to study
- Data entry and analysis was quick and easy using Qualtrics
- Using blended methods makes for well-rounded data
- Using blended methods makes it easy to drawing conclusions
- Survey had large sample size
- Survey was easily distributed among participants

Cons:

- Survey approval by university was extremely time consuming and difficult
- Survey preparation was time consuming and required expertise
- Low survey response rate
- Technological divide from participants to researchers

Evaluation Findings:

Figure 5.3 is a table comparing the findings from the Ecological Screen Project and the Wolcott Park Project, which is used to determine the success of both participatory design processes. Each category is given a score: extremely successful, somewhat successful, neutral, somewhat unsuccessful, and extremely unsuccessful. Each category has three empty circles. The more successful a category is the more the circles will be filled in (see key for scoring). The categories with more white circles than black circles represents a category that is somewhat or extremely unsuccessful. Once all categories are scored for each project, the total number of black circles is divided by the total number of circles that could be rewarded (in this case it is 48 possible circles) to give the rate of success. The Ecological Screen Project was scored from the inferences drawn from the three qualitative data methods, while the Wolcott Park Project was scored from the quantitative data drawn from the survey.

Comparing Evaluation Findings:

Democratic Process	**Ecological Screen**	**Wolcott Park**
Clear and Fair Procedure	● ● ●	● ● ●
Engages Broad Public	● ○ ○	● ● ◐
Provides a Voice for All	● ● ○	● ● ○
Community and Ecological Considerations		
Meets Needs of People	● ● ●	● ● ●
Enhances a Sense of Community	● ● ●	● ● ●
Protects Ecosystems and Biological Diversity	● ● ●	● ● ○
Encourages Stewardship	● ● ●	● ● ●
Awakens Lay Creativity	● ○ ○	● ● ●
Design Outcomes		
Improves Community/Everyday Environments	● ● ●	● ● ◐
Improves Creative/Aesthetic Design	● ● ●	● ● ◐
Improves Functional/Practical Design	● ● ●	● ● ○
Allows for Easy Project Implementation	● ● ○	● ● ○
Overall		
Overall Client Support of Project	● ● ●	● ● ●
Overall Public Support of Project	● ● ●	● ● ●
Overall Client Approval of Process	● ● ●	● ● ●
Overall Public Approval of Process	● ● ●	● ● ●

Key:

● ● ●	Extremely Successful
● ● ○	Somewhat Successful
● ● ◐	Neutral
● ○ ○	Somewhat Unsuccessful
○ ○ ○	Extremely Unsuccessful

Figure 5.3: Matrix comparing the Ecological Screen evaluation findings and the Wolcott Park evaluation findings. Each criteria is rated along a five level likert scale.

Total black circles Ecological Screen: 42 out of 48 possible, **87.5%**

Total black circles Wolcott Park: 42.5 out of 48 possible, **88.5%**

After calculating the scores from both projects, I found that the Ecological Screen Project scored 42 out of 48 possible circles giving it an overall success rate of 87.5% as compared to the Wolcott Park Project, which scored 42.5 out of 48 possible circles resulting in a success rate of 88.5%. As you can see, both participatory processes scored similarly. Although, neither of the case studies received a perfect score or close to perfect score, which could be due to several

factors. It is to be noted that a perfect score in all categories is not needed for a successful participatory process. UConn's methodology believes that if the process scores above a 75% then it should be regarded as successful. Although, attempting reaching a perfect score should be a goal to strive for in future projects.

Firstly, the Ecological Screen Project received only 1 out of 3 circles for engagement of the broad public. I believe this is the case due to the fact that many of the participants consisted of residents who had expressed concern about the DPW facilities. Announcement of the meeting was not shared publically besides posting to the town's website and town clerk's office. The local resident groups used word of mouth to let others know about the meetings, however, this did not help engage the rest of the larger community. Wolcott Park scored 2.5 circles for this category, making it slightly more successful for engaging the broader public. Even though this process used many methods to include everyone, the numbers did not show up. The first meeting sessions had a good turnout, yet in the second meeting less than half of the participants returned. This may be due to scheduling conflicts with there only being one time for the second meeting, which possibly could have been too late for many participants.

Both case studies received the same score of 2 out of 3 circles for providing a voice for all. The public meetings for the Ecological Screen were structured around open group discussions and Q&A, which can be viewed as intimidating for some of the more reserved participants. This could lead them to believe that their voice was not heard during the meetings. Wolcott, on the other hand, consisted of both open and small group discussions, yet some of the more opinionated participants may have felt trumped within the smaller groups.

For protecting the ecosystems and biological diversity, Wolcott Park scored 2 out of 3 circles. I assume that UConn's graphics and presentations did not show the elements that were

emphasizing on this issue. As landscape architects, we have a duty to protect the existing habitats we touch, therefore our proposed schematic redesign for Wolcott included several strategies for protecting the existing ecosystems as well as making improvements to enhance the overall park. An example of this is using facultative wetland vegetation along and near the existing pond which is in an unhealthy state due to run off. We also proposed to keep only half of the pond man-made and maintained and let the rest return to nature as a wetland. This shows that our graphics need to portray these steps more in order to educate the public on how we intend to protect existing ecosystems as well as improve the overall environment within the park. The process for the Ecological Screen received a perfect score for this category because we portrayed a strong environmental cause within our designs by working to protect existing wildlife, increasing biological diversity, and educating the public on succession of vegetation in the riparian area.

The Ecological Screen Project also had a score of "somewhat successful" for awakening lay creativity. This means that the participants did not have the chance to explore design ideas individually or in small groups, instead they participated in ways that were only for raw fact finding and feedback on designs created by UConn. The participatory process for the Ecological Screen would have scored higher if it had had a hands-on activity similar to the one found in Wolcott Park's process, which received a perfect score in this category.

Wolcott Park's process was .5 of a circle away from a perfect score for improving the community and everyday environments, which could be due to the project type and budget. The majority of Wolcott's design improvements are functional and aesthetic, which aid in increasing park usage but does not completely impact the community at large since it is a neighborhood park. The Ecological Screen Project received a full score because the design helped to mitigate

the views, sounds, and smells from the fill pile, which satisfies the needs of the surrounding residents and the public that use the area.

In addition, Wolcott's process received the same score for improving creative and aesthetic design. The budget is tight for this project, due to town wide budget cuts, therefore, the design needed to focus on the functional improvements before the creative ones. Another reason for this may be that since the project is still in the schematic design phase, many creative details have not been flushed out in the design yet. Even with a low budget, the UConn team can improve the overall aesthetics of the park with increasing and diversifying the vegetation, adding unique park structures and other elements, and adding pavers instead of concrete walkways in certain areas. Furthermore, its process scored only 2 out of 3 circles for improving functional and practical design. This could have a similar conflict with a tight budget. At the moment, the budget only has enough room for the most important improvements such as adding more parking, repaving the walks, parking lots, and tennis court, improving the lighting infrastructure, and rebuilding a new concession stand and restroom facilities. Other functional improvements that are being put on the back burner include; expanding the existing playground area for older children and provide seating and shade for parents, adding new trail systems and cleaning existing ones in the children's forest, adding a shade structure or pavilion for the seniors, and adding more seating to the baseball field. The Ecological Screen Project had a perfect score for all three of these categories because the budget was enough to provide a functional buffer to the view, sounds, and smells of the DPW facilities, improve the natural beauty to the proposed graded berm with vegetation, and even provide the residents with a recreational space for walking and bird watching.

Both case studies scored 2 out of 3 for easy project implementation, yet for different reasons. The Ecological Berm was assessed to have difficult project implementation due to trust issues between the residents and the town from a conflict that arose several months ago before construction began (refer to Chapter 3), which may put a temporary halt on implementation. For Wolcott Park, some of the municipal/client members that were surveyed believed that implementation may be somewhat difficult due to budget issues.

Overall, both case studies received perfect scores for having clear and fair procedures, meeting the needs of people, enhancing a sense of community, encouraging stewardship, overall support of the project, and overall approval of the participatory process by all groups. In both case studies, UConn was hired in order to mediate an existing problem issue regarding relations between the town and a resident group (Fairfield) or from the community (Wolcott). However, both participatory design processes were successful in preventing conflict during the public meetings and therefore did not need to address conflict mediation strategies.

CHAPTER 5: Conclusions – What Was Successful or Not?

Process

Ecological Screen:

As found in Chapter 5, the Ecological Screen Project Received 42 circles out of a possible 48, giving it success rate of 87.5%. UConn's methodology believes that a score above 75% is considered to be successful. From this I can conclude that the participatory design process for the Ecological Screen Project was very successful. The participatory process was extremely successful in having a clear and fair procedure, meeting the needs and desires of all the participants, enhancing a sense of community amongst the residents and town, protecting the existing ecosystems and biological diversity of the site, encouraging local stewardship, improving the community and everyday environments, and improving the site with both functional and aesthetic design elements. Additionally, UConn held the support of the client group and residents during the entire process as well as received overall approval from all groups on the final design solution. The residents and clients were extremely happy with UConn's participatory process and are looking forward to seeing the finished product in the next year.

Wolcott Park:

In Chapter 5, the Wolcott Park participatory design process was scored as well. It received 42.5 out of 48 total circles, which resulted in an 88.5% success rate. Therefore, this process was just as successful as the participatory process used in the first case study. I conclude that the participatory design process used in the Wolcott Park Project had a clear and fair procedure, engaged the broad public, met the needs of all the clients, stakeholders, municipal officials, and

community members, enhanced a sense of community within the neighborhood, encouraged local stewardship in the neighborhood and Wolcott Park, awakened lay creativity of the participants during the planning process, and lead to re-design with many functional and aesthetic improvements for the park. Lastly, the client, stakeholder members, town officials, and public have supported the project thus far, as well as approved the process in which they have been involved in. All groups look forward to the next step in the project as well as what will come at the next public meetings.

Evaluation Methods

Ecological Screen:

Thus far, this thesis has explained that using qualitative research methods as a single approach process evaluation is a valid method to measure the success of a participatory design component. This evaluation method used the strategy of triangulation with three types of qualitative research: in-person interviewing, participant observation, and self-review. By using this strategy, the results that were found from each method were corroborated amongst either other in order to prove the validity of the data. From there, I was able to confidently make conclusions on the overall success of the participatory component used in the Ecological Screen Project. However, when comparing this evaluation method to a blended approach, as used in the Wolcott Park Project, it was ultimately not effective in forming the concrete and numerical data that typical quantitative research can provide.

Wolcott Park:

As explained above, it was concluded that using a blended approach is much more effective in evaluating the success of a participatory design component. As used in the Wolcott Park project, a blended approach takes the advantages of both qualitative and quantitative research methods in order to accurately make inferences from a set of data as well as build a deeper understanding on underlying concepts. The evaluation method used in the Wolcott Park Project included a survey with open and close-ended questions, which was a quick way to give us feedback from all participant groups. However, the way in which these surveys were distributed had a big downfall. Since the surveys were online, the response rate was extremely low. Furthermore, this process evaluation lacked other qualities that were admired from the Ecological Screen Project, like the public observation and professional review. Therefore, I concluded that using a blended research approach to evaluate the success of a participatory design component is far more effective when there are multiple types of both qualitative and quantitative methods. This idea is further expanded on in Chapter 6 when I explain the ideal participatory design process and evaluation method.

Conclusions - Summary

So far, this thesis has discussed two case studies: Ecological Screen in Fairfield, CT and Wolcott Park in West Hartford, CT. I described both participatory design processes that were used in each case study as well as explained how I used two different evaluation methods to measure the success of each process. In this chapter, I concluded that the participatory design process used in the Ecological Screen Project was just as successful as the process used in the Wolcott Park Project. The scores for both participatory design processes came out to be very similar (87.5%

success rate for the Ecological Screen Project and 88.5% success rate for Wolcott Park), thus proving validity in both. The determination of these scores is further explained in Chapter 5. In addition, I concluded that using a blended research method, as opposed to only using qualitative research as a single method, resulted in more in-depth and comprehensive findings when it came to evaluating the success of a participatory design process. Although qualitative research is a vital part of the evaluation process, it can be too theoretical to draw valid conclusions from on its own. Using a blended approach to evaluate the participatory design processes adds formality by collecting comprehensive data that can easily be measured through quantitative research methods, while retaining an intuitive and natural edge that comes with qualitative research. Additionally, a blended approach gives the researcher more flexibility when it comes to designing the process evaluation and what specific methods could be used. They are not limited by either qualitative or quantitative methods due to the fact that they can use both in any matter they see fit. Having mathematical data, being a credible source, can help confirm the exploratory data that may be viewed as abstract to those who seldom investigate through qualitative methods. Likewise, retaining the exploratory data provides a deeper understanding of the process that numbers could not uncover. Yet, the ideal participatory process evaluation should include a diverse mix of both qualitative and quantitative research methods, which can be used through triangulation. This can result in conclusions that are far richer and exploratory than by using only one blended method.

Ideal Model for Participatory Design Process and Evaluation

Lastly, this chapter will map out both the ideal participatory design process as well as the most effective evaluation method to measure the success of the implemented participatory design process. The ideal process and evaluation method can be used in future projects in the Town of Fairfield, the Town of West Hartford, and other projects done by UConn's Community Research and Design Collaborative (CRDC). This is also intended to be used as a model that any municipality, institution, or practice can use and modify to fit any current or future project that requires a participatory design component or an existing participatory process that calls for evaluation.

Ideal Participatory Design Process:

I concluded that both participatory design processes used in each case study were successful. Therefore, the ideal process pulls the most effective participatory elements from both the Ecological Screen Project and the Wolcott Park Project. Additionally, the ideal process adopts other strategies that were inspired by several pioneers of the participatory movement, my additional research for this thesis, and from my experience through my undergraduate and graduate program at UConn. In order to describe the ideal participatory design process this section will include:

1. Criteria for the Ideal Participatory Design Process
2. Power Distribution
3. Rules and Standards for Ideal Participatory Design Process:
    a. Client Interaction
    b. Stakeholder Engagement
    c. Public Meeting Standards

4. Workshop Activities to Collect Participant Inventory on Project Site:
5. Conflict Mediation and Consensus Building
6. Public Meeting Timeline

Criteria for Ideal Participatory Design Process:

Democratic Process

- Has clear and fair procedure
- Engages broad public
- Provides a voice for all

Community and Ecological Considerations

- Meets the needs of people
- Enhances a sense of community
- Protects ecosystems and biological diversity
- Encourages local stewardship
- Awakens lay creativity

Design Outcomes

- Improves everyday environments
- Improves creative/aesthetic design
- Improves functional/practical design
- Allows for easy implementation

Participant Support

- Overall client support of project
- Overall stakeholder support of project
- Overall community support of project
- Overall client approval of process
- Overall stakeholder approval of process
- Overall public support of process

Power Distributions:

The ideal participatory design process allows for fair yet effective power distributions. As explained in Chapter 1, Arnstein's Ladder of Participation is a good way to tell how successful a process is at giving the community a voice during the planning process. (Figure 6.1) When ranking your participatory design component on this ladder, ask yourself, "Who holds the decision making power? Who is left out? What strategies can I use in order to engage those without a voice?" A successful participatory design process will be in either the "consultation" rung or higher. Although the "informing" rung is above non-participation, it can sometimes lead to a one-way flow of information, which does not allow for any feedback from the community. Also known as "Decide announce defend," coined by Lawrence Susskind, this strategy can make coming to a consensus impossible and can even jeopardize the trust in future projects. Furthermore, placing any lower on the ladder is no longer considered participation.

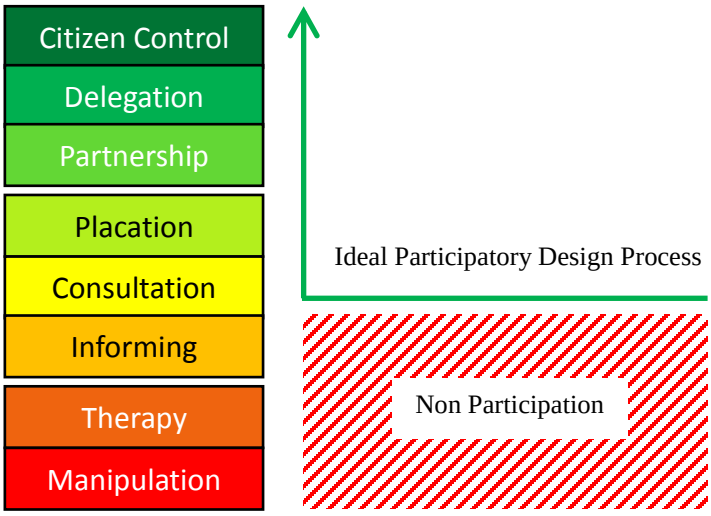


Figure 6.1: Diagram of the Ideal Participatory Design Process Power Distribution on the Ladder of Participation

Rules and Standards for Ideal Participatory Design Process:

Client Interaction –

- Always have a written Memo of Understanding and/or contract before beginning a project
    - To be reviewed and signed by client
    - Discuss reimbursements
- Write the program with the client
    - Discuss goals, feasibility, and requirements
    - Keep community and stakeholders in mind
- Recognize clients motives for involving the public and make sure they understand your entire process and requirements
    - Be an advocate for the public as well as your client
- Decide whether or not there will be a post-project review or process evaluation before beginning meetings in order to prepare
- Brainstorm a timeline for project phases and meetings
    - Keep it practical
        - Too little time between meetings can result in design ideas and materials that are too cursory or unfinished
        - Too much time between meetings can result in losing the interests of participants and risking (those who remain) forgetting what happened at previous meetings
    - Make a list of who to meet with
        - Stakeholder groups
        - Municipal officials
        - Public
- Discuss goals, agendas, and roles for meetings
    - Will the client be taking an active part in meetings and activities?
- Have frequent meetings with client and municipal officials for plan approval
    - Before each public meeting
    - Before final public meeting
- Once final masterplan is completed, meet to discuss implementation and next steps

Stakeholder Engagement -

- Schedule meeting with all interested stakeholder groups from list created with client
- Allow them to voice their concerns and opinions
- Fully explain project and development decisions to them
- Allow stakeholder groups and/or representatives to come to public meetings
- Gain their approval for project

Public Meeting Standards –

- Discuss the public meeting timeline with the client in order to stay on track and keep realistic goals as the project moves forward
    - Collaborate on the public meeting dates, agendas, and goals
- Public meeting locations should be in a neutral setting within the town
    - Preferably near the project site
    - Location should have appropriate room for expected number of attendees
        - Materials needed in the room:
            - Enough tables and chairs for all
            - Pin up space
            - Projector and screen
- First meeting should have two sessions (one in the afternoon and one in the evening)
- Follow up meetings can be at one time (preferably evening)
    - If this is the case, a PDF or video recording of the presentation should be available on the Town's website immediately after for those who could not attend
- All meetings should be scheduled during the week and avoid the summer/winter holiday months
    - Weekend meeting can be scheduled if it is a large scale charrette that lasts most of the day. This should be a widely advertised event and should incentivize participants to come to (food, games, hands-on activities)
- Meetings should be announced publicly once scheduled
    - Posted on Town Website
    - Posted in Town Hall, Community Center, and other relevant locations
    - Advertise in local newspapers
    - Email invitations sent to all residents/users within a specified distance of site
    - Email invitations sent to all relevant and interested stakeholder groups
    - Email invitations sent to all nearby businesses and institutions
- Meetings must be open to all who attend
- See Figure 6.X for suggested meeting timeline and agenda
- Assign roles to project team: presenter/mediator and note taker/observer
    - Presenter/mediator is in charge of leading meeting as well as mediating participant discussion and conflict during all public meetings.
    - Note taker/observer is in charge of taking notes of all comments, reactions, and occurrences during all public meetings. Observation must remain unbiased.
    - Video and/or audio record meeting to be posted on town website along with meeting PowerPoint presentation
- Provide sign-in sheet and have participants give their name, email, and affiliation before meeting begins
    - Keep attendance during future meetings and record any newcomers
- All voices must be heard during meetings:

- Open large group discussion
- Small group discussion
- Small group workshops
- Individual printed surveys
- Q&A sessions
- Follow the Rules of engagement for each meeting:
    1. All questions/comments will be directed to the moderator. The moderator will either answer questions/respond to the comments or solicit additional information from other meeting attendees.
    2. Only one person speaks at a time so all comments can be addressed in an appropriate fashion. Under no circumstances will there be direct communication between meeting attendees. *The exception to this rule is during the work sessions.*
    3. If interested in asking a question or making a comment, please raise your hand and the moderator will select speakers one at a time. Once selected, please
        - State your name, address and any official affiliation with West Hartford
        - Questions/comments to be limited to 90 seconds in duration
    4. Limit of one question per person until all individuals have been given an opportunity to comment. If time allows, additional questions/comments will be entertained.
    5. If you would like to ask a question or have a comment and would prefer not to speak at the meeting, please send an email to (put project manager's email here)

- Workshops and group activities must be in groups of 3-6 participants
    - Round tables
    - Keep groups diverse
    - Materials must be available for each group
    - Assign someone from each team to be note taker and presenter
    - Project team to assist teams as needed, but not influence them
    - If meeting location is within walking distance of site, the workshop can be a site transect walk
    - Workshop should allow for participants to get creative and voice their opinions
    - Use this time to handout pre-project survey
    - At the end of workshop have each group present their work to group
    - Project team should save and collect all materials and notes from workshop
- Meetings should not end until an overall consensus has been reached
    - Majority of participants must have approval (at least 75%)

Workshop Activities to Collect Participant Ideas and Concerns:

*Use at least 2 activities during first meeting

- Pre-project survey
    - Printed or e-survey during first public meeting
    - Asks basic questions on opinions and desires for project
- Aerial map & tool kit charrette
    - As seen in the Wolcott Park Project
    - Small groups at tables discuss over aerial maps
    - Tool kits allow participants to get creative
    - Comments are recorded
- Project site transect walk
    - Similar to Lawrence Halprin's RSVP Cycles
    - Have participants walk through chosen routes at the site
    - Ask questions on feelings
- Catalog imagery workshop
    - Participants given list or PowerPoint of images
    - Paired with survey asking what they liked or did not like
- Table scheme display
    - Basic idea or model placed in central location
    - Participants place stickers to vote on certain sections or write notes
- Online surveys
    - Convenient way to collect information from participants not able to attend first meeting
- Open circle workshop
    - Participants sit in circle and openly discuss needs, wants, & desires
    - Mediator is needed for this
- Photo survey
    - Small groups of participants explore a certain area taking pictures of certain subjects and themes that they like
- Street stall
    - Set up table with project information, photos, and printed surveys for those who pass by to fill out
    - Can be in center of town or at the site itself

Conflict Mediation and Consensus Building:

Tips for resolving conflict inspired by Lawrence E. Susskind's, *Breaking the Impasse* as well as the Consensus Building process. Use these strategies if conflict arises or if public is not coming to a consensus during public meetings

Tips for Resolving Conflict -

1. Choose a neutral location and appropriate time to talk
2. Compromise on a solution that meets the needs of the majority of the group
3. Allow for all voices to be heard and reaffirm that you listened
4. Stay calm, positive, and neutral
5. Discuss issues and avoid pointing fingers
6. Use interpersonal statements
7. Focus on agreements
8. Remain on topic
9. Describe what is necessary and why
10. Stay open to creative ideas

Consensus Building Process -

1. Plan - Schedule meetings with clients, stakeholders, and the public
2. Advocate - choose spokesperson or team leaders for groups – also ask who is missing?
3. Define - Create an agenda and rules for the meeting
4. Fact Find – collect desires, concerns, and needs of all groups
5. Brainstorm and Negotiate – look at various alternatives for the group to consider
6. Compromise - Meet with each group to discuss proposals
7. Build Consensus - Decide on what proposal is best for everyone
8. Approval – Get the support of elected officials/representative or higher up
9. Implementation – Carry decision forward
10. Recap - If there are disagreements after consensus has been made, remind the group/individual of the decision making process

Public Meeting Timeline:

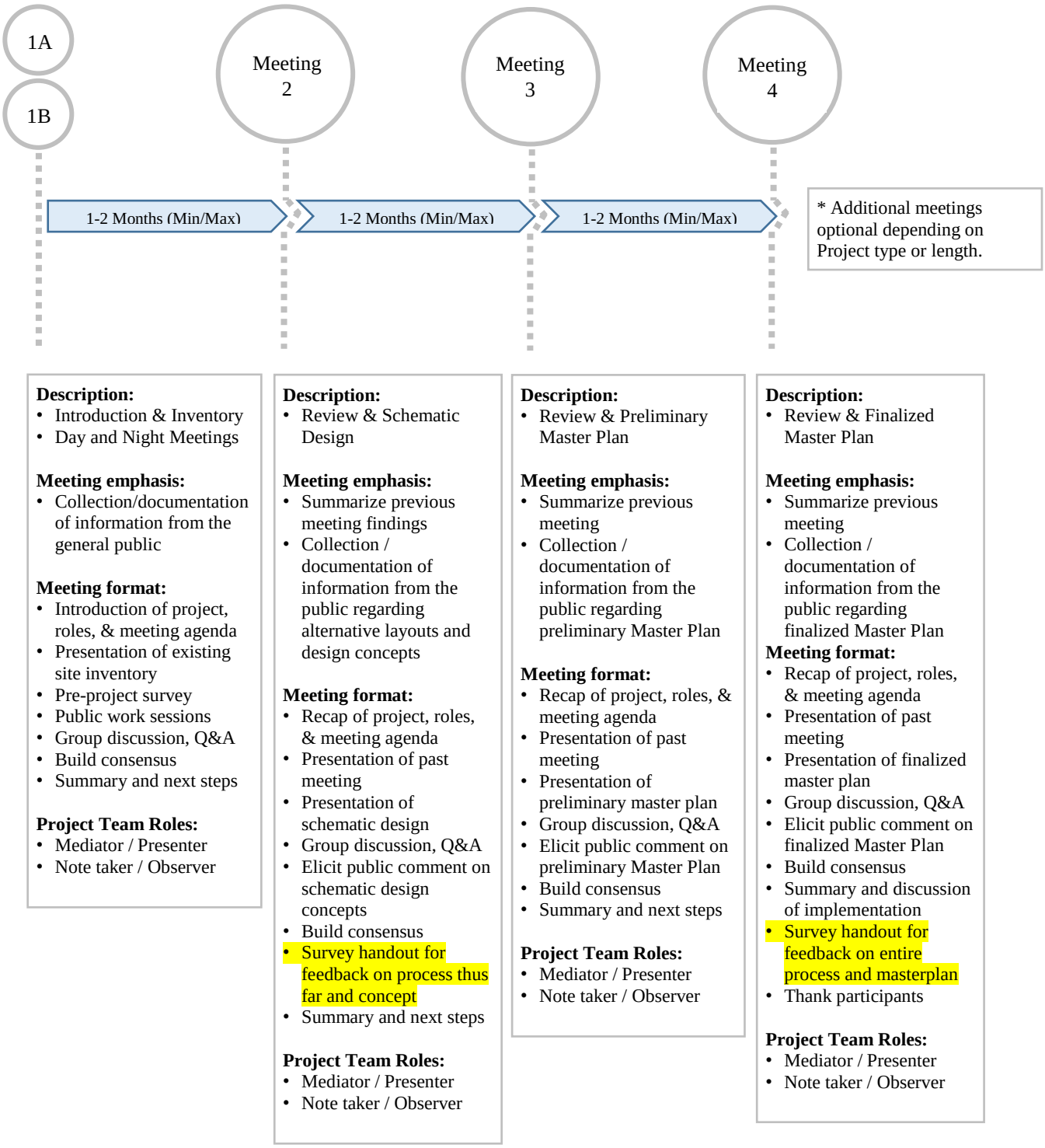


Figure 6.X: Ideal Participatory Design Process Public Meeting Timeline. Yellow highlighted bullet points locate appropriate time for feedback survey on public meeting process. Note that public observation should take place at all public meetings.

Ideal Evaluation Method:

In the beginning of this chapter I concluded that a blended research approach is more effective when it comes to evaluating the success of a participatory design component as compared to using a single, qualitative only approach. For that reason, the ideal evaluation method for measuring the success of a participatory design process uses mixed methods research with both qualitative and quantitative research methods. (See Chapter 5 and Chapter 6 - Conclusions for further explanation). Specifically, this evaluation method adopts the strategy of triangulation (see Chapter 2), which helps confirm the same concept through three different data collection methods. The ideal evaluation method uses quantitative data collection through close-ended questions in surveys and qualitative data collection through open-ended survey questions, public observation, and professional review. (Figure 6.X) This section includes: survey standards, example survey questions and formatting, public observation standards, public observation evaluation chart, professional evaluation standards, and professional evaluative criteria for evaluating the participatory design process. All survey questions and evaluation criteria charts have been modified from the previous case studies for improving the overall participatory design model.

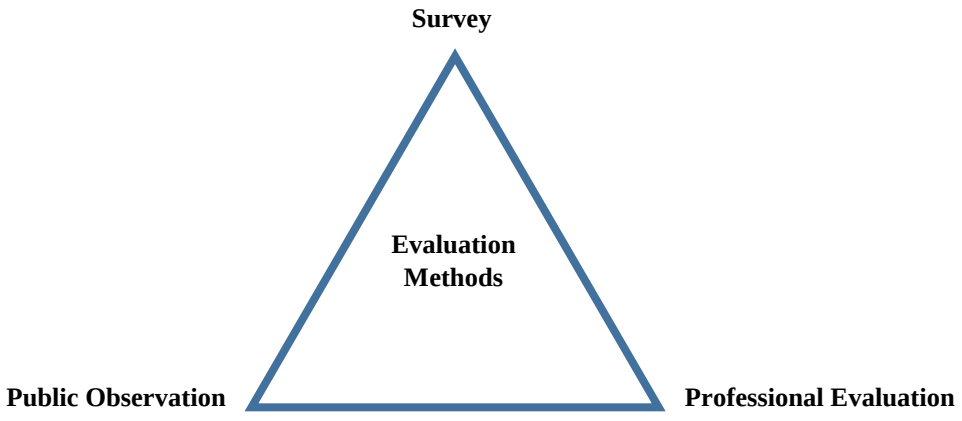


Figure 6.X: Ideal Participatory Design Evaluation Method Triangle

Survey – Quantitative and Qualitative Research

- Asks participants directly for feedback on participatory design process and project outcomes
- Mix of open and close-ended questions
    - Use likert scale for close ended questions
- Distributed during public meetings in order to have high response rate
    - Printed format, provide writing materials
    - 2nd meeting for progress feedback & last meeting for final feedback
    - Those who cannot attend meetings have access to survey link online
        - Provide PowerPoint presentations, additional materials, and audio/video recording from each meeting.
        - Survey should be the same as handout
- Given to all participants:
    - Community
    - Stakeholders
    - Client group
        - more detailed survey asking feedback on implementation
    - Municipal members
        - more detailed survey asking feedback on implementation
- Offer a modified survey online for those who could not attend one of the meetings
    - Provide with updated PowerPoint and video/audio recording of presentation
- Survey Findings:
    - For written surveys, use a secretary or other to type and record all collected responses
    - Show quantitative data as simple bar charts, tables, and percentages
    - Quantify qualitative data through a program similar to Qualtrics by tagging each response with a topic
        - List all topics and number of mentions (from most to least)
        - Review topics with the most mentions to find the most common responses
        - Show as sample response quotes to further explain topics
- Survey approval:
    - If survey is to go through university, IRB approval must be obtained
    - Training is required for those who are associated with survey

Example Participatory Design Process Evaluation Survey

1. What is your affiliation with the _____ project?

    - Municipal official in _____
    - Community or stakeholder member

2. What motivated you to participate in the meetings for _____?

3. What did you like most about the meetings for _____?

4. What did you like least about the meetings for _____?

5. Did the meetings for _____ meet your expectations?

    - Yes
    - Kind Of
    - No

6. How fair or unfair do you believe the public meeting process was?

    - Extremely fair
    - Somewhat fair
    - Neutral
    - Somewhat unfair
    - Extremely unfair

7. How inclusive or exclusive do you believe the public meeting process was?

    - Extremely inclusive
    - Somewhat inclusive
    - Neutral
    - Somewhat exclusive
    - Extremely exclusive

8. How valued or unvalued do you believe your voice was in the public meeting process?

    - Extremely valued
    - Somewhat valued
    - Neutral
    - Somewhat unvalued
    - Extremely unvalued

9. How easy or difficult did you find participating in this public meeting process to be?

    - Extremely easy
    - Somewhat easy
    - Neutral
    - Somewhat difficult
    - Extremely difficult

10. How satisfied are you with the following aspects of the _____?

	Extremely satisfied	Somewhat satisfied	Neutral	Somewhat dissatisfied	Extremely dissatisfied
Ecological aspects					
Aesthetic aspects					
Functional aspects					

11. Do you believe the _____:

	Yes	Somewhat	No
Met the needs of people			
Helped to enhance a sense of community?			
Helped to enhance ecological and biological diversity?			
Encouraged stewardship?			
Engaged participants in a creative process?			
Improves community and everyday environment?			

12. How do you think this _____ will impact the community?

For Municipal officials and client group…..

13. How easy or difficult will it be for _____ to implement the _____ that was created for _____?

- Extremely easy
- Somewhat easy
- Neutral
- Somewhat difficult
- Extremely difficult

14. Why do you think it will not be easy for _____ to implement the _____ that was created for _____?

Public Observation – Qualitative Research

- Uses observation of participants during public meetings to evaluate the process in action
- Project team note taker is in charge of observing participants' comments, responses, and reactions during all public meetings
    - Write notes
    - Audio and/or video record meetings and discussions
- Review notes and give each category a score on the Public Observation Evaluative Chart (Figure 6.x)
- Observer must remain unbiased and honest during observation and scoring

Public Observation Evaluation for Participatory Design Process	**Extremely Successful**	**Somewhat Successful**	**Neutral**	**Somewhat Unsuccessful**	**Extremely Unsuccessful**
Public Meetings and Workshops					
1. Clear and fair procedure					
2. Engages broad public					
3. Provides a voice for all					
4. Clear consensus was met					
5. Overall support of project					

Figure 6.X: Public Observation Evaluation for Participatory Design Process. Use observation of participants during public meetings.

Professional Evaluation – Qualitative Research

- Uses self-evaluation strategies as a way to get the professional opinion and feedback on the participatory process within the project team
- Allows designer to be self-reflective and critical in order to make improvements for future projects
- Have each project team member review and score each category on the Self-Evaluative Chart (Figure 6.X)
    - Review each member's evaluation
    - Collaborate on final assessment

Professional Evaluation for Participatory Design Process	**Extremely Successful**	**Somewhat Successful**	**Neutral**	**Somewhat Unsuccessful**	**Extremely Unsuccessful**
Democratic Process					
Clear and fair procedure					
Engages broad public					
Provides a voice for all					
Community and Ecological Considerations					
Meets need of people					
Enhances a sense of community					
Protects ecosystems and biological diversity					
Encourages stewardship					
Awakens lay creativity					
Design Outcomes					
Improves community and everyday environments					
Improves creative and aesthetic design					
Improves function and practical design					
Allows for easy project implementation					
Overall					
Overall client support of project					
Overall public support of project					
Overall client approval of process					
Overall public approval of process					

Figure 6.X: Professional Evaluation for Participatory Design Process. Self-reflection done by all members of project team.

Using the Ideal Model:

The Ideal Participatory Design Model includes suggested evaluation methods throughout the process (i.e. surveys, observation, and self-reflection). Using the model does not require that both the evaluation and process must be used in conjunction, however if a contract calls for post-project review or process evaluation, it is recommended that the complete model is used in order to result in the most successful outcome. This is because a participatory design component is only regarded as a successful once it is evaluated by the researcher after implementation. Modifications to the process are likely to occur (project type, timeline, budget, etc.), which will affect the end result. Using the proposed evaluation method not only validates the participatory design process being used, but also provides the researcher/designer with in-depth feedback from the participants on their thoughts of the overall process. This allows for positive and thoughtful

improvements on their modified participatory process. The ultimate goal of using a participatory design component is that all participants feel as though their voices have been heard, that they can trust those making the decisions, and that at the end of the day they are comfortable and satisfied with the final solution. Successful participatory design creates public spaces that are cared for because it was designed with the needs and desires its users in mind. Those who participate feel a sense of pride that they helped bring the project to life, which encourages them to take part in other community projects. Local stewardship and community involvement improves the spaces in which we inhabit every day, and in long run will benefit future generations.

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Appendix/Resources

Fairfield DPW Berm Meeting Notes

Fairfield, CT Public Meeting Notes: 6/23/2017

Location: Sherman Elementary School

7:00 PM

Attendees: DPW Director, Super Intendant of Public Works, and Beach Association Members, Residents

Agenda: Initial Meeting

Presentation by DPW: Spoils Pile

- 40+ years old pre-2013
- estimate of 40k cu yd @ $10/cu yd to remove
- FRP awarded in 2013-16; saleable product became a challenge
- attempting to reduce pile from El.58' to El.24' or 1.5 acres
- every 3,150 tons = 1' reduction and all weighed in on scale
- solution to creat landscape berm to screen DPW's analysis of incoming and outgoing material
- controlled hours of operation and road use; Post Rd. and Reef Rd. from 7-3:30pm not including fueling/ greasing as early as 5am. Transfer Station all night.
- goal to drop pile to 24' @ 6 month intervals over 18 to 24 months; ie. 3,000 tons outgoing in last 10 weeks
- water testing? to be discussed by Environmental Consultant

Presentation by CRDC:

- role is to facilitate, coordinate and create, protect acoustics and bird population, and create park-like setting w/ biodiversity
- focus on fill then on tree operation
- town and DPW site in flood zone; can't hide
- public to complete two surveys; 'what to do with pile?' and 'how long will it take?'
- public to tag their houses on aerial photo
- next meeting to be a work session in 3 to 4 weeks

Presentation by Rob, Environmental Consultant:

- no contamination of surface water
- landfill leaching; moderate levels in Phase I Site Assessment Study
- town located trash and water treatment in 1950's on current site; now inert
- Spoils Pile includes municipal waste, brush, and construction debris(asphalt and concrete)
- e. DEP violation cited re: storm water plan; new sedimentation pond to collect contractor's (Julian Construction) sediment

Fairfield, CT Public Meeting Notes: 10/5/16

Location: Sherman Elementary School

7:30 – 9:30 PM

Turnout: 27 (30 with UConn and client team)

Agenda

- Discuss models/project overview at table
- Public Works Director discusses timeline and what needs to happen before we start the project.
    - Permitting/costs
- Environmentalist discusses toxins on site
- Discussion of next meeting

Observations:

- Models and graphics on table and pined to board behind
- PowerPoint on projector screen
- Group gathers around table for initial discussion
- Public happy with discussion and project so formal PowerPoint is not used
- First Selectman acts as mediator as discussion heats

Comments/Concerns:

- Wildlife
- Timeline → environmental plan, budget, construction, phases?
- Views from North to South
    - Couple was concerned who lived on north side of site
- Maintenance / water for plants
- Hiking trails
- Phases
- Plants (sizes)
- Height of pile (existing and proposed)
- Pile on sides of site
- Noise of trucks from site
    - Couple living near entrance (N side) hear trucks everyday coming and leaving
- Odor
- Run off into wetlands/pollutants
- Land use in center of town – why was this built here?
- Partnerships - Audubon?
- Potential asset to town

Public Outreach and the 'Berm' at Fairfield's DPW Facility - Interview

Interviewee: First Selectman of Fairfield, CT

Project Inception:

1. What was the motivation to create a berm to the south side of the DPW facility?

   The operation there had gotten so big and had such an impact on the neighborhood specifically visual impact that a berm seemed to be the best way to compromise with the neighbors to keep the operation functioning yet hide it behind the berm to minimize the visual impact on their homes.

2. Did you consider doing the work 'in-house'? If yes, why did you reconsider?

   No, our fire chief took an interest in this project and reached out to Peter using his contacts with UConn. That's what got us into it. It was the berm that came out of that idea so while we knew we were looking for options. We did not have a firm concept in mind and we were very excited hearing about how Peter approached things in terms of getting the neighborhood and stakeholders involved and coming up with a collaborative design solution.

3. Why did you contact Peter Miniutti and Community Research and Design Collaborative (CRDC) vs. others? How did you know about us?

   (See question 2)

Public Outreach:

1. How important do you find involving the public on a project like this? Why?

   I think it's extremely important. I think what you are talking about is a in essence a relationship solution and I think all the stakeholders in a relationship have to come together if you are going to have a long lasting solution that is satisfying. You have stakeholders, you have different objectives and things that have changed over time. The yard has been there for 50 years. 50 years ago the homes were all beach cottages. Now they are multi-million dollar homes so things like the environment and visual environment matter more now than when they were just summer cottages.

2. Do you feel obligated to involve the public, or do you personally enjoy the process?

I enjoy the process but I think it's extremely important to involve the public. Most of my career was in the private sector and if you are making a significant change you need to involve the costumers. You need to know if they are going to buy your product or not. You want them involved in that. In essence the residents are buying our product, they are tax payers. We want them happy with the outcome we want them as satisfied as they can be. It's not a perfect world, we can't make everyone happy but we need to try to make everyone happy.
And yes I enjoy the process, it's the nature of the job. You wouldn't be in a job like mine if you didn't enjoy people. I'm an engineer by training and that's in essence problem solving and this is another type of problem but I enjoy the whole process.

3. What are some concerns that come with working with the public?

   It's more getting the facts out there. I think that as an old boss of mine said that you are entitled to your own opinion but you are not entitled to your own set of facts and I think we have certain times that we have gone through this process and realize there are a lot of misunderstanding and a lot of misconceptions. I would say to some degree it works on both sides. There were certain things we didn't understand about the impact which is why it's good to involve the public but you need to structure the communication with a strong education component to make sure everyone in on the same page and agrees to the same set of facts. After that you can still disagree but you got to start with that bases and that's what I like about the approach Peter used.

Project Performance:

1. How do you feel the public outreach went in regards to UConn's work?

   I thought it was excellent. We had two public hearings and we are still continuing to use the diagrams and graphics developed and I think the public understands as well as they can what we are up to. At some point they won't know until we actually do it but they got as a good of an education and understanding as they can get.

2. Do you think that using visual aids when explaining the project design to the public was helpful or confusing? (i.e. our graphics, maps, models)

   I think the visual aids were essential and it couldn't have been done without them. And they were the appropriate visual aids.

3. How could we improve our interaction with the public?

You did an excellent job. I know you met with myself and other key people on the town's side before to understand the issue. I know we had the two different meetings with the public we defined the issues and the process so the public knew what to expect. That is everything I would expect in a good communication process and design process.

Service Learning:

Service learning is a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities.

1. Do you support the idea of service learning?

Yes.

2. Do you feel the public reacts positively or negatively to having students involved?

In this case I don't think it was key issue. I'm not sure if you went back and quizzed the public they would know. The fact that they don't know isn't a negative at all but I don't think they viewed this a learning experience or exercise or anything other than a first grade professionally run project.

Public Outreach and the 'Berm' at Fairfield's DPW Facility – Interview

Interviewee: Director of Public Works of Fairfield, CT

Project Inception:

1. What was the motivation to create a berm to the south side of the DPW facility?

The Town was getting complaints from neighboring residents regarding the visuals and noise emanating from our Public Works property.

2. Did you consider doing the work 'in-house'? If yes, why did you reconsider?

An extensive landscape design project is outside to the expertise of our existing Town employees.

3. Why did you contact Peter Miniutti and Community Research and Design Collaborative (CRDC) vs. others? How did you know about us?

Our Fire Chief has heard about the work that Professor Miniutti did in other communities. The UConn brand gave us credibility in that it was an outside entity and also not a consultant with profit motives involved.

Public Outreach:

1. How important do you find involving the public on a project like this? Why?

We needed to involve them. They will be the main beneficiaries of the future improvements.

2. Do you feel obligated to involve the public, or do you personally enjoy the process?

We were obligated to include them, because they were the main customers. I did enjoy the project, it is something that was desired by the residents, as opposed to some project were they are objectors.

3. What are some concerns that come with working with the public?

With human nature, some voice opinions that are self-centered, well-meaning but not the best idea, or just plain incorrect.

Project Performance:

1. How do you feel the public outreach went in regards to UConn's work?

Very well, the public came out with a good feeling and something that we all agreed upon.

2. Do you think that using visual aids when explaining the project design to the public was helpful or confusing? (i.e. our graphics, maps, models)

It was helpful. I think everyone related to both the low tech models, and the charrette type presentation.

3. How could we improve our interaction with the public?

Possibly through a website that would serve as a repository for the information. There was a lot of good information produced. I think the Town will create something with it all gathered, if that is acceptable.

Service Learning:

Service learning is a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities.

1. Do you support the idea of service learning?

Yes they do.

2. Do you feel the public reacts positively or negatively to having students involved?

Peter took the lead in presenting, and I think it worked out well. The audience liked his approach and style. Samantha did not take an active part in the presentation. Even if she presented and was wonderful, I am not sure the audience would have accepted the information coming from a grad student as readily as they did from a professor.

Public Outreach and the 'Berm' at Fairfield's DPW Facility – Interview

Interviewee: Superintendent of Public Works of Fairfield, CT

Project Inception:
1. What was the motivation to create a berm to the south side of the DPW facility?

Be a better neighbor by shielding our work from residents view

2. Did you consider doing the work 'in-house'? If yes, why did you reconsider?

Time, money

3. Why did you contact Peter Miniutti and Community Research and Design Collaborative (CRDC) vs. others? How did you know about us?

Reputation, previous successes, compromise vs win all mentality

Public Outreach:
1. How important do you find involving the public on a project like this? Why?

Hugely important so they feel a part of the process, their voice matters, they have input

2. Do you feel obligated to involve the public, or do you personally enjoy the process?

Both, if we are going to do the work and get questioned, why not get public buy in

3. What are some concerns that come with working with the public?

Bigger ideas than budgets support, can't make them all happy

Project Performance:

1. How do you feel the public outreach went in regards to UConn's work?

Excellent, great communication

2. Do you think that using visual aids when explaining the project design to the public was helpful or confusing? (i.e. our graphics, maps, models)

Very helpful, a picture is worth 1,000 words

3. How could we improve our interaction with the public?

Based on observations and feedback, no improvement needed

Service Learning:
Service learning is a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities.

1. Do you support the idea of service learning?

Yes

2. Do you feel the public reacts positively or negatively to having students involved?

This can be a coin flip based on people's ages and perceptions, some people entrenched in their beliefs may not respond to a younger view point, but I feel you can spin that this younger generation has to live with the results and by that will continue to improve on environmental conditions.

Others comments?

I am very impressed with the overall program;
Affordability
Community awareness
Assists in making better neighbor relations
Openness / transparency

Thank you, Scott R Bartlett

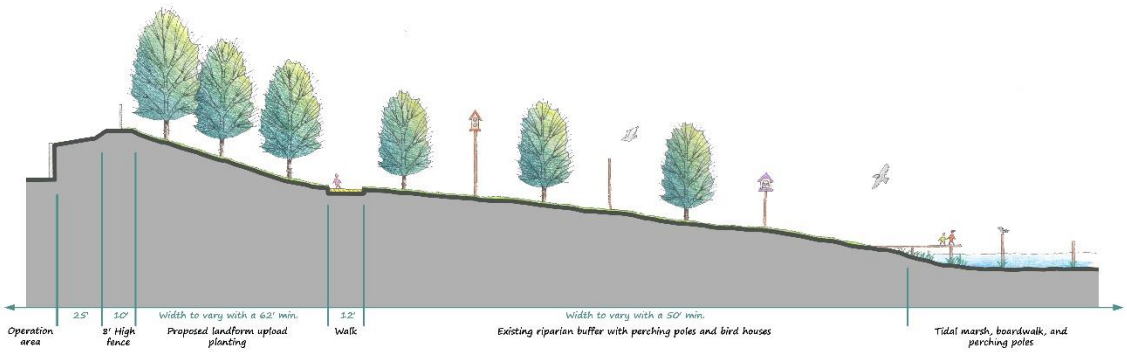


Figure A.1: Section A

Figure A.2: Section C

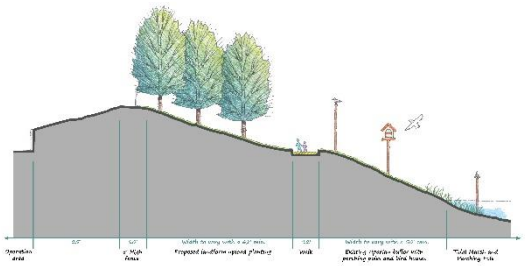


Figure A.3: Section B

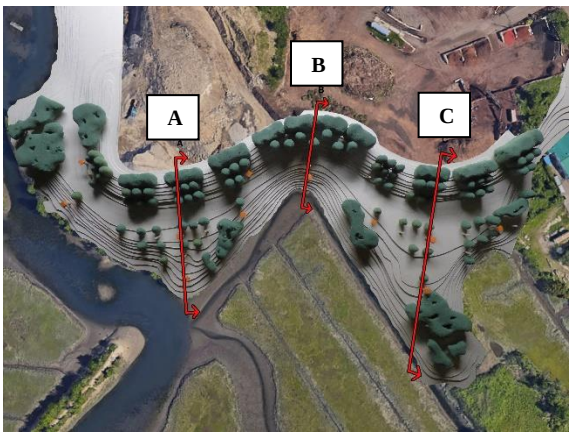


Figure A.1 – A.3: Proposed sections of site to show berm, vegetation, path, and possible bird perching poles in relation to the water. See map for section cut lines.

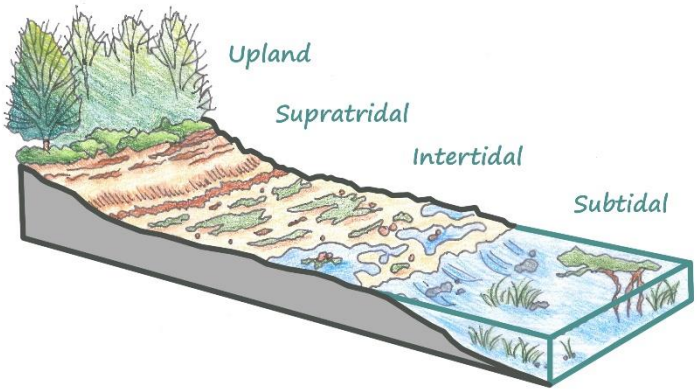


Figure A.4: Educating the public participants was a primary goal. This graphic (and others below) teach the participants what techniques we are using in the proposed plans in order to fix the problem as well as improve the surrounding habitat. This graphic shows all the tide levels and the upland where the evergreen screens will begin to thrive.

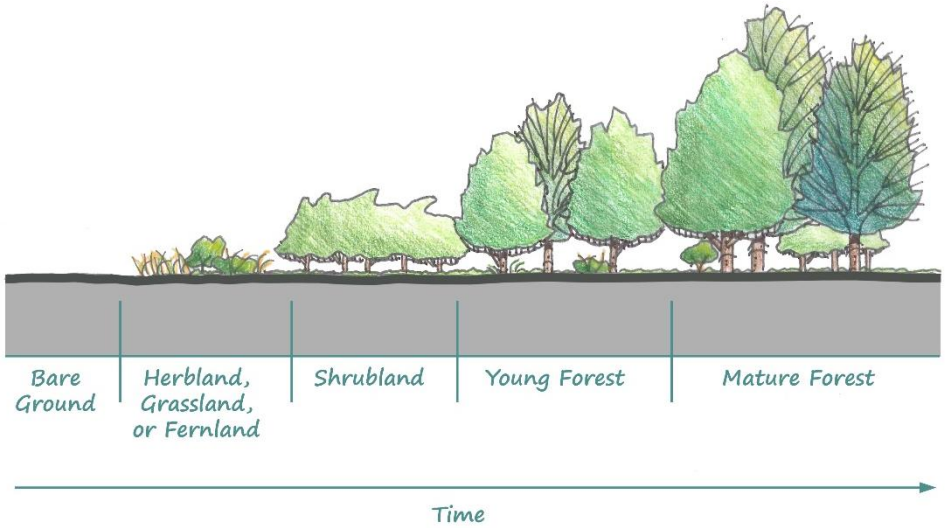


Figure A.5: This graphic shows the growth patterns and succession of vegetation.

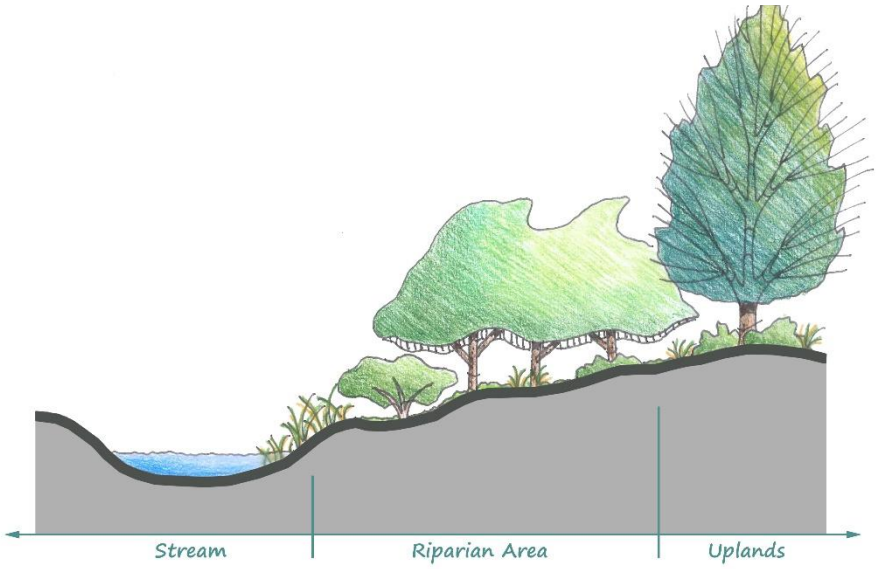


Figure A.6: Shows proposed riparian area to be adjacent to water body, which will lead up to the upland area (berm).

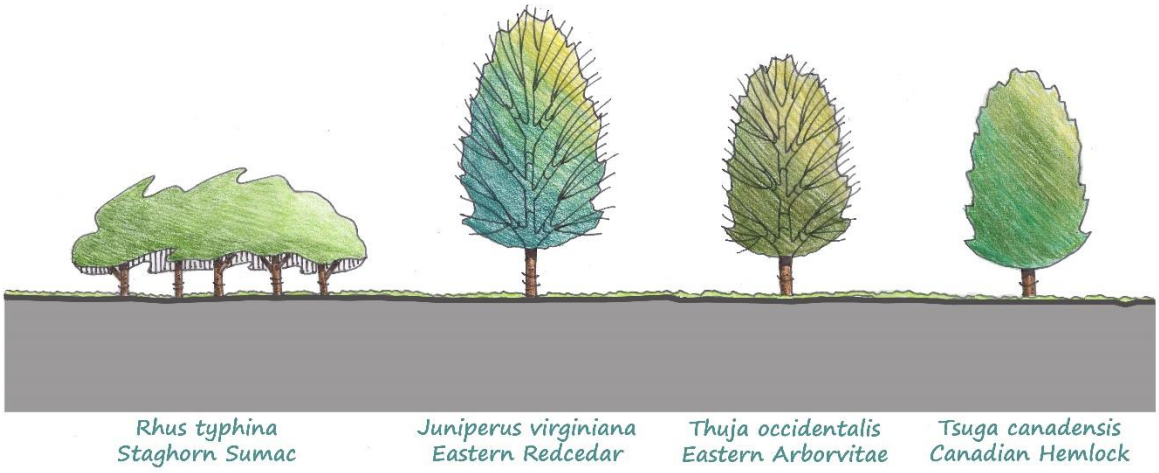


Figure A.7: Shows all proposed species used in plan. Rhus typhina is a deciduous species that will allow for biodiversity and animal habitats, while the other three species are evergreen and will act as a screen for the facility area.

Landscape Ecology Principles – Richard TT. Forman

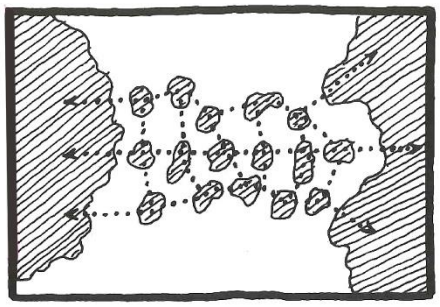


Figure A.8: Cluster of Stepping Stones - The optimal spatial arrangement of a cluster of stepping stones between large patches provides alternate or redundant routes, while maintaining an overall linearly-oriented array between the large patches.

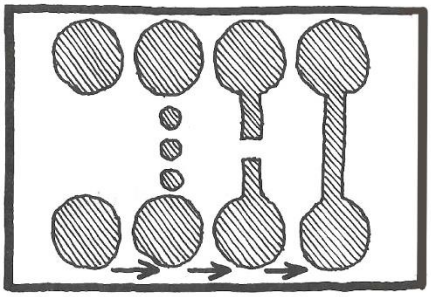


Figure A.9: Stepping Stone Connectivity - A row of stepping stones (small patches) is intermediate in connectivity between a corridor and no corridor, and hence intermediate in providing for movement of interior species between patches.

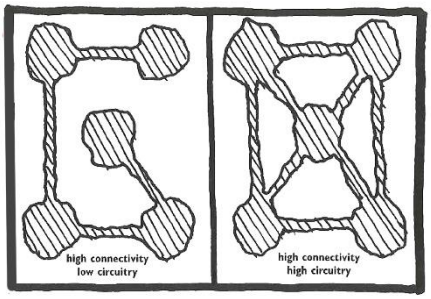


Figure A.10: Network Connectivity and Circuitry - Network connectivity (i.e. the degree to which all nodes are linked by corridors), combined with network circuitry (i.e. the degree to which loops or alternate routes are present), indicates how simple or complex a network is, and provides an overall index of the effectiveness of linkages for species movement.

Wolcott Meeting Notes

Wolcott Park, West Hartford Meeting Notes: First Public Meetings

Location: Community Center

Meeting A: 11/15/2016 @ 1:30 PM

Meeting B: 11/16/2016 @ 7:00 PM

Meeting Participants: Director of Leisure Services (Client) and UConn team

64 Total Participants between both sessions

Agenda (For Both Meetings):

- Meetings are set up with formal presentation space in front of the room (projector and rows of chairs) and 6 round tables in the back used for the workshop
- Client passed around an email and name sheet for everyone arriving
- Meetings begin with a brief introduction from our client & director of leisure services – everyone is seated in the front of the room
    - Explains what the project scope is
    - Why everyone was invited
    - Introduces UConn and explains our roles
        - I briefly explain my thesis
- UConn presents to the participants:
    - Who we are (CRDC) & our past projects
    - What our role is in the project
    - What the program of the project is
    - Explains the agenda of the meetings (presentation first then workshop after)
    - UConn explains rules for the meetings
    - Brief site inventory presented by Samantha
        - Site photos
        - Existing section cut lines
        - Mapping
    - UConn explains the importance of leaving out our opinions (analysis) of the park in order to influence the participants – we want their honest feedback
    - UConn explains the workshop to be held
    - Questions and Answer session
        - No strong concern so far
- Workshop session begins
    - Participants are led to the back of the room and are told to sit at any table they would like
    - Recommended that they spread out and sit with others that they do not know
    - Workshop 1A = 4 groups (approx. 20-25 people total)
    - Workshop 1B = 6 groups (approx. 45-50 people total)
    - Each table had:
        - an aerial map of the park
            - purple zones are no touch zones (places that are important to users of park – rec courts and fields or places that are vital to park – entrances)
        - tool kit

        - trees
        - flowers
        - parking
        - path segments
        - loop path string
        - bridge
        - wildcard pieces
        - sharpies
        - glue
        - scissors
    - Each group was told to have one person be the note taker and write everything that was said during the session on the comments section on the side of the map
    - Groups were told to use their creative skills, imagination, and desires to create their own redesign of the park
    - The work session went on for about 20-30 minutes
    - At the end of the session each group stood up and presented their maps to the room

- UConn and client thanked everyone for coming and participating
- Everyone was told that there will be an email/flyer regarding the next public meeting to happen in the near future
- UConn collected all the maps for feedback

<u>Wolcott Park, West Hartford Meeting Notes:</u> Baseball Commission Meeting

Location: Town Hall

11/29/2016 @ 12:45 PM

Meeting Participants: Client, UConn Team, Baseball Commission of West Hartford

Agenda

- Client fills them in on what CRDC does, our role in the project, past meetings, our agenda, their help/role in the park and project.
- Baseball Priorities/Comments:
    - Preservation of field *****
    - Lighting
        - Lights need remediation
        - Blind zones
    - Special place in community
    - Outgrown specs of field
        - Equipment
        - Check specs of little league field (200' min.)
        - Issue of pond near by
        - Maybe extend fence / something adjustable?
        - Check height of fence
        - Outfield too small with expanded infield
    - Major league 10,11,12 age moved up to larger field
    - Wolcott is the show field
        - Travel tournaments
        - Summer/fall leagues
        - Rec
    - Concession stand updates
        - Modernize
        - Prime source of revenue for leagues
        - Update restrooms
    - Share space with soccer
        - Batting cage near soccer field
        - Small bowl near soccer sometimes used for baseball practices/drills (open lawn bowl)
    - Storage near south side of baseball field
    - Storage near north side of field
    - Mention of adding bleachers to 1st and 3rd base sides
        - Space on path saved
        - Help erosion
        - Home and away parents like to sit near their teams dugouts
        - A lot of people try to sit in shade of forest
        - Sun too strong for existing bleachers on hot days
        - Max seating (50-200)?
            - 15 kids on each team, plus parents, siblings, etc.
    - Overgrown trees covering lights

- Leagues: youth baseball, little league, major league (older kids) , ?
- Major league (11,12,13 age) need more space → 50-70
- More space is better and safer for reaction time
    - Mound to base distance
    - Kids use stronger bats now
- Little league 46-60 (mound-bases)
- Use Fernridge and Eisenhower, not Kennedy?
- Use Wolcott for major league and championship games for younger
- Make this field for younger season?
- Expand at other fields that have the space to grow?

<u>Wolcott Park, West Hartford Meeting Notes:</u> PWD & Retired Principal Meeting

Location: Town Hall

11/29/2016 @ 1:30 PM

Meeting Participants: Client, UConn Team, Retired Principal of Wolcott Elementary, and Public Works Department Staff

Agenda

- Client fills them in on what CRDC does, our role in the project, past meetings, our agenda, their help/role in the park and project.
- 1990 – Children's Forest first named
    - Issue with teens, parties, illegal hangout areas
    - Needed a change
        - Open up
        - Wider paths (8')
        - Open to community
    - Outreach help
        - Eagle scouts
        - Home depot
        - Community group projects
        - PTO – parent teacher organization
        - Annual trail days to clean up
        - Connection to Chatfield
        - 20-30s pond used for ice
        - Now proposed bridge connection to path near tennis courts
        - Pond became unhealthy
            - Runoff from lots
        - Dredged pond (12 years ago)
            - DPW - department of public works
        - Restocked pond with 5 native species from area
            - Kids got to put fish in and name them (all named Bob)
        - Pond needed oxygen after dredging → added windmill
    - Pond is currently very low
    - Aeration stone at bottom of pond
        - Needs to be pulled up and cleaned - Last done?
        - PTO in charge
        - Maintenance with windmill
    - 3 principles in 3 years at Wolcott
    - Forest used then:
        - Science classes, part of the curriculum
        - Class walks, trips, exercise
    - Forest uses now:
        - Haunted forests
        - Movie nights
    - Planted 500 daffodils on Wolcott drive
    - Memorial on Wolcott drive for senior who passed away

        - Needs work
    - Scientists visited forest during Retiree's time:
        - Back around 2000-2005
        - Incredible diversity of bird species in children's forest
        - Bat lady – lots of bats
        - Blue bird houses, bat houses
        - Arborists
            - Invasive Russian olive trees
            - Mature cottonwoods
    - 15-20 years ago splash pad put in
        - Safer than pool
    - Henry A. Wolcott (father)
        - Henry F. Wolcott (son)
        - Visited and talked about park
        - Homer Scott – 25 years ago conservation
            - Took white irises from Henry A. farm
            - Homer gave to Plato to plant at school
    - PWD with forest:
        - Provide wood chips
        - Tree work
        - Dredged pond
        - Plant maintenance upon request
    - PTO does fall/spring clean ups mostly
    - Raised walks in forest are preexisting from beginning – needs work
    - Friends of Wolcott?
        - Friends of Fern
        - Set funds aside
        - Partner with community groups
- PWD Concerns:
    - Community garden
        - gardeners use fence as storage on off season
        - woodchuck burrows
        - fence line overgrown
        - wants:
            - remove fence, grub over, add split rail fence (on two sides)
            - Easier for PW to maintain, mow, etc.
        - fence around windmill for safety and security
        - fence material issue
            - wood is sustainable
            - pvc is easy to maintain
- Retiree's closing comments:
    - Science not as integrated now
    - No time for park/forest classes and activities
    - Check PTO bylaws
    - Wolcott park used to be a farm
        - Farm house by NBA entrance NW

<u>Wolcott Park, West Hartford Meeting Notes:</u> PTO Meeting

Location: Wolcott Elementary School

12/6/2016 @ 3:30 PM

Meeting Participants: Client, Samantha Stewart (UConn), and Parent Teacher Organization of Wolcott Elementary School

Agenda

- Wrap windmill to take away future paint costs
- How to integrate the forest into the curriculum?
- Current Forest uses for curriculum: Creative writing, mindfulness, walks
- Who will maintain windmill?
- Who will care for forest?
    - Contribution from families
    - Cleanups
- What activities will be present there?
    - Regular schedule
    - Summer cleanup to help with fall
    - Organize with PWD for help
- PTO events:
    - "Run a Muck"
    - Movie night
    - Haunted forest
    - Possible community garden use?
- Wants:
    - Connectivity, paths, new bridge
    - Signage
- Current issue with memorial for student - Tree is dying
- Loss of culture without forest in curriculum
    - For this generation of students
- Funding needed for improvements in park and forest
- Help with:
    - Pump and windmill (PTO paid and responsible for upkeep)
        - Spring and fall
    - Cleanups spring and fall
    - Current family taking care of this is moving on (child is graduating)
        - Need to find new support family/group
- Eagle scout projects, volunteers, boy scouts, community service
- Concern with poison ivy in forest
    - Plant services (PWD) sprays upon requests
- Improvements on walks in forest
- By laws/PTO budget – line for maintaining windmill, pump, and forest
- Stewardship
- "Growing Green Schools"
    - Check out

<u>Wolcott Park, West Hartford Meeting Notes:</u> - Second Public Meeting

Location: Community Center

1/25/17 @ 6:30 PM

Meeting Participants: Client and UConn Team

About 30 participants total

Agenda

- Meeting is located in a different room than the last public meetings
  - Instead of open room, this one is a formal auditorium with large projector and many rows of seats
  - Client begins meeting with sign in sheet as well as a brief intro:
    - Thanks
    - Budget notes
    - Prelim schedule for project
    - Meeting agenda
  - UConn (Peter) begins presentation on who we are, our role, and the project (for those who missed)
  - Sam presents findings from last public meetings (1A & 1B)
    - Shows pictures of groups working
    - Shows pictures of groups presenting
    - Shows all maps
    - Explains graphically coded maps
    - All comments given
    - 4 main categories: Recreation, Amenities, Circulation (pedestrian and vehicular), and green space
    - Summary analysis map of all majority comments
  - Peter explains our professional summary analysis maps
    - Opportunities and constraints
  - Peter goes through the prelim/concept plan
    - Parking
    - Play area
    - Activity nodes
    - New circulation spine
    - Children's forest and pond
    - Fields and courts
    - Vegetation
  - Natalie explains all architecture options
    - Younger people want sustainable options
    - Older people want traditional
    - Helen says we can only have traditional
  - Q & A and discussion – approval of plans from participants with no strong concern
  - Close meetings with thanking the participants for coming

<u>Wolcott Park, West Hartford Meeting Notes:</u> In House Meeting

Location: Department of Leisure Services, Town Hall

7/28/17 @ 10:00 AM

Meeting Participants: Client, Town Planner, UConn Team

Agenda – Discussion of Next Steps for Wolcott

- Schedule was de-railed due to budget and getting a new town manager
- Few participants had asked what had happened
    - Town takes blame
    - Took a while to put plans on website
- Luckily, still have funding for the project → starting July 1, 2018
- Need plans to take to the town council for approval and next steps
- Sam discussed thesis and social program evaluation component
    - To do:
        - Send survey link to everyone on email list
        - Say thank you for participation for my thesis
        - Express apology for not getting this to everyone sooner (due to budget and management changes)
        - Say we are committed to them and to moving along with the Wolcott Park project
        - Provide link from town's site to allow more traffic
        - Sign from UConn and Helen
- Peter explains plan
- Next steps:
    - Alternatives → for things that can be changed, wish list items
        - Ex: Architectural styles & layouts
    - Critical Items → for things that can't be changed on the plan
        - circulation spine
            - For this come up with grading plan and construction details
        - Tennis court repaving
        - Parking lots – repaving and adding more spaces
        - Pedestrian circulation
        - Trail system in children's forest (2nd trail is wish list item)
- Planner asks about phasing
- Client wonders if things like the terracing by the baseball field would be too much $$$
- What also needs to be addressed:
    - Lighting infrastructure
    - Enhancing and improving pond
        - Make circle area of pond an amenity
        - Let the rest go back to nature to help with cleaning runoff
    - Expansion of baseball field??? Into wetland?

        - Up to 500’ of disturbance
    - Spine
        - Pavers @ nodes
        - Bituminous everywhere else to save $$$
        - Grading schematics need to be done
- Client does not want pavilion→ but seniors want and need a space in the park
    - Picnic tables in shade instead?
    - Need activity node off of west end of spine
- Peter got email from a woman who’s retired from DEEP (water management)
    - Said park was dangerous, a lot of out of towners
    - Race issue?
    - Doesn’t like basketball players
    - “road by park connects to troubled inner city”
    - Doesn’t want more parking
    - Feels vulnerable for women alone in park…
- Lighting and wayfinding needed
- Stewardship allows for more eyes on the park → safety
- New circulation plan allows for more options for walking loops
- Need path/access to baseball field from parking lot
    - Lots of people cut through grass
- Need shade activity nodes
- Plan Items Needed:

    - Alternatives for wish list items
    - Set critical points
    - Break down with phasing for budget
    - Initial budget to go to new building, tennis courts, and play area nodes first, then parking
    - Construction details and schematic grading
- Next town meeting in September/Fall 2017
- Explained how undergrad will be taking over design for Sam as she focuses on thesis
- Need to schedule meeting with new town manager and human services committee
    - UConn can attend
    - Managing expectations
- Client trying to save money to use for parking lots and additional plan items
- UConn to get quantities for proposed plan
- Meeting to be scheduled after schematic plans revised
- Sam to send client pdf of schematic plan

Wolcott Park Initial Interview & Responses

Public Outreach with the Town of West Hartford for Wolcott Park

Project Inception:

1. What was the motivation to re-design Wolcott Park?
2. Why did you contact Peter Miniutti and Community Research and Design Collaborative (CRDC) vs. others? How did you know about us?

Public Outreach:

1. How important do you find involving the public on a project like this? Why?
2. Do you feel obligated to involve the public?
3. Do you personally enjoy the process?
4. What are some concerns that come with working with the public?

Project Performance:

1. How do you feel the public outreach is going in regards to UConn's work?
2. Do you think that using visual aids when interacting with the public is helpful or confusing? (i.e. our graphics, maps)
3. How could we improve our interaction with the public to this point?
4. Looking forward, do you believe this method will make for a successful project outcome?

Service Learning:

Service learning is a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities.

1. Do you support the idea of service learning?
2. Do you feel the public reacts positively or negatively to having students involved?

Others comments??

Public Outreach with the Town of West Hartford for Wolcott Park

Interviewee: Director of Leisure Services

Project Inception:

1. What was the motivation to re-design Wolcott Park?
   West Hartford was designed around neighborhood parks. This park was next on the list to be renovated. Several big ticket items are needed in the next few years (tennis court renovation and rebuild of a snackbar/restroom building). Lack of parking has been an issue for years. And with the recent change over of leadership at Wolcott Elementary School, the direction of the Children's Forest needed attention.

2. Why did you contact Peter Miniutti and Community Research and Design Collaborative (CRDC) vs. others? How did you know about us?
   We worked with him through Friends of Fernridge Park, for a design of that neighborhood park. No immediate plans to implement the plan exist because significant investment was made prior to the plan, including replacing the pool, installing a new playscape, installing additional parking on boarder road (Whitman) and repaving the central parking lot.

Public Outreach:

1. How important do you find involving the public on a project like this? Why?
   Community outreach is an important component of any good park renovation plan. The community is our constituency. We reached out to all stakeholders, including the school (both administration – present and past, and PTO); parents of young children (Mom's and More); cyclists (WH Bike Alliance); seniors (WH Senior Citizen Advisory Board); sports leagues (All Sports Council; WH Youth Baseball, WH Youth Soccer); neighboring businesses (Chatfield Retirement Community); neighbors (mailing to residents within a 5-minute walk); resident with special needs (WH Citizens With Disabilities Commission); High School Athletic Director; Parks & Recreation Advisory Board; Leisure Services staff; Public Works staff; WH Police Department.

2. Do you feel obligated to involve the public?
   Absolutely.

3. Do you personally enjoy the process?
   Absolutely. Great new ideas sometimes come from unexpected comments.

4. What are some concerns that come with working with the public?
   It is very important to listen and to manage expectations.

Project Performance:

1. How do you feel the public outreach is going in regards to UConn's work?
   The UConn team has done very well, leading the workshops, patiently explaining and documenting the process, and delivering detailed drafts.

2. Do you think that using visual aids when interacting with the public is helpful or confusing? (i.e. our graphics, maps)
   The process worked very well. I will let others who participated respond more fully.

3. How could we improve our interaction with the public to this point?
   I have not yet posted the link to the design process, which we promised to do. We've been too busy with the budget! I would like to submit some additional suggestions from Public Works before posting the current plans.

4. Looking forward, do you believe this method will make for a successful project outcome?
   Yes, I have high hopes that this process will result in a substantive park renovation plan that the public and politicians will understand and support.

Service Learning:

Service learning is a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities.

1. Do you support the idea of service learning?
   Yes. It is meaningful to help students attending our state university. It also cost effective for us (a municipality) because we can receive a solid park plan for relatively low cost while helping our flagship public university.

2. Do you feel the public reacts positively or negatively to having students involved?
   I think the pubic reacts positively to helping students with the learning process.

Others comments??

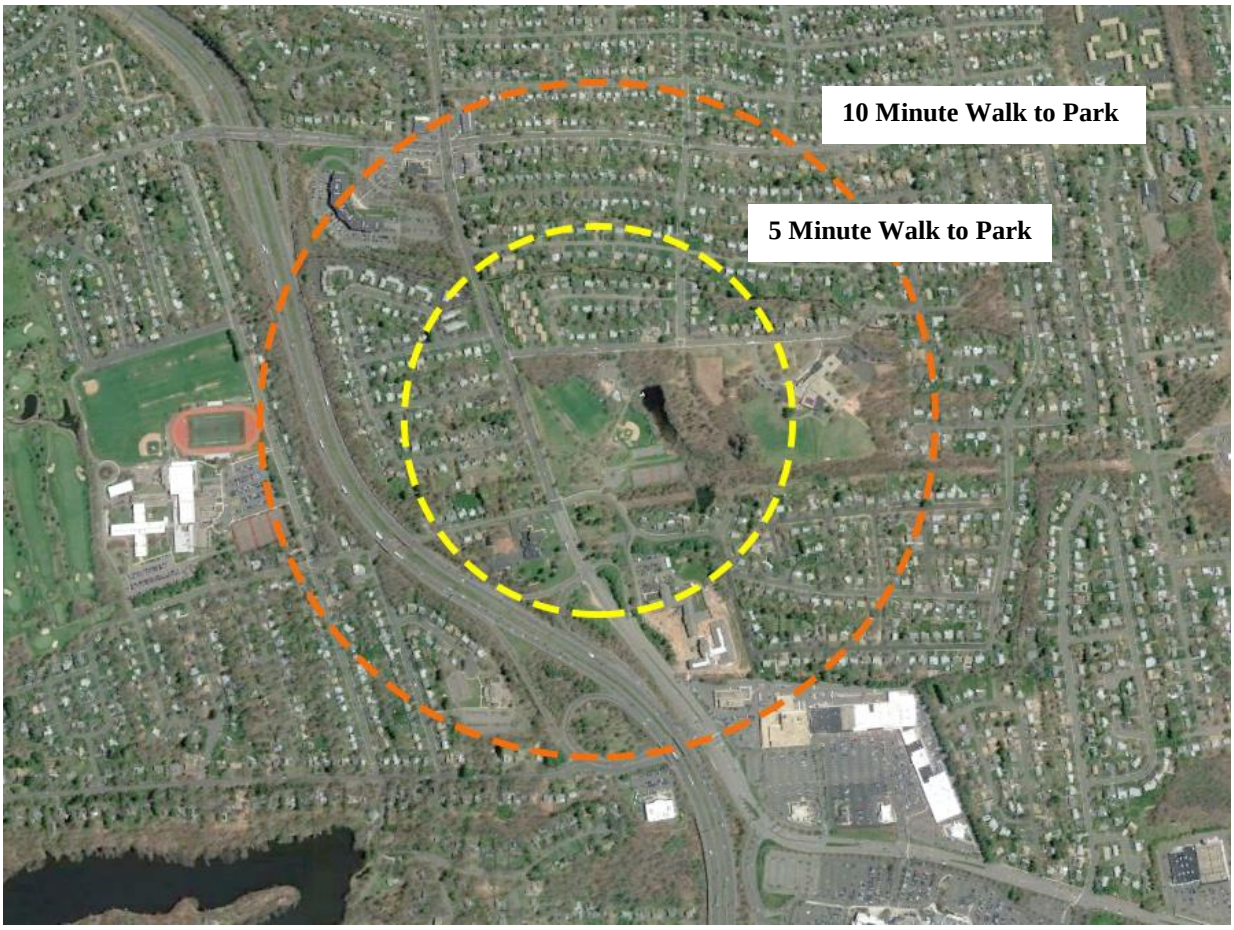
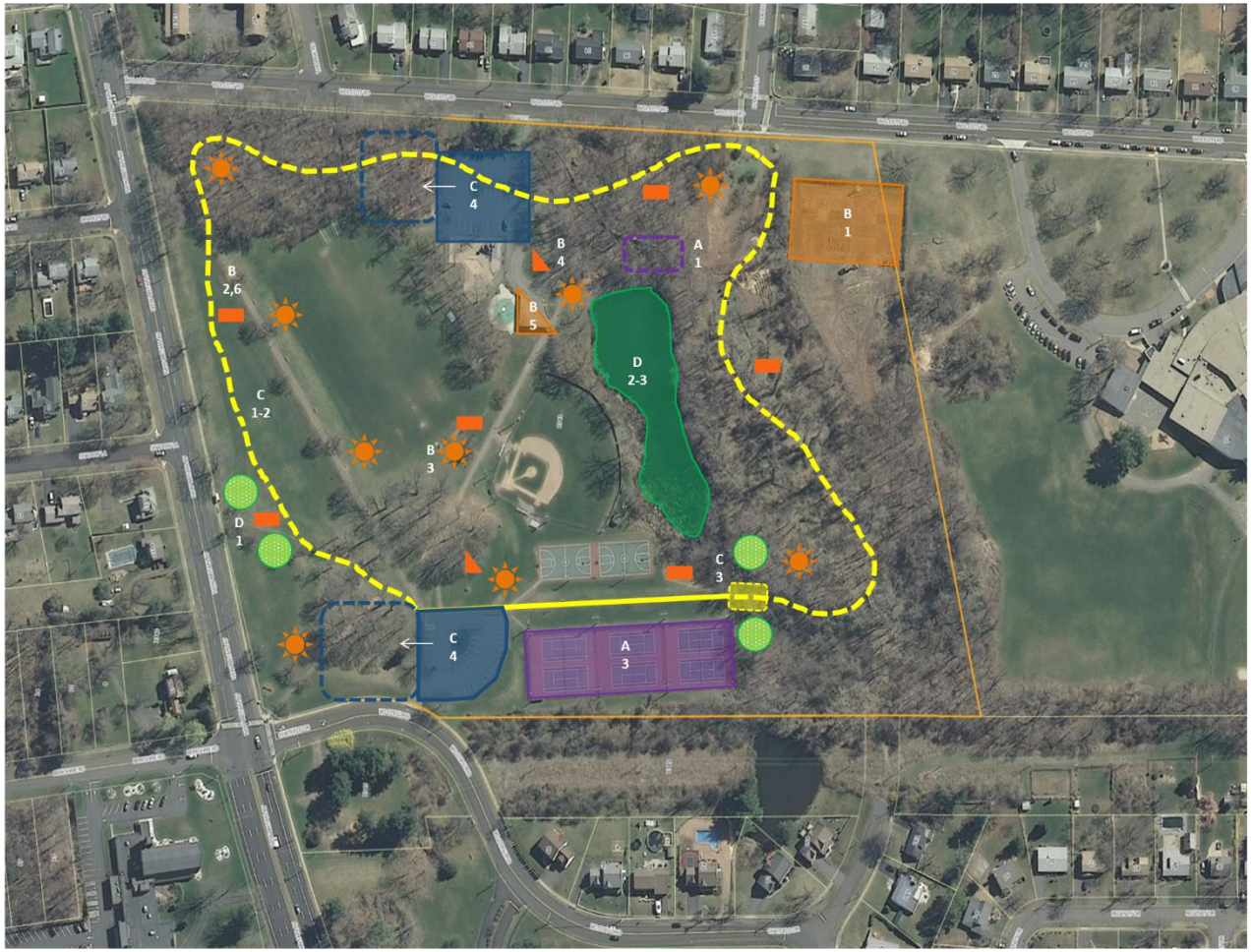


Figure A.11: Aerial map showing a 5 and 10 minute walking radius from the center of Wolcott Park. Wolcott Park is a neighborhood park so for the participatory meetings UConn invited all residents within these limits. (Other residents of West Hartford were invited through a flyer on the town's website due to the fact that this participatory design program aims to engage the broad public. The meetings were open to everyone who wanted to come, including those who visit Wolcott park from other neighborhoods or towns, although the majority of the park's users are from this area. Other participants invited were stakeholder groups and town municipal members. All this can be found in Chapter 4.)

(Below)

Figures A.12 – A.20: Team maps 1, 3–10 from public meetings 1A and 1B. Team 2 map is shown in Chapter 4

Team 1



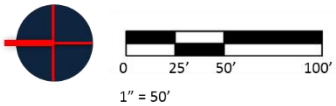
Comments

A. Recreation:
1. Bocce/horse shoe courts.
2. No additional fields for play; no room.
3. Retain pickleball courts on the property

B. Amenities:
1. Victory garden fence – surrounds the gardens concern if removed: the garden would be wide open so not good for gardeners for many reasons. Keep as fence!
2. Park benches.
3. Lighting after dark.
4. Water fountains.
5. Update bathrooms.
6. Add park benches around newly created walking trails for rest.

C. Circulation:
1. Multi-generational walkway; exercise area, stations.
2. Trails not on street.
3. Put a bridge over stream.
4. Extend parking lots.

D. Green Space:
1. Trees near the benches if there were not any near by.
2. Pond needs attention/clean.
3. Larger pond for fishing location.



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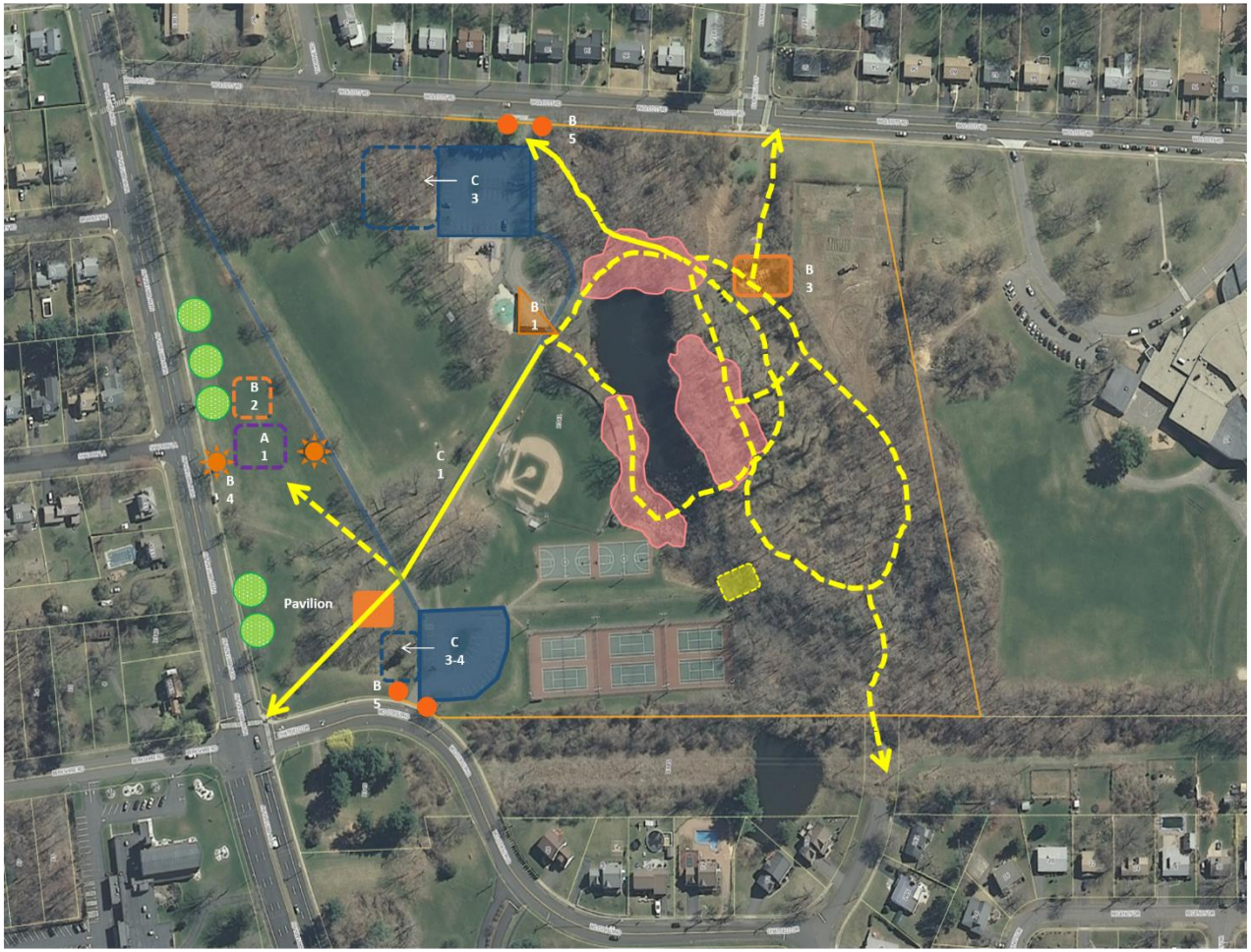
Figures A.12: Team 1 Map

Team 3

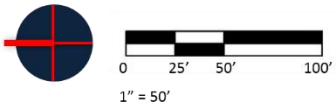


Comments

A. Recreation:
1. Ice skating.

B. Amenities:
1. Demolish restroom building and build new bathrooms.
2. Senior Center activities and weather proof shelter; tai chi, dancing, yoga.
3. Use of amphitheater.
4. Outdoor lighting for skating.
5. Entry markers / gates.

C. Circulation:
1. Retain sidewalks – not safe accessibility.
2. Enhance the pond and add path.
3. More parking.



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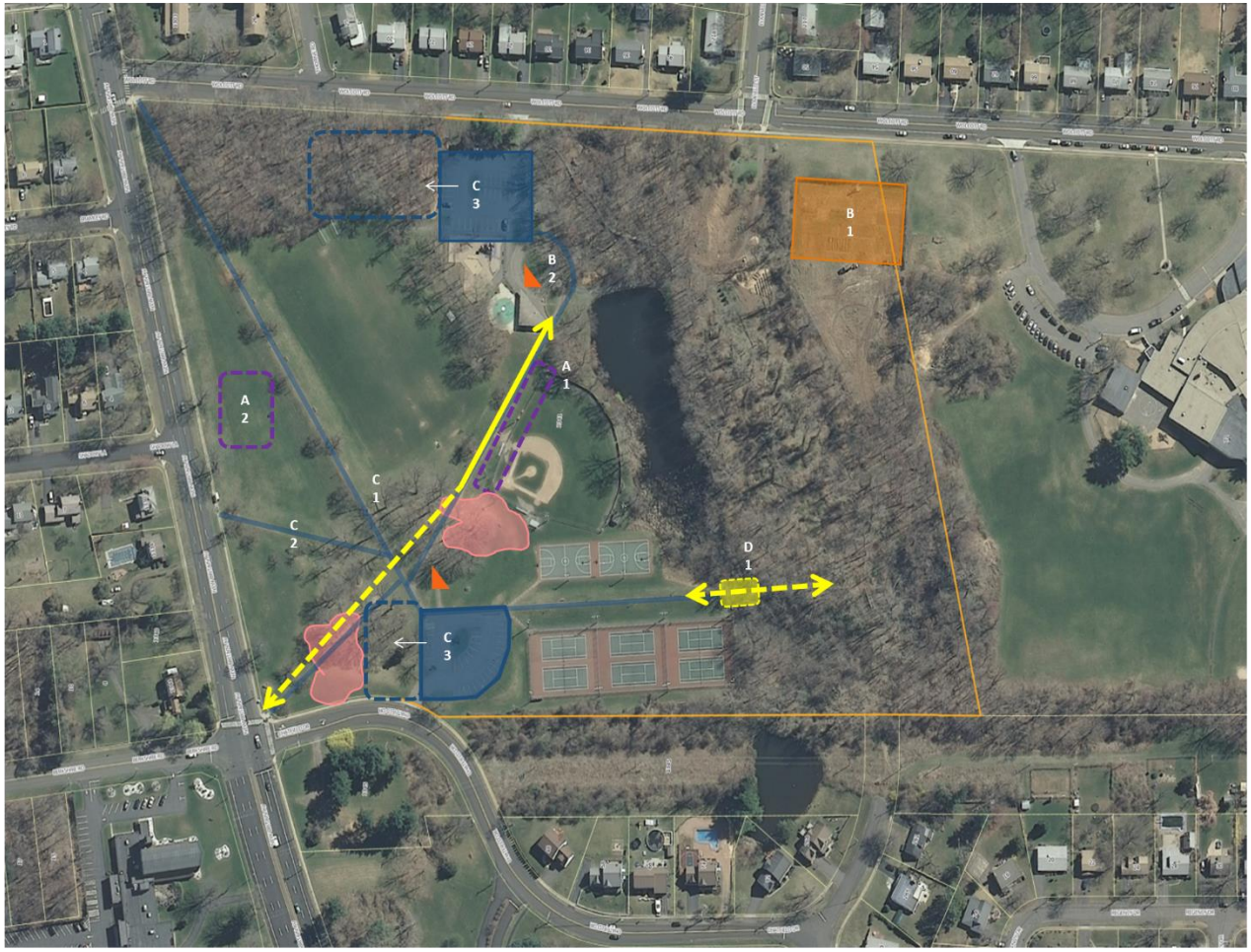
Figures A.13: Team 3 Map

Team 4



Comments

A. Recreation:
1. Spectator stands for baseball.
2. Volleyball court.

B. Amenities:
1. More garden space.
2. Water fountains!

C. Circulation:
1. Improve walkways.
2. Remove unused path at N.B.A
3. More parking.
4. Bridge to Children's' Forest.

0 25' 50' 100'

1" = 50'

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Figures A.14: Team 4 Map

Team 5

Comments

A. Recreation:
1. Bigger playground.
2. Ice skating in park.
3. Hockey.
4. Repavement of tennis and basketball.

B. Amenities:
1. Move snack shack.
2. Better lighting.
3. LED lighting.
4. Solar panels for baths.
5. Lights on court on late.
6. Renovate bathrooms.

C. Circulation:
1. Signs for trail.
2. More parking.
3. Widen sidewalk near baseball field.
4. Repave walks. Bad puddles near pond.
5. Remove path to N.B.A.

D. Green Space:
1. Beautification.
2. Landscape Pond.
3. Replace trees as needed.
4. Pathway in forest defined.
5. Boardwalk through.

0 25′ 50′ 100′

1″ = 50′

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Figures A.15: Team 5 Map

Team 6

Comments

A. Recreation:

1. Keep/improve playground. Good nest to parking lot. Fence is good but need to be fixed.
2. Playground needs updating!
3. Playground- Rubber surface instead of wood chips.
4. Parent/child swings in playground.
5. Area for toddlers and 5+ in playground.
6. Tennis court renovations/ fix lights.
7. Soccer field: improve southern edge against trees/playground.
8. Basketball courts – renewed.
9. Add adventure park.

B. Amenities:

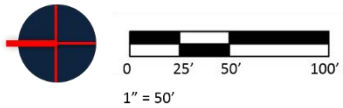
1. Garden area – better efforts to promote/advertise (signage?) to gardens.
2. More benches and seating near splash pad.
3. Clean, unlocked bathrooms.

C. Circulation:

1. Sidewalks make wider for walkers and bikers together.
2. Wheel chair accessible everywhere.
3. More parking.
4. Fix drop off.

D. Green Space:

1. Clean (eliminate growth) and make better greenspace in trees on Wolcott/New Britain Ave corner = entrance!
2. Signs on trees (tree species).
3. Shade near splash pad.
4. Protect forest – Greenspace! Encourage Town to maintain Landscapes in forest/trails. Wolcott Parents currently do landscaping in forest to keep useful.
5. Keep existing bridge in forest.
6. Open up forest.
7. Overgrown trees/roots (tripping hazard) need to be corrected. Invasive plants – gone. Poison Ivy control – its everywhere making space unusable.



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Figures A.16: Team 6 Map

Team 7

Comments

A. Recreation:
1. Expand playground.
2. Add turf to replace mulch.
3. Add all age rides.
4. Ice skating rink on existing tennis courts during winter months.

B. Amenities:
1. Add bleachers / seating on first base side.
2. Update lighting fixtures.
3. Update concessions stand.

C. Circulation:
1. Repave / replace sidewalks.
2. Add walk path signage.
3. Add 30 parking spots (west).
4. Repave / replace parking lots.

D. Green Space:
1. Add fountain in pond.
2. Update / fix current bridge in forest (east side).

0 25′ 50′ 100′

1″ = 50′

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Figures A.17: Team 7 Map

Team 8

Comments

A. Recreation:

1. Consider playground options that would appeal to older children – add more not eliminate current.
2. Agrees to eliminate sandbox.
3. Preserve sledding hill.

B. Amenities:

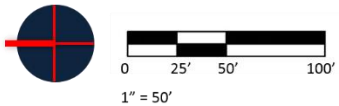
1. New picnic tables.
2. Better lighting in parking lots.
3. More and better signage (map of park, mileage markers on loop).
4. New concession and bath house and better lighting.
5. Add more trash and recycling bins but eliminate dumpster.
6. Water fountains that work.
7. Bird boxes / houses.

C. Circulation:

1. Stairs or ramp up to community garden from Wolcott Road.
2. Replace both long walkways.
3. Remove path near N.B.A.
4. Parking – expand, configure east and west.
5. Ask CL&P for use of corner for parking/property.

D. Plantings:

1. Keep existing trees as much as possible.
2. Signage for flora and fauna.
3. Repair boardwalk.
4. Clean up pond.
5. Maintain diverse ecosystems.
6. Add shade tolerant ground cover.



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Figures A.18: Team 8 Map

Team 9

Comments

A. Recreation:

1. More lights.
2. Resurface tennis courts.
3. Timer on court lights.
4. Volleyball nets.
5. Tetherball.
6. Climbing wall.
7. Lights for soccer field.

B. Amenities:

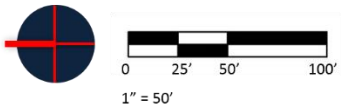
1. Access to restrooms all day (x7 days and early evening until dusk. In summer during baseball stay open).
2. Benches throughout – trex like.
3. Water fountains.
4. Keep trash cans out during winter.
5. More lights along walkways.
6. Upgrade existing lights.
7. Trex picnic tables.

C. Circulation:

1. Replace sidewalks.
2. Extend walkway to loop (connect to New Britain Ave.
3. More parking.
4. Ask CL&P for use of corner for parking/property.

D. Green Space:

1. Repair existing boardwalk with trex.
2. Clean up pond and bring fountain back!



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Figures A.19: Team 9 Map

Team 10

Comments

A. Recreation:

1. Playground - Make it accessible.
2. Fix the gates.
3. Add swings.
4. Add playscape for older kids – if no room get rid of sandbox.
5. Skate park.
6. Ice skating rink.

B. Amenities:

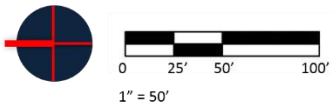
1. Please revamp Louise's garden.
2. Fix up bathrooms.
3. Get rid of broken water fountains.

C. Circulation:

1. Paths – increase ADA accessible paths.
2. Additional parking on Wolcott Road.
3. Ask CL&P for use of corner for parking/property.

D. Green Space:

1. We like the pathway and the pink puff trees.
2. Maintain paths in Wolcott Forest.
3. I'd love the "raised pathway" in the forest to be updated.
4. Add tree labels to forest.
5. Dredge the pond.
6. We like the park but want improvements.



UCONN Community Research & Design Collaborative

Figures A.20: Team 10 Map

Participatory Design Process Evaluation Survey - Wolcott Park

Q1 What is your affiliation with the Wolcott Park project?

- Municipal official in West Hartford
- Community or stakeholder member

Q2 What motivated you to participate in the meetings for the re-design of Wolcott Park?

_____

_____

Q3 What did you like most about the meetings for the re-design of Wolcott Park?

_____

_____

Q4 What did you like least about the meetings for the re-design of Wolcott Park?

_____

_____

Q5 Did the meetings for the re-design of Wolcott Park meet your expectations?

- Yes
- Kind Of
- No

Q6 How fair or unfair do you believe the public meeting process was?

- Extremely fair
- Somewhat fair
- Neutral
- Somewhat unfair
- Extremely unfair

Q7 How inclusive or exclusive do you believe the public meeting process was?

- Extremely inclusive
- Somewhat inclusive
- Neutral
- Somewhat exclusive
- Extremely exclusive

Q8 How valued or unvalued do you believe your voice was in the public meeting process?

- Extremely valued
- Somewhat valued
- Neutral
- Somewhat unvalued
- Extremely unvalued

Q9 How easy or difficult did you find participating in this public meeting process to be?

- Extremely easy
- Somewhat easy
- Neutral
- Somewhat difficult
- Extremely difficult

Q10 How satisfied are you with the following aspects of the re-design conceptual plan?

	Extremely satisfied	Somewhat satisfied	Neutral	Somewhat dissatisfied	Extremely dissatisfied
Ecological aspects	○	○	○	○	○
Aesthetic aspects	○	○	○	○	○
Functional aspects	○	○	○	○	○

Q11 Do you believe the Wolcott Park conceptual re-design...

	Yes	Somewhat	No
Helped to enhance a sense of community?	○	○	○
Helped to enhance ecological and biological diversity?	○	○	○
Engaged participants in a creative process?	○	○	○
Was practical?	○	○	○
Enhanced a useful community space?	○	○	○
Improved the community?	○	○	○

Q12 How do you think this re-design will impact the community?

Display This Question:

If What is your affiliation with the Wolcott Park project? Municipal official in West Hartford Is Selected

Q13 How easy or difficult will it be for the town of West Hartford to implement the design that was created for Wolcott Park?

- Extremely easy
- Somewhat easy
- Neutral
- Somewhat difficult
- Extremely difficult

Display This Question:

If What is your affiliation with the Wolcott Park project? Municipal official in West Hartford Is Selected

And How easy or difficult will it be for the town of West Hartford to implement the design that was c... Somewhat difficult Is Selected

And How easy or difficult will it be for the town of West Hartford to implement the design that was c... Extremely difficult Is Selected

Q14 Why do you think it will not be easy for the town of West Hartford to implement the design that was created for Wolcott Park?

Figure 4.21: Participatory Design Process Evaluation Survey. Printed survey that was digitally sent to all participants through the Qualtrics system.

Dear Wolcott Park Project Participants,

I am writing to invite you to participate in a survey related to the Wolcott Park project. I am a master's student of Peter Miniutti and I've been working with UConn's Community Research and Design Collaborative (CRDC) and West Hartford's Department of Leisure Services. For my thesis I am studying the success of our public meetings and participatory process for the Wolcott Park project. Please take 3-5 minutes to complete this form. I really appreciate any feedback you have as it is a contributing factor to my thesis. You will also find the attached information sheet for your reference. Wolcott park info sheet

Thank you,

Samantha Stewart (and Peter Miniutti)

Follow this link to the Survey:
Take the Survey

Or copy and paste the URL below into your internet browser:
https://uconn.co1.qualtrics.com/jfe/form/SV_dpboiVG7BAz6Krj?Q_DL=8jKOpuw93Oq9ubr_dpboiVG7BAz6Krj_MLRP_0VNdvlLoDyNP1LT&Q_CHL=email

Figure 4.22: Sample survey email sent to all participants asking for their feedback.

Dear Wolcott Park Project Participants,

Last week I sent you an invitation to participate in a survey that will inform my thesis research here at the University of Connecticut. Please take a moment to complete this survey, if you have not already done so.

Thank you for your time and attention,

Samantha Stewart (and Peter Miniutti)

Follow this link to the Survey:
Take the Survey

Or copy and paste the URL below into your internet browser:
https://uconn.co1.qualtrics.com/jfe/form/SV_dpboiVG7BAz6Krj?Q_DL=8jKOpuw93Oq9ubr_dpboiVG7BAz6Krj_MLRP_0VNdvlLoDyNP1LT&Q_CHL=email

Figure 4.23: Sample survey email sent to all participants reminding them for their feedback. Sent one week after the initial email was sent.

Full Survey Report

Participatory Design Process Evaluation Survey - Wolcott Park

August 17th 2017, 12:22 pm MDT

Q2 - What motivated you to participate in the meetings for the re-design of Wolcott Park?

I initiated the meetings as an organizer of the park planning process.
I live across the street from the park and it was exciting to see this project moving in the wright direction. it will bring a breath of fresh air into the neighborhood.
Enhancement of field/court facilities for youth
I have lived at Wolcott townhouses across from the park since 1995 , walking daily thru the park now but having used it and the fields for activities when my daughter was growing up.
invitation by Director of Human and Leisure Service and board member of Fernridge Park advocacy group
I live in the area and utilize the park.
My family has utilized Wolcott park for many years and we have created cherished memories there. I used to play basketball regularly both during the day and night. Our baby daughters loved the enclosed swings and they cooled off as toddlers in the spray park. They loved to play hide and seek in the playground and their climbing skills developed as they got older. As students in Wolcott elementary, they explored the Children's Forest and we participated in school events that were held in the park, such as the Haunted Forest. Both of my daughters played soccer there for their respective travel teams. Wolcott park will always hold a special place for my family.
I was concerned about the condition of the tennis courts.
To be of service to the town and to make sure that there are bicycle and pedestrian amenities
Neighborhood resident and frequent visitor to the park.
to make sure that the interest's of the community at large were represented and in particular the West Hartford Seniors.
I often walk there.
I am interested in all of the things that make West Hartford a great place to live, and one of the critical factors for the health of our town is our use of recreational space.
I was involved with a similar project with Peter Miniutti at Fern Park.
I am a member of the Park and recreation advisory board and was asked to attend the meetings. I also graduated college with a degree in Recreation Management and am a former member of the Leisure Services department in West Hartford for over 30 years. I have an interest in the work being done to improve our parks in town.
I love the park and have had some nice times at it and want to make sure it's enjoyed by future residents. Improving the park is also good for my property's value
We live directly across from the park and enjoy it immensely.

Q3 - What did you like most about the meetings for the re-design of Wolcott Park?

They made the planning fun, and I appreciated being asked to participate.

The thoughtfulness of UConn listening to the residents. the fact that they wanted to get the communities input before design. I also loved the interaction with the models and the different ideas from the residents.

The slide presentation.

The open forum and thoughts given to all suggestions that were made.

The hands on props

That they were well- organized, structured in a way that allowed people to talk in small groups and therefore have a variety of opinions heard, and that people could express what they thought was best using the three-dimensional model

small group conversations use of maps to help re-design park

New landscape, addressing pond issues, revitalized parking lot, designated trail, new signage.

many suggestions were discussed

Listening to the recommendations of various stakeholders in a very open inviting atmosphere.

I was not able to attend - but I was apprecitive that a meeting was held and that I was able to provide input via email.

I liked the opportunity to brain storm with others who had an interest in park improvements. These people were neighbors, administrators, park dept staff, participants from the sports leagues and others who all had something to say. This helped to get a wider perspective of what should be done. I also like that we could brain storm ideas without the budget. This allowed for more of a "if you could have anything" approach rather than to be constricted by a budget at this point in time.

I liked seeing the number of people that participated in the meeting. To me, this means that there are citizens who are vested in the best interests of the park. I thought there was good discussion and a number of great ideas that could make the park more attractive to different groups of kids and adults. I also enjoyed learning about the services provided by UConn in assisting with landscape architecture and park design.

I liked seeing residents engaged in the park planning process. The structure of the collaborative work sessions empowered residents to participate. The rules protected each participant's voice so that no one person drowned out other opinions. The results truly were a reflection of the collaborative work.

I liked hearing the various ideas of how to improve parking, plantings, etc to make full use of the property

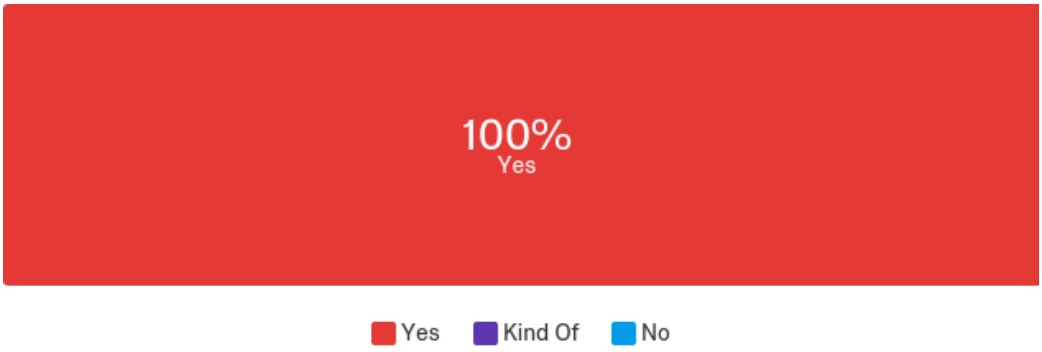
I didn't get to attend this meeting. I was out of town.

adherence to agenda! opportunity for community input (break-out groups to imagine next generation of the park).

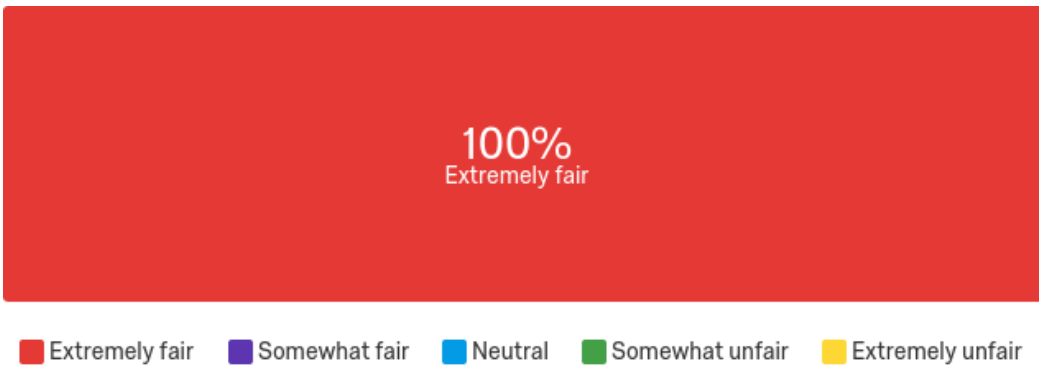
Q4 - What did you like least about the meetings for the re-design of Wolcott Park?

Although we had a great turn out for each session, we could always have welcomed more participants. We had a good cross section of the neighborhood and park stakeholders.
Not much, I thought the meeting where productive and informative.
n/a
Seemed overwhelming!! And of course, the challenge of how to pay for improvements!
had no negative impression
I don't like the idea of citing trees down in the wetland area on Wolcott Road side.
I really have nothing negative to say about the meeting.
Nothing.
nothing
At the last meeting one of the guests was a bit negative regarding proposals. Not very open-minded.
The open process did allow some proposals/discussion that I felt were not helpful.
I could only go to the first one as the second was at a time I could not come.
The timing of the meeting didn't work out for me.
It would have been great to have a larger turnout from the community.
I suppose knowing that we might spend a lot of time on ideas that you knew would never go anywhere because the reality is that there are such limited funding available for park improvements.
Dates not publicized in advance/plan for spring meetings not held.
I haven't heard any follow up from the meetings.

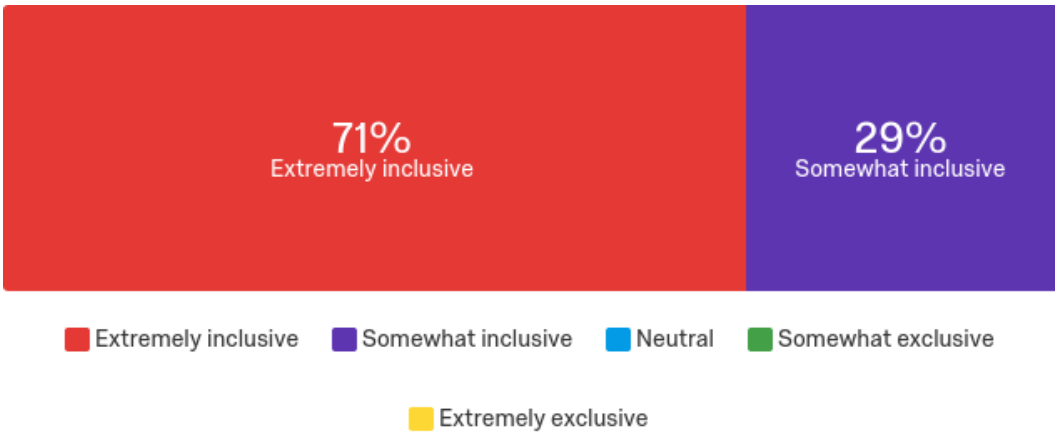
Q5 - Did the meetings for the re-design of Wolcott Park meet your expectations?



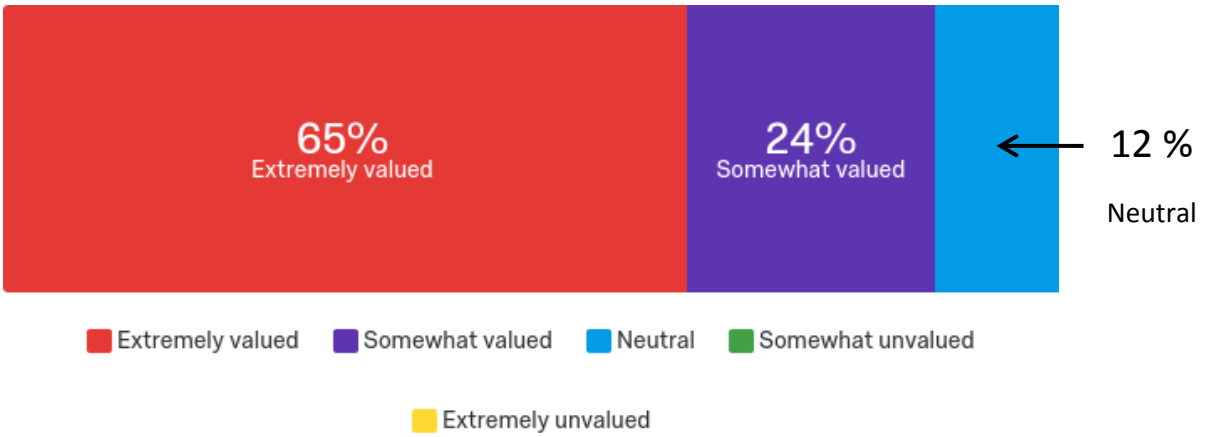
Q6 - How fair or unfair do you believe the public meeting process was?



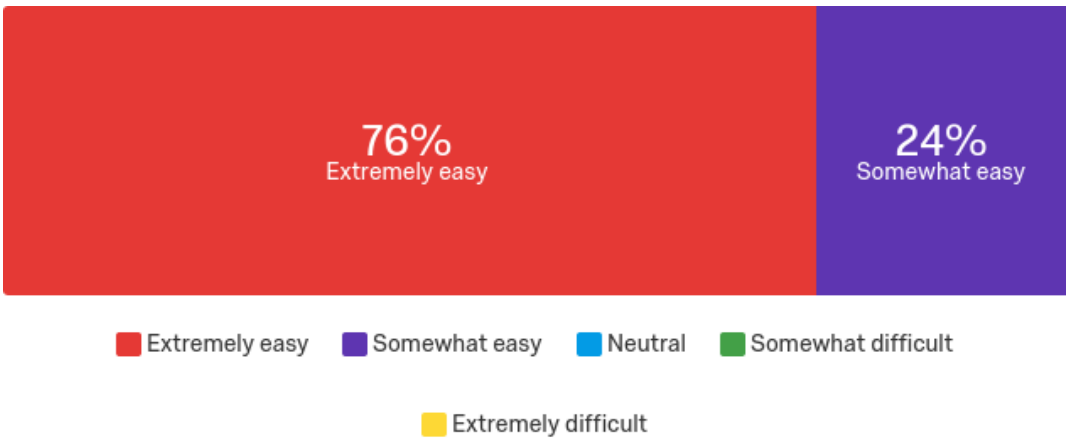
Q7 - How inclusive or exclusive do you believe the public meeting process was?



Q8 - How valued or unvalued do you believe your voice was in the public meeting process?

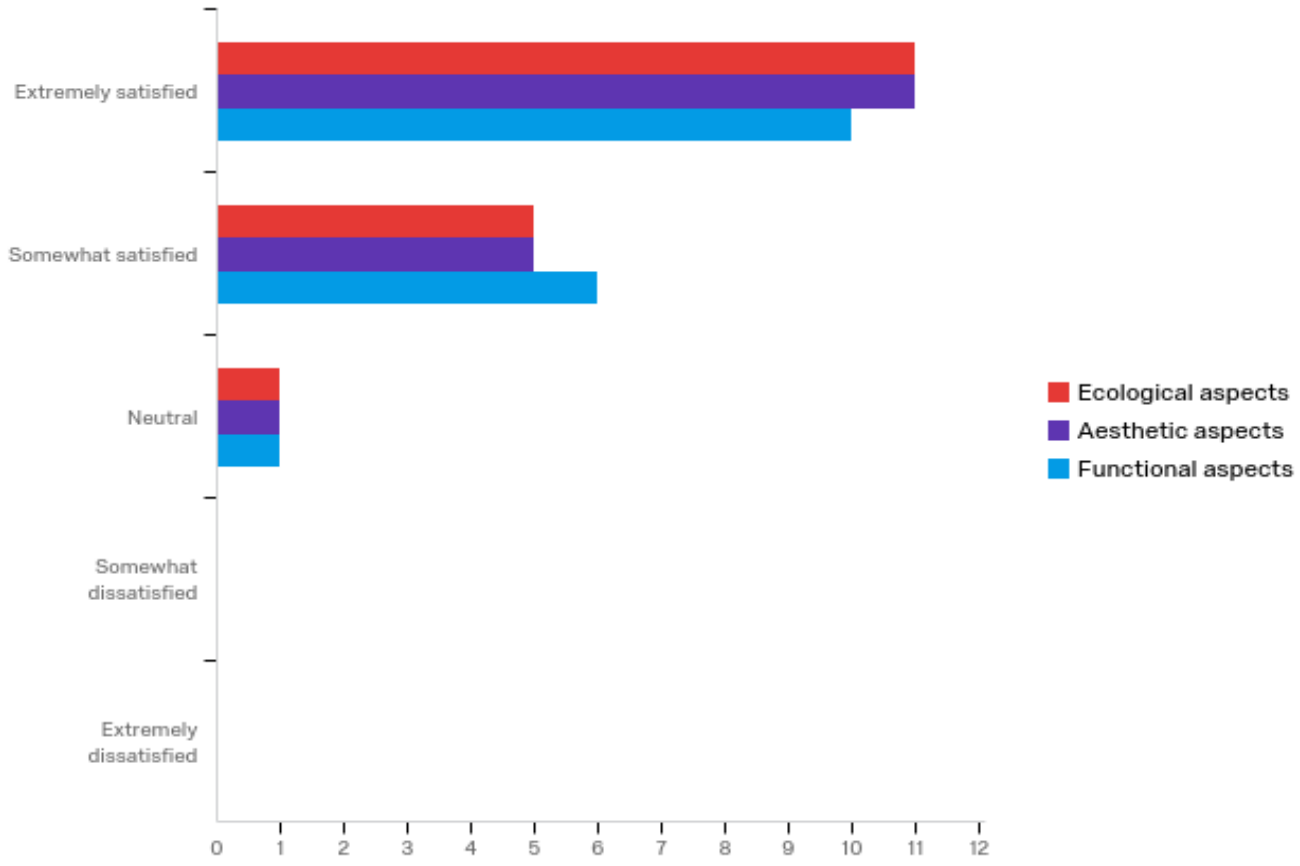


Q9 - How easy or difficult did you find participating in this public meeting process to be?



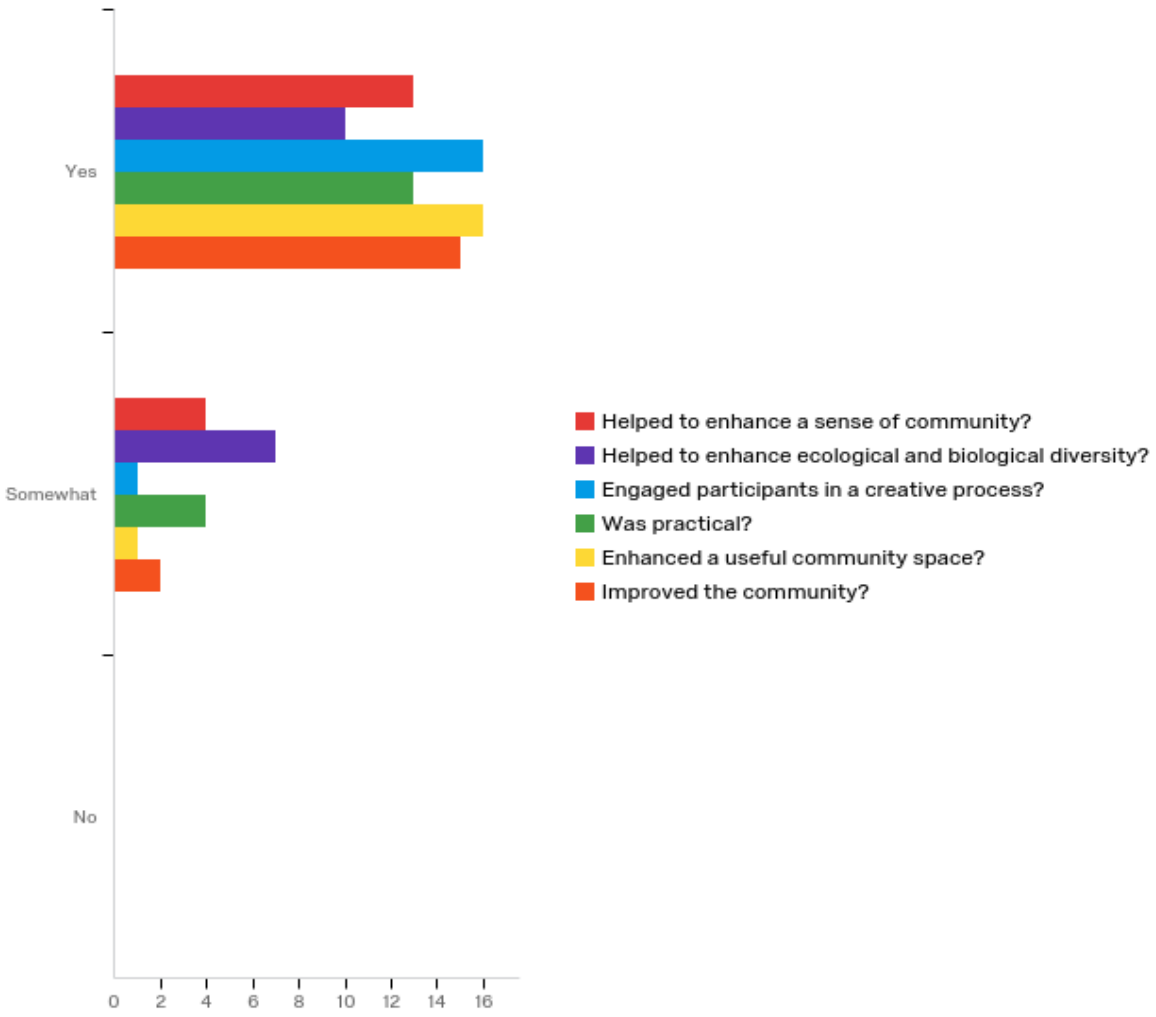
Q10 - How satisfied are you with the following aspects of the re-design conceptual plan?

#	Question	Extremely satisfied		Somewhat satisfied		Neutral		Somewhat dissatisfied		Extremely dissatisfied		Total
1	Ecological aspects	64.71%	11	29.41%	5	5.88%	1	0.00%	0	0.00%	0	17
2	Aesthetic aspects	64.71%	11	29.41%	5	5.88%	1	0.00%	0	0.00%	0	17
3	Functional aspects	58.82%	10	35.29%	6	5.88%	1	0.00%	0	0.00%	0	17

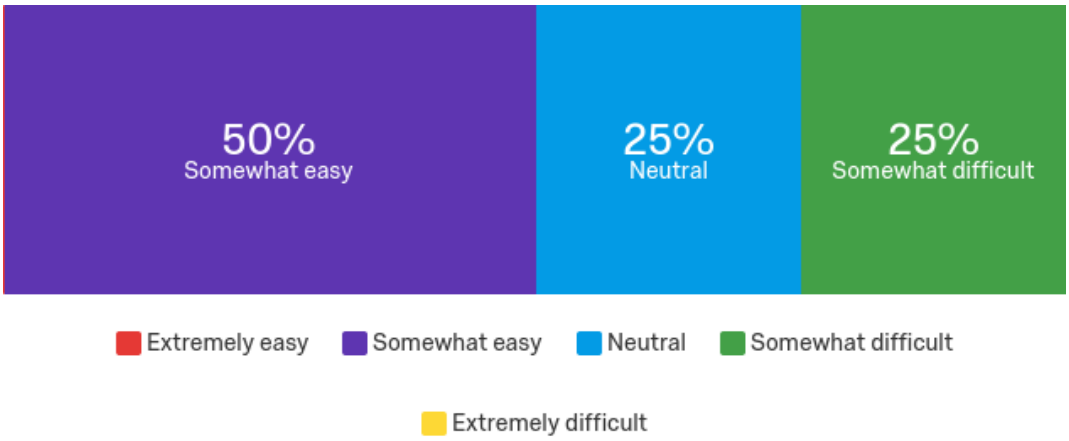


Q11 - Do you believe the Wolcott Park conceptual re-design:

#	Question	Yes		Somewhat		No	
1	Helped to enhance a sense of community?	15.66%	13	21.05%	4	0.00%	0
2	Helped to enhance ecological and biological diversity?	12.05%	10	36.84%	7	0.00%	0
3	Engaged participants in a creative process?	19.28%	16	5.26%	1	0.00%	0
4	Was practical?	15.66%	13	21.05%	4	0.00%	0
5	Enhanced a useful community space?	19.28%	16	5.26%	1	0.00%	0
6	Improved the community?	18.07%	15	10.53%	2	0.00%	0
	Total	Total	83	Total	19	Total	0



Q13 - How easy or difficult will it be for the town of West Hartford to implement the design that was created for Wolcott Park?



Q12 - How do you think this re-design will impact the community?

The final product is still a work in progress. Once it is approved by politicians and the funds remain in place, we can begin the next phase: implementation. By involving the community that lives a five minute walk from the park as well as important stakeholders of the park, such as sports leagues, bicyclists, parents of young children, residents with disabilities, local businesses, public school students and administrators, and elderly residents, we hope we ignited their interest in this neighborhood park. We the goal is to encourage local stewardship of this neighborhood park, perhaps spawning a "Friends of Wolcott Park" neighborhood group.

It will give this community an excellent recreational park to bring kids and families to.

I think the community will be happy with renovations and feel a sense of pride in what the park can do for the community

I guess I am waiting to see what ultimately comes of all these ideas and plans...my conclusion after the last meeting was that the plan presented a wish list. But nothing was really going to happen unless monies became available....have not heard that is happening with all the fiscal issues going on in west hartford!

hopefully be a catalyst for Wolcott Park to also have a 'friends' group to be stewards and advocates of the park. it is a well used park with great neighborhood support as well as town wide usage.

Encourage utilization.

I think this proposal will have a positive impact on the community. Elmwood is becoming the hot area of West Hartford and a park that will provide enjoyment to its community can only benefit the surrounding neighborhood and town in general.

Hopefully, the park will be used with more frequency.

It will provide a functional space for many townspeople to use

I think it will have a very positive impact on our community. It provides something for everyone from walking and picnics to athletic uses. A facelift is sorely needed after decades of heavy use. Looking forward to seeing the finished product.

The redesign will meet the needs/expectations of various sectors of the WH Community.

I did not think that a definite plan was completed, and if it has been I do not know it, therefore I cannot answer the two preceding questions, and only checked off circles because the software insisted I mark something. I also wonder if there is funding to actually execute such a plan given the current financial situation of the town of West Hartford.

It will improve the safety and use-ability of the park for more people. It will also take into account the demands currently being placed on the facilities at the park.

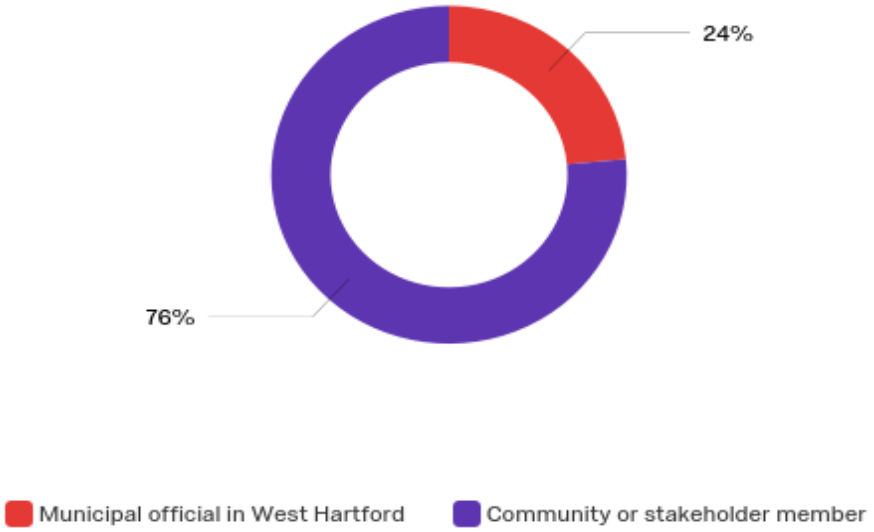
It is a much needed project that would benefit the users of the park.

I believe many will benefit from whatever projects are completed. It shows a level of interest and care for our parks and it will help to improve the overall look,usage and function. Its a step in the right direction. This park is long overdue for improvements so every little bit of funding will certainly be useful.

*since we haven't seen the finalized plan it's hard to answer many of the questions above- not sure how to compare community input, aesthetics, etc so I answered based on the direction it seemed to be going I think the re-design will allow different types of residents to access the park and will improve the enjoyment of the park for those who already frequent it. The functionality will be improved as well as aesthetics. As said above, it may also improve property values

There seemed to be agreement on the priorities that needed to be addressed. Therefore I think an implemented plan will have a positive impact on the community.

Q1 - What is your affiliation with the Wolcott Park project?



#	Answer	%	Count
1	Municipal official in West Hartford	23.53%	4
2	Community or stakeholder member	76.47%	13
	Total	100%	17

Q14 - Why do you think it will not be easy for the town of West Hartford to implement the design that was created for Wolcott Park?

(No responses for this question: all municipal participants had answered at somewhat easy or easy for, "How easy or difficult will it be for the town of West Hartford to implement the design that was created for Wolcott Park?"

IRB-1 Study Protocol

Protocol Version # and/or Date: Version 3~~1~~ – July 21, 2017~~May 20, 2017~~

Study Protocol Title: Evaluating the success of making equitable, predictable, and transparent development decisions through encouraging community and stakeholder collaboration in two participatory design case studies

Research Plan

Purpose/Introduction: *[State the reason for the study, the research hypothesis, and the goals of the proposed study as related to the research question(s). Provide a clear and succinct summary description of the background information that led to the plan for this project. Provide references as appropriate and, when applicable, previous work in animal and/or human studies. Provide previous UConn protocol number, if applicable.]*

UConn's Community Research and Design Collaborative (CRDC) is an organization consisting of the landscape architecture faculty, graduate, and undergraduate students. Our mission is to do sustainable, equitable, and affordable outreach work with communities. We promote using participatory design strategies throughout the design process in order to make fair, transparent, and successful design outcomes. Participatory design is an approach that encourages actively involving all stakeholders, clients, community members, and site users to make sure the solution meets their desires and needs. Through CRDC, I used this approach with the Wolcott Park in West Hartford, CT. For my research I completed a series of public and client meetings, public workshops, in order to educate the public and build a strong consensus not only for the final design result, but also at every step throughout the process. To evaluate the effectiveness of this participatory process, I plan to implement a survey with both municipal and community participants. The survey research outlined here is designed to evaluate the procedural fairness, ecological soundness, and value of the design.

Description of Wolcott Park Project: The Wolcott Park Project is a neighborhood park project that is using a participatory design component in order to actively involve all community members, stakeholders, and municipal members in order to come up with the best solution for everyone regarding the re-design and updating of the park. In order to engage all users, CRDC has held a series of public and client meetings throughout the early stages of the project in order to find the appropriate design solution. The survey (to be approved) will be used as a way to analyze the success of our participatory design process and will help CRDC create a perfect model for future projects.

Design, Procedures, Materials and Methods: *[Describe the study design, including the sequence and timing of all study procedures. Include screening procedures, if any. The IRB strongly suggests that investigators incorporate flexibility into the study design to accommodate anticipated events (i.e. explain how missed study appointments can be made up by participants). If the research involves study of existing samples/records, describe how authorization to access samples/records will be obtained. If the study involves use of deception explain the reason why this is necessary. If applicable, describe the use of audiotape and/or videotape and provide justification for use. If this study offers treatment for the participants' condition, complete the Treatment Study Supplemental Form (IRB-1C) and attach it to this application for review. If the study includes measures, survey instruments and questionnaires, identify each and, if available, provide references for the measures. Describe what they intend to measure (relate to purpose/hypothesis) and their psychometric properties (e.g., reliability and validity). Identify any that were specifically created for the study.]*

To evaluate the effectiveness of the participatory design used in the project we will use a survey instrument, designed by the student researcher in coordination with the study co-PIs listed in this protocol. The survey is designed to assess procedural, ecological, and design related aspects of the project.

The survey will be developed using Qualtrics data collection software, and will be administered both in paper and digital formats. Participants will be attending a project related event to be held in late June/early July and will be asked to complete the paper form at that time. Those who are not present at that meeting, but have participated in the Wolcott Park project thus far will be e-mailed a survey. E-mail addresses will be derived from project sign in sheets that were collected throughout the participatory design project. The student researcher, Samantha Stewart will be responsible for collecting survey responses and entering them into Qualtrics software (paper forms) with the guidance of project PIs. The student researcher will work with project co-PIs to analyze and report the data appropriately.

Justification of Sample Size/Data Analysis: *[Justification of Sample Size: For qualitative and pilot studies, describe how the proposed sample size is appropriate for achieving the anticipated results. For quantitative studies, provide a power analysis that includes effect size, power and level of significance with references for how the sample size was determined. Explain the rate of attrition, with references as appropriate. Data Analysis: For all studies, provide a description of the statistical or qualitative methods used to analyze the data.]*

We plan to reach as many participants in the Wolcott Park project as possible, and we expect this to yield up to 50 responses, in total. We will use descriptive statistics to analyze the data we collect.

Inclusion/Exclusion Criteria: *[List major inclusion and exclusion criteria. Any proposed exclusion criterion based on gender (women of childbearing potential), age, or race must include justification for the exclusion. Describe the conditions under which participants may be removed from the study, i.e., noncompliance with study rules, study termination, etc.]*

Any person who has participated in the Wolcott Park project is eligible, and all participants are over the age of 18.

Risks and Inconveniences*: [Describe the potential risks to participants (and secondary participants, if applicable) and steps taken to minimize risks. Assess the likelihood of the risk occurring and, if it were to occur, the seriousness to the participant. Types of risks to consider include: physical, psychological,*

social, legal, employment, and financial. Also describe any anticipated inconveniences the participants may experience (time, abstention from food, ~~,~~ etc.).]

~~T~~*An inconvenience to participants may include the time it takes to fill-out the evaluation survey. We are asking all participants to fill-out this survey which will take approximately 5 minutes to complete.*~~here are no risks associated with participating in this research.~~

Benefits: *[Describe anticipated benefits to the individual participants. If individual participants may not benefit directly, state so here. Describe anticipated benefits to society (i.e., added knowledge to the field of study) or a specific class of individuals (i.e., athletes or autistic children). Do not include compensation or earned course credits in this section.]*

Survey respondents do not stand to benefit directly from this research, though other similar communities may benefit from the improved programming that may result from this effort.

Risk/Benefit Analysis: *[Describe the ratio of risks to benefits. Risks to research participants should be justified by the anticipated benefits to the participants or society. Provide your assessment of anticipated risks to participants and steps taken to minimize these risks, balanced against anticipated benefits to the individual or to society.]*

The benefits outweigh the risk associated with this effort.

Economic Considerations*: [Describe any costs to the participants or amount and method of compensation that will be given to them. Describe how you arrived at the amount and the plan for compensation; if it will be prorated, please provide the breakdown. Experimental or extra course credit should be considered an economic consideration and included in this section. Indicate when participants will receive compensation.]*

Participants will not be compensated for their responses.

Data Safety Monitoring: *[This is a prospective plan set up by the study investigators to assure that adverse events occurring during studies are identified, evaluated, and communicated to the IRB in a timely manner. Although the investigators initially propose a Data Safety Monitoring Plan (DSMP), the IRB must approve the plan and may require revision of the plan. A DSMP is required for all human studies at the University of Connecticut except for studies determined to be exempt from continuing IRB review. For studies that present more than minimal risk to participants, the IRB will review and determine on a case-by-case basis whether a data safety monitoring board is most appropriate. Please refer to the IRB's policy regarding data safety monitoring before completing this section - http://research.uconn.edu/policies-procedures.*

Issues that should be addressed in the DSMP include the following:

1. *frequency of the monitoring*
2. *who will conduct the monitoring (Under UConn policy a student cannot be the sole person responsible for monitoring the data and safety of the protocol procedures.)*
3. *what data will be monitored*
4. *how the data will be evaluated for problems*
5. *what actions will be taken upon the occurrence of specific events or end points*
6. *who will communicate to the IRB and how communication will occur*

Sample response to issues listed above for minimal risk/slight increase over minimal risk – "Survey results will be monitored by the PI in conjunction with the student investigator once every two weeks (items 1, 2 and 3). Survey responses will be reviewed to monitor for clarity (i.e., the same question is skipped by 5 or more participants). In that case, the question will be revised and an amendment will be submitted to the IRB (items 4, 5 and 6)."

The data will be collected and monitored by the student researcher, Samantha Stewart, in conjunction with the project PI, Peter Miniutti and the Co-PI, Miriah Kelly, and these three will also be responsible for evaluating the data for any problems or issues. Survey results will be monitored by this group once every two weeks. Any issues or changes will be communicated by project PIs to UConn IRB in a timely and appropriate manner.

Privacy/Confidentiality*:* *[Explain how the privacy interests of participants will be maintained during the study (note that privacy pertains to the individual not to the data). Describe procedures for protecting confidentiality of data collected during the study and stored after study closure. Describe how data will be coded. Describe plans for storage and security of electronic data (plan must comply with the University's Policy on the Security Requirements for Protecting University Data at Rest). If identifiable, sensitive information (illegal drug use, criminal activity, etc.) will be collected, state whether a Certificate of Confidentiality will be obtained. Be sure to state whether any limits to confidentiality exist and identify any external agencies (study sponsor, FDA, etc.) that will have access to the data. If participants will be screened, describe the plans for storage or destruction of identifiable data for those that failed the screening.]*

Survey data will be de-identified during the analysis process, and participants will be grouped according to their association with the project (community member, municipal officials) at that time. Researchers will keep all study records locked in a secure location. Research records will be labeled with a code. The code will be derived from sequentially ordered numbers randomly assigned to participants. A master key that links names and codes will be maintained in a separate and secure location. The master key will be destroyed after 3 years. All electronic files (e.g., database, spreadsheet, etc.) containing identifiable information will be password protected. Any computer hosting such files will also have password protection to prevent access by unauthorized users. Only the members of the research staff will have access to the passwords. Data that will be shared with others will be de-identified to help protect participants' identities. At the conclusion of this study, the researchers may publish their findings. Information will be presented in summary format and participant names will not be identified in any publications or presentations.

We will do our best to protect the confidentiality of the information we gather but we cannot guarantee 100% confidentiality. Data that we collect may be shared with other researchers in the future, but only after all identifying information have been removed. General findings from this study will also be shared with colleagues around the state and country, but again, participant names will not be used.

Informed Consent

As PI, you are responsible for taking reasonable steps to assure that the participants in this study are fully informed about and understand the study. Even if you are not targeting participants from "Special Populations" as listed on page 4, such populations may be included in recruitment

efforts. Please keep this in mind as you design the Consent Process and provide the information requested in this section.

~~**Consent Setting:** [*Describe the consent process including who will obtain consent, where and when will it be obtained, and how much time participants will have to make a decision. Describe how the privacy of the participants will be maintained throughout the consent process. State whether an assessment of consent materials will be conducted to assure that participants understand the information (may be warranted in studies with complicated study procedures, those that require extensive time commitments or those that expose participants to greater than minimal risk).]~~

~~Prior to completing the the survey, participants will be asked to review an information sheet (attached) regarding our study and our intentions to use the data we collect.~~

~~**Capacity to Consent:** *[Describe how the capacity to consent will be assessed for participants with limited decision-making capacity, language barriers or hearing difficulty. If a participant is incapable of providing consent, you will need to obtain consent from the participant's legal guardian (please see the IRB website for additional information).]*~~

~~All participants must have the capacity to consent.~~

Waiver or Alteration of Consent: *[The IRB may waive or alter the elements of consent in some minimal risks studies. If you plan to request either a* ***waiver of consent*** *(i.e., participants will not be asked to give consent), an* ***alteration of consent*** *(e.g., deception) or a* ***waiver of signed consent*** *(i.e., participants will give consent after reading an information sheet), please answer the following questions using specific information from the study:]*

Waiver of signed consent (i.e. participants give consent only after reading an information sheet):

- *Why is the study considered to be minimal risk?*

There is no risk associated with participating in this survey research. The questions we will ask are related to their participation and are not personal or sensitive in any way.

- *Does a breach of confidentiality constitute the principal risk to participants? Relate this to the risks associated with a breach of confidentiality and indicate how risks will be minimized because of the waiver of signed consent.*

The information we are collecting is not sensitive and a breach of confidentiality is not likely to have any adverse effects.

- *Would the signed consent form be the only record linking the participant to the research? Relate this to the procedures to protect privacy/confidentiality.*

The purpose of the waiver is to avoid having a document where the participant name is listed in association with their response. In the survey we will only ask them if they are a "community member" or a "municipal official".

- *Does the research include any activities that would require signed consent in a non-research setting? For example, in non-research settings, normally there is no requirement for written consent for completion of questionnaires.*

No

Information Sheet for Wolcott Park Participatory Design Process Survey

Principal Investigator: Peter Miniutti
Student: Samantha Stewart
Title of Study: Evaluating the success of making equitable, predictable, and transparent development decisions through encouraging community and stakeholder collaboration in two participatory design case studies

You are invited to participate in this survey of UConn's Participatory Design Process for Wolcott Park. I am a graduate student at the University of Connecticut, and I am conducting this survey as part of my course work. I am interested in evaluating the community outreach process that we have used throughout this project.

Your participation in this study will require completion of the attached questionnaire. This should take approximately 5 minutes of your time. Your participation is voluntary and we will do our best to keep the information you share confidential. You will not be paid for being in this study. This survey does not involve any risk to you. However, the benefits of your participation may impact society by helping increase knowledge about the importance of involving the community and stakeholders in the design process.

You do not have to be in this study if you do not want to be. You do not have to answer any question that you do not want to answer for any reason. We will be happy to answer any questions you have about this study. If you have further questions about this project or if you have a research-related problem, you may contact me, Samantha Stewart at: samantha.stewart@uconn.edu or my advisor, Peter Miniutti at: peter.miniutti@uconn.edu . If you have any questions about your rights as a research participant you may contact the University of Connecticut Institutional Review Board (IRB) at 860-486-8802. The IRB is a group of people who review research studies to protect the rights and welfare of research participants.

Please complete the attached survey and return it by Friday, July 28, 2017. Thank you.

Participatory Community Space Design Evaluation Survey – Submitted for IRB Review

General

1. What motivated you to participate in the meetings for the re-design of Wolcott Park? (open-ended)
2. What did you like most about the meetings for the re-design of Wolcott Park? (open-ended)
3. What did you like least about the meetings for the re-design of Wolcott Park? (open-ended)
4. Did the meetings for the re-design of Wolcott Park meet your expectations? (yes, kind of, no)

Process

5. How fair do you believe the public meeting process was? (Likert scale response)
6. How inclusive do you believe the public meeting process was? (Likert scale response)
7. How valued do you believe your voice was in the public meeting process? (Likert scale response)
8. How easy or difficult did you find this public meeting process to be? (Likert scale response)

Design

9. How satisfied are you with the ecological aspects of the re-design that was developed? (Likert scale response)

10. How satisfied are you with the aesthetics of the re-design that was developed? (Likert scale response)
11. How satisfied are you with the functional aspects of the re-design that was developed? (Likert scale response)
12. Do you believe the re-design of the Wolcott Master Plan:
    a. helped to enhance a sense of community? (yes, kind of, no)
    b. helped to enhance ecological and biological diversity? (yes, kind of, no)
    c. Engaged participants in a creative process? (yes, kind of, no)
    d. Was practical? (yes, kind of, no)
    e. Enhanced a useful community space? (yes, kind of, no)
    f. Improved the community? (yes, kind of, no)

Implementation and benefit to the community

13. How easy or difficult will it be for you to implement the design that was created? (Likert scale response) --* question only for town officials
14. How do you think this re-design will impact the community? (open-ended)

<u>Program Evaluation Meeting Notes:</u> - Initial Meeting

Location: Miriah Kelly's Office

Wednesday, April 26, 2017 @ 9:00AM

Meeting Participants: Miriah Kelly, Peter Miniutti, and Samantha Stewart

Agenda:

- Sam and Peter present research topic and Wolcott Park participatory design process
- Explained evaluation process for participatory design component:
    - Verbal evaluation from community
    - Written evaluation from client
    - Evaluative criteria table from professionals (UCONN) – guided from research

- Miriah suggested:
    - Revise surveys with her
        - Make some questions to be answered on a scale
        - Less open ended
        - Fewer questions
        - Create separate revised surveys for client/town officials and community participants
    - Possibly audio recording meetings
    - Randomly interviewing several community members and town officials
    - using survey platform through University that is similar to surveymonkey
        - use printed versions to hand out in meetings

    - Sending our revised surveys to be approved by IRB
    - Get certification through university
    - Miriah to be sending information Sam and Peter
    - Have written research goals and objectives to help drive collected data analysis and questions

- Miriah is to be part of Sam's graduate advisory committee
- Schedule follow up meeting to discuss revising surveys

<u>Program Evaluation Meeting Notes:</u> - Follow Up Meeting 1

Location: Miriah Kelly's Office

Thursday, May 11, 2017 @ 1:00PM

Meeting Participants: Miriah Kelly and Samantha Stewart

Agenda:

- Prepare for submission to IRB
- 3-4 week turnaround from IRB
- For Submission: Monday, May 22nd
    - Protocol
        - Found on UConn IRB website → IRB form → Study Protocol
        - MK to fill out → will sent to Sam for review and revision
    - Consent Form
        - Found on UConn IRB website → Templates and samples → consent form → information sheet by student researcher
        - For Sam to Fill out
    - Survey
        - Community participants & Client group / town officials
        - Part A: 10-12 Qs
        - Part B: 3-5 open ended
        - Done in Qualtrics
        - For paper and digital
        - MK to start on draft → send to Sam and Peter for review
- Sam to prepare self-evaluative (professional) Q's based from lit research

    - End product = visual model / timeline for the perfect participatory design model
- Sam to call graduate school
    - Paper work
    - Due dates
    - Approval
    - Applying for graduation
- Schedule time for thesis defense
    - MK away 17-23rd of August
    - Plan to finish data collection by end of July
    - Plan to finish evaluation and analysis of data beginning of August
    - Plan for thesis defense by end of August

**** Peter to take CITI certification course / refresher course

Program Evaluation Meeting Notes: - Follow Up Meeting 2

Location: Miriah Kelly's Office

Monday, July 10, 2017 @ 11:00 AM

Meeting Participants: Miriah Kelly and Samantha Stewart

Agenda:

- IRB re-submission
    - Protocol and application edits
    - Contact if not back in 1 week
- Have Peter Miniutti approve edits before submission
- Contact Helen for email list
    - Prepare list with emails and names – put into Qualtrics
- Make draft survey in Qualtrics

*Additional follow up meetings for survey data analysis and thesis preparation were not recorded.