PUBLIC HOUSING AND NIMBY: THE EFFECTS OF CITIZEN PARTICIPATION IN SITING PUBLIC HOUSING FACILITIES IN TULSA

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Introduction

Public housing has become akin to toxic waste facilities in the amount of citizen opposition generated to oppose the placement of these facilities in particular communities. While problems associated with low-income public housing have increased, the need to provide low-income housing has remained persistent. Collisions between these two forces have become more frequent. Therefore, the need to find solutions to this conflict has grown in importance. This research examines what forms of non-traditional citizen participation, if any may alleviate "not in my back yard" (NIMBY) attitudes toward the siting of public housing facilities. We argue that increased participation and dialogue involving the community might lead to less conflict and more acceptance of the facility in their neighborhoods. We will attempt to identify factors that may be useful in formulating public policy to deal with NIMBY activities.

A goal of some policymakers is to concentrate their efforts on the problems associated with high-density public housing located in undesirable areas. While the issue of NIMBY and the siting of public housing does not appear to fit within usual environmental policy concerns, we feel it is important to realize that public housing does involve the living environment of citizens and presents a threat to the "...health and safety" (Walsh *et al.* 1993:25) of citizens. To this end, policymakers have attempted to disperse public housing throughout the community with the hope of reducing the concentration of low-income public housing and the problems associated with high density housing. Organized responses by citizens, however, have thwarted this strategy. Successful movements opposing the siting of these facilities has resulted in the poorest people in the community continuing to reside close together in the worst areas of the community. This situation breeds crime and a sense of hopelessness and the surrounding neighborhoods experience these negative effects also (Fuerst and Petty 1991). Low-income individuals and families, along with the surrounding community, find themselves in a seemingly intractable situation.

Opposition to the presence of public housing in one's neighborhood is commonly referred to as the NIMBY syndrome. NIMBY has been around since the beginning of community living (Marshall 1989), arising from "protectionist attitudes of and oppositional tactics adopted by community groups facing an unwelcome development in their neighborhood" (Dear 1992:288). NIMBY is viewed primarily as a middle and upper middle-class phenomenon. Educated citizens with money, influence, and time attempt to keep "undesirable" facilities out of their neighborhoods (Marshall 1989). According to the 1990 Robert Wood Johnson Foundation Study, individuals most likely to oppose development are white, high-income executives as well as older citizens. Strong opponents also tend to be "homeowners, married, highly educated and male" (p. 242). Residents are concerned that these facilities may lower their property value, disturb the equilibrium of their neighborhood, or bring in the "wrong-sort" of people to their communities (Bussel 1993). Due to recent changes in the political and legal environment, involvement from middle and lower class citizens associated with NIMBY has increased (Marshall 1989). NIMBY is no longer confined to wealthier citizens and the potential for a NIMBY response has increased. These changes have given citizens greater power to stop undesirable projects – even projects that are important for the good of the community as a whole (Marshall 1989).

Most citizens agree that low-income public housing is "desperately needed" (Fuerst and Petty 1991:91). Citizen "objections are not based upon if they should be built" (Inhaber 1992:16); rather, it seems that problems arise during the "siting process" (LeRoy and Nadler 1993:108). Since there is a demonstrated need for these facilities, it is necessary to assess what strategies may be implemented by policymakers to address this dilemma. An answer may be found in citizen participation and involvement. It is possible to change opposition to acceptance (Arens 1993) – if citizens are involved in the decision making process (Folk 1991).

Citizen participation is widely accepted as being "acts that aim at influencing government, either by affecting the choice of government personnel or by effecting the choice made by government personnel" (Verba and Nie 1972:2; Tarlock 1984). The components of participation include calling and writing decision-makers, voting, signing a petition, and participating in a public demonstration (Verba and Nie 1972). These are known as traditional or classic political participatory methods.

Citizen participation is thus a set of principles and procedures that are designed to check decisions made by policymakers that affect citizens. These checks are generally employed to ensure responsiveness (Mayo 1960; Pitkin 1972; Prewitt and Eulau 1969; Verba and Nie 1972). "Contacting" is a form of participation in which citizens contact governmental officials to complain about, or request, services (Coulter 1991).

Though traditional methods of political participation provide important means by which citizens are able to express political concerns (Crosby 1986; Rosener 1975; Thomas 1982; Peel and Ellis 1987; Inhaber 1992; Tarlock 1985), we wish to examine non-traditional methods such as neighborhood-level participation. These forms of participation give citizens the opportunity to become involved in a more direct manner. The goal of neighborhood level participation is to engage citizens earlier in the siting process (Crosby *et al.* 1986; Rosener 1975; Thomas 1982; Peele and Ellis 1987; Inhaber 1992; Tarlock 1985).

Literature Review

NIMBY

"The story of NIMBY is not a new one. Anyone rich enough to have lawyers and to influence city hall has always been able to see to it that a facility is not located next to his home" (Marshall 1989:307). The NIMBY syndrome has long been associated with hazardous waste sitings and environmental issues. NIMBY has evolved to encompass the siting of other specific public services, such as prisons, halfway houses, drug rehabilitation centers, nursing homes, and public housing (Davis 1993:103-8; Lester and Bowman 1983). The "acronym NIMBY and all its attached political causes and consequences, cannot be confined to hazardous wastes facility siting, or even to environmental policy in general" (Rabe 1994:167). NIMBY has grown to include any facility that the general public or the immediate community deems undesirable.

As NIMBY has increased in frequency, it has also spread to other areas of public service sitings. One such area is public housing. The NIMBY phenomenon has expanded to "housing designed primarily for low income citizens" (Rabe 1994:168). The case that will be presented here certainly points to low-income public housing as fertile ground for NIMBY. Consequently, the political and social importance of this situation can no longer be overlooked.

Since a leading solution to the problems associated with public housing facilities appears to be the dispersal of new facilities throughout the community, it is likely that a larger portion of the general public will be effected. Government planners must contend with opposition from the communities that have been listed as possible sites for public housing. Such an aroused interest will likely lead to NIMBY activity. It is important for policymakers to be aware of citizen groups that are likely to become involved in NIMBY oppositions, in order to formulate policies that are responsive to citizens' needs and the public good as a whole.

In the past, politicians and public administrators have "dismissed the NIMBY syndrome as community selfishness and ignorance" (Inhaber 1992:18). Due to the spread of NIMBY and the persistent need to site new public housing facilities, politicians and public administrators now realize they can no longer dismiss these concerns (Marshall 1989).

Public Housing

Low-income public housing facilities were authorized by the 1937 National Housing Act. This program is the oldest of its kind and has produced 1.3 million public housing units that are owned by public housing authorities in over 3200 locations (Landers 1987). The tenants of these housing projects were required to pay rent based on the tenant's income, which was sufficient to cover operating costs.

The 1949 National Housing Act set a goal of "a decent home and a suitable living environment for every American family" (Landers 1987:214). In only three years, the Act produced 155,000 units. From the early 1950s and into the late 1960s, there were 15,000 to 35,000 public housing units built annually. Federal subsidies were extended to cover operating costs, which allowed the lowest of low-income families to live in public housing. According to the National Association of homebuilders, these public housing units were "high density, stripped of amenities, and located in undesirable areas" (Landers 1987:214).

According to Fuerst and Petty (1991:118), public housing has become extremely undesirable due to crime, vandalism, and social dysfunction. Most of these problems are found in many public housing facilities. The cause of this is "location, control, enormous concentration, socially troubled families, design flaws, few supporting social services, and inept management."

Public housing has become undesirable to both tenants and the surrounding neighborhood. Typically, these facilities are dense, overcrowded, and infiltrated with crime. Public housing affect neighborhoods by increasing crime rates, reducing property values, and contributing to a general deterioration. These negative effects provide the motivation for many residential communities to oppose public housing construction in their neighborhoods.

One might think that citizen groups, armed with motivation and organizational skills, would be able to easily turn back an undesirable project. The United States Supreme Court has not been sympathetic to citizen concerns on the subject of public housing siting. It seems that the stage has been set for intractable conflict.[1] The Court's rulings demonstrate that the federal government has substantial latitude on this question. While the government must act in the best interests of public good, they are not required to reimburse the owner with the highest possible value of properties, and in the case of public housing, governments may site the facility wherever they wish it to be.

Tulsa Public Housing - The Setting

The Tulsa Housing Authority (THA) operates 12 low-income multifamily public housing facilities. Additionally, there are more than 30 privately owned government subsidized low-income housing facilities within Tulsa. These privately owned facilities are commonly referred to as Section 8 housing.[2]

The THA oversees 2,254 multifamily living units. The majority of these units are located in North Tulsa. North Tulsa is the second most populated area and has the largest proportion of minority residents. It also has the city's highest unemployment rate and the largest proportion of residents who live in poverty (Paskin *et al.* 1992). This is typical of areas in which public housing is located (Inhaber 1992; Bussel 1993; Dear 1992).

THA has an official location policy for public housing. Its stated purpose includes the promotion of housing opportunities for lower-income and minority households, dispersal of housing throughout the community, and the avoidance of the creation of new lower income and minority concentrations as a result of local, state, and federal housing programs (Tulsa Housing Authority 1995). Of the 12 multifamily public housing facilities seven are located in North Tulsa, four are located in West Tulsa, and one is located in East Tulsa. South Tulsa, which is generally regarded as the most affluent area in Tulsa, has no public

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[1] The Supreme Court in *Hadacheck v. Sebastian* 239 U.S. 394, 1915, and *Penn Central Transportation* 438 U.S., 1978 have generally held that if the government can show that a public project advances the public good, the government can site the project over citizen objections.

[2] Section 8 housing involves the renter leasing to lower income residents with any difference in the amount paid by the low-income lessee to be reimbursed by the government. These dwellings are usually single family homes. This type of housing unit is not relevant to our study. We are only concerned with multiple family dwellings.

housing facilities. It is clear that Tulsa's public housing is exemplary of the problems associated with public housing in general.

Community Participation and Involvement

Citizen contacting, though a popular mode of public response to an undesirable government activity, does not have a significant impact on government policies (Crosby *et al.* 1986). This is not to imply that citizen participation in any form is without merit. It is possible that traditional methods of citizen participation are not adequate in addressing the needs of both the government and the citizens. Neighborhood level participation is a more intense form of citizen participation and has grown in its importance (Thomas 1982). Research has indicated that traditional modes of participation have had limited impact and have served primarily as a check on government actions after the fact (Rosener 1975; Crosby *et al.* 1986).

In an effort to improve the effectiveness of citizen participation, a group at the Center for New Democratic Process searched for solutions to the weakness of citizen participation. This group developed a method that they term "citizen juries." The group identified five criteria that could be used to increase the effectiveness and success of citizen participation: (1) participants should be representative of the broader public and selected in a fair manner; (2) the proceedings should promote effective decision-making; (3) the proceedings should be fair; (4) the process should be flexible; and (5) the likelihood that the recommendations of the group will be followed should be high (Crosby *et al.* 1988:175-177).

Crosby et al. (1986) analyzed the citizen panel method suggested by the Center for New Democratic Process in 1984. They tested the effectiveness of the five criteria as applied to a dispute concerning adverse environmental impacts from the agricultural industry on the water supply in the state of Minnesota. They found that the panel method was successful in addressing participant selection, broad based decision-making, and producing fair procedures. Where the water supply program needed improvement, recommendations were suggested by the panel, which were forwarded to state officials. The author concluded that all five criteria are important if citizen participation is to succeed.

Peelle and Ellis (1987) examined an analysis of 105 selected water and highway engineering projects for potential solutions for NIMBY. Their analysis of the successes and failures of these projects demonstrated a significant relationship between the degree of public participation and the public's willingness to accept a siting proposal. When an agency or developer attempted to site a project without previously consulting the public, ignored public sentiment, or did not attempt to educate the public in the early stages of the project, the project was met with opposition. If a developer or agency pursued the opinions of the citizens through channels such as public opinion, survey of public needs, assistance of small group meetings, and provision of the means to exchange information with concerned citizens, chances of project success increased (Peelle and Ellis 1987).

Rosener (1975) notes that citizen participation is usually viewed as a review function that acts as a type of check on policy decisions. Through voting, public hearings, and advisory committees elected officials have deemed this type of citizen participation as a sufficient means for input. Improvements have occurred in citizen participation regarding who participates, how they participate, why they participate, and when they participate.

Rosener (1975) presents a matrix that identifies 14 functions in which participation techniques perform best for elected officials and public administrators. The focus here, however, will be on only one of these functions: "develop support / minimize opposition." Rosener provides 18 techniques that could be utilized to serve this function. Of those 18, we will examine seven.[3]

The first technique is the use of *citizen advisory committees,* which is a "generic term used to denote any of several techniques in which citizens are called together to represent the ideas and attitudes of various groups and/or communities." The second technique is *citizen representation on public policymaking bodies,* which is defined as the composition of public policy-making boards comprised of either partially or wholly of appointed or elected citizen representatives. The third technique is the *citizen review board* in which decision-making authority is given to citizen representatives who are either elected or appointed to review alternative plans and decide which plan should be implemented. The fourth technique is *design-in*,

[3] We believe that these seven techniques best reflected neighborhood level participation (see Rosener 1975). Also, these seven techniques were chosen for reasons of parsimony.

which is a variety of planning techniques in which citizens work with maps, scale representations, and photographs to provide a better idea of the effects that proposed plans and projects may have on their community. The fifth technique, *fishbowl planning,* involves a process by which all parties can express their support or opposition to an alternative before it is adopted, thereby bring about a restructuring of the plan to the point where it is acceptable to most, if not all, involved parties. This involves the use of several participatory techniques – public meetings, public brochures, workshops, and a citizen's committee. The sixth technique is *meetings (community-sponsored)*, which are gatherings organized by a citizen groups or organizations; these meetings focus upon a particular plan or project with the objective to provide a forum for discussion of various interest group perspectives. The final technique is *meetings (neighborhood level)*, which are meetings held for the residents of a neighborhood that has been, or will be, affected by a project, and which are usually held early in the planning process or when the plan has been developed.[4]

The research design of our study will be patterned after these techniques. The survey used in this study has been constructed to sample respondents based on these seven techniques. We intend to determine if these techniques are effective in reducing opposition in siting public housing facilities in Tulsa. We hypothesize that the level of non-traditional citizen participation is adversely correlated with opposition to siting public housing facilities. In other words, as opportunities for neighborhood level participation increase, opposition will decrease.

Data and Methods

The sample was restricted to permanent adult residents of the City of Tulsa who were homeowners.[5]

Professionally trained interviewers solicited citizens' responses to public housing facilities being placed in their neighborhood via a telephone survey. The survey, conducted in 1995, contained 22 questions focused on measuring opposition to the siting of public housing facilities. Respondents were asked whether they had actually experienced a proposed public housing siting. The survey also measured the level of opposition and the types of participation in which they would engage.

The independent variables were geographical area, familiarity with public housing, the perceived risk of public housing, trust in government, gender, racial group, age, social economic status, perceptions of efficacy, and the importance of neighborhood[6] (see Table 1). We also took into consideration and measured past political participation. The following variables were combined to measure past participation: voted in last city councilor election, voted in last mayoral election, recently written a city councilor, recently attended a council meeting, and participated in a public protest. The variables were binary coded, ranging from 0 to 3 (see Table 1).

To measure the types of participatory activities that can influence opposition, seven variables referred to as tradeoffs, were selected. The tradeoffs, patterned after Rosener, were: location approval, construction plan approval, advisory committee, oversight board, rules establishment, limited management participation, and participation in all phases of management.

The dependent variable was the determination of whether the participatory tradeoffs affected the acceptance of the housing facility.

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[4] These techniques can be found in Rosener (1975).

[5] We restricted our sample to homeowners because we felt that the focus of our study should be on those that had a stake in their neighborhood's quality, i.e., property values, crime risks, and the usual inability of homeowners to simply move away from the threat that public housing might present. Business owners would not be as representative since many do not live in the area in which their businesses are located. We gathered our telephone data by using random digit dialing to assure the representativeness.

[6] Based on previous research (Peelle and Ellis 1987; Fuerst and Petty 1991; Crosby *et al.* 1986) we believed that these variables would be best suited to determine whether or not they would affect the acceptance of a public housing facility.

Table 1

Means and Standard Deviations for All Variables Included in the Analysis*

INDEPENDENT VARIABLES	VARIABLE DESCRIPTION	MEAN	STD DEVIATION
Residential Status	0=Other; 1=SE	0.728	0.446
Familiarity	0=No; 1=Yes	0.319	0.467
Perceived Risk	ordinal variable ranging from 0=Strongly Disagree to 3= Strongly Agree	1.793	0.988
Trust in Government	ordinal variable ranging from 0=None to 3=Great deal	1.675	0.76
Gender	0=Male; 1=Female	0.501	1.197
Race	0=Nonwhite; 1=White	0.842	0.365
Age		41.259	17.736
Socioeconomic Status	summed Z-scores for Income & Education	0.65	2.194
Perceived Efficacy	ordinal variable ranging from 0=None to 3=Great deal	1.444	0.987
Neighborhood Quality	ordinal variable ranging from 0=Not Important to 2=Very Important	1.842	0.39
Past Participation	summed variable ranging from 0 to 5	1.976	1.144
Actual Participation		1.080	1.540
Hypothetical Participation		2.788	1.776

* N=426

Findings

Involvement and Perception of Government

When asked about trust of government, the survey revealed that 11% of the respondents had a great deal of trust, 52% had a fair amount of trust, 29.7% had little trust, and only 6.8% had no trust at all. Of the respondents, 88.1% were registered voters, 58.3% voted in the last city council election, and 72.8% voted in the last mayoral election.[7]

When asked about political involvement other than voting, the numbers dropped dramatically. Only 17.3% of the respondents have called or written a city councilor to voice their opinion about an issue in the last five years. Only 11% attended a city council meeting to voice their opinion about an issue in the last five years. In the last five years, only 18% participated in a political protest.

Response to Siting Public Housing Facilities

The survey showed that 81.5% of the respondents believed that the quality of their neighborhood was excellent or good. Eighteen percent believed that the quality of their neighborhood was fair or poor. When asked if neighborhood quality was important, 84.8% of the respondents stated that it was very important, 13.8% responded that it was somewhat important, and only 9% responded that it was not important. When asked if a public housing facility located in their neighborhood would be a danger, 59.7% responded that it would be and 36.8% responded that it would not be.

Nineteen percent have actually had a public housing facility proposed in their neighborhood.[8] When asked how they reacted to this facility, 5.4% wrote or called their city councilor, 5.4% signed a petition,

[7] We cannot explain why these percentages are so high. This is an accurate depiction of the data. Perhaps our question was unable to filter responses that tended to inflate these percentages.

[8] N = 81.

2.3% spoke at a public hearing, 4.9% joined a community organization, and 1.6% had been involved in a public demonstration. Only 5.6% approved or gave support for the facility.

When asked what would change their opinion and make them more receptive to the facility, 2.8% of the respondents stated that if government and the facility promised to maintain open lines of communication with the community, their opinion would change. If the neighborhood received compensation for losses that could occur, 3% would change their opinion. If the facility location decision required community approval, 5.9% would change their opinion. Community participation in construction plans would result in 4.7% altering their opinion. Of the respondents, 4.4% stated that an opportunity to participate on a citizen advisory committee would change their opinion. In addition, 4.4% stated that if they were allowed to participate on an oversight board, their opinions would change. Three percent stated that if they were allowed to participate in the management decisions of the facility, their opinion would change. Finally, 4.4% stated that if they were allowed to participate in all phases of the facility, their opinion would change.

For the respondents who have not experienced a proposal for a public housing facility in their neighborhood, the question was posed in hypothetical terms.[9] When asked if they would write or call their city councilor, 56.4% responded that they would, and 58.8% would sign a petition against the proposed siting. Moreover, 34.4% would attend a public hearing, 48.2% would join a community organization, and 24.4% would participate in a public demonstration against the siting proposal. Only 27.2% would support a public housing facility in their neighborhood.

When asked what would change their opinion and make them more receptive to the facility, 8.9% of the respondents stated that if the government and the facility promised to maintain open lines of communication with the community, their opinion would change. Eleven percent responded that if the neighborhood were compensated for possible losses, their opinion would change. If the facility location decision required the community's approval, this would result in 16.9% altering their opinions about the public housing facility. Fifteen percent would change their opinion if the community were allowed to participate in construction plans. If the community were allowed to participate in citizen advisory committees, 16.6% would change their opinion, and 19.2% stated that if they were allowed to participate in an oversight board their opinion would change. If they were allowed to participate in establishing the rules that tenants must follow, 15.9% stated that their opinion would change. Finally, 14.1% of the respondents stated that if they were allowed to participate in the management decisions of the facility, their opinion would change, whereas 15.2% stated that if they were allowed to participate in all phases of the facility, their opinion would change.

Statistical Analysis

This analysis examines both the levels of expected opposition to the siting of public housing and the possibility that participatory tradeoffs would lessen such opposition. The first part of analysis looked at citizen participation to oppose the siting of a public housing facility. The analysis examines the both the actual group and the hypothetical group. The two groups were compared for the effects of the independent variables on lessening NIMBY opposition. Because of the dichotomous nature of our dependent variable, we determined that logistic regression to be the appropriate method to be used in our statistical analysis (Aldrich and Nelson 1968; Walsh 1987).

For the actual group, two variables were statistically significant. The *perceived risk* variable was significant at the .05 level. This demonstrates that perceived risk of the danger that the facility presents to the neighborhood is important to those who actually experienced public housing in their neighborhoods. In addition, the variable *lived near a facility* was significant at the .01 level. This finding suggests that the notion of living near a low income housing facility is disturbing to citizens, which may be caused by ramifications of crime, loss of property values, and a general threat of risk the facility presents to the community (Fuerst and Petty 1991; Marshall 1989; Rabe 1994; Landers 1987).

In the hypothetical group several variables were statistically significant (see Table 2). First, the *neighborhood quality* variable was significant at the .05 confidence level. This should be expected because those that value the quality of their neighborhood would not welcome the siting of a public housing facility (Bussell 1993; Dear 1992; Landers 1987). As with the actual group, the variable labeled

[9] N = 340.

lived near a facility was significant at the .01 level. The *perceived risk* variable was also significant at the .01 level. Perceived risk may help explain why the other three variables were significant. It is likely that the concerns of living near a housing facility along with neighborhood quality and socioeconomic status are ancillary to the general fear of the facility. In other words, perceived risk of the facility may influence the significance of the other variables.[10]

Table 2

Logistic Regression Equation Predicting Citizen Participation

INDEPENDENT VARIABLE	ACTUAL GROUP (N=80)	HYPOTHETICAL GROUP (N=340)
Neighborhood Quality	.2318 (.6185)	.6827* (.2915)
Trust in Government	-.3589 (.2794)	.2150 (.1547)
Past Participation	.3351 (.2000)	.1006 (.1011)
Lived near a Facility	1.4754** (.4811)	-.8302** (.2507)
Efficacy	-.0845 (.234)	.0832 (.1229)
Perceived Risk of the Facility	.6205* (.2546)	.4689** (.1166)
Age	.0163 (.0148)	-.0011 (.0067)
Gender	.1819 (.3844)	-.1459 (.1118)
Racial Group	-.0867 (.6175)	.0617 (.3116)
Residential Location	-.4624 (.2683)	.6236 (.6127)
Standard errors are in parentheses	x = 30.43**	x = 49.33
* p<.05 **p<.01	Pseudo R =.43	Pseudo R = .49

The second part of the analysis looked at tradeoffs that citizens would accept in order to allow the siting of public housing facilities. A difference of proportions test was applied to all tradeoffs between the actual and hypothetical groups.[11] Only one of the seven tradeoffs was statistically significant, the tradeoff of *participating in management decisions* (see Table 3). This result indicates that if citizens are allowed to participate in management decisions, they are more likely to accept the siting of public housing facilities. However, this variable is admittedly vague, and reveals little in terms of insight as to what specifically causes that concern.

Table 3

Willingness of Citizens to Accept Tradeoffs to Site Public Housing Facilities

TRADEOFFS	ACTUAL % YES (N=67)	HYPOTHETICAL % YES (N=362)	Z-SCORE*
Location decision requires community approval	37.9	27.6	1.036
Allowed to participate in construction plans	30.3	24.5	0.682
Allowed to participate on citizen advisory committee	28.4	27.1	0.138
Allowed to participate on oversight board for input to tenant criteria	28.8	31.5	-0.2783
Allowed to establish rules that tenants must follow	26.7	26.1	0.087
Participate in management decisions	20.0	22.9	2.632**
Participate in all phases of the public housing facility	28.87	24.6	0.452

*Difference of proportion test between respondents who have actually experienced the siting of public housing and respondents that had not.

** p<.01

[10] A Pearson's test for colinearity proved that the independent variables are not significantly correlated.

[11] We used a difference of proportions test to determine which tradeoff, through combining the real experiences of citizens and those that might experience a siting, would be effective in reducing siting opposition.

Conclusion

The hypothetical group is likely to be of higher socio-economic status, care a great deal about their neighborhood, and be fearful of the risk that the housing facility may present to their community. The hypothetical group indicated that it would become more involved in protest activities than the actual group.

The actual group shares with the hypothetical group their fear of the housing facility. The actual group participated in protest activities on a much lower level than the hypothetical group.

It appears that the most significant issue in siting public housing facilities is the perceived risk that the facility brings to the community. Policymakers attempting to site a public housing facility in an area that has not previously experienced public housing, should also consider the socioeconomic status of the area, the concern of residents about the quality of their neighborhood, and the resident's previous political involvement. The offer of ways for the effected community to involve themselves in the process had little effect on the willingness of the community to accept the facility. It seems that concerns involving the risk the facility presents to the community outweigh the opportunity to become involved in the process.

The results of this study indicate that the policymaker should emphasize overcoming the perceived risk of the facility more than offering participatory tradeoffs. In the actual group, the perceived risk variable was the only significant variable influencing opposition. In the hypothetical group, the perceived risk variable was the dominant factor influencing opposition and could be the motivating factor for the other variables.

This findings of this study are limited by the relatively small sample size for the actual group (81) and by the fact that only five of the eleven variables (R^2 = .20) were significant (a better-specified model can improve the findings).

Additional research in this area should pursue the perceived risk finding. This variable has the most significant impact in the opposition to the siting of public housing facilities. The focus of additional research could explore methods that could overcome the perception of risk associated with public housing facilities.

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PART IV

ENVIRONMENTAL POLICY PLANNING AND ADMINISTRATION

STRATEGIC POLICY INNOVATION AND FLASH FLOOD HAZARD MITIGATION:

THE TULSA STORY

Mark Meo

Introduction

The story of Tulsa, Oklahoma's triumph over the recurring threat of flash flooding is a dramatic tale that has been discussed at several natural hazards conferences and workshops in recent years (e.g., Flanagan and Associates 1994; Hinkle 1994). Tulsa, which once was vulnerable to repeated devastation of homes, buildings, and loss of life, undertook a major effort to diminish the destructive power of episodic flood events in its Mingo Creek watershed. In the wake of the 1984 Mother's Day flood, which incurred losses of $184 million in damages and 14 lives, Tulsa adopted an innovative program that enabled the city, in partnership with the U.S. Army Corps of Engineers (ACE), to design and construct an award-winning flood control system comprised of a network of landscaped detention basins along Mingo Creek, organizational changes in city government, and land use reforms that has signaled an end to the city's constant flood worries while serving as a model program for the nation (Hardt 1994; Patton 1993; Patton 1994).

A less well-known aspect of the Tulsa story, however, is the role of the individual people who made the city's comprehensive stormwater management program possible. While the changes that arose in the wake of the record-setting 1984 flood command attention, less well known are the sequence of events and the leadership roles that key individuals played in them, which collectively contributed to the comprehensive policy foundation upon which future activities and accomplishments would stand. When, in retrospect, the disparate strands of individual actions are woven together, the evolution of Tulsa's flood control policy takes on the appearance of a complex strategy that ultimately found the right *policy window* to be put in motion. In light of the lengthy incubation period in which the flood control program matured, and the number of individuals whose actions contributed to the program now in place, it is instructive to examine cases such as Tulsa's to improve our understanding of the policy innovation process and the factors that contribute to its success.

In this paper, an argument is made that Tulsa's response to its flash-flooding hazard represents a strategic type of policy innovation. While a clear paradigmatic shift from reliance on structural flood control solutions to nonstructural ones is evident from the history, a careful reading of that history also reveals the concerted efforts of several key individuals to facilitate such a shift within the institutional, legal, and sociopolitical constraints surrounding them. The respective roles of these policy entrepreneurs will be examined to clarify the different steps and stages involved in the policy innovation process, and to make clear what differences exist between strategic approaches to policy innovation and other forms prevalent in the literature. In order to frame the argument, that literature is discussed in the next section. Following this, the historical evolution of the Mingo Creek flood control project is described in which the salient activities of the policy entrepreneurs are identified. Finally, the implications of the Tulsa case for policy innovation for wider application are discussed.

Strategic Policy Innovation

How innovation in public policy, or policy innovation, occurs has been the subject of a growing amount of scholarly interest in recent years for several reasons. First, the federal government has been actively promoting the devolution of many of its programmatic responsibilities to the states and municipalities without