

Promoting Sustainable Development Through Participatory Design in a Small Town: Mebane, North Carolina: 2nd Phase

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1. Introduction

The goal of this project is to generate appropriate design guidelines and implementation strategies for development in key locations of downtown Mebane, North Carolina. One of the main objectives of the project is to enhance community participation in this process. The appropriate goal setting technique in this regard is chosen as charrette process, i.e., the rapid pace at which the design is finalized with a guiding principle: consensus (Sanoff, 2000).

The charrette process is planned in three phases. In the first phase, objectives and strategies were determined based on the identified problems. The second phase elaborates on design implications of these strategies. Finally, in the third phase the appropriate design guidelines will be generated for the development of downtown Mebane. Following the first phase of the process, which was presented in the ARCC spring 2001 conference, second phase is prepared, illuminating the third phase.

2. Charrette process as a technique

The charrette process is a goal setting technique by way of collecting local knowledge as a compliment to professional knowledge. Therefore, it is a collaborative exchange of ideas and information between the public and the professionals on a specific problem or a project related to built environment, or a decision concerning the future of society (Sanoff, 2000). Since there are many disciplines involved in the formation, improvement and development of physical environment and the society occupying it is diverse, numerous disciplines are expected to be involved and cooperating in the charrette Process. Thus, it is inherently an interdisciplinary problem solving approach.

The distinguishing characteristics of charrettes are:

- group involvement,
- development of a product,
- time limitations,
- commitment to reaching consensus (Gollattschek & Richburg, 1981).

Regarding the group involvement criterion, the primary concern is that people, who are directly or indirectly affected by the development decisions, participate in the process (Smith & Hester, 1982). Therefore, there are two main objectives of the charrette process. The first is to gain the unified support of a representative cross section of citizens affected. This is necessary because of the inevitable need of their endorsement when it is time to implement these decisions.

Second, the charrette process is aimed at securing the support of the power structure that will commit the necessary resources for implementation (Sanoff, 2000). Therefore, in

addition to professionals' involvement in the process, support from citizens and from the power structure is indispensable for a successful implementation of the decisions developed through the charrette process.

Development of a product is the second criterion in the charrette process. In order to achieve this aim, it is necessary that there is an identifiable problem to discuss to begin with. For identifying the problem and generating solutions, user participation is inevitable in the charrette process. Moreover, involvement of professionals from within and outside the community is another dimension that helps to come up with a product at the end of the process (Sanoff, 2000, Smith & Hester, 1982). In addition to all of these, one of the major constituents is commitment to put recommendations into action.

As the third criterion time limitations should be considered in the charrette process. On one hand, the success of a charrette process is dependent on the implementation period. Ideally, the charrette process maximizes participation over a 3-5 day framework. This is a structured schedule but an open process for participation (Sanoff, 2000, Smith & Hester, 1982). In a charrette, design solutions are developed by planning intensively in a compressed period of time while working against deadlines to resolve differences (Cramer & Wehking, 1973). Three major mechanisms are used during this process. First, idea generation requires a reciprocal knowledge transfer among all affected parties. Second, decision-making requires a dialogic discourse ideas presented of. Finally, problem solving provides recommendations and proposals as process outcomes (Sanoff, 2000).

On the other hand, there are time limitation problems during the process for evaluating the outcomes of several steps, which will inform the following steps in the process. Therefore, it is necessary to plan the program in such a way that these time limitations are considered.

It is possible to see the charrette process as the initial organizing step for a longer implementation period. Thus, there are some basic strategies to follow during this critical process in order to develop consciousness and willingness among the participants to achieve a consensus. Perception of a common goal and sense of urgency are two complementary strategies in this regard. Representations of all the components of a community should be involved for developing a sense of full participation. At the same time, the process should be designed in such a way that a sense of individual contribution to the process should be also maintained (Sanoff, 2000). Charrette should help resolve conflicts and to redirect the energy toward common concerns (Smith & Hester, 1982).

Although these basic strategies and mechanisms are present in most charrettes, there are differences and hence several categories of the charrette process (Sanoff, 2000). First, educational charrettes generally address an architectural or urban design problem serving community issues. They end up with schematic representation of the solution ideas. The process usually involves university students and their instructors. Second, leadership forums, retreats, focus groups are forums for citizen activists, elected officials and nonprofit developers. These informal forums are used to define local problems; help list the relevant issues and test some alternatives appropriate for the problems. The third category is traditional problem solving charrette, which involves practicing professionals and participating citizens, and focuses on producing solutions to a well-defined problem.

For example, the outcome maybe a plan of a building or a park that is necessary for the community. Finally, interdisciplinary team charrette involves a holistic approach that deals with issues such as economic development, affordable housing, neighborhood crime and transportation. Teams of eight to twelve practicing professionals come together for this comprehensive task.

3. Case of Mebane, North Carolina

In light of the above charrette categories, the charrette proces of Mebane, may be regarded as an educational charrette because of its connection to North Carolina State University’s College of Design, as well as a traditional problem solving charrette because of its ultimate aim, which is to generate a design solution.

In Mebane charrette, the area of concern was predetermined, as the downtown area. The main objective was to identify alternatives for the development patterns of downtown Mebane that would promote sustainability. Therefore, the charrette process was designed in such a way that, the citizens were able to define the problems in the study area and propose several objectives together with relevant strategies.

The charrette process in Mebane had the main objectives found in most charrette processes. Participation of citizens from a cross section of the society and involvement of power structure were guaranteed. However, this charrette was the first step of a three-step process, which includes idea generation, decision making, and problems solving.

In the first step, problems were defined and ideas were generated by the participants. At the end of the first charrette, all the goals and strategies, which were developed and ranked by the participants, were listed (Figure 1). Based on these goals and strategies, several proposals were visualized in order to increase the awareness during the decision making process. Visual understanding of these goals and strategies is crucial for the charrette process, since it will increase the understanding of the participants about the design implications of their decisions.

<p>GOALS AND STRATEGIES</p> <p>1. Attract people to downtown More restaurants New uses (education & entertainment) Adaptive re-use (White Furniture Company) Shops: specialty/antiques “Town square” area New grocery store in downtown Conversion of post office to library More landscaping Pedestrian crossing at railroad Diagonal parking Small educational center in downtown</p> <p>2. Retain character/history of Mebane Façade improvements Adaptive re-use (White Furniture Company) Focus on existing buildings Designed open spaces A train station More landscaping Pedestrian crossing at railroad</p> <p>3. More people living in downtown Shops downstairs – flats upstairs Focus on existing buildings</p>	<p>4. Make streets more attractive to pedestrians More landscaping Move electric wires underground “Town square” area Repaired sidewalks Improve street lights</p> <p>5. Mixed-use in downtown Improve street lights Shops downstairs – flats upstairs Develop White Furniture as business incubator Focus on existing buildings</p> <p>6. Improve ways to get to Mebane A train station Pedestrian crossing at railroad Repaired sidewalks</p> <p>7. Economic development New grocery store in downtown A train station</p> <p>8. Fill the empty spaces/spots Façade improvements</p>
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Figure 1. The list of goals and strategies.

Therefore, the first charrette for idea generation continues with the second step, decision-making. In this step, there are some design implications generated in light of the goals and strategies identified in the first charrette. That is, participants have the opportunity to visualize the design implications of the solutions they propose in the first charrette.

In the first charette the participants individually matched the most important three goals with three strategies. Therefore, among all of the goals and strategies generated by the participants, the ranking was achieved according to their perspectives. Regarding this ranking of the goals and strategies achieved in the first charrette, the design professionals prepare the visual representations of the primarily chosen solutions by the participants. Two major alternatives are developed. First, locating an educational complex, and transforming the surrounding environment into a recreational outdoor space are demonstrated through digitally edited photographs (Figure 2, Figure 3). Second, re-use of the White Furniture Company building as a recreational center is visualized with its surrounding potential outdoor areas (Figure 4).



Figure 2. An educational complex near White Furniture Company Building (before and after).



Figure 3. Open spaces surrounding the educational complex (before and after).



Figure 4. An open space near White Furniture Company Building (before and after).

Although these alterations implemented in the specific locations of downtown Mebane, the general concerns, such as attracting more people to downtown, retaining its historical character, making the streets more attractive to pedestrians, and increasing the number of people living in downtown are the guiding ideas of all proposals. Moreover, the underlying principles in all of the design implications are drawn from the strategies that were identified in the first charrette. Several of these principles are adaptive re-use, more landscaping, addition of new uses, underground electric wires, and designed open spaces.

The final step, problem solving will be designed to make sure that participants have an equitable role in the formation of the final decision. There will be few design alternatives in the third charrette, based on the reactions about the design implications in the second step. Thus, the result of this three-step process will be based on the ideas and preference of participants, and the expertise of the professionals.

4. Conclusion: Evaluation of the process

Establishing critical awareness for the current condition and development alternatives among the residents of Mebane is one of the potentially successful aspects of this process. Although the details of Mebane Charrette process are explained in the paper covering the first phase (Rifki et al, 2001), some aspects are still notable at this stage. There are several achievements, which are specific to this project. First, the ongoing planning process carried by the county planner was a complementary project because of its lack of concentration on the downtown. Second, the regular meetings with the county planner helped to arrange a meeting for the charrette process. People are informed about the project and the content of the charrette meeting. Besides, these regular meetings provided a certain amount of time, which is already designated to discuss the future of their city by the residents of Mebane. Third, the involvement of local newspaper was beneficial. The charrette process, and the concluding remarks of the first phase were published in the local newspaper. This provided awareness for the residents, who did not take part in the process.

The mixed formation of groups in the Mebane Charrette to include residents and government officials at the same time provided well-adjusted discussions among them. By the presence of one government official and four residents in the groups the problem

of dominance is eliminated. Furthermore, with the existence of one member of design team in each of the groups decreased the problem of dominant personality in Mebane Charrette.

However, there are some limitations of the technique due to its inherent features. The number of participants is limited because of feasibility concerns (Smith & Hester, 1982). Besides, it is never guaranteed that the minority groups are represented (Hester, 1994).

The generalizability of this effort as a case study is limited as it is in any charrette project because of the specific characteristics of each town and participant group, which are the major identifiers of the outcome of the process. However, as a technique for goal setting, charrette process works efficiently to help generate design guidelines. Moreover, case study provides limited basis for scientific generalization. Although the findings of case studies are generalizable to theory, they are not generalizable to population because the study itself does not represent a sample (Yin, 1989). Consequently, the results and guidelines are specific to this project, even though the implementation of charrette process for goal setting and generating design guidelines is generalizable.

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