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Citizens' Perspectives of Access to the Decision Making Process and Community Improvement as Determinants of Brownfields Redevelopment Success

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CITIZENS' PERSPECTIVES OF ACCESS TO THE DECISION MAKING PROCESS
AND COMMUNITY IMPROVEMENT AS DETERMINANTS OF BROWNFIELDS
REDEVELOPMENT SUCCESS

A DISSERTATION

Submitted to the Faculty of
Montclair State University in partial fulfillment
of the requirements
for the degree of Doctor of Philosophy

by

SHEVON LETANG
Montclair State University
Upper Montclair, NJ

2013

Dissertation Chair: Robert Taylor, PhD

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MONTCLAIR STATE UNIVERSITY

THE GRADUATE SCHOOL

DISSERTATION APPROVAL

We hereby approve the Dissertation

CITIZENS' PERSPECTIVES OF ACCESS TO THE DECISION MAKING PROCESS
AND COMMUNITY IMPROVEMENT AS DETERMINANTS OF BROWNFIELDS
REDEVELOPMENT SUCCESS

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ABSTRACT

CITIZENS' PERSPECTIVES OF ACCESS TO THE DECISION MAKING PROCESS AND COMMUNITY IMPROVEMENT AS DETERMINANTS OF BROWNFIELDS REDEVELOPMENT SUCCESS.

By Shevon Jean Letang

Brownfields redevelopment is acclaimed as a successful program that has revitalized struggling urban communities and returned unproductive, underutilized, and abandoned industrial and commercial properties to municipalities' tax rolls. Despite a major brownfields' redevelopment goal being to improve the communities and their citizens' quality of life, to date, the program has not been evaluated from the mainstreams' perspective as to its impact on their neighborhoods and their quality of life. A survey of 129 citizens from urban, suburban and exsuburban municipalities in Passaic County New Jersey sought to evaluate the social outcomes of three redeveloped projects from the affected mainstreams' perspective. Additionally, the research sought citizens' perspectives about access to the brownfields redevelopment decision-making processes for the purpose of participation. This access would be for them to express their concerns and values about these community projects in public decision making even to the extent of having these concerns reflected in the projects' outcomes. The research explored relationships between citizens' access to the decision making process and acceptance of the redeveloped projects. Also, it explored relationships between the impacts of neighborhood changes ascribed to the redevelopment and their acceptance. Results reveal that the municipalities differ in their response to the projects' outcome and towards the decision-making processes. Overall,

there is a neutral to a fairly positive response toward the redevelopments. When citizens felt more empowered in the decision-making processes they are more likely to be accepting of the social outcomes of the redeveloped projects. Additionally, they are more favorable of these projects as the number of positive changes increase. Citizens' values for redevelopment success such as public and environmental health, job creation, social cohesion, closely align with brownfields redevelopment goals for sustainable communities. This indicates that their values for improved quality of life and expectations for their communities are not discordant with those of local officials. However, emphasis is placed on different priorities. There is need for heightened awareness and sensitivity to each parties' values, concerns, challenges and priorities and how to prioritize and streamline these issues for the communities overall well-being. Institutionalization of community participation programs within the municipalities is needed.

Acknowledgement

I give God the glory for helping me obtain this degree, which is among my chief aspirations. Without his grace, mercies, wisdom, and guidance, I would not be able to complete what I started.

To Dr. Taylor my Committee Chair, I say a thousand thanks for your advice, patience, encouragement, and wisdom as you guided me along one of the most challenging periods of my life. Under your expert guidance, I have learnt and matured as a researcher. You have contributed to my success in many ways.

I am extremely grateful to the other members of my Committee, Dr. Harban Singh., Dr. Judy Shaw., Dr. Mark Kaelin and Mr. Patrick Mottola Esq. for their wise critiques and sacrifice whenever I reached out to them for help. Without your contributions to this document, I would not have been able to see it come to successful fruition.

Words cannot express my appreciation to the staff in the municipal offices of Clifton, Hawthorne, and Paterson, the New Jersey Department of Environmental Protection, and in the Passaic County Department of Economic Department, including Director Deborah Hoffman. You were all very willing, polite, and knowledgeable as I mined data from your files to achieve this extraordinary feat. To Mayor Jim Anzaldi of Clifton and past Mayor Frank Chrisatelli of Hawthorne, kudos to you both for your unwavering support, encouragement and for supply of critical information. Councilwoman Ames of Paterson your kind supply of information even when you were being inconvenienced is highly appreciated. Special thanks to Mr. Dan Block of Kohler Distributing Company for his con-

tribution. To the citizens who consented to be interviewed, I frankly say without your input, I would not be able to complete this research. Your support was invaluable.

To my colleagues in the PhD program who unselfishly gave their time and effort in various ways to help me collect the data, I owe a wealth of gratitude. Thanks to you all for your encouragement. I love you all. Sincere appreciation to the staff and faculty of the Earth and Environmental Health Department, who has contributed in helping me achieve my academic goal. Dr. Sawahiko Shimada special thanks to you for donating your time. To the Graduate School, thank you for giving me the opportunity to pursue and obtain this degree.

I thank God for the support in so many ways, that my immediate family members and relatives, including Catherine, have given me as I walked this road. You prayed for me, laughed with me, and encouraged me when I felt weary. You are a wonderful support circle. Thanks to Dr. Judith Dunker of my church family whose advice, prayers and support was invaluable. Thanks also to others of my church family who encouraged me through your prayers.

God's richest blessings on you all!

DEDICATION

To the loving memory of my sister Heather Hope Henry who believed in my abilities and encouraged me to maximize my potential.

Table of Contents

Contents

ABSTRACT	iv
Acknowledgement	vi
DEDICATION	viii
LIST OF TABLES	xiii
LIST OF FIGURES	xvi
Chapter 1	1
1.1 Introduction to brownfields redevelopment.....	1
1.2. Research Objectives	7
1.3 Research Stages	8
References	13
Chapter 2.....	16
2.1.1 New Jersey Brownfield Statutes.....	16
2. 2. Status regarding the presence of brownfields in Passaic County and the municipalities being studied.....	21
2.2.1. Brownfields redevelopment in Passaic County	21
2.2.2. <i>Background Information to the Municipalities in the study area</i>	22
2.2.3. <i>Background Information to the Sites</i>	27
3.1 Determining Eligibility	42
3.2 IRB review	45
3.3 Evaluative Criteria	45
3.4 Survey Instrument Construction.....	48
3.4.1. <i>Structure of the Survey Instrument</i>	49
3.5 Survey Implementation	51
3.8 Study Area Demographics.....	55
Appendix I IRB approval letter.....	58
Appendix II Advertisement Poster.....	59

Appendix III Survey Instrument	60
Chapter 4	64
The Media Coverage of Brownfields Redevelopment, a Local Scale Investigation	64
Abstract	64
4.1 Introduction	64
4.1.1 Literature review	68
4.2. Methodology	69
4.3. Results	74
4.4. Discussion	82
4.5. Conclusion.....	89
References.....	93
Chapter 5	96
Community Perception of Redevelopment Changes and Social Processes and the Impact on Brownfields Redevelopment Success.	96
Abstract	96
5. 1. Introduction.....	97
5.1.2. Theories of Place Attachment.....	98
5. 2. An evaluation of citizens' satisfaction of brownfields redevelopment.....	101
5. 3. Methodology	105
5.4. Results	109
5.5. Discussion	128
5.6 Conclusion.....	141
References	143
Appendix II	151
Chapter 6.....	157
Citizens' Qualitative Response to three Brownfields Redeveloped Sites and the Redevelopment Process in three Municipalities in Passaic County New Jersey.	157
Abstract	157
6.1. Introduction	158

6.1.1. <i>A Community Vision and Citizens' Expectations</i>	159
6.1.2. <i>Validation for Inclusion of Anecdotes in Evaluation</i>	160
6.2. Methodology	162
6.3 Results	164
6.4. Discussion	167
6.5. Conclusion.....	175
Chapter 7	192

Citizens' Perspectives of Access to the Decision- Making Process as a factor in

Acceptance of Brownfields Redevelopment Projects in Passaic County New Jersey. 192

Abstract

7. 1. Introduction	193
7.1.2. <i>Some legislation for citizen participation</i>	198
7.1.3. <i>Public Participation Theories</i>	201
7.1.4. <i>Types of public participation identified</i>	204
7.1.5. <i>Community Participation & Social Capital</i>	206
7.1.6. <i>Rationale for this research</i>	209
7.2. Methodology	218
7.3 Results	230
7.6. Discussion	267
7.7. Conclusion.....	285
References.....	290

Chapter 8.....296

An Analysis of the Brownfields Redevelopment Decision Making Models and their

Influence in Facilitating Community Participation in three Brownfields Redevelopment

Initiatives in Passaic County New Jersey.....296

Abstract

8.1. Introduction.....	297
8.1.2. Examples of Citizens' Role and Influence in Official Environmental Decision Making Processes.	302
8.1.3. Theoretical foundations of Administrative Decision-making	305
8.2. Methodology	309
8.3. Findings	311

8.4. Models of the decision making processes in the municipalities	342
8.5. Discussion and Conclusion	348
References	358
Chapter 9.....	363
Research Conclusion.....	363

LIST OF TABLES

Tables		Page
Table 2-1	Status of brownfields presence in Passaic County	21
Table 2-2	Municipals demographics and attributes	23
Table 2-3	Study sites information	28
Table 3-1	Demographic characteristics of survey respondents	56
Table 4-1	Source identity of articles of brownfield issues	74
Table 4-2	Categories of brownfields concerns identified	75
Table 4-3	Story prominence and brownfields theme source	78
Table 4-4	Article presentation of brownfields redevelopment and time period	81
Table 5-1	Cronbach alpha for ‘observed changes’ and ‘public acceptance’ variables	109
Table 5-2	Number of favorable observed changes by number of respondents	111
Table 5-3	Inter correlation matrix of perception of ‘observed changes’ item scale in the municipalities	112
Table 5-4	Factor analysis for public acceptance	113
Table 5-5	Reliability inter-item correlation matrix for public acceptance	114
Table 5-6	Favorable changes observed by public acceptance	116
Table 5-7	Mean values for RDH and PubA by municipalities	118
Table 5-8	Important identified reasons to approve of redevelopment projects	121
Table 6-1	Survey respondents anecdotal reports in the redevelopment discourses by municipality	183
Table 7-1	Criteria goals of fairness and competence from both the ethical-normative and functional-analytical perspective	213

Table 7-2	Summarized contextual guide to the research paper	217
Table 7-3	Demographic characteristics of survey respondents	218
Table 7-4	Initial communication methods of information about site redevelopment activity	231
Table 7-5	The municipalities outreach strategies for access to the participatory and decision –making processes and their research relevance	233
Table 7-6	Cronbach alpha for ‘normative criteria’ ‘influence criteria’ and ‘public acceptance’	237
Table 7-7	Reliability inter-item correlation matrix for public acceptance	238
Table 7-8	Factor analysis for public acceptance	240
Table 7-9	Reliability inter-item correlation matrix for access to the decision-making process	241
Table7-10a	Factor analysis results for access to the decision making-process	242
Table7-10b	Factor analysis results for access to the decision making process	243
Table 7-11	Mean values for RDH and PubA by municipalities	245
Table7-12a	Correlation results for exploratory analysis for the municipalities	247
Table7-12b	Correlation results for exploratory analysis contd	248
Table 7-13	Citizens’ democratic model of access to the decision-making process and perceived influence	250
Table 7-14	Desired reasons for access to the decision making process	252
Table 8-1	Thematic factors underlying the sites redevelopment decision processes	312

Table 8-2	Models of the redevelopment decision-making processes in the municipalities	345
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LIST OF FIGURES

Figure		Page
Figure 1-1	Community conceptual model of brownfield redevelopment success	11
Figure 2-1	Redeveloped study site location in Paterson and census tract demographics	24
Figure 2-2	Redeveloped study site location in Clifton and census tract demographics	25
Figure 2-3	Redeveloped study site location in Hawthorne and census tract demographics	26
Figure 2-4	Hawthorne study site and location in the census tract and Passaic County	29
Figure 2-5	Clifton study site and location in the census tract and Passaic County	33
Figure 2-6	Paterson study site and location in the census tract and Passaic County	37
Figure 3-1	Evaluation criteria for citizens acceptance of brownfields redevelopment projects	46
Figure 4-1	Prominence of brownfields concerns by location of articles	78
Figure 4-2	Overall thematic concept of brownfields issues	79
Figure 5-1	Observation of negative changes	110

Figure 5-2	Perception of livability after redevelopment	119
Figure 5-3	1995 un-developed site picture showing original factory and no redevelopment related changes	148
Figure 5-4	Land change 2002 showing the absence of the factory and the first sign of change	149
Figure 5-5	Landscape change 2007 showing construction of Kohler, demolition of buildings on adjoining site and landscaping south of the Kohler site	150
Figure 5-6	Former Whitney Rand factory onsite	151
Figure 5-7	Landscape changes in 2003 showing Walgreen and Autozone onsite to the north of Walgreen and demolition of old buildings to the southeast	152
Figure 5-8	Landscape in 2010 showing the demolished building replaced by open space southeast of the redeveloped site	153
Figure 5-9	Landscape in 1995 showing former Shulton factory onsite	154
Figure 5-10	Landscape in 2006 showing the housing complex redevelopment onsite	155
Figure 5-11	Landscape change in 2010 showing recreational, open space east of the property, additional foliage and cleared adjoining site of the former Athenia factory	156

Figure 6-1	Main issues identified concerning redevelopment in the municipalities	164
Figure 7-1	Photographs and maps of the redeveloped sites and surrounding neighborhoods and locations in Passaic County and Northern New Jersey	219
Figure 7-2	The inter-related approach to research variables and brownfields redevelopment goals	228
Figure 7-3	Administrative summarized report of community participation process and outcome and identified redevelopment criteria of successes in the three municipalities	265
Figure 7-4	Community concept of brownfields redevelopment project success	266

Chapter 1

Research Introduction

1.1 Introduction to brownfields redevelopment

Brownfields are somewhat of a paradoxical urban redevelopment policy issue creating differential ideological views and hot political and national debates. To some, brownfields are used as an advantage to address issues of urban revitalization and social welfare; while on the other hand, they are viewed as vital economic solutions to urban problems. Brown fields are defined by the EPA and other Federal agencies as *“abandoned idled or underutilized industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination”* (Bascot & Dell 2006:143). Some brownfields in some neighborhoods are so impacted by the degree of contamination of buildings and land that that they affect the neighborhood quality, encourage illegal dumping and other illegal activities. They therefore present a barrier to investment and a disincentive to live and work in such neighborhoods (Greenberg et al 2000).

Brownfields redevelopment is a formalized program within the United States Environmental Protection Agency (USEPA) governed by the Small Business Liability Relief Act and Brown fields Revitalization Act (2002) also known as the Brownfield Act (Pub .L.No.107-118, 115 stat. 2356). It is a subsequent amendment to the 1980 Comprehensive Environmental Response Compensation and Liability Act (CERCLA) to provide liability protection to prospective redevelopers. It therefore provides an incentive for redevelopment of brown fields. However, the issue of liability has been subjected to a

lot of controversy. (The efficacy and appropriateness of cleanup standards remain very controversial). Under the Act, the EPA is authorized to provide multipurpose grants in the amount of \$200,000, and \$350,000 in exceptional cases, annually to States and Local Governments to assist with environmental assessment and remediation. Job training grants are also administered to municipalities particularly to assist low-income minority citizens in brownfields impacted areas to obtain jobs during the redevelopment assessment and remediation phase. Revolving loans in amounts totaling up to \$ 1 million are provided for assessment and remediation also.

In the area of public policy, brownfields redevelopment objectives are seen as embracing the smart growth philosophy (Stephenson 2005; EPA 2006; Smart Growth Network 2000; Greenberg et al 2001; New Jersey Future 2008). Brownfields redevelopments are compact developments that enable sustainable growth and minimize development of virgin lands (EPA 2001). These virgin lands are also known as ‘greenfields’. Smart growth incorporates new development practices that encourage better housing, economic expansion, efficient transportation, and, environmental outcomes. (Smart Growth Network 2000; Environmental Protection Agency 2001; Amekudzi & Fomunung, 2004) Affordable housing is also important in smart growth initiatives. Eisen (1999) goes further to declare that brownfields are linked with sustainable development. These guiding principles share the premise that development must be carried out in a manner consistent with satisfactory environmental quality so that the public health is not compromised. Therefore, brownfields redevelopment should positively impact the built environmental quality. The built environment is seen as having

a positive or negative effect on the nation acquiring its environmental goals (EPA 2001). Summarizing, the quality of the built environment is enhanced and preserved by land use measures that improve water and air quality; compact development that restricts undeveloped land use. Other criteria include, effective transportation design facilities and location that promotes efficient fuel use, limits health risks, minimize noise, facilitates accessibility preferably by walking; a sustainable urban structure with closely located infrastructures; protection of biodiversity; favorable aesthetics. In addition, cultural, historical, and architectural landscapes and buildings should be protected. Protected, accessible green spaces to fulfill recreational, play, farming and healthy living is important. Micro scale urban design features that promote and improve the environment for cyclists are highly recommended (EPA, 2001; EPA, 2006; Swedish Environmental Protection Agency, 2012; Clarke, 2003).

The concept of the built environment embodies the protection of public health from harmful air pollutants and unacceptable risks to health and safety (Swedish Environmental Protection Agency, 2012). In line with this concept, brownfields redevelopment goals incorporate the principle of significant reduction of public and environmental health risks and protection and promotion of the public and environment health as a key criterion of site remediation.

Another brownfields redevelopment goal incorporates community participation. Community participation is a priority because it is viewed as a critical component of brownfields redevelopment success.(New Jersey Future 2008) Since people will be basically the end users of these projects, then their access to the decision making process

is viewed as crucial. This goal is also a goal of environmental justice. Therefore access to the decision making process for the purpose of community participation, cannot be divorced from this paradigm. Environmental justice is fulfilling its mission when all groups and individuals irrespective of race, culture or income have equal access to the decision making process to make demands for a healthy, livable and safe working environment and is afforded equal protection from environmental and health hazards (EPA, 2012). The decision making process is also expected to incorporate concerns of all participants in the process, they should be able to influence policy decisions and their participation should be actively sought by the decision makers (Bullard & Johnson 2000). Environmental justice is a concept that has generated a significant number of studies and it seen as empowerment of the disenfranchised (Solitare et al, 2002). Environmental justice concepts have also been written into law by Executive Order 12898 by President Bill Clinton on February 11, 1994. Community participation then is about procedural democracy.

However, currently, dissensions exist and information is sketchy as to the overall success of brownfields redevelopment. Literature also report about uncertainty regarding the long-term effectiveness of cleanup standards. Newspaper stories and research ask the question “how clean is clean?” There are also varying opinions among professionals and the public as to the safety of the sites after redevelopment. The New Jersey Department of Environmental Protection (NJDEP) came under repeated fire from the general public, media, some scientists and the legislature for ineffective management of the sites in terms of remediation standards, public health and safety risks, monitoring among others and has

responded by introducing more stringent remediation and public information standards, effective 2008 (NJDEP, 2008).

The relevance of smart growth policies, environmental justice goals and access to the decision making process and some other issues that are central to brownfield redevelopment goals, and criteria of environmental quality have been highlighted in relationship to brown fields redevelopment. Therefore, the question arises as to the relative capacity of the urban/rural environment after revitalization to satisfy the needs and wants of individuals and society. In other words, the crux of the matter is the grassroots peoples' perspectives about the decision processes of the redevelopment initiatives and if they feel that their opinions matter to the municipals' officials, to the extent of seeing these opinions reflected in the projects outcomes. These redevelopments promote economic revitalization and stability but it is not certain if these municipalities' priorities are in tandem with the values important to the residents and so serve to complement and preserve these values. Therefore knowing the communities' perceptions of the built environment in terms of community improvement/impact after redevelopment is essential to answer these questions. Finally, the level of satisfaction or dissatisfaction towards the outcome may be based on preferences as to the best use of the land regarding the type of redevelopment initiatives and the degree of community impacts. To date, a gap exists in the body of literature as to these raised issues pertaining to the grassroots perspectives of the brownfields' initiatives. Successful remediation of brownfields however has mainly been highlighted from an economic perspective in reports (United States Conference of Mayors, 2008; Hirschhorn, n.d; Stephenson 2005; Watzer et al,

2006). Other successes are lauded such as brownfields conversion to open space and varying descriptions of community participation (EPA, 2012). Reports reveal glowing reports of economic revitalization with the majority of feedback originating from public officials. For example, the NJDEP's (2012) website describes brownfields reuse success stories in the counties highlighting some achievement of revitalization goals and public private economic partnership initiatives between private developers and the municipalities. Achieving remediation goals on the site is also a way the organization views success. Information was, however, very scant as to the public's perspectives. Regarding the success report for the only site mentioned for Passaic County, that is, the former Boris Kroll Site in Paterson, NJDEP states, *"the project is particularly welcome in the city and local residents and officials believe it illustrates their faith in renewal and the future"*. It is unclear how many of these locals are being referenced, who they are, and who they represent. Developers' opinions have also been sought and used in evaluating brownfields redevelopment processes and economic impacts on their business ventures. Few reports highlight some public opinion, but mainly come from those belonging to group organizations such as nonprofits, and a few relevant community leaders. However, the affected interested mainstream opinion has been conspicuously lacking from the literature. The mainstream constitutes the bulk of the intended market so their views could have implications for future development projects and their overall success. The matter of public reaction to United States brownfields redevelopment lacks clarity Greenberg et al (2001) says. Lange & McNeil (2004) cites the importance of issues like green space, infrastructural development, particularly transportation, apart from

environmental concerns in terms of brownfields redevelopment, must be considered in analysis for the projects successes. Here the importance of the attainment of social goals to enhance quality of life is emphasized. The purpose of this study therefore is to determine and convey, through surveys, citizens' perception of brownfields redevelopment in their municipalities. It seeks the evaluation of the redevelopments from the citizens' perspectives because citizens' evaluation of implemented projects and programs is critical to building sustainable communities. The research explores the relationship between perception of community changes owing to the redevelopment, and public response to brownfields' redevelopment projects. In addition, it explores a relationship between the perception of access to the decision-making process and, public response to the brownfields redevelopment projects. The results may vary in the communities. As such, the goal is to determine mainstream citizens' acceptance of brownfields redevelopment projects in their neighborhood through their perception of community improvement and access to the decision making process.

1.2. Research Objectives

The research objectives are as follow:

1. Determine if a relationship exists between neighborhood environmental changes accorded the redeveloped project and citizens' perceived success of the project.
2. Discover respondents' perception of the impact of the existing redeveloped site use on theirs, the neighborhood's quality of life, and their preferences as to the end use of the site.
3. Discover the factor/s, which facilitates their receptivity to a proposed redevelopment.

4. Determine what model of decision-making was used in the redevelopment process in the municipalities.

5. Determine if access to, and participation in the redevelopment process has a relationship to perception of the initiatives' acceptance.

6. Discover and compare the respondents' model of success of brownfields redevelopment with that of municipalities' public officials.

To obtain relevant answers, the study will be conducted in the municipalities of Clifton, Hawthorne, and Paterson in Passaic County New Jersey. The redeveloped sites targeted for the research were the former Whitney Rand site in Paterson, former Shulton Toiletries in Clifton and the former BASF Corporation site in Hawthorne. Subsequently, the stages in this document described in the chapters are as follow:

1.3 Research Stages

Chapter 2 gives some insight into the backdrop of brownfields redevelopment and the municipalities in which the research was conducted. It also includes a very brief overview of the status of brownfield redevelopment in the state of New Jersey and Passaic County and the state statutes governing their redevelopment. It also highlights some economic issues that undergird brownfields redevelopment to give a better understanding of the context within which these projects are redeveloped. It then gives pertinent redevelopment information surrounding the sites including their environmental issues, and the remediation methodologies employed at the sites.

Chapter 3 describes the overall methodological approach to the study.

Chapter 4 describes, from a local media perspective, the complex issues that drive

brownfields redevelopments in a municipality. It zeroes in on an example of how the local daily newspaper frames the brownfield discourse in Paterson and the social context in which the emergent issues are framed. In a sense, it expands and enriches the introduction to the various issues and stakeholders involved in a redevelopment process and the concerns of the stakeholders. Additionally, it helps to develop a better appreciation of issues that drive brownfields redevelopments in a municipality, gives rich insight into stakeholders' interaction in the discourse, and reveals that brownfields issues are of importance to the media.

Chapter 5 explores how community changes resulting from the redevelopments drive the citizens' perspectives of project acceptance and indicates priority values through the degree of favorability ascribed to these values. These may also be possible factors underlying their evaluation of the changes. Respondents' preferences regarding some possible and expected redevelopment benefits and some concerns are first brought to light in this chapter.

Chapter 6 is a sequel to the previous chapter and gives a deeper insight, of broader based stakeholder discourse perspectives through citizens' anecdotes, of the intensity and scope of the public values and their critique of public officials' responses. Respondents' preferences, and concerns regarding the remediation exercise, access to the decision-making process, respective end land uses of the sites and their perception of how the existing use of the site impact their quality of life is revealed more in depth. It also looks at the similarities and differences between the municipalities. Here a more insightful picture of the

publics' overall concept of project success/acceptance emerges and why they feel the way, they do.

Chapter 7 then evaluates respondents' perception of access to the decision making process used in the municipalities and its relationship to their perspectives of the social outcomes of the project. The citizens' perception model of redevelopment acceptance/success is compared with that of the public officials for similarities and differences and discussed.

Chapter 8 highlights decision making theories, discover the underlying models of the brownfields redevelopment decision-making process in the municipalities, and examines whether or not they facilitate meaningful public participation. These institutional models play a significant role in how the citizens' view access to the decision making process because they will either promote or be somewhat restrictive in granting access to enable them to competently stake their claim in the discourse.

Chapter 9 is an overall conclusion to the research and concludes by highlighting some lessons learned based on the research results. It highlights also, the limitations of the study.

Based on the information derived in the literature, I present a graphic concept of citizens' success of brownfields redevelopment below in Figure1- 1. Citizens are concerned about the opportunity to have these values and concerns fed into the decision process. They want municipal officials to be responsive to these treasured neighborhood needs and wants from the inception of the proposed project, when site reuse has not yet been determined, to the extent of even when remediation strategies are being discussed. These

issues are all intertwined with the end use of the site because they are perceived to impact quality of life including health and safety and neighborhood integrity.

Community concept of brownfield redevelopment project success

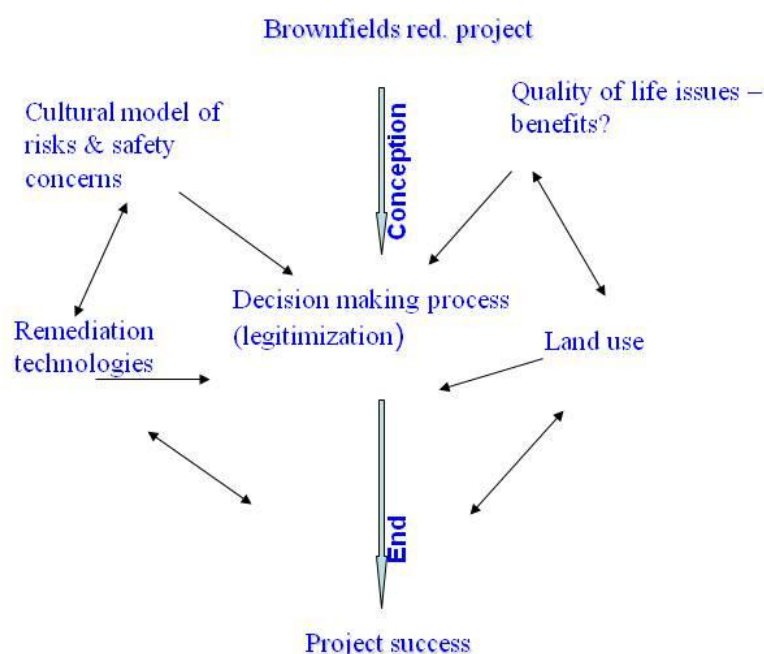


Figure 1-1 Community conceptual model of brownfield redevelopment success.

It is envisaged that this research can assist a wide variety of stakeholders, that is, federal, state and local government officials, urban planners, public decision makers, public and private developers, and environmental advocacy and public health organizations in their analysis and execution of effective policies. It can also assist in risk communication strategies through an awareness of educational needs obtained through revealed values

and preferences. It is desired that the economic field will find this information helpful in that people's preferences can be harnessed into the equation of economic revitalization thus helping to determine the overarching long-term success of brownfields redevelopment. In recognition of the importance of social capital and health, and their linkage with the built environment through results of empirical studies (Leydon , 2003), this research will add more valuable insight into the theoretical body of knowledge of the manner in which people conceptualize and react to these development projects. It is hoped that it will give more insight into the relationship between environmental negatives and neighborhood health. This research is furthermore intended as a guide for the aforementioned parties to gain an idea of the intensity and scope of public views. It is desired that issues of preferences can be placed in a clearer perspective and be used as a foundation for negotiations and citizen's participatory process and public decision-making. The reviewed bodies of both peer reviewed and grey literature has been helpful in giving an idea of the complexity of brownfields redevelopment whilst revealing the necessity to continue to seek answers to unravel and understand the many issues that surround these initiatives.

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Chapter 2

General Background Information to the Municipalities, the Redeveloped Sites, Brownfields Issues in the State and Study areas.

This chapter gives some insight into the backdrop of brownfields redevelopment and the municipalities in which the research was conducted. It also includes a very brief overview of the status of brownfield redevelopment in the state of New Jersey and Passaic County and the state statutes governing their redevelopment. It also highlights some economic issues that undergird brownfields redevelopment to give a better understanding of the economic context within which these projects are redeveloped. It then gives pertinent redevelopment information surrounding the sites including their environmental issues and remediation methodologies employed, seeing that environmental risk issues was a concern for some respondents in Hawthorne. Environmental risk issues will exacerbate public health issues. Public health is highly valued by citizens as seen in Hawthorne's Council minutes, and revealed in the case of a session held on March 21, 2001 (pgs 5-7) which also show Council members also having some concerns about public exposure and environmental remediation as well. Public health is also treasured by the public nationwide.

2.1.1 New Jersey Brownfield Statutes

Because of its history as the first industrial state in the United States (U.S.), New Jersey has been left with a rich legacy of contaminated properties (23,000) of which approximately 10,000 are brownfield properties (New Jersey Department of

Environmental Protection, 2011). This is a significant number considering the relatively small size of the state although this represents only 2 % of the approximately 450,000 brownfield sites in the U.S. Under the state's Industrial Site Recovery Act of 1993, (ISRA) about 12,000 of these properties are being remediated (NJDEP, 2007). Inclusive of these 12,000 properties that are being remediated are brownfields. In Passaic County there are 300 identified brownfield sites (See Table 2-2). This Act was implemented as part of the amendment of the widely unpopular Environmental Cleanup Responsibility Act of 1983 (ECRA). ECRA was heavily criticized as being an obstacle to cleanup activities and further economic development of the sites. This Act (ECRA) allowed the transfer of non remediated industrial brownfields to a new owner on condition that it is used for the same industrial purpose and contaminant exposure levels are within the standard set for that of industrial use. Other New Jersey statutes governing brownfields' cleanup and redevelopment include the Spill Compensation and Control Act ; Site Remediation Reform Act and Executive Order # 140 (2009) under which is the Licensed Site Remediation Professional Program. The Spill Compensation and Control Act require a responsible party to remediate a contaminated site. The Site Remediation Reform Act and Executive Order #140 reforms the process of site remediation to ensure that sites will be remediated within an appropriate and acceptable period. The rule also stipulates that new cases for remediation utilize the services of a Licensed Site Remediation Professional (LSRP) to perform remediation services. It came into full effect on May 7, 2012. The LSRP program gives the LSRP authority to oversee the remediation activities pertaining to the contaminated site. This will enable the New Jersey Department of

Environmental Protection (NJDEP) staff to focus more on enforcement activities and on highly complex contaminated sites. LSRPs speed up the remediation process but are subject to NJDEP's oversight and audit. The Act also mandates the provision of Technical Assistant Grants (TAGS) for nonprofit groups to hire a Licensed Site Professional (LSP) as a technical advisor to heighten community awareness and understanding about the environmental concerns and the remediation issues and actions at a site that is contaminated. The maximum amount administered for one site is \$10,000 for the remedial assessment and a maximum amount of \$100,000 for the remedial action. An important consideration for eligibility for TAGS is the level of community involvement. Another prerequisite for eligibility is that one or more of the community group members must be an area resident in the neighborhood that houses the site. This is to ensure representation for the affected citizens. (NJDEP, 2011)

2.1.2. Brownfields and Economic Development.

The principles of the real estate market undergird brownfields redevelopment. Therefore, the program seeks to align its goals with those of economic development as well as the social goals for community development. Two assessment criteria, among others, for determining the feasibility for development, are the extent of the public benefits to be derived and the economic needs and objectives of the community. Therefore, of primary concern to Economic Development Authorities (EDA) and the developer, whether public or private, are the financial and market feasibility of the project. However, an exception to the matter of market feasibility is the case when the redevelopment project is for low-income housing. In addition, how this project affects the community's fiscal health and

its citizens is important. This refers to the how the project will economically affect the neighborhood and is determined through a fiscal impact assessment. A fiscal impact analysis seeks to ensure that the costs to the public in terms of the demands to be placed on the community's infrastructure (such as sewerage system, school carrying capacity among others), be not greater than the revenues that will accrue to the municipality from the project. This research found that infrastructural redevelopment impacts were a major concern for some survey respondents in Clifton in their assessment of the redevelopment project's impact. (See Chapter 5) However, in considering a proposed redevelopment initiative, this fiscal impact analysis results may be of less importance to the economic authorities than that of job creation and the ability to attract additional development (International Economic Development Council, 2012). Here it must be mentioned that in the first stage (pre development phase) of the real estate redevelopment process which include the feasibility assessments and environmental review, there is a role for the community. This is the political feasibility in terms of the community's attitude towards the proposed project.

It was aforementioned that although brownfields redevelopment is inclusive of social and public health goals as derivatives, it is primarily a real estate market driven program and concerned with 'recycling of land'. However, because of the issue of possible water and land contamination and their associated public and ecological implications, the achievement of both environmental and economic goals is essential to successful brownfields redevelopment. However, brownfields officials mostly use the economic impacts as a metric to gauge the success of the projects. Two of the reasons are

first, the importance that decision makers and legislators ascribe to these economic criteria is for public policy direction, and secondly and significantly, economic impacts are easier measured and quantified than environmental and public health impacts. The International Economic Development Council (2012: 79, citing Bartsch's February, 2000: 20) gives some common indicators by which economic impacts are assessed. They include the number of jobs and businesses created, leveraging of private sector funding, development of housing units, tax revenues gained by the municipality, and the "*number of sites that entered the state Voluntary Cleanup Program (VCP) and subsequently completed it*". The research results will later show that in keeping with the norm, some of these indicators were of primary importance to municipal officials in gauging the projects' successes.

The Passaic County Economic Development Authority website states there is a place for community outreach and notification in the county's Brownfields Assessment Program. It identified some organized committees in the county namely The Passaic County Smart Growth Committee, Comprehensive Economic Development Strategic Committee, and Open Space Farmlands Preservation Committee as all part of this venture. The Committee members include NGO representatives, industry and commerce representatives and local residents (Passaic County Brownfields Assessment Program, 2010). It further states that high priority is given to sites recommended by local residents and based on the sites proximity to sensitive populations such as the school population and community facilities. In the light of the reportedly high value placed on citizens' site recommendations, this research therefore reinforces its argument that the affected citizens

must be involved in evaluation of brownfields redevelopment successes. This is equally important as well as the economic evaluations. Furthermore, maintaining community relations is part of a remediated brownfield's long-term property management. This will facilitate sustainable reuse of the property both in the present and future.

2. 2. Status regarding the presence of brownfields in Passaic County and the municipalities being studied.

Table 2-1

Status of brownfields presence in Passaic County

Municipality	No of brownfields	% of Passaic County total	Status		Comments
			No. closed with restrictions	No. redeveloped	
Paterson	140	46.7	12	4	1 partially redeveloped.(Boris Kroll Site)
Clifton	53	17.7	na	5	
Hawthorne	6	2	0	1	
Passaic	22	7.3	na	na	
Wayne	19	6.3	na	na	
Totowa	13	4.3	na	na	
Other municipalities	47	15.7	na	1	'The Mills' in Little Falls municipality is redeveloped.
Total	300	100			

Na means the information was not accessed.

Sources : Passaic County NJ Economic Development Division; Hawthorne NJ; Paterson NJ municipality.

2.2.1. Brownfields redevelopment in Passaic County

In Table 2-1, the municipalities in which the study was conducted are the first three listed.

The table reveals that Paterson has been the most severely impacted by brownfields followed by Clifton. This is owing to the fact that Paterson, formerly known as “Silk City”, was the birthplace of the American industrial revolution housing many former manufacturing industries including textiles since the 18th Century. The cessation of these manufacturing activities left Paterson with this legacy. The subsequent Chapter four (4) will highlight a case study of the media perspective of brownfields redevelopment discourse in Paterson to give an idea of some stakeholders’ interactions in the brownfields story and issues surrounding these sites redevelopment. Currently, there are 28 high priority brownfield sites in Paterson (Passaic County Brownfields Commission minutes, October 19, 2011). As seen in Table 2-1, some sites are closed with restriction. This means that the remedial measures applied to the site/s will require continuous monitoring and maintenance of engineering control over a significant time to ensure long term effectiveness of the remedy and to prevent unrestricted use of the property. Restricted use is applicable based on the intended site use and if contaminants are still present after remediation that will preclude it meeting the remediation standard for a particular reuse. In Hawthorne, the sole redeveloped site is the one included in the research. Proposed redevelopment plans for the others have been placed before the Planning Board for consideration such as the former Colgon site later mentioned in the research (Hawthorne municipality, 2012) Regarding Clifton, the municipality also had a fair amount of industries also, hence its significant number of brownfields.

2.2.2. Background Information to the Municipalities in the study area

Table 2-2 summarizes some general background information to the municipalities,

followed by Figure 1 through 3 with a breakdown of the population by race in the Census Tracts in which the sites are located.

Table 2-2

Municipalities demographics and attributes

Municipality	Size	Median household income	Population % poverty status (2007- 2011)	Local Govt. structure	Sites census tract 2000 population
Paterson	8. 43sq. miles	\$34,302.00	27.1	Mayor and Council	Black (3429) Hispanic (1462) White (570)
Clifton	11. 26 sq. miles	\$63,106.00	8.6	City Manager system since 1926. The City manager is the Chief Executive and reports to the Council.	White (3753) Hispanic (384) Black (119)
Hawthorne	3.33 sq. miles	\$78,478.00	6.3	Mayor and Council	White (5576) Hispanic (748) Black (84)

Source: United States Census Bureau (2000 & 2010 census reports)

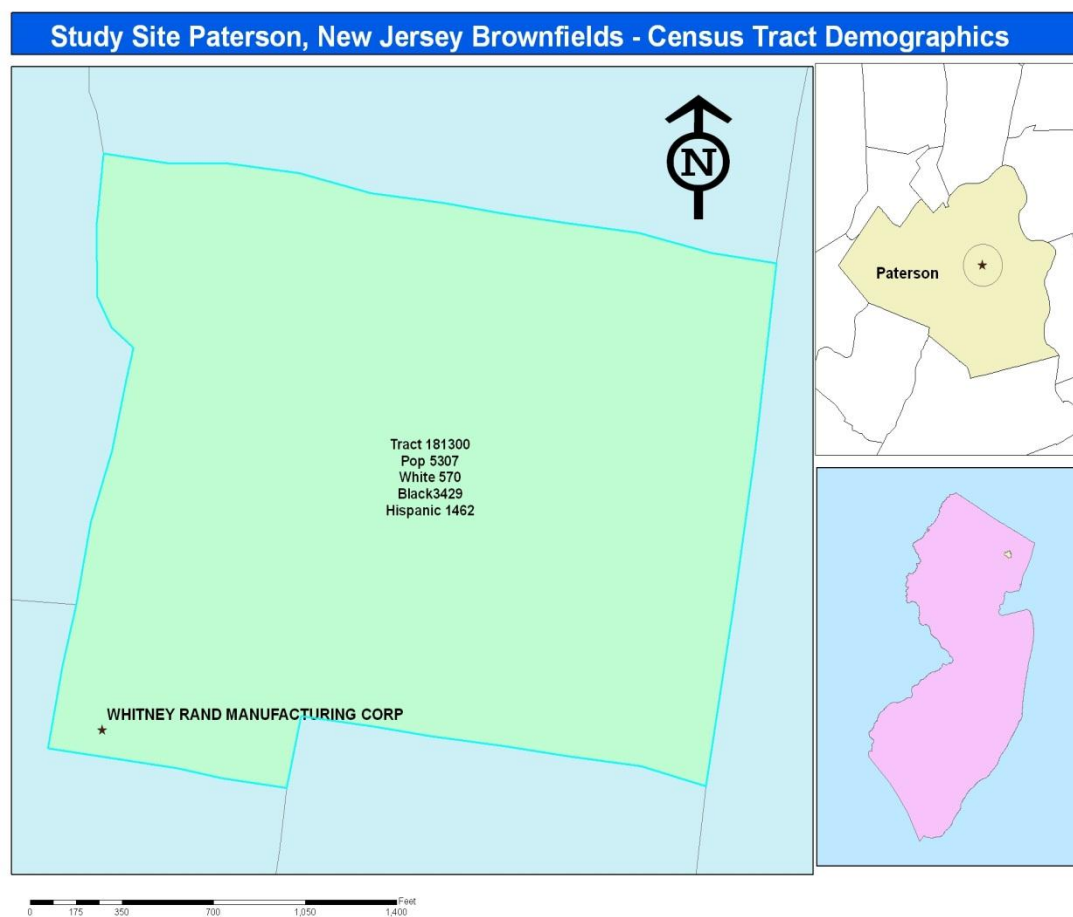


Figure 2-1. Redeveloped study site location in Paterson and census tract demographics

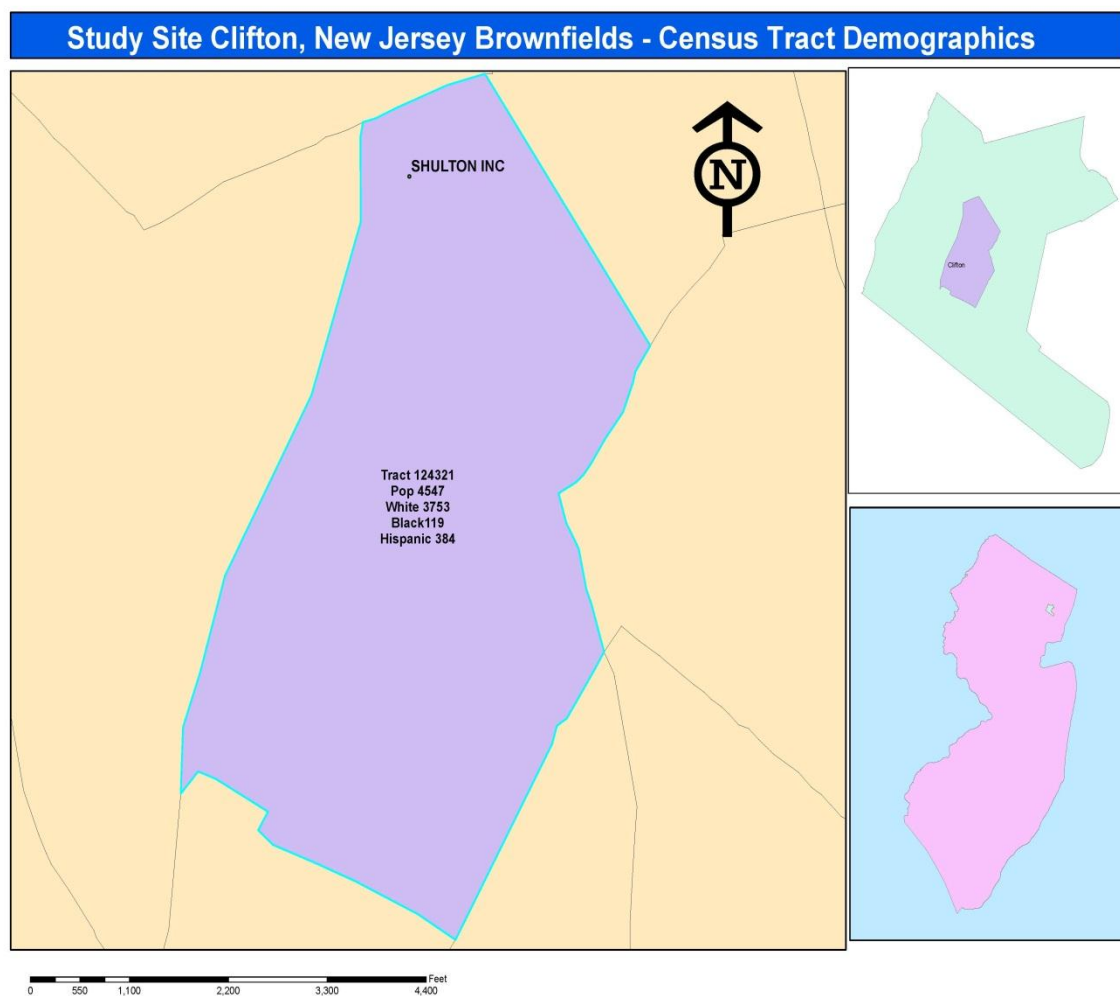


Figure 2-2. Redeveloped study site location in Clifton and census tract demographics

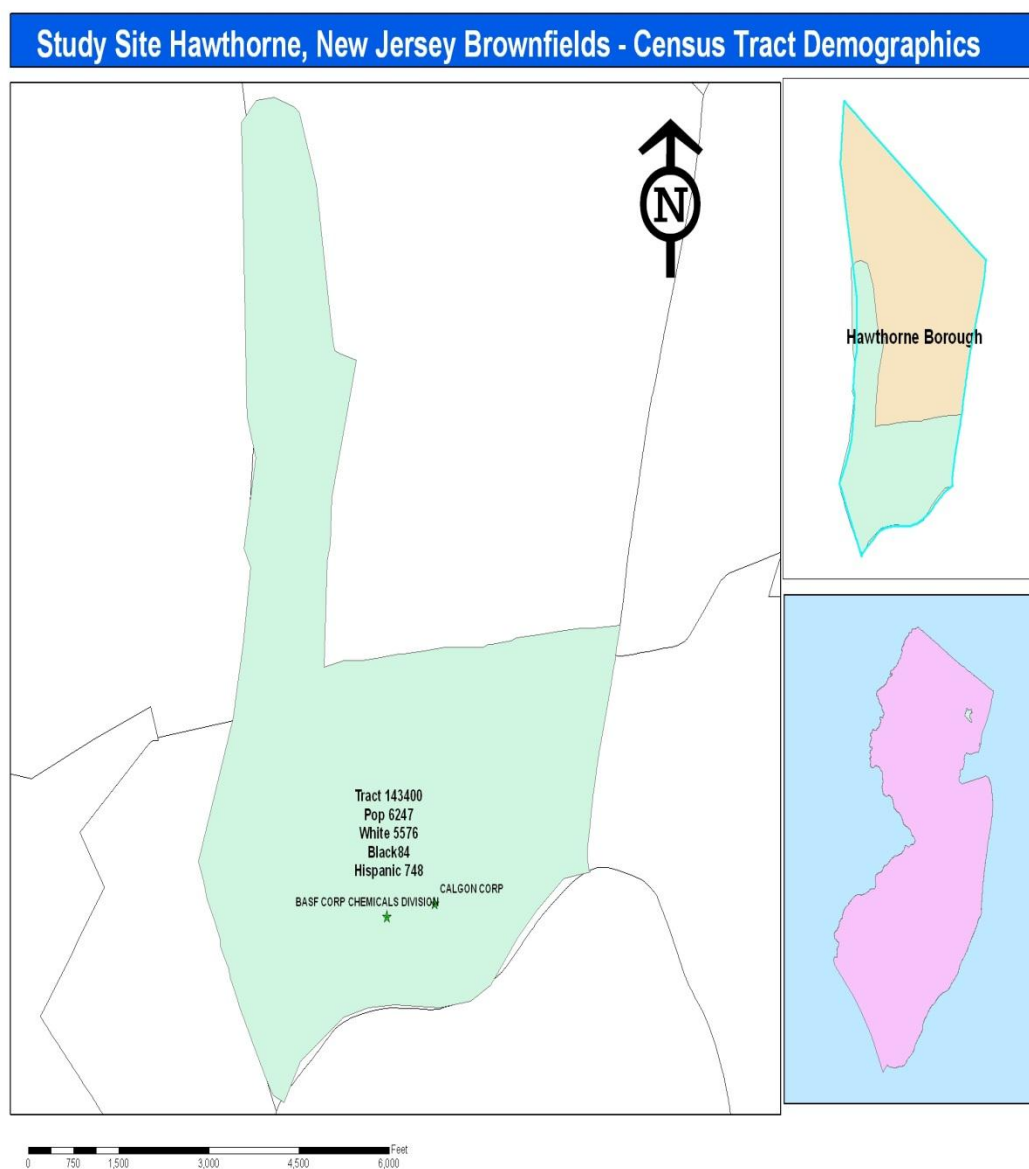


Figure 2-3. Redeveloped study site location in Hawthorne and census tract demographics

In addition to showing the location of the sites within the census tracts, Figures 2-1

through 3 show the location of the census tracts within the municipalities and the location of Passaic County (lower right thumbnail) in which the municipalities are located in north eastern New Jersey. The densely populated urbanized city of Paterson has a population of 146, 199 people (U.S. Census Bureau, 2013). In Table 2-2 shows that in the census tract, in which the site is located, there is a majority black populace. They accounted for approximately 65% of the population and Hispanics for approximately 28% in 2000. Regarding suburban Clifton, the white population account for the vast majority in the census tract, with 83%, followed by Hispanics with 8.4% and Blacks 2.6%. In exurban Hawthorne, in the respective census tract, the racial population bears somewhat of a resemblance to Clifton's, with the white populace being 89.3%, Blacks, 1.3% and Hispanics approximately 12%. In the tracts because other races account for a very small percentage, their population count is not mentioned. Regarding the poverty status, Table 2-2 reveals that of the three municipalities, Paterson is more stressed by poverty and has the lowest median household and family income.

2.2.3. Background Information to the Sites

Table 2-3 gives a summary of the information regarding the three (3) study sites. More in depth information is given in the subsequent paragraphs.

Table 2-3

Study sites information

Present site name	Former uses	Present use	Examples of contaminants found	Remediation method
Kohler Distributing Company (former Inmont and BASF Chemical Industries)	Silk Industry. Chemical manufacture.	Beer warehouse.	Semi volatile & volatile organic compounds e.g.. benzene, aniline.	Soil excavation. Bi-oremediation Ground water extraction; etc.
Walgreens and Autozone (former Whitney Rand)	Steel cabinets & shelving manufacture.	Pharmacy and an auto parts shop.	VOCs e.g. toluene, chlorobenzene.	Soil vapor extraction & air sparging. Deed notice. Engineering control.
Winthrop Court and Cambridge Crossings (former Shulton Inc. Industries)	Shulton Toiletries eg. 'Old Spice' cologne; disinfectant.	Residential complex.	Chlorinated VOCS ; lead, chromium, hydrocarbons etc.	Soil excavated. Engineering Control. Deed Notices.

Source: NJDEP Site Assessments and Removal Action reports Trenton NJ

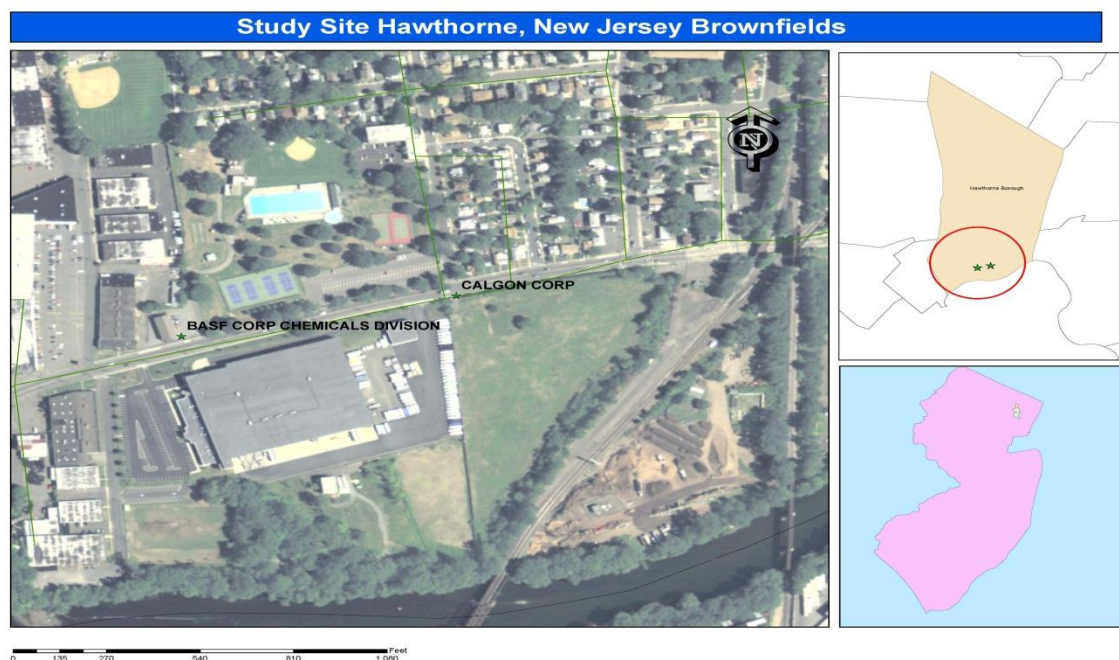


Figure 2-4 : Hawthorne study site and location in the Census Tract and Passaic County NJ

Former Inmont site, Hawthorne

Figure 2- 4 shows the former BASF site that was redeveloped into present day Kohler Distributing Company, the studied site. The former adjacent Colgon/MERCK site bears some relevance to the study, and is also shown in relationship to the redevelopment of focus. Respondents and Council minutes and NJDEP records make mention of this site in conjunction with BASF, regarding its contamination, site reuse, and dispute about its reuse. It also has some bearing on the chapter dealing with citizens access to the decision making process.

Kohler Distributing Company buildings occupy 190,000sq ft (Kohler, 2012) on the 22 acres it owns of the former approximately 31 acres site at 150 Wagaraw Rd. that

was the home of the former Inmont Facility an ink and dye manufacturer, United Technologies and other industries, and lastly BASF, a chemical manufacturing company that ceased operations in 1990. Eight and three quarters (8.76) acres of the adjoining site were owned by former Colgon then MERCK a chemical company. Kohler then bought the property from BASF. Kohler is a lucrative business with annual sale exceeding six million and a net worth of 110 million (Kohler, 2012). It started operating in Hawthorne in 2004. Kohler reports some of its assets consist of a 60 truck rolling fleet operation (50 of which are heavy duty traversing 50 daily routes), 10 merchandizing vans, and 178 employees. Redevelopment of the site was undertaken solely by Kohler the private financier.

Environmental Concerns of the former Inmont site

The site is underlain by mainly highly permeable fractured sedimentary rocks that facilitate the transfer of legacy contaminants of concern (COCs) through the soil into the underlying Brunswick aquifer of the Newark basin system. However, the water flows away from the municipal drinking wells, southwards into the Passaic River. A high specific gravity is enabling the downward migration of these COCs into the aquifer. The COCs heavily affecting the ground water are semi-volatile organic compounds (SVOCs) aniline and nitrobenzene. Toluene, benzene and trichloroethane, ethylbenzene, and xylenes are the major VOCs in the groundwater but at lower concentrations than the SVOCs. Other contaminants include tetrachloroethene, 1, 2, 4 – trichlorobenzene and chlorobenzene. (New Jersey Department of Environmental Protection Site Remediation Records, 1984 -2010)

Site Remediation

The fine-grained sediments overlaying the bedrock have the ability to retain storage of these non-aqueous phase liquid (NAPL) contaminants for extended times, indicating the need for ongoing treatment and groundwater monitoring for long periods of time. Remediation methods include soil treatment and excavation of historic contaminated fill. This fill was transported off site for disposal and the excavated areas backfilled with clean fill and covered with vegetation. Remediation for ground water contaminants commenced June 1998, and using aerobic fluid bioreactor for contaminant removal in the extracted ground water. The treated water was then reinjected on site. An In-situ bioremediation project (ISB) to facilitate bioremediation of the COCs was established as a pilot project in 1998 but was discontinued because an acceptable rate of continued degradation has been absent. However, extraction and ground water treatment is ongoing and remedial options continue under regulatory scrutiny. (NJDEP Remedial Report, October 27, 2010). Groundwater monitoring is done annually (Council Minutes, February 3, 2010.) to evaluate system effectiveness and trends in contaminant concentration overtime. Concerns of council members noted at this meeting were the risk of contaminated water into public supply wells and impact on habitats. These fears were allayed by the engineer who stated no foreseen impacts were expected. Of note is that during the survey, a few citizens expressed concern about groundwater and soil contamination and the type of remediation executed. Council minutes reveal that the former owner (BASF) fenced off the site after its closure preventing human traffic on the site. This prevents any illegal activity like crimes such as “midnight” dumping. This is a

form of Engineering Control. Engineering Control are actual structures that are put in place onsite to prevent contaminant exposure and migration (if warranted) from one environmental medium to another and to prevent further spread within the same medium. Engineering controls are recorded into the land record system and are intended to continue to be enforced on the respective site for many years and will be transferred to the current owner when the property acquires new ownership. The present owner as well as the party that originally constructed the Engineering Control is therefore responsible for submission of reports regarding maintenance and monitoring to the NJDEP. Council Minutes (May 3, 2000:34) reports a No Further Action letter was received from NJDEP (clean up began 1985) clearing 15 acres for redevelopment. Of note is that the 15 acres never required remediation. However, it was seven (7) of this 22 acres that required remediation.

As previously stated, approximately 8.76 acres also formerly housed an adjoining former industrial site (formerly Colgon, then occupied by Merck, a chemical company). This site is also responsible for contaminant migration onto the former BASF site. At this portion, reuse options are being currently explored. Both soil and groundwater have been contaminated with benzene and mercury and remediation methods include groundwater treatment and soil excavation and treatment. Council minutes, (May 3, 2000:34) estimated a cleanup period lasting for about 6 -7 years. The NJDEP's current report on the New Jersey Contaminated Site list, says the site is "active" meaning that remedial actions are still being undertaken. It has been a 'bone of contention' between citizens, prospective developers, and the governing body concerning site redevelopment and reuse.

The current owner/developer has applied to the Planning Board for approval to construct a supermarket and retail stores.

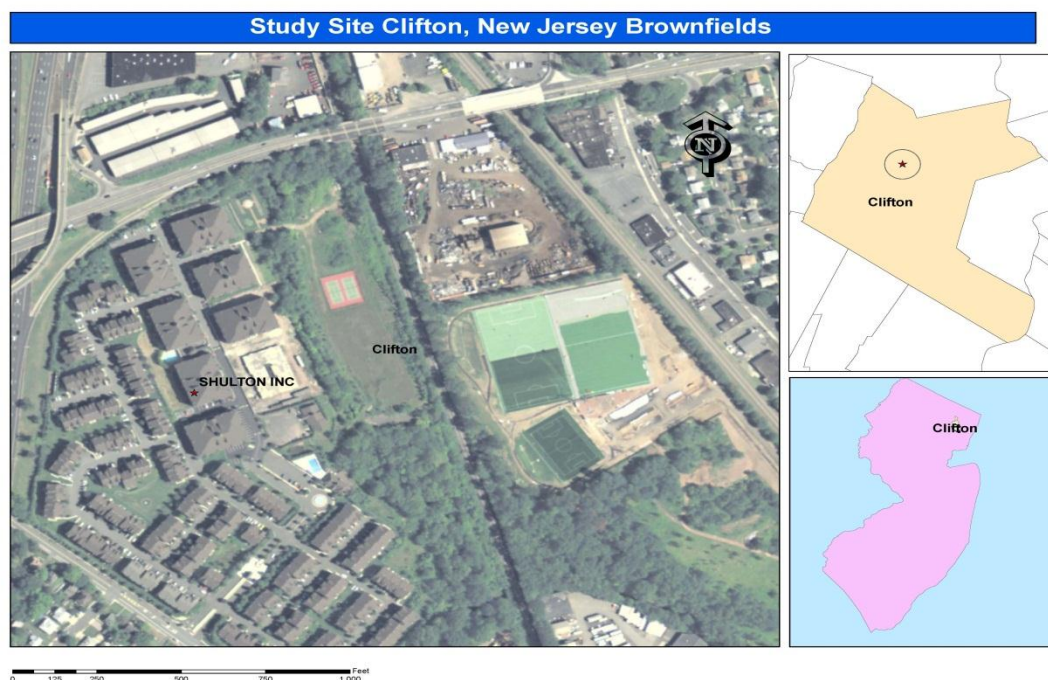


Figure 2-5 : Clifton redeveloped study site, and location in the Census Tract and Passaic County NJ

Former Shulton Industries, Clifton

Figure 2-5 shows the redeveloped site of the former Shulton Industries. Shulton Industries Complex residing on 42.5 acres of land was once a thriving Clifton industry manufacturing shampoo, cologne, and disinfectant. It was a major contributor to the city's tax base (the property was worth \$15 million during its heyday). Shulton Industries started its operations in 1946 and ceased operation in 1991, significantly eroding the tax base and putting many Clifton residents out of work. The demolition of the buildings

commenced in 2000. Shulton also represents a reminder of Clifton's historical industrial economic legacy as well as a possible nostalgic reminder of its role in fostering social cohesion since many locals were economically dependent on it. This may have bonded people together in a way because they lived and worked together. This is evidenced by the former Council's decision to display, in the Art Center, a mural that once graced the walls of Shulton factory (The Record, 1999, October 22; Friday).

Redevelopment began about two years after demolition of this facility. The first set of houses were constructed in 2002, continuing to 2004 and has been redeveloped into a 637 one and two bedroom condominium apartments and town houses gated complex subdivided into three neighborhoods (The New York Times, December 31, 2000). Prior to demolition, newspaper reports said the vacant buildings were vandalized (The Record, October 22, 1999; Friday) and had overgrown vegetation and habitat for wildlife (The Record, July 18, 1997; Friday). Shulton had onsite operations from 1946-1991, then it was sold to American Cyanamid Company of Wayne N.J. from whom the developers bought the site. The redevelopment was financed and remediated through a private sector entity.

Contaminated Area Environmental Concerns of Shulton

The sources of Shulton's COCs were caused by a former UST, an above ground tank farm, agricultural operations, commercial and/or industrial businesses north, and north west of the factory up gradient of the site. Of note, the adjacent Parkway Iron Company and Athenia Steel company (northeast of Shulton) scrap metal yard operation had contributed oil and petroleum substances to the site. The Athenia Steel Company is

currently in the redevelopment phase undertaken by the municipality through the Community Development Block Grant program. The Shulton site itself has been a contaminant source to adjacent properties such as the area around nearby Weasel Brook, through release of 100-200 gallons of hydraulic oil on November 16, 1988. The contaminated environmental media is ground water and sediments. Contaminants found include chlorinated VOCs, (trans-1,2-dichloroethene and trichloroethene), elevated levels of petroleum hydrocarbons and cadmium in soil at concentrations above ECRA guidelines (ECRA had not yet been amended). In the Weasel Brook area, there were CAPAHs in sediments, volatile organic compounds (VOCs) benzene, toluene, ethylbenzene and xylene, naphthalene, 2 – methyl naphthalene acenaphthene were also present, lead, arsenic and chromium in groundwater. All of these were above ECRA guidelines. A Hydrological Assessment report in April 1991 obtained from the NJDEP records, reported that there are no domestic supply wells within 1000 ft of the site, and nine domestic wells in Clifton are within 3300 ft of the site. There is no drinking water intake located within 15 miles downstream of the site.

Site Remediation

General remediation methodologies for the site entailed tons of contaminated soil excavated and transported off site and backfilled with clean fill. Shulton operations resulted in 18 areas of concern identified under ISRA. In April 1994, NJDEP issued a No Further Action Letter under ISRA for the industrial activities at the site for the majority of these areas thus closing Shulton's case. However, four (4) areas of concern were excluded from this earlier No Further Action Letter. These areas included Weasel Brook Bank

Area; Historic Fill Area; Parkway Iron & Steel Company Discharge Area (a nearby former industry) and groundwater. Weasel brook which receives run off from the site, is part of the Passaic River basin area, and is one of its tributaries. The former areas of concern that received the No Further Action Letter were cleaned up to residential standards, unlike these four identified areas that contained contaminants above the NJDEP cleanup standard for soil. Concerning an area beneath the parking lot, 6200 tons of contaminated soil was also removed and backfilled with clean soil. In the Weasel Brook area, there was very limited soil removal activity and Engineering Control was constructed with a fence around a delineated and restricted area. There are also two parcel roadways transecting the affected area and natural vegetation planted to prevent contaminant exposure and migration. This remediation method for Weasel Brook was considered appropriate because offsite contaminants of mainly unknown origins are still being deposited in the soil along the brook. Concerning the groundwater, the No Further Action Letter was not applicable in this case and the former owner was not required to engage in remediation activities. This is owing to the fact that there was no clearly identified contaminant source. Furthermore, the source of potable water for the redevelopment is the municipal source. In 1999, a Deed Notice was recorded for the area to document the Engineering Control for the County land records. NJDEP granted a final No Further Action Letter in December of the same year for these areas of concern. With the exception of Weasel Brook, they were all in attainment of NJDEP's Residential Direct Contact Soil Cleanup Criteria. Deed notices are Institutional controls that provide notice to the public and prospective purchaser and give legal long-term responsibilities and

instructions to the owners of the site restricting its land use to a specific purpose such as in the case when public exposure to remaining contaminants on site is still possible.

Interestingly, during construction of the houses on a section of the lot (Lot1.03), it was discovered that there was residual soil contamination. Additionally, a tank containing perfumed solvents was discovered. Remediation activities included tank removal in 2004 and soil excavation of the affected soil.

Former site of Whitney Rand, Paterson

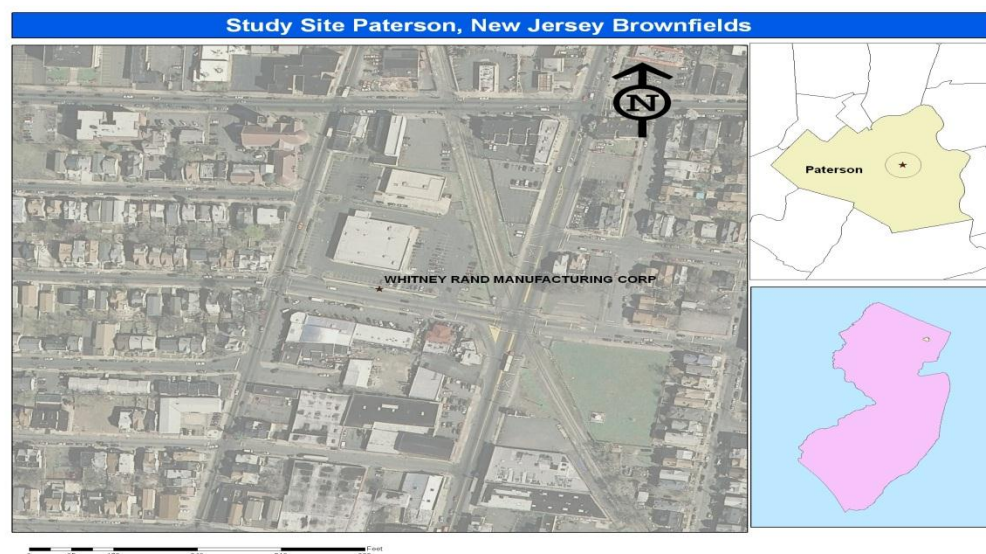


Figure 2-6 : Paterson redeveloped study site, and location in the Census Tract and Passaic County NJ

Figure 2-6 shows the redeveloped site of the former industrial site. This industry manufactured and assembled steel cabinets and equipment and was owned by Whitney Rand Manufacturing Corporation. Previously, Brogan Cadillac owned and operated a business on the property. It is surrounded by mainly business commercial entities and to the west is a residential area. In 1999, demolition activities of these buildings occurred

and in 2002, Walgreens Pharmacy and Autozone were constructed.

Contaminated Area Environmental Concerns of former Whitney Rand, Paterson

Ground water contamination is the major environmental concern at the site. NJDEP record states there may be a hydraulic connection between two aquifer systems; one is the overburden that comprises the shallow water bearing zone and the second is the bedrock aquifer. It has been found that VOCs tend to concentrate more in the bedrock hence the concern about a hydraulic connection. Results from groundwater monitoring wells and Hydro punch locations reveal that there are VOCs in the bedrock that exceeds Groundwater Quality Standards (GWQS). These are VOCs benzene, chlorinated alkanes, and chlorinated alkenes in dissolved phase. In the overburden, chlorinated VOCs (PCE and TCE) in dissolved phase were onsite contaminants extending over the majority of the property. Possible contaminant plume migration to a lesser degree emanating from an adjoining property is also of significant concern. Additionally, petroleum related compounds and 1, 1, 1,-TCA were detected in the overburden sections of the property. Contaminants in the soil below the water table were also a source of concern contributing to the groundwater contamination. Toluene, benzene, ethylbenzene and xylene (BTEX) were the petroleum based products detected. Asbestos was also a contaminant that was removed from the buildings prior to demolition.

Site Remediation

The remediation of groundwater continued after the two buildings (Walgreens and Autozone) were constructed. Soil Vapor Extraction and Air Sparging activities were implemented under the Autozone building. A receptor evaluation was done during

remediation to evaluate if there was possibly any contamination of domestic water supply wells. No domestic well within ½ and one mile of the site was discovered. A No Further Action letter was granted by NJDEP at the site for soil remediation. Deed notices (Institutional controls) were recorded also for both properties on August 23, 2007.

Pertaining to site monitoring, deep monitoring wells were established in 2008. The Deed Notice accompanied engineering controls that have been implemented. The Notice restricts the entire property to non-residential use to prevent human contact with the contaminated soil on the property. The Engineering Control is a vegetative cap and impermeable cap constructed with asphalt and concrete. Caps prevent leachate of the contaminants into the soil and therefore the groundwater. They also limit public exposure to contaminants from soil vapors and dust. The capped areas are the vehicle parking lots and the loading and off loading areas. There is a chain link fence 6 ft high, that restricts access to the property from the southern end. In keeping with NJDEP's requirements, a monitoring report of the engineering control must be submitted every two years.

However, no monitoring of the engineering control is being done because the property owner passed away (Ann Wolfe, Personal Communication, NJDEP Case Manager, April 30, 2010 Friday). Owners of brownfield properties are expected to have funds in place to secure their obligation monitoring and maintenance costs. These costs can total up to \$5,000 to \$10,000 annually (New Jersey Institute of Technology, 2012) but it is possible this amount can be exceeded over time. However, the demise of the property owner precludes this activity.

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Chapter 3

A Methodological Approach to Site Specific Evaluation of Brownfields Redevelopment in Passaic County New Jersey.

This is a case study of local perception of brownfields redevelopment impact and the decision-making processes surrounding the exercises in communities selected from Passaic County New Jersey. Three redeveloped brownfield properties were purposively selected based on the desired criteria to select three types of sites in locations that were urbanized, suburban and ex suburban and to do a comparison in these localities.

3.1 Determining Eligibility

To determine the eligibility for prospective households in the research, the New Jersey property tax records, an online database, was used to obtain the respective property addresses within each municipality. These properties were buffered within a ¼ mile radius of the site using Geographic Information System (GIS) software. This specific distance was chosen bearing in mind that if people live closer to the site, they are more likely to be cognizant of the site, and its social, economic and environmental impact on theirs and the neighborhood's overall quality of life. Additionally, they would more likely be 'exposed' to the participatory processes, if any, relevant to the redevelopment exercise. In this regard, Planning and Zoning laws require consultation with property owners, within a 200ft radius of the property, but, the decision was made seeing that any spillover effects from the outcome is more likely to impact more people than only those within this distance. The extracted properties from the tax records were transported into the GIS program and addresses geocoded for those located on the streets in the buffered area. The

program also supplied parcel data of the buffered streets and gave information as to the number of properties on the buffered streets. Regarding Paterson, since it is very densely populated, and because of labor resource constraints, a distance of 900ft was arbitrarily selected. In the case of Clifton, the distance was extended by 200ft in order to have a comparable number of houses to the other municipalities and an adequate number for statistical analysis. Also, considering that there would be the possibility of prospective respondents not being home during the time of the survey. Of note is that the validity of the database of listed addresses was verified during the process of collecting the data on the field.

Individuals' eligibility for inclusion in the research was based upon their knowledge of the presence of the targeted redeveloped project before and after the redevelopment. Therefore, they would be more likely to be more aware of neighborhood changes owing to the redevelopment. The length of time they are/were living near the site was important too, also the prospective respondent in each household had to be 19 years and over at the time of the interview. It was predetermined that there would be one call back attempt if the respondent was absent. Additionally, householders absent on interview days, including callbacks, were sent mailed questionnaires with instructions. The data was collected using a structured interview schedule, with the exception of three households, two in Hawthorne, and one in Paterson that responded to the mailed questionnaire. Data collection activities took place over a period of four months, from April to July 2010. Secondary data from Council and Planning and Zoning Board minutes were collected during May 2011 to August 2011.

The Passaic County Brownfields Commission office provided a list of the redeveloped brownfield properties from which these three sites were selected in Paterson (urban), Clifton (suburban), and Hawthorne (ex suburban) municipalities. Background information on the sites was obtained from the Site Remediation Department records in the New Jersey Department of Environmental Protection. Records from pertinent newspaper articles were also used for data collection.

With regard to survey responses, out of a possible 86 eligible households in a delineated area of 109 households in Hawthorne, respondents from 48 homes were interviewed. Factors accounting for the non-response were respondents being absent during first and second survey attempts, refusals (eight), unoccupied homes, and one (1) converted to office space. During analysis five (5) were dropped from the analysis because the individuals said they had no knowledge of the presence of the site. Knowledge of the presence of the site before redevelopment was critical to continuation of the interview. Concerning Paterson, there were 138 prospective households in the delineated area. Of this amount, 10 were initially unavailable because of prospective respondents' refusal, ineligibility, and unoccupied houses. Out of the remaining 128 prospective respondents, 50 were interviewed and 47 responses analyzed. Access to the remaining 78 was not possible because the people were not home during the times of the survey. In Clifton, the delineated area comprised of 66 houses with 13 prospective contacted individuals unavailable for interview because of ineligibility, refusals and one house converted to an office. Thirty- nine (39) respondents were therefore interviewed. Fourteen (14) householders were not home despite callbacks. In all, 129 interview

schedule/questionnaires were analyzed. To access the individuals who were repeatedly not home, and so as to increase return rates, interviews were carried out with willing respondents in strategic public places, (for example by the Hawthorne Municipal pool), located nearby the targeted neighborhoods in all three municipalities. Permission was sought from the relevant public authorities and business owners to do so. To ensure the respondent was eligible for interview, a map of the delineated neighborhood was shown to the individual to ascertain place of residence.

3.2 IRB review

Prior to the implementation of any data collection methods in the municipalities, there was an Internal Review Board (IRB) process to ensure that mandated requirements were met (See Appendix 1 for a copy of the IRB approval letter. Please note that the topic underwent minor changes since then). Permission for subsequent extension was granted as necessary. The process requested that permission be obtained from relevant municipal authorities before commencing the survey or planned interviews with public officials. Cooperation and permission from the citizens was sought through letters stating the purpose of the survey. It was also advertised by posting leaflets at public libraries in the municipalities. (See Appendix II for a copy of the poster). All these documents, including the interview schedule were perused and approved by the IRB before distribution.

3.3 Evaluative Criteria

The survey instrument sought to measure both the process of the brownfield decision-making exercise in terms of community access, and that of a perceived related outcome

goal, that is, public acceptance (success) of the site-specific project. More specifically, process variables were measured and related to outcome goals. It also measured perception of community changes in relationship to outcome goals. Figure 3-1 below presents a synopsis of the evaluative criteria.

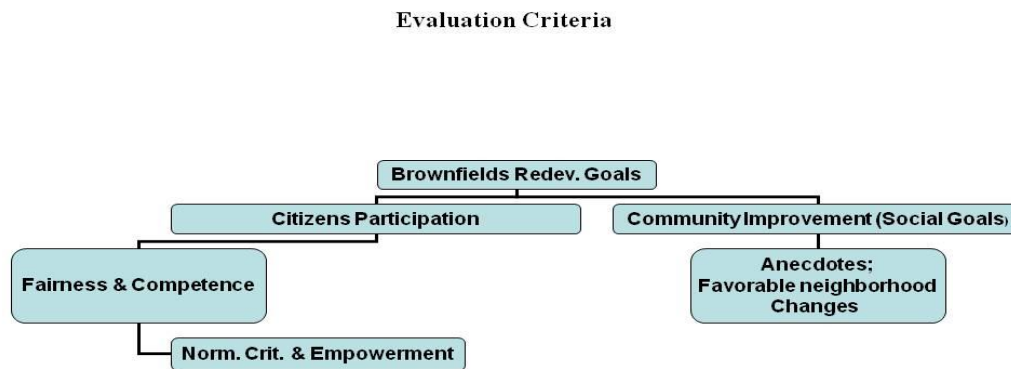


Figure 3- 1 Evaluation Criteria for Citizens Acceptance of Brownfields Redevelopment Projects

Affected citizens' perception (evaluation) of *access to the decision-making* process for authentic public participation was sought by analyzing some statements measuring two Meta criteria; they are **fairness and competence**, (See Renn, Webler & Weidemann, 1995) and the concept of **Empowerment**. Some of these statements are normative (what the process ought to be) and the others seek respondents' perception of what in their opinion, the process was in actual reality. They include the following: 1. Early involvement in the process. 2. Access to knowledge and resources. 3. Incorporation of

citizens' values into the process. 4. Perception of influence in the process. These statements are just a few of possible statements that could be used in the scale but they were deemed sufficient for this exercise based on the results of the Cronbach Alpha test of reliability. The communities' responses, that is *Public acceptance* and or satisfaction (based on whether or not they perceive the project is a success) with the development was measured mainly by perceived achievement of social goals individually and collectively. After all, brownfield redevelopment overarching goals seek positive changes in the four (4) societal sectors both nationally and locally. Therefore it was deemed appropriate to ask citizens about the type of changes they had seen (*Community Improvement*) because of the initiative and their impression of the change. Therefore, it could be assumed that the more favorable the impression of the change, the more likely it is that these observations could influence a more favorable perception (*Public acceptance*) of the redevelopment in terms of its impact on the individual and neighborhood.

To ascertain the decision making model that was used in the redevelopment process in the municipalities and, in order to gain a balanced perspective and to augment citizens' reports, phone and in person interviews and email correspondences were conducted with public officials who were involved in the process and a developer representative. In a subsequent chapter, further information on this aspect will be provided. Additionally, the administrative records such as Council Minutes, Planning, and Zoning Board Minutes gave valuable insight into the context in which the redevelopment decisions surrounding the sites including the strategic aspects were made. This includes looking at how facilitating public officials were in their role as administrators, in

allowing meaningful participation. Newspaper reports were also used to give valuable information about the issues surrounding the redevelopments.

Important to the study is the discovery as to whether or not the redevelopment had galvanized any land use changes and other redevelopment in the vicinity of the sites in question. The study looked at its effect if any, on neighborhood property values. Tax Assessors records were used in this determination and Google Earth satellite technology to give an idea of land use changes. Observation of land use changes also enabled, to some extent, some verification of environmental changes observed by participants.

3.4 Survey Instrument Construction

Prior to the instrument construction, a focus group of eight persons was convened in a proxy municipality with significant brownfields redevelopment projects having similar socio-economic status and racial demographics like Paterson. The members were asked 16 open ended questions about their perception of the neighborhood/community before and after the redevelopment exercises, its overall impact, and, access to the redevelopment process. Answers, in addition to concepts and ideas obtained from the literature, were used to construct the first draft of the interview schedule. The draft included twenty (20) 5 point Likert Scale closed ended questions where **1** is **strongly disagree** to **5, strongly agree** seeking to measure the independent variable '*access to the decision making process*' and nine item statements measuring the outcome variable 'public acceptance.' The Likert scale possesses two portions. One is the stem statement that examines an individual's attitude about the subject of interest and the scale that seeks agreement or disagreement with the statement. Community improvement defined by the

scale named '*Observed changes*' was also measured on a 5 point scale where **1** is **unfavorable to 5 very favorable**. This scale was used to ensure adequate sensitivity to individual differences in the respondents is captured and the degree of variations provided by response alternatives. The draft was also delivered to colleagues, members of the proxy community including some focus group members to be rated on clarity, relevance, length and content coverage. To assure reliability and internal consistency of the item scales of the draft, Cronbach test of reliability was applied to the attitude scales of measurement. Statements that showed weak relationship to both the other item statements and internal consistency of the measured scales were deleted and final results yielded a scale with five (5) items to measure '*Public Acceptance*' and six (6) items for '*Access to the decision making process*' (Community Participation). It must be noted that the closer the values are to 1, the more reliable the measured scale. The interview schedule/questionnaire was then modified accordingly and pre tested a second time on community persons from Paterson to assess time taken to complete the questionnaire, clarity of questions and instructions, structure, layout and relevance. Colleagues also participated in a second round of review. The instrument was also translated into Spanish because of a significant number of Spanish speaking populations in the Paterson target population. Notably, after administration in the actual survey, Cronbach Alpha reliability test was done again with noticeable increase in reliability values for the final scale of the measured '*Public Acceptance*', and '*Access to the decision making process*' variables.

3.4.1. Structure of the Survey Instrument

The final instrument (See Appendix III) consists of mainly close-ended questions with 1

open-ended question. Respondents were however given the option during the interviews to offer comments that are analyzed in a subsequent chapter. In fact, many who voiced their opinions of the redevelopment did so freely without any prompting. The survey instrument had clear instructions for completion of the instrument.

Questions 1 and 2 are mainly to determine eligibility for interviewing. **Question 3** looks at environmental, health & safety, recreational factors that are conducive to health and general well-being in the built environment, (including perception of the overall effect of the redevelopment project) and explore citizens' perspectives. It is based on the idea that whilst these assessments will be determined subjectively, there are likely to be elements of objectivity. For example, it can be determined, without scientific measurement or complex analysis, if an environment is cleaner and aesthetically appealing than formerly. Availability of recreational facilities can be objectively determined too. They were advised to base their assessment only for their neighborhood in which the targeted redeveloped site is and keep their focus on the impact of the particular redevelopment site/project. Their opinion of the change was sought only for affirmed changes.

Question 4 seeks to determine specifically, if the redevelopment has affected the neighborhood and individual on a positive or negative social scale including building a sense of community cohesiveness and thus overall quality of life. The first statement "*Redevelopment has helped the community*" conceptually embodies the respondent's overall perspectives as is seen from the Cronbach reliability test result in Chapter 5.

Question 5 seeks to determine indicators of what the citizens' value in the brownfield discourse and may be an indicator of factors that indicate their acceptability of a proposed

redevelopment. The indicators can contribute to a feeling of well being.

Question 6 attempts to capture the method/s used to inform the citizens and how they discovered the redevelopment initiative. This may be an indication of the commitment and aggressiveness of the public officials in seeking to involve the community in direct participation of the process.

Question 7 items are a normative evaluation assessing the quality of the public participation process from a citizen's perspective. Factor analysis, to be mentioned later in the chapter, reveals two latent factors measuring this variable.

Question 8 are statements seeking to capture respondents priority reasons in order of importance, for desiring access, if any, to the decision making process in their municipalities.

3.5 Survey Implementation

Before administration of the survey, my colleagues who were the interviewers were trained in conducting surveys and other relevant issues. They were provided with instruction sheets, maps, and a list of targeted streets with the addresses and explanation of relative acronyms and codes. Quality control was enabled through continued consultation and briefing between interviewers and main researcher by phone during data collection and after a day's work. The instrument, recording sheets etc. were also crosschecked by the researcher and clarification sought if needed. Additionally, during administration, one researcher was designated the recorder at each survey site, and recorded on the specified sheet, the premises visited, need for call back, and completed interviews. In Paterson, the Spanish version of the questionnaire was delivered by a

Spanish-speaking researcher to this ethnic group. All respondents were provided with sheets with the Likert attitude scales for their responses as they were read the questions.

To maximize data collection return, householders unavailable on the interview days including the days of ‘call backs’, were sent questionnaires by mail. (The instrument is designed so that it can function for interview purposes and self-administration). A cover letter seeking support and explaining the survey, and with instructions for the questionnaire completion was sent to each “absent” householder in all three municipalities. This was not successful. Only one questionnaire from Hawthorne and two from Paterson were returned.

. As stated before, permission was sought from the relevant public authorities and business owners to interview eligible persons in identified public places close to the sites. To ensure the respondent was eligible for interview, a map of the delineated neighborhood was shown to the individual to ascertain place of residence is in the targeted area. All aforementioned other criteria for eligibility were enforced too. This was a rewarding strategy.

3.6 Quality Control

During data entry, quality control was assured by proof reading the database. Each interview schedule in the database was crosschecked with the hard copy to spot discrepancies in data entry and coding. Corrections were made as necessary. This activity was done solely by the main researcher therefore avoiding inter-coder mistakes. Secondly, during exploratory analysis/screening of the data, careful attention was given for mistakes in data coding and entry and rectified as necessary.

3.7 Analysis

SPSS statistical software was used to do both descriptive and inferential analysis of the instrument. Because, some statements (in measuring a variable) were written both in the negative and positive, then reverse coding had to be done before executing the factor analysis process. Seeing that each item statement for the measured scales '*Access to the Decision Making Process*' and '*Public Acceptance*' have to be summed in the process of obtaining an overall mean score for the individual, it is critical that each item statement is measuring the same latent factor and is highly correlated with other statements of the factor. A latent variable can be defined as "*an underlying characteristic that cannot be observed or measured directly; it is hypothesized to exist so as to explain [manifest] variables such as behavior, that can be observed.*" (Warner, 2008: 754 citing Vogt, 1999:154-155) The results should show if the item statement is a suitable candidate for inclusion in measuring this underlying factor. The factor can then be named based on the type of information supplied by the inter-related variables. Therefore to determine the structure of the data, Principal Component Analysis (PCA) and Factor Analysis (FA) with Varimax rotation was done. PCA provides information about the variance that the retained factors explain. This can provide insight into the number of factors that can be retained for the measured scale provided by Eigen values. In other words, the number of underlying factors present in the measured scale. An Eigen value of one (1) or over is highly desirable and a value of .9 is acceptable. However, as said before, retained factors can be used in analysis based on theoretical and conceptual issues and it is desirable that retained factors should explain a range of about 40% -50% of variance (Warner, 2008).

The number of components or factors retained in the model by no means exhausts the number of variables that could be used to measure the pertinent underlying constructs. For the purposes of the study, they were considered adequate based on theoretical and conceptual issues. This decision was supported when, during an interview, without any prompting, a highly educated respondent said the questionnaire was “good” and took into consideration his, and the community’s issues. Secondly, in the pre-tests, respondents said it captured pertinent community issues concerning the redevelopment. In this regard, the instrument ensures face validity by measuring what it is supposed to measure.

According to Warner (2008: 864), “*face validity is sometimes desirable, when it is helpful for test takers to be able to see the relevance of the measurements to their concerns, as in some evaluation research studies where participants need to feel that their concerns are being taken into account.*” Additionally, factor analysis enables construct validity. The FA and PCA tests yielded only one (1) factor/component for the dependent variable ‘*Public Acceptance*’. For the independent variable *Access to the Decision making process*’ two (2) latent factors were identified. One I named ‘*Influence Criteria*’ and the other ‘*Normative Criteria*’. Normative means, how things ought to be; that is, how the community participation exercise ought to be regarding standards that ought to be followed. Applicable here are implied issues of fairness and justice terms of procedural democracy. The variable ‘*Influence Criteria*’ considers the individual’s perception of internal control in the process. Beierle and Konisky (2000:590) states, *Process attributes are those over which agencies and participants have considerable control when designing participatory efforts, such as the emphasis placed on deliberation among*

participants”.

During exploratory analysis of the data to determine the method of inferential statistics to be used in analysis, the missing scores for three respondents for the independent variable were substituted with the mean score for the respective municipality. Histograms were used to check for the distribution shapes, box plots to observe outliers, and assessment for equality/similarity of group variances tests for violations were done. Cross tabulations were also done to check for violated consistencies. Based on the results, and because of some violations of the data, the non-parametric analysis for hypothesis testing was done. These are Chi-square for testing relationships, Kruskal – Wallis (H) tests for differences in means and Spearman’s Rho (the non- parametric equivalent of Pearson’s r).

3.8 Study Area Demographics

Table 3-1

Demographic characteristics of survey respondents

Municipality	Age group with highest frequency	Years of residency category with highest frequency	Main ethnicity	Educational category with highest frequency
Paterson	30-39	10 - 20 years	African American (64%)	High school
Clifton	50-59	10 – 20 years	White American (90%)	College
Hawthorne	60 and over	Over 31 years	White American (91%)	College
N=129				

The demographics show a predominantly middle aged to senior white population in Clifton and Hawthorne, with Hawthorne being the more senior. There is an African

American black and also Hispanic predominantly younger population in Paterson who has been residing in their neighborhoods for a significant period. This somewhat reflects the demographic profile of the municipalities.

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Appendix I IRB approval letter.



**MONTCLAIR
STATE
UNIVERSITY**

Institutional Review Board

Voice: 973-655-4128

Fax: 973-655-5150

September 11, 2009

Shevon Letang
48 James St.
Montclair NJ 07042

Re: IRB Number **000775: Environmental Justice and Risk Perception as Determinants in Brownfields Redevelopment**

Dear Ms. Letang:

After an expedited review, Montclair State University's Institutional Review Board (IRB) approved this protocol on **9/8/2009**. The study is valid for one year and will expire on **9/7/2010**.

Before requesting amendments, extensions, or project closure, please reference MSU's IRB website and download the current forms.

Should you wish to make changes to the IRB-approved procedures, prior to the expiration of your approval, submit your requests using the Amendment form.

For Continuing Review, it is advised that you submit your form 60 days before the month of the expiration date above. If you have not received MSU's IRB approval by your study's expiration date, ALL research activities must STOP, including data analysis. If your research continues without MSU's IRB approval, you will be in violation of Federal and other regulations.

After your study is completed, submit your Project Completion form.

If you have any questions regarding the IRB requirements, please contact me at 973-655-3182, besingj@mail.montclair.edu, or the Institutional Review Board.

Sincerely yours,

Dr. Joan Besing
IRB Chair

cc: Dr. Robert Taylor
Ms. Amy Aiello

Appendix II Advertisement Poster



MONTCLAIR STATE
UNIVERSITY

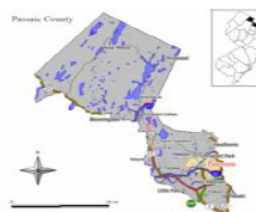
Department of Earth and
Environmental Studies
Voice: 973-655-4448
Fax: 973-655-4072

WHAT IS THE EVENT?

NEIGHBORHOOD SURVEY ON CITIZENS' VIEWS OF LOCAL
REDEVELOPMENT AND NEIGHBORHOOD QUALITY.

PURPOSE

TO COLLECT COMMUNITY FEEDBACK ABOUT NEIGHBORHOOD REDEVELOPMENT AS PART OF
ON ON-GOING RESEARCH AIMED AT ENHANCING THE REDEVELOPMENT PROCESS



WHEN

DURING APRIL 2010

Source: http://en.wikipedia.org/wiki/Paterson,_New_Jersey

BY WHO?

CONDUCTED BY MONTCLAIR STATE UNIVERSITY STUDENTS

WE SEEK YOUR KIND COOPERATION IN THIS EXERCISE.

THANK YOU!

Shevon Letang

Montclair State University

montclair.edu

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Appendix III Survey Instrument

Research topic: Perception of Community Improvement and Access to the Decision Making Process as Determinants of Brownfield Redevelopment Success.

Purpose: To determine respondents' perception of the local redevelopment project exercises undertaken in their communities in the past 6- 10 years in terms of neighborhood quality and the redevelopment process.

General questions (please circle the appropriate answer)

1. How long have you been living at your present address in this area of the community?

2. Are you aware of any old factories, commercial plants or underutilized or abandoned buildings or vacant lots within 1 to 2 blocks from where you live that have been rebuilt or reused for other purposes? (E.g., former SHULTON site – now RESIDENTIAL) *Please circle yes or no as relevant to you.*

YES/NO (If not, then do not proceed any further with the questionnaire. End here)

Observed changes in neighborhood

3. Have you **observed** any of these changes in your area of town over the past 6 -10 years to the present? *Please respond by circling either yes or no and indicate your level of approval or disapproval by ranking them in order of their favorability to you where 1 = unfavorable; 2 = somewhat favorable; 3 = not sure; 4 = favorable; 5 = very favorable. Circle the relevant number.*

	Observed	Opinion
- Cleaner environment	Yes/No	1 2 3 4 5
- More recreational facilities available including parks	Yes/No	1 2 3 4 5
-Reduced crime and street loitering		
	Yes/No	1 2 3 4 5
- Improved streetscapes (signs, sidewalks etc.)	Yes/No	1 2 3 4 5
- New or reused industrial e.g. factories, abandoned, commercial buildings (Redevelopment projects)	Yes/ No	1 2 3 4 5
- Improved safety conditions	Yes/ No	1 2 3 4 5

- | | | |
|---|---------|-----------|
| - Improvement of conditions favorable to better public health | Yes/ No | 1 2 3 4 5 |
| - Other (please specify) | Yes/ No | 1 2 3 4 5 |
| - No change | Yes /No | 1 2 3 4 5 |
| - Have there been any negative changes? | Yes/ No | |

**Community acceptance of redevelopment including brownfields
redevelopment**

4. *Please indicate your agreement or disagreement with the following statements where 1= strongly disagree; 2 = disagree; 3 = not sure; 4 = agree; 5= strongly agree. Circle the relevant number.*

Strongly disagree -----Strongly Agree

1. Redevelopment activities have helped the section of the community where I live
1 2 3 4 5
 2. The redevelopment change/s have agreed with citizens' values 1 2 3 4 5
 3. Redevelopment change/s has helped to create a more livable community and a sense of place (assessing satisfaction) 1 2 3 4 5
 4. Redevelopment change/s in my area has improved social life 1 2 3 4 5
 5. Redevelopment in my area has improved my and family's quality of life
1 2 3 4 5
5. *How important are these possible reasons to you to be favorable of redevelopment projects in your area? Please rank in order of importance where 1 = not favorable; 2 = somewhat favorable; 3 = not sure; 4 = favorable; 5 =very favorable. Circle the relevant number.*

Not Favorable-----Very favorable

- | | |
|---|-----------|
| - Aesthetics of environment | 1 2 3 4 5 |
| - Improvement of conditions favorable to public health and safety | 1 2 3 4 5 |
| - Make your property increase in value | 1 2 3 4 5 |
| - Reduce crime | 1 2 3 4 5 |
| - Preserve historical values | 1 2 3 4 5 |
| - Participation in redevelopment process | 1 2 3 4 5 |

- Provide jobs 1 2 3 4 5
- Improve social relations 1 2 3 4 5
- Other (specify) 1 2 3 4 5
- Not important at all

6. Please choose the appropriate answer/s by circling the corresponding number

How did you learn about the site redevelopment activity?

1. Community meeting
2. Eyewitness (walking or driving by)
3. Neighbor/friend/family member
4. Public official (local government)
5. Posters/leaflet
6. Local community area representative
7. Non Profit Organization/church/neighborhood club
8. Other (Please specify)

Community Participation; Access to decision making process

7. Please indicate your agreement or disagreement with the following statements where 1 = strongly disagree; 2 = disagree; 3 = uncertain; 4 = agree; 5= strongly agree. Circle the relevant number.

Strongly disagree-----Strongly Agree

1. The community should be made aware and given the opportunity to participate in the municipality's planning decisions from as early as the planning stage. 1 2 3 4 5
2. I want to learn more about how redevelopment decisions are made in the municipality. 1 2 3 4 5
3. People like me have little or no influence in redevelopment decisions and activities that local public officials make and undertake. 1 2 3 4 5
4. I feel "left out" of local government officials' redevelopment planning activities. 1 2 3 4 5

5. Community residents want and need to voice their opinion about site reuse and redevelopment of old underutilized or abandoned premises and vacant lots especially close to where they live. 1 2 3 4 5
6. Local public officials did not care about my opinion concerning reuse of the site. 1 2 3 4 5

8. Here are some possible reasons for people wanting to be part of the decision making process. Please rank the 3 you consider most important to you in the order of preference where 1 = most important; 2 = important; 3= somewhat important.

- Public officials' decisions affect my life
- Preservation "for future generation"
- My knowledge of community issues
- I want to influence policy
- Other (please specify)
- I am not interested in taking part in the decision making process.

Demographic Data

To help the researcher to analyze these questions please supply the following information about yourself. Please circle the relevant categories.

Age (yrs): 19– 29 30– 39 40– 49 50 – 59 60 and over

Ethnicity: African American White American Asian Native American Hispanic or Latino of any races; Other (please specify)

Gender: M F

Educational Level: High School Some College/University Classes College/University graduate. Other (please specify)

THANK YOU FOR YOUR PARTICIPATION!

Chapter 4

The Media Coverage of Brownfields Redevelopment, a Local Scale Investigation

Abstract

The coverage of redevelopment issues in Paterson, New Jersey is important to the media. This content analysis of the “Herald News” explores the extent to which the media reflects the dynamics of the public debates, policy actions, and sustained discussion revolving around the local Brownfields redevelopment. The results show that government officials and private real estate developers primarily drove the media discourse. The media’s primary focus was that of profitability of urban economic renewal. Of least coverage was the public health and environmental consequences of redevelopment. The framing of brownfields redevelopment and related factors in Paterson, a former industrial city, by “Herald News”, its daily newspaper, possibly reflects the community’s values, ideas, priorities, and culture. Statistical results show a progressively more favorable and less negative response to the exercises during the years under review, implying sustained levels of discussion and general social acceptance of policy action. The media perspective has played a significant role in heightening awareness of some pertinent social issues with which communities grapple with in community development and raising some questions for future research.

4.1 Introduction

Discourse is an overall pattern of speaking, writing or other public action that results from multiple sources. A dominant discourse establishes the primary messages or images regarding important issues in the community. In many cases, the primary community

newspaper fashions the dominant discourse on important issues. In New Jersey, a highly urbanized state with a substantial industrial heritage, a key issue facing older central cities is the location, health impacts, environmental remediation, and redevelopment of brownfields. Often, the most influential local newspaper frames the issue, in such a manner, as to provide a major influence on the dominant public discourse, possibly affecting how individuals perceive and order their interpretation of reality. Frames can effect and galvanize change and action through the way they are structured. This study examines how the “Herald News”, the daily local newspaper of Paterson NJ, an older industrial city, frames the issue of brownfields and their redevelopment. In doing so, it seeks to answer the question of how this paper perceives the initiatives. Brownfields are any former or current commercial or industrial site that is currently underutilized or vacant and on which there is, or has been suspected to have a discharge or contamination that presents a possible environmental and public health risk. Brownfields can be viewed as a public health, ecological issue, and social issue or as a redevelopment opportunity. Paterson was chosen for this case study because of its rich legacy of brownfield sites, and aggressive urban revitalization program, including brownfields, and, owing to the significant amount of articles highlighting the initiatives that could be obtained from the Lexis Nexis online database.

Paterson, the third largest city in New Jersey, is densely populated with a Census 2000 population of 149,222 persons (New Jersey Municipal Data Source Book , 2009), and more recently, 146, 199 people (U.S. Census Bureau 2013). It is located in Passaic County northern New Jersey. The presence of a significant number of brownfield

premises evidences its rich industrial history and to date the Passaic County Brownfields Commission (2012) records 140 brownfield sites. The majority is industrial comprising of a total of 28 high priority brownfields sites (Passaic County Brownfields Commission minutes, October 19, 2011). The municipal authorities actively pursue redevelopment of these brownfields hoping to spur economic revitalization in the city while reaping the benefits of an improved social and physical environment and public health. To bring about revitalization efficiently and effectively, the city designated some areas in the city as “Areas in need of redevelopment” inclusive of “Brownfields Redevelopment Areas” (BDAs) in these areas. The BDA program was established by the New Jersey Department of Environmental Protection to assist selected communities impacted by many brownfield sites to clean and reuse these sites using an area wide approach. Brownfields presences in communities have been interpreted as symbols of hopelessness, poverty, and crime.

To explore the level of importance that the paper ascribes to the communities’ values, ideas, priorities and culture in relation to the brownfields initiatives, the “Herald News” the daily and only newspaper servicing Paterson, was analyzed. Combined with “The Record”, a major daily newspaper to which it is closely aligned but which does not distribute in Paterson, they have 9,925 subscribers (Personal communication with a Herald staff reporter, November 9, 2009). The “Herald News” has won prestigious awards and has been in circulation in Paterson since the 19 Century. This research therefore looks at how this newspaper reflects brownfields issues to indicate the dominant issues, messages, and culture of the redevelopment initiative in the municipality. Specifically, this research seeks to explore links between media coverage, public

perception, political activities, and policy actions regarding brownfields redevelopment in the municipality, informing judgments as to the likelihood of sustained levels of discussion and action on brownfields redevelopment. As such, its objectives are:

1. Specify the issues about brownfields and associated factors emphasized in the communities by the newspaper.
2. Determine how the newspaper portrays brownfields and other environmentally contaminated, uncontaminated, vacant, and underutilized sites in terms of the importance attached to matters pertaining to them.
3. Discover what the contents reveal specifically about the general perception toward neighborhood quality, policies relating to brownfields and the process of their development.
4. Identify the dominant actors in the brownfields redevelopment process, as reflected by the articles.

This research presents some variables of pertinent issues that surround brownfields redevelopment in a locality that grapples with putting them to sustainable reuse. It should assist in a more targeted, focused multi-stakeholder discourse agenda and therefore sustained dialogue as stakeholders interact in such a critical urban revitalization program. This will also assist in building capacity. Specifically, the question is whether the articles' perception of the discourse will indicate a positive outlook for sustained discussion and action concerning the redevelopment. An important brownfields redevelopment policy requests community participation with a

multi-stakeholder approach.

4.1.1 Literature review

The influence of the media in society cannot be denied. Morris Janowitz, (1967); Paek, Yoon, & Shah, (2005), highlighted the importance of the local media in weaving the fabric of social interactions and values in local communities. They mentioned the reliance of the professional politicians on this important source of communication in advancing both their personal and public agenda, in terms of crucial programs, such as urban renewal, among others. Kaufman & Smith (1999:170 - 72) also described varying frames adopted by the policy makers and the public that may strongly influence public participation in decision-making processes. Scheufele (1999:116), in turn, mentioned that political figures and interest groups, through the perceived newsworthiness of their messages, influence how the media news is framed. These stakeholders and journalists also influence the volume and character of news messages of an issue (Scheufele & Tewksbury, 2007). Entman (1993) described how the power of a frame exerts political and social influence through the communicated word. However, Entman's (2003) Cascade Model recognized the complex influence that the differing stakeholders bring to bear on the framing process. Greenberg and Lowrie, (1999:10) gave their input by mentioning the critical role that both the print and electronic media play in promoting or hindering the cause of government programs at both national and local levels, such as the Brownfields initiative. In addition, they acknowledged the sensitivity of the media to projects and programs that generate much public interest and emotions and, thus, readership by the nature of their ability to impact individuals and communities politically,

environmentally, economically, and legally (Greenberg & Lowrie, 1999; Greenberg et al, 2008). The Brownfields program can fit into all these categories. In fact, the literature has been useful in declaring the importance of content analysis technique in determining the level of importance that both the print and electronic media ascribe to specific issues (Deacon, Pickering, Golding, & Murdock, 1999; Riffe, Lacy, & Fico, 1998; Roberts, 1997). This is therefore, a useful tool in determining local media and community interactions within the sphere of brownfields reuse and redevelopment.

4.2. Methodology

News coverage for the period September 2004 - August 2009 was examined for themes and associated activities pertaining to the reuse and redevelopment of brownfields, and an exploratory analysis of the values, ideas, priorities, and culture of the residents including municipal officials, journalists, and relevant others. Values, ideas, priorities, and culture are examined, in general, based on the belief that they are the precursors for public perception and possibly sustained support for brownfields redevelopment activities in the municipality. News articles, including BRIEFS and OPINION/EDITORIAL sections from "Herald News," were read by the researcher using a content analysis approach. A content analysis *"is a research technique for making replicable and valid inferences from data to their context"* (Krippendorff, 1980, p. 21). Pertaining to OPINION (Our View)/Editorials, these were included to get staff reporters' perspective of the discourse and thus a more comprehensive scope. Reviews were specifically about Paterson or, if the article coverage was on a county perspective (The paper services

Passaic County also) Paterson had to be featured prominently in it. Because Paterson has designated areas as BDAs and these are located primarily in areas targeted as Redevelopment Areas, articles with news about these redevelopment areas were reviewed based on the strong possibility that brownfields are included in the story line.

Information was accessed from The Lexis Nexis electronic database, coded solely by the researcher thus excluding coder variability and increasing reliability of the coding procedure and instrument. The coding schedule was pre-tested on similar content examples to glean an idea of their applicability and comprehensiveness. Only manifest contents were used to discern themes and the main level of measurement applied was the nominal scale and, to a minimal extent, the ordinal scale. Data quality was assessed by carefully perusing each article again and the coding rechecked to ensure it was appropriately coded. Also, the coded information obtained from each article was crosschecked with that of the database entry. Other ways of checking for accuracy of facts was by telephoning the newspaper staff to clarify uncertainties regarding authorship of the sources of the OPINION articles and any other pertinent factors.

This research method incorporated a thematic text analysis that looks for occurrences of concepts in a document (Roberts, 1997:56) and thereby contents of the news items. Brownfields reuse and redevelopment incorporates many sectors of society including **economic, policy, housing, health and safety, the environment, recreational and land use among others** necessitating this approach. In the search for articles for review, key words like, **brownfields & real estate; open space; affordable housing and housing; redevelopment; crime; economic development; Paterson; historic**

preservation; contaminated land; revitalization; toxic sites; public health; Paterson & land use planning; land acquisition; land and retail; and housing were used. They were used in combination with each other to access **all** relevant articles within the prescribed study period. To assess the theme, the primary subject matter under discussion or present in the article under review was noted. This can be realized from the information supplied by the title of the article and or recurrent dominant and explicit information grounded in the text. The thematic approach was, therefore, able to discern the overall context in which the brownfields redevelopment exercises and pertinent factors were placed. Some authors endorse the use of thematic analysis in content analysis because of its usefulness in the study of values, attitudes, and beliefs of the communicator (Riffe et al, 1998).

The thematic context was categorized into five basic categories. They are Redevelopment **Issues; Environmental Contamination/Remediation; Public Health; Policy & Management and Other**. Inclusive in “Other” is crime, safety, historic preservation, quality of life, and developer choice and one article about a redeveloper bankruptcy issue. By scanning the caption of articles and their contents, and using Paterson as the geographic location, 91 articles out of over 1000 examined were selected from the database. Some of the articles in the 1000 appeared more than once because of key terms and the interrelated context of the stories, hence only the 91 articles.

To discern the portrayal of brownfields, and, associated factors pertaining to their reuse and Paterson’s revitalization, the importance the paper attaches to this subject can be observed by the prominence accorded the issue. Prominence was measured by the

position of the article in the newspaper; for example, whether or not it is front-page news. The Lexis Nexis database gave the page numbers exactly in accordance to the page position in the hard copy. For example, page A01 was the front page of the main general NEWS section, B01 was the front page of the Section located after the main NEWS; other Sections followed consecutively, ending in Section E. Articles not located on the front pages of these Sections were classified “Inside page”. The size of the article in terms of the space it occupies, and the number of words in the document determined its prominence, and thus the importance of its contents. A hard copy of a daily edition of the newspaper revealed that a standard front page 2 column article consisting of 134 words measured approximately 3.75 inches square (area 14 sq. in.) covering approximately 6% of the Front page’s 220 sq. in. area. A rough estimate of the sizes of the individual articles obtained through the number of words supplied by the electronic database then determined if the story was a major or minor article. For the purposes of this research, an article of **less than 200 words** was considered **minor**, **200 – 500 words intermediate**, and **greater than 500, major**.

To obtain the community’s primary brownfields redevelopment, reuse, and associated factors concerns, sentences (units of analysis) spoken by actors or paraphrased were analyzed in the entire article and general comments of the journalists analyzed. By observing the numbers of paragraphs in which the issue is highlighted / discussed and /or how early it is mentioned in the body of the text, the primary concerns were revealed. The issues identified in the sentences were then coded according to their subject matter. They were counted, their proportion determined by their percentages, and the most

dominant concerns emerged. For example, if most of the paragraphs revolved around economic matters, it was coded as such. “Determination of site reuse” connotes considerations of site reuse issue; such as choices of project types for redevelopment, such as mixed use, residential, recreational, commercial entities. “Other” includes choice of developer issues, project delays, historic preservation, project evaluation, crime, and safety and quality of life issues.

“Sources” (actors) are the sources that were quoted or who made a direct statement. These people, and or institutions/organizations were overtly represented in the text. Therefore, the number of times the source was alluded to or quoted in the text was determined. If an article had more than one actor, the most prominent ones were selected for analysis based on the number of times they were alluded to or quoted relative to other actors, (Riffe et al, 1998) and position of authority. Sources are of importance to discern stakeholders’ differential presence, and, views of the social and political spectrum represented in the media as an indication for sustained levels of action and discussion. In addition, it indicates whose views are mainly sought in the communication process.

Finally, to determine the perception of brownfields redevelopment and its associated concerns, sentences and paragraphs were examined including statements made by sources. Those with outlooks that were more favorable were termed “positive”, those with a more negative stance were termed “negative”, and those, which had a balance of both outlooks, were termed “neutral”. The SPSS statistical package aided the research analysis.

4.3. Results

Table 4-1
Source identity of articles of brownfields issues

Source	No. of articles	%
Government officials/Political figures	40	44
Private Developers/Business Interests	22	24.2
Journalists (staff)	15	16.5
Not for Profits	5	5.4
Community residents	4	4.4
Experts	3	3.3
Other (non local politician & police officer)	2	2.2
Total	91	100

As shown in Table 4-1, Government Officials/Political figures accounted for the dominant source from which 40 articles (44%) relayed stories of issues/ concerns events about brownfields and related aspects of their redevelopment. Developers from private real estate/Business Interests are the next dominant category accounting for 24.2% (22 articles). Cumulatively, Developers/Business Interests; Political/Government Officials have a dominance of 68.2%. Fifteen articles (16.5%) of articles revealed Journalists (staff reporters) were the third majority sources. Of note is that the Not for Profits (5 articles – 5.4%) are active redevelopers but on a lesser magnitude than private developers. The table shows the “Other” category of represented sources accounting for 9 (9.9%) articles.

Regarding the size classification of the articles into the **categories Major, Minor and Intermediate**, brownfields matters were considered major in scope (70 articles or 77%). Fifteen articles (16 %) accounted for the intermediate bracket and six articles (7%) fell into the minor category. This has implications for the perceived significance and newsworthiness of an issue.

Table 4-2

Categories of brownfields concerns identified

Primary brownfields concerns	No. of articles	%
Site redevelopment issues	7	8
Environmental contamination	1	1
Combination of environmental contamination & Remediation	6	7
Economic Matters	40	44
Policy /legal issues	9	10
Determination of site reuse issues	13	14
Other	15	16
Total	91	100

Source: “Herald News” articles for period September 2004 – August 2009

According to Table 4-2, economic matters in 40 articles (44%) are primarily the city’s brownfields issues /concerns. The “Other” category accounted for 15 (16%) of the issues and the second majority. Site reuse issues were third in importance, accounting for 13 articles (14%). Pertaining to environmental contamination, interestingly, by itself, it was found to be the least concern (1 article or 1%). However, in combination with issues of remediation including environmental assessment, it increased to six articles (7%).

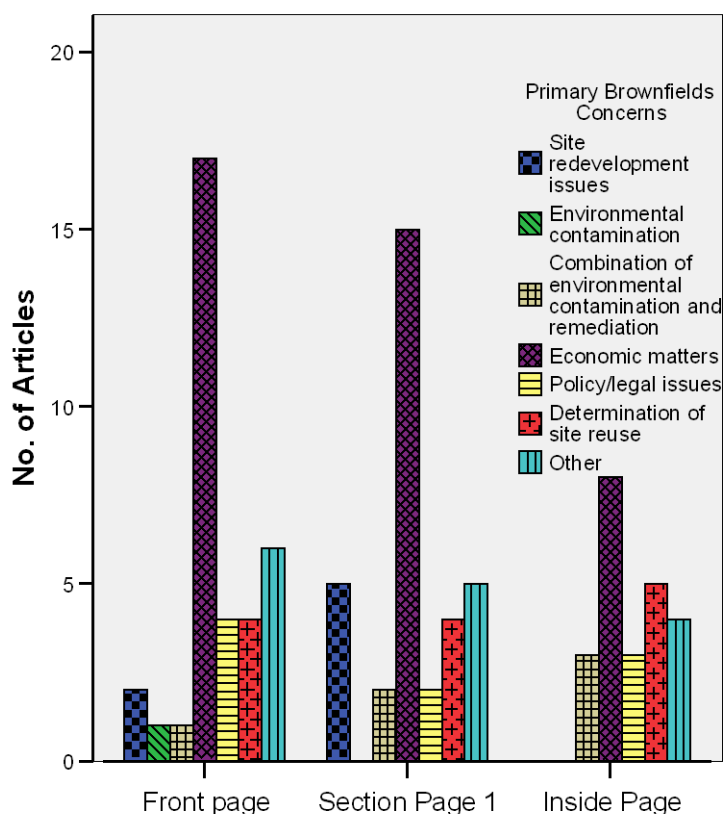


Figure 4-1 Prominence of Brownfields Concerns by Location of Articles

Source: “Herald News” articles for period September 2004 – August 2009.

Figure 4-1 indicates the importance (prominence) accorded brownfields concerns.

Overall, the majority of brownfields issues warranted location in the General News

Section A. However, four of the articles in Section A were located on inside pages and

coded accordingly. Notably, environmental contamination representing only 1% of issues

was a front-page article. The combined category of environmental contamination with

remediation had half the pertinent articles, achieving “minor prominence” (three of six,

that is, 50%). Policy / legal issues (included are matters of contractual agreements,

enforcement, development rights, enforcement and developer selection process) whilst

emerging as fourth (10%) of brownfields concerns, were perceived of great importance by the newspaper because the majority of the nine articles (four or 44%) referring to them were placed on the front page. The majority of economic concerns gained “top prominence” on the front page with 17 (42.5%) of the 40 articles on the front page. Fifteen, (37.5%) were also placed on the first page of a SECTION (middle prominence). The articles of “Other” issues were also primarily located on the front page, that is six of 15 (40 %) and five of 15 (33%) on the first page of a Section. The majority of site redevelopment issues, five of seven (71%) achieved middle prominence by location on the 1st page of a Section. Altogether, 68 (75%) of articles were both placed on the front page and 1st page of a Section.

Table 4-3**Story prominence and brownfields theme source**

Story Prominence		Brownfield theme source			Total
		Government official	Developer	Other	
Front Page	Count	15	11	9	35
	Expected Count.	15.4	8.5	11.2	35
	% within Story Prominence.	42.9	31.4	25.7	100
	% within Brownfield Theme source.	37.5	50	31	38.5
Section Page 1	Count	20	8	5	33
	Expected Count	14.5	8	10.5	33
	% within Story Prominence	60.6	24.2	15.2	100
	% within Brownfield Theme source.	50	36.4	17.2	36.3
Inside Page	Count	5	3	15	23
	Expected Count	10.1	5.6	7.3	23
	% within Story Prominence	21.7	13	65.2	100
	% within Brownfield Theme source.	12.5	13.6	51.7	25.3
Total	Count	40	22	29	91
	Expected Count	40	22	29	91
	% within Story Prominence	44	24.2	31.9	100
	% within Brownfield Theme source.	100	100	100	100

P < .001 Cramers V = .314

To discern if the prominence accorded a story was associated with the Sources, a chi - square test of association was done. Table 4-3 shows the observed and expected frequencies for Story Prominence and Brownfields Theme Source. To meet the

assumptions of the test (no cells with expected frequencies less than five) “Source” was categorized into three levels: “Government Official” – inclusive is elected officials; “Developer” and “Other”- including journalists which dominate this category.

Government officials accounted for the majority of “Front page and Section Pg. 1 news with Developers a significant second. The “Other” source category dominated coverage in the “Inside pages”. The relationship strength was determined by using Cramer’s V test; Cramer’s V = .314. This is a very strong relationship, which was statistically significant: $\chi^2(4) = 17.95, p < .001$. This infers that there is a relationship between the perception of news value of brownfields redevelopment and the Source.

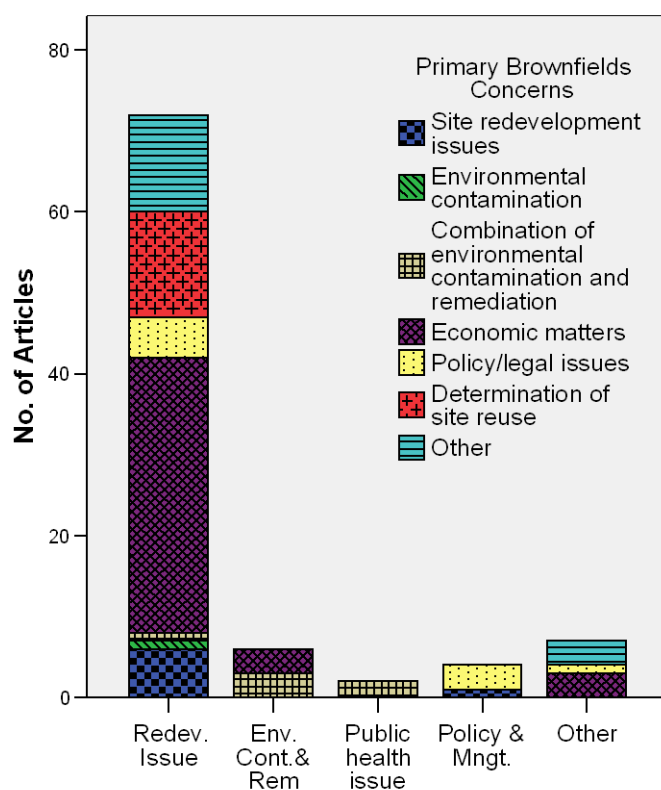


Figure 4- 2: Overall Thematic Concept of Brownfield Issues

Figure 2 reveals the thematic direction of the articles framing of the brownfields initiative. All categories of primary concerns were centered on redevelopment issues. Also, all site reuse (13 articles or 14 %) and sole environmental contamination (1 article or 1%) issues were redevelopment issues. The majority of economic matters (34 articles or 37%), and site redevelopment issues (6 or 6.5%) were viewed from a redevelopment perspective. The Public Health theme represented the least amount of articles, (2, or 2%) and these are a portion of the “combination of environmental contamination and remediation” issues that, secondary to the “environmental contamination” issues, are the

Table 4-4

Article presentation of brownfields redevelopment and time period

Article presentation of brownfields		Time Period		Total
		2004 - 2006	2007 - 2009	
Positive	Count	20	26	46
	Expected count	23.8	22.2	46
	% within Article Presentation	43.5	56.5	100
	% within Time Period	42.6	59.1	50.5
Negative	Count	17	6	23
	Expected count	11.9	11.1	23
	% within Article Presentation	73.9	26.1	100
	% within Time Period	36.2	13.6	25.3
Neutral	Count	10	12	22
	Expected count	11.4	10.6	22
	% within Article Presentation	45.5	54.5	100
	% within Time Period	21.3	27.3	24.2
Total	Count	47	44	91
	Expected count	47	44	91
	% within Article Presentation	51.6	48.4	100
	% within Time Period	100	100	100

P = .047 Cramer's V = .260

least concern.

Concerning perception of brownfields redevelopment during the years under review

Table 4-4 looks for an association with the perception of the initiative and the former and

latter years. As the years progressed, there was a more positive perception of the initiative; for example, 56.5% of articles for period 2007 – 2009 in contrast to 43.5% during 2004 – 2006. Negative perceptions decreased considerably from 73.9% in 2004 – 2006 to 26.1% in 2007 -2009. The table also shows the observed and expected cell frequencies. The chi-square test reveals a significant association: $\chi^2(2) = 6.133$, $p = .047$. The Cramer's V test result = .260 shows a moderately strong effect. It is inferred that as the years progress, there is the possibility for a more positive outlook for the redevelopment initiative.

4.4. Discussion

For 'The Herald', economic matters emerged as the primary issue of a primarily urban redevelopment initiative. This is supported by a Paterson Councilmember who stated that expected benefits from these initiatives are "*to clean up the neighborhood, build economic development, and revitalize the areas as well*". (Personal communication, September 11, 2010) To redevelop, rehabilitate and reuse these properties demand extensive financial resources in project costs, legal fees, among others. Therefore, national, state, and local governments have implemented laws/ policies/ ordinances to facilitate development (Davis, 2001). The articles captured the municipality's struggles in seeking funds for project redevelopment/reuse and land sales for brownfield properties. This process was complicated by onsite contamination and developers restraints because of remediation costs for projects. This issue is also of national significance. Articles related the city's struggles with developers (including Not for Profits) who were delinquent on tax payments expected by the municipalities from redeveloped properties

(Articles, June 1, 2007; Friday and June 21, 2007 Thursday). In fact, a significant amount of the negative discourse of the process originated from economic matters such as land sales and tax matters (Article, October 23, 2006 Monday).

In the matter of job creation, the articles did not indicate significant job creation from the exercises. However, this was a significant matter for citizen sources represented. A neighborhood survey supported the media reports that citizens expect to benefit from job creation but for some citizens, this is a contentious issue with some environmental justice implications (Letang, Chapter 6). Some respondents, approximately 9 %, reported that race and crime history was a factor in individuals getting jobs from the redevelopment projects and that there is the need for job training facilities. In fact, the respondents, including the 9%, ranked job provision, as the third most favored of eight reasons to approve of redevelopments initiatives in their neighborhood. Of note is that especially in economically depressed communities, it is expected that significant job training will be undertaken because of the brownfields initiatives to improve recipients' job skills and increase their potential for acquiring jobs. Few articles spoke of some job creation but this is minimal in a city of 146, 199 people with a large unemployed labor force. The unemployment rate, in the 2010 census was 27.1%. A government official reported negotiations are made with developers to hire local labor but this is not mandatory. This was endorsed by a developer in an article (July 20, 2008 Sunday). Interestingly an official of the Passaic County Economic Development Department said that 25 locals have been employed by Walgreen, (D. Hoffman, Personal communication, April 21, 2010) one of the three (3) new redevelopments in the city and

the site redevelopment evaluated in the survey.

Concerning site reuse matters, whilst ranking 3rd in importance of primary brownfields concerns/issues, was equally accorded “top and middle prominence” by “Herald News” (Eight of 13 articles) indicating significant levels of importance. Of note, many of the issues reported by the paper concerning project type and redevelopment activities (site reuse) gave affordable housing and brownfields conversion significant coverage. This is supported by the Paterson Master Plan (2003) that highlighted this issue as one of the main problems in Paterson. Additionally, the particular reuse is seen as a means to an end. For example, the January 15, 2009 Thursday edition said, “*The reuse of the Paterson Armory on Market St. into a recreational center will serve to reduce juvenile delinquency (crime) which plagues the city*”. An article (June 12, 2005) mentioned the citizens set reuse values on recreational centers, better housing, crime reduction and good paying jobs. Again, the survey endorsed the value that citizens place on site reuse issues such as provision of recreational centers. Some respondents expect that redevelopment initiatives should provide this vital facility. However, only 2 % of respondents mentioned that affordable housing should be a site reuse priority. The thrust is to build affordable houses geared towards problem solving, such as, lack of home ownership that the Master Plan (2003) includes as a priority. However, the question is, “can the city’s residents with a median income of \$34, 302.00(U.S. Census Bureau, 2013) afford homes built by the developers that are priced at market rates of \$200,000.00 to \$ 300,000.00 plus, depending on the number of bedrooms available”?

In the October 23, 2006 Monday (p B07) and October 15, 2006 Sunday (p A01) daily

editions, the journalists raised this issue. They stated that the city's sale of some properties (including brownfields) to private developers forced non – profit organizations like Paterson Habitat for Humanity to in turn purchase land from private developers at market rates priced at over \$60,000 for each property. Formerly, these properties would be available at the city's yearly auction to be purchased by these non – profits (\$27,000 each). This makes homes more affordable for citizens who benefit from homes constructed by this group. (It has built over 170 homes in one of the poorest sections of the city on lands that were once vacant or abandoned.) Whilst this group is able to fill only a small niche, it is very significant. Their noteworthy deeds can possibly contribute to crime reduction. This issue highlights municipal authorities dilemma whose values conflict with what was a priority – close a budgetary gap. The media perspective of the discourse suggested underlying tension between real estate developers, Not for Profits and the municipality as they struggled for control of the properties for redevelopment.

Concerning “environmental contamination& remediation” being the least of concerns, because most of the issues relating to it are located on the inside of the paper, this suggests minimal concern in the public discourse. In addition, the Public Health theme was discerned based on two articles alluding to it on a statewide and county basis and Paterson being notably referenced. This may be because : 1). The public is ignorant of the matter and its ramifications; 2) The authorities minimize the significance of the matter so as to avoid controversies; 3) The reporters lack the necessary expertise and knowledge to adequately report about it (Cox, 2010: 160). 4) The matter and its potential frame do not warrant newsworthiness. Greenberg et al (2008, pg 81) cited a story is

newsworthy if it presents the making of a new interesting problem. Lack of newsworthiness can be detected from placement of the article deep inside the newspaper with limited chances of being seen. Despite the public health theme's apparent lack of newsworthiness during the review period, in the subsequent survey in 2010, 38 of 47 persons (81%) ranked public health and safety as the major priority for them to be receptive to brownfields redevelopment projects in their neighborhood. However, generally brownfields redevelopment is seemingly considered newsworthy and valued by a variety of Sources because of its perceived and actual ability to attract and keep audiences' interests. This has implications for framing and promoting the redevelopment initiatives because the more coverage and prominence the issues obtains, the greater the possibility to attract citizens and hopefully their acceptance. Additionally, Sources also get to advance their agenda and perspective of the relevant issues. Entman, (1993), Kaufman & Smith (1999) gave credence to this statement. This agenda in Paterson is also advanced from a cultural perspective that should hopefully resonate favorably with the citizenry. A story's prominence may give the Source the advantage to have his personal and professional values relayed (subjective or not). The fact that the majority of the sources represented were both government and developers and the majority of stories sourced by them were front page news, provides an opportunity for claims making to project brownfields redevelopment as a strategic tool to bring new economic life to the city whilst impacting other sectors of community life. This has implications for sustained discussion of the initiative. Sources may also be selected based on their credibility to contribute to "newsworthiness", availability to be interviewed and knowledge. Hansen

(1991:449-51), in his article “*social construction of the environment*”, elaborated that public authorities are regarded as valid sources that can articulate environmental issues. Of note, is a reminder that brownfields redevelopment impacts a wide swath of sectors so these Sources would be regarded as potentially valuable to be informants in this multi-sectored aspect. The stories sourced from public authorities’ figures and developers got prominent coverage because they may be considered the driving forces behind the brownfields discourse with the ability to effect societal changes. In addition, in stakeholders interaction with each other, and, faced with the multi-dimensional aspects, conflicts arise which constitutes an interesting story. However, this analysis showed mostly the social interaction of the media staff, public officials, and developers making their claims in a complex arena. Regarding journalists personal decisions as to the news value of an item and therefore it’s framing and prominence, Donsbach, (2004) postulated that psychologically, the journalists reinforces his own opinion of the particular issue. Secondly, this decision is based on validation of the decision from the supporting social network of the professional body. In addition, he stated what other media are reporting influences the journalist’s construction of reality.

The category “Other” achieved primarily top and middle prominence by inclusion of a significant number of articles pertaining to historic preservation. Both the Master Plan (2003), and the paper reveals historic preservation is highly valued by both local officials and the community. Efforts are undertaken to preserve the old mills (brownfields) in the Great Falls Historic District that attest to the proud past of Paterson and the hope that revitalization can propel the city into a better tomorrow. The frame

establishes preservation values in a context that resonates and appeal to the locals' pride in their city's character. Urban revitalization is projected as a moral cultural matter with economic benefits giving it momentum for sustained implementation and discussion. Additionally, from this perspective, it may set the wheels in motion for a collective cultural frame with which the brownfields efforts can attain credibility and salience to the neighborhoods. According to Benford and Snow (2000:621), for issues to be salient to a target population, it has to be core to their beliefs, ideas, and values. Entman (2003:417) stated, *"Frames that employ more culturally resonant terms have the greatest potential for influence."*

The significant results showing the association between perception of brownfields redevelopment and subsequent years shows the likelihood of brownfields redevelopment becoming more established as a possible engine of growth implying sustained levels of discussion because of perceived and actual benefits that are creating a sense of community. A possible explanation for the more positive perception of brownfields redevelopment over the years is that a more confident redevelopment climate has ensued. In the earlier years (2004 – 2006), the city's redevelopment process was evolving and it is possible that significant mistakes and setbacks were experienced as the city grappled with a relatively new national and local initiative. In addition, there were public health and ecological implications and investment and legal uncertainties also.

The reuse/revitalization of these sites is perceived as being pivotal to have economic and cultural transformation in a municipality that is stigmatized by some societal ills. Despite the current economic meltdown, interests in redeveloping these

properties remain high. On the other hand, there is a strong critique for better municipal fiscal management relating to the exercise. However, the complex issues relating to the process, that may cause controversies because of the many differing stakeholders' perspectives, and other compound variables involved, must be appreciated. Here Entman's (2003) Cascade Model comes to mind.

4.5. Conclusion

Brownfields redevelopment are framed as a major mean to an end in Paterson to minimize or solve many of its priority problems such as budgetary constraints, lack of affordable homes and home ownership, tax matters, job creation, crime reduction among others. The city is proud of its historical legacy and undertakes conservation activities through redevelopment of old industrial premises into compatible conforming end uses that are expected to address community needs. The "Herald News" showed that the community discourses revolve around site reuse, job opportunities, affordable housing, and crime reduction. This is supported in the community survey that revealed citizens are concerned about these matters in assessing their satisfaction with brownfields redevelopment in their neighborhood. The media report of some aspects of the brownfields discourse matches that of the local discourse.

The dominant media frame establishes that brownfields are viewed by the municipality and developers chiefly from an urban redevelopment perspective with their main focus being on economic revitalization and viability. The media perspective of City Officials is that they expect brownfields redevelopment to attract investment, tax ratable, and developers for profit potential. This is endorsed in this research conducted by Letang

, Chapter 7) and other empirical reports who found that these economic criteria are mainly used by municipal officials and developers to ascertain brownfields redevelopment success in municipalities. A subsequent interview with a Councilwoman, and review of Council minutes supported The Herald's perception of the very dominant role that economics holds in the expectation that brownfield's revitalization will boost a struggling local economy. Job creation is valued highly by the few community sources represented as well as the municipality although the articles reveal few jobs were created. The survey supports the media reports that citizens expect to benefit from job creation but for some citizens, this is a contentious issue with some environmental justice implications. Matters of site reuse and housing are also important to the majority of Sources; affordable housing was a chief concern for Non- Profits. The results also showed that brownfields issues and their redevelopment were framed by the newspaper least from a public and environmental health perspective. Interestingly, the majority of survey respondents prioritize public health and safety as the most important reason for them to be receptive to brownfields redevelopment, including potential redevelopments in their neighborhood.

Despite the conflicts surrounding the exercise, the analysis suggests a positive direction for the future of brownfields redevelopment in the city. This was endorsed by the mainly positive direction shown by the articles indicating sustained communication and interaction between developers and the municipality. The articles indicate a minimal involvement by the grass roots citizens in the revitalization process that can affect the process in the future. This may be a matter of reporting or citizens in reality may be

minimally involved. Not for Profits as community advocates are portrayed as being very vocal about the need for affordable housing and their involvement in the redevelopment process revolves around land acquisition and economics as such.

The research gives credence to the empirical research of the highly dominant role that government officials, local politicians potentially play in the social construction of issues, including urban revitalization (Hansen, 1991; Entman, 1993). This highly dominant role is obviously facilitated by legal mandates in urban redevelopment, including brownfields policies and their value to the paper as credible newsworthy sources. This may have implications for the design of community participation exercises that seek to accommodate consideration of wide stakeholder views including grassroots citizens' values and perspectives. Community participation is a strong area of national and international discourse and is highly promoted in redevelopment planning exercises among others in the United States as a democratic right. This analysis showed the different messages/issues that concerned the stakeholders, including the media, who contribute to defining brownfields redevelopment issues in their municipalities.

Three interesting considerations emerge from the results. 1) Has brownfields redevelopment in the municipality adequately addressed even a portion of the community's problems? The "Herald News" shows that the community discourses revolve around site reuse, job opportunities, affordable housing, and crime reduction. 2) Do the citizens perceive their concerns in this respect to be seriously considered by government officials in planning for the redevelopment? 3) What is the impact of brownfields redevelopment on the need for affordable housing for citizens? Has there

been a reduction of this need or is affordability itself an issue as was suggested by the research? The media has played a significant role in giving ‘food for thought’ on these social issues with which communities and not only those in the United States, continue to grapple with in instituting social and environmental programs for community development. This sets the stage for building on existing research and embarking on new ones to answer these thought provoking questions.

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Chapter 5

Community Perception of Redevelopment Changes and Social Processes and the Impact on Brownfields Redevelopment Success.

[Portions of this chapter was published by OIDA International Journal of Sustainable Development (2013)]

Abstract

People can be resistant to environmental changes. Changes may be disruptive to their ideology, affections, and rootedness to which people respond to their place. This is even more disruptive if they perceive the change to be fast paced. How people assess these changes in their neighborhoods is linked to their satisfaction or dissatisfaction with initiatives executed in the neighborhoods. Satisfaction is one mechanism by which people respond to environmental and social changes because it embodies judgmental and cognitive processes in how individuals assess how policies affects their well being. This research - in keeping with this philosophy -has used public satisfaction as a measure to assess the perceived success of three brownfield redevelopment projects. Perceived satisfaction is the result of the assessment of objective attributes of social and physical environmental factors. This research uses a variety of quantitative tools with supporting qualitative documentation to explain the effects that the community changes have on the neighborhoods' perceived success of the redevelopment projects. A survey of 129 respondents residing near three brownfields redevelopment projects in three municipalities in Passaic County New Jersey was conducted. The purpose is to discover the relationship between changes in the built environment and social neighborhood and

the level of acceptance or satisfaction with the redevelopment project. Also, affected citizens' sentiment of what is valued in a prospective and actual redevelopment exercise is sought. To complement the respondents' answers regarding 'observed changes' public officials, were questioned and Council Minutes in each municipality, dating from before to after the redevelopments; newspaper reports were perused for mention of any changes, that could be attributed to the redevelopments. The results of this survey indicate that citizens regard improvements in the built environment as well as the social environment as highly significant criteria in evaluating brownfields redevelopment beneficial use. People have high expectations from these brownfields redevelopment projects and tend to be more responsive and supportive when more than one observed positive and less negative changes in the built environmental were observed. Brownfields redevelopment projects will receive ratings that are more positive if the end use is consistent with citizens' values and lifestyles and not detract from it.

5. 1. Introduction

In this chapter, I attempt to draw on the field of Environmental and Community Psychology to better understand and interpret the dynamics of the interplay between citizens' response and their acceptance of the Brownfields redevelopment projects in their neighborhood.

Certain development categories such as a mixed use are reported to promote better environmental quality of the built environment and overall wellbeing of people (EPA, 2001; Hirschorn, n.d). Based on smart growth principles, brownfields redevelopment can be expected to address social capital, public and ecological health.

The literature reveals the importance of the design of neighborhoods to encourage social cohesion and community connections. Furthermore, empirical studies have observed the connection between social capital, effective democracy, crime prevention, and promotion of economic development (Example, Leydon, 2003). The definite advantage of creating and patterning the built environment geared towards the sustainable development of the cultural, socio-economic, health status of people whilst maintaining environmental integrity should therefore be a desired and maintained end of brownfields revitalization projects.

Brownfields redevelopment smart growth philosophy also encourages the creation of open spaces. Open spaces such as greenways, and parks have been touted as positively impacting environmental quality, biodiversity, public health and wellbeing. To this end, brownfields in Canada and the United States (U.S.), (EPA, 2010; De Sousa, 2003) and internationally, are being increasingly converted to green spaces, greenways and playgrounds. This has implications for land use policies.

5.1.2. Theories of Place Attachment

The literature claims there is a psychological attachment between individuals and place that produces an affective bond with the community. Manzo and Perkins (2006) asserted, fundamentally, people interpret and interact with their community cognitively, affectively, and behaviorally. These desirable dimensions will “breed” an individual that is more emotionally attached to the place and his community, which will foster socially responsive cohesive behaviors conducive to community engagement activities like

community planning and preservation including development projects. This is so because an individual's self-identity is closely connected to how he identifies with his community including neighbors. These are critical components to community building in environmental and community psychology and should be considered in community participatory planning for positive outcomes. Building a network of social interactions with shared values of psychological and social processes at the core, foster empowering relationships. Empowering relationships are also based on reciprocity between an institution and its members, including community as pertinent (Rich et al, 1995; Israel et al, 1994; Manzo & Perkins, 2006). This means that both organization and individuals will become enriched by the dynamics of partnership engagement (Empowerment theory) thereby engendering more sustainable relationships. Research also identifies a gap in linking theories of evolutionary aspects of community participation in technical assessments to the concepts of social and political changes in social theories. This research, in a subsequent chapter, attempts to help in this area by exploring from the citizens' perspectives, access to the decision making process and its effect on their perception of socially desirable variables that encourages well being in their neighborhood (Example, sense of place/place attachment.)

Bearing in mind the foregoing, to this end, Burdge & Vanclay, (1996), advocated the implementation of social impact studies to examine the possible social and cultural impacts of policies and projects upon humans. Social impact affects work, living, recreational spaces and social interactions whereas cultural impacts affect norms and values, self-identity, and the way people understand and interpret society. Burdge and

Vanclay (1996) recognized the underutilization of this valuable tool in assessing projects and policies impacts, its usefulness as a decision-making tool and ultimately project acceptance/ success. Greenberg (1999: 313-314 in citing Habe 1989) responded by saying that the concept of sense of place and conformity with town character is being progressively established as a key criteria by planners in the United States during decision making and other processes in determining developmental impacts. Habe (1999) said 98% of 70 planners rated this criterion as key. However, he raised the vexing issue, of the use of mainly expert knowledge in these assessment methodologies to determine these intangible benefits. Often, public perceptual and cognitive responses to the environment have been neglected by these town planners. Negative changes can result in citizens feeling a sense of disconnect from what is familiar and dear in their neighborhoods, increasing a sense of dissatisfaction with developmental projects. Planners and other relevant authorities should to be cognizant of these valued factors in anticipating and reacting to citizens' responses to environmental changes.

People can also be resistant to environmental changes because it disrupts the ideology, affections and rootedness with which people respond to their place. This is even more disruptive if they perceive the change to be fast paced. The importance of a sense of place has been present in ancient cultures and is pervasive today in both eastern and western cultures and the social sciences. It connotes the attachment that people has to place, to the extent that their identification is bound up with the place and its associated features. From the individual's association with the landscape, environmental values are derived which serves to feed this place attachment (Green, 1999). A positive attachment

to place is also facilitated when people feel they can still exert control over their lives despite being confronted with changes, and, that does not retard their daily activities (Uzzel et al, 2002). This increases livability of and satisfaction with the neighborhood.

5. 2. An evaluation of citizens' satisfaction of brownfields redevelopment

The importance of citizens' responsiveness to proposed policies and projects implementation in their localities has received significant attention in the literature. Ho, (2007), Phillips, (2003), Hula, (2003), The National Brownfield Environmental Justice / Community Caucus, (1999) firmly believe there is a place for citizen involvement in program evaluation of government policies and initiatives. This is warranted, because, at various stages of a program or project cycle, the effects of different socio-economic or cultural effects may be realized (Barrow, 2002). This is widely believed to be an incentive to increase public sentiments about public officials' responsiveness to their concerns. Ho, (2007:10 citing Bowler and Donovan 2003), said *"only 33% of Americans in 2003 believed that public officials cared about what the public thought, a significant decline from 73% in 1960."*

A survey of 200 residents in a predominant Hispanic community revealed preferences for development that provide open space, recreational, health and educational facilities and new affordable housing. Factories, warehouses, large commercial entities that may pose pollution and aesthetics problems are unwanted. Respondents also favored a consultative process before redevelopment (Greenberg & Lewis, 2000). This supports the McCarty et al (2002) stance who stated the importance of realizing the valuable input

residents can make about community needs since they are the ones best suited to define their needs. Greenberg & Lewis (2000) therefore provide insight that the land use to which the property is redeveloped may give rise to varying levels of satisfaction or dissatisfaction. Brownfields projects, in addition to providing jobs, are expected to improve environmental quality and citizens quality of life overall. This has implications for environmental justice issues in terms of access to a municipality's decision-making process. If people have preferences, then it can be said the desire exist to see preferences materialize by having the opportunity to make choices among options to suit individual and societal needs.

Quality of life, as measured by the concept of satisfaction, is an important agreed upon indicator used by policy makers to assess environmental quality, Marans (2003) informed. Satisfaction has been deemed an appropriate measure because it embodies judgmental and cognitive processes in how individuals assess how policies impact their well being. This research in keeping with this philosophy has used public satisfaction as an outcome to assess the redevelopment perceived success. Perceived satisfaction is the result of the assessment of objective attributes (in consideration of context) of social and physical environmental factors and the meaning individuals ascribe to these attributes. A typical example is that the perception of an unpleasant aesthetics of a place may result from actual sightings of indiscriminately placed derelict vehicles. Whilst acceptance does not necessarily mean individual satisfaction, for the purposes of this exercise, they are taken as given and used synonymously.

Concerning brownfields redevelopment, some empirical attempts have been made

to develop and refine indicators of successful brownfields redevelopment. Wedding and Brown (2007), described four domains of assessment of an overarching Sustainable Brownfields Redevelopment Tool (SBR) in determining the attainment of sustainable redevelopment goals. Inclusive domains are *Environmental and Health indicators*; *Financial indicators*; *Social and Economic indicators* and *Livability indicators*. Experts were asked to rate the indicators of this tool. Of note, is that a community survey of residents and employees to determine community improvement was considered enough of a significant component to warrant a weighting of 8.56 out of 10 in the *Livability* domain. In the entire SBR, the indicators with the highest weights were in the range of 8.00 – 8.89 accounting for 11 of the 40 indicators. This indicates that community opinion regarding brownfields redevelopment impacts is regarded as a critical evaluation tool by experts. Therefore, this research will provide some insight to policy makers of how this policy is impacting neighborhoods. It will also give local officials “*a fresh look at government performances from the citizens’ perspective*” (Ho, 2007:17).

Hula (2003) specifically sought to discover the people of Michigan’s responses to a government’s initiative to redevelop contaminated sites into viable entities. Furthermore, Davies (1999) assessed citizens’ satisfaction with three redeveloped sites in Michigan and concluded that the initiatives engender satisfaction, which is enhanced through public participation. However, Davies qualitative assessment was done on five area group leaders. This research uses a variety of quantitative tools with supporting qualitative documentation to explain the effects that the community changes have on the neighborhoods’ perceived success of the redevelopment projects. Additionally, the scope

of respondents was widened to include all residents living in close proximity to the redeveloped sites and not merely area representatives alone. Each person had the opportunity to tell his or her story, providing a more representative view of public sentiments in the affected locations. The assessed literature (Example, Greenberg, 1999) gave some information as to what citizens expect and the variables concerned in assessing environmental quality. They however, were not assessing mainstream perception of the change/s of these variables owing to an intervention (brownfields redevelopment, in this case).

This research purports that citizens' acceptance of brownfields redevelopment is related to their perception of community improvement. This is so especially in view of the quantity/ies of observed positive or negative changes which varies by communities. This research seeks to discover the relationship between changes in the built environment and social neighborhood and the level of acceptance or satisfaction with the redevelopment project. It also seeks to discover the sentiments of affected citizens regarding what is valued in a prospective and actual redevelopment exercise. The results will give valuable insight as to their social, political, and cultural worldviews in the determination of acceptance or non-acceptance of the outcome, which subsequent steps further test and clarify. A community's favorable response to a redevelopment activity or technology used in the process can lead to it being perceived as high beneficial and low risk and vice versa. These affective values will also drive people's attitude and the stance one takes on issues pertaining to brownfields redevelopment, such as their sense of well being, and health and project satisfaction.

5. 3. Methodology

Respondents were asked about observed changes perceived to be resulting from the redevelopment initiative. They were repeatedly reminded their responses must be based on the redevelopment during the interviews. Specific time periods were targeted based on the time after each redevelopment took place in the municipalities to the present time of the survey (2010), because, if changes occurred based upon site redevelopment activities, they would realistically occur over a range of time. Based on the length of time they lived in the area at their present addresses, respondents are more likely to be observant of these neighborhood changes. Respondents were required to give a ranking of degree of favorability on Likert type scaled items statements ranging from one to five (1 – 5), where 1 is unfavorable and 5 is very favorable only if they affirmed any changes in their neighborhood environment. However, these results must be interpreted with caution bearing in mind that respondents could attribute ‘changes’ owing to the redeveloped project when in actuality, it is not. Nevertheless, the results will indicate that an improved built environment is regarded highly by citizens in evaluating brownfields’ redevelopment beneficial use.

Using the Cronbach alpha test of reliability, the data was aggregated for all the municipalities because it was unnecessary to restrict the results to individual municipalities. The main purpose was to test the consistency of answers across the board. The SPSS statistical test analyzed 13 of the 129 responses because these respondents gave a full complement of answers to all the item variables measuring the observed changes. Table 5-1 shows (See page 105) the Cronbach alpha test of reliability results for

this independent variable ‘observed changes’. Prior reliability results was .771 when the two item statements “observe other changes” and “no change” were included in the analysis and rose significantly to .953 when they were dropped from the analysis. A score of .771 is acceptable and .953 is highly reliable. In order to minimize redundancy in the statistical result, it was necessary to eliminate these two item statements “no change” “observe any other changes” mentioned previously for two reasons. First, in order for the interview to continue, the interviewee had to have observed a notable change in their neighborhood, that is, the respective redeveloped project, making the item statement “no change” void. Selection for analysis therefore included respondents who had observed this change in their areas. Secondly, the response to “observe any other changes” was captured in the question “have there been any negative changes?” because respondents tended to express other changes that happened to be something they did not like. This question required a “yes” and “no” answer and a descriptive component of the changes. ‘Observation of any other changes’ was treated and analyzed in Chapter 6 as a separate variable, distinct from the independent variable ‘observed changes.’

Cronbach Reliability test analysis on the outcome variable ‘Public acceptance’ yielded a result of .906 (See Table 5-1) showing high internal consistency of this measured scale. To explore the relationship between changes in the neighborhood’s built environment and the level of acceptance or satisfaction with the redevelopment project, Chi-square test of association was done. The level of acceptance is inclusive of perceived benefits like health and social factors. To avoid ¹violations of the chi-square that would

¹ No cells should have expected frequencies less than five.

result from analysis on individual municipalities, the data had to be aggregated. Also, the scaled items were collapsed into three (3) categories for the number of “observed changes”, that is, ‘0-1’, ‘2-3’ and ‘uncertain’. Similarly, to avoid statistical violations the ‘public acceptance’ variable was collapsed into two (2) categories, ‘positive’ and ‘uncertain/poor perspective.’ Factor analysis was also done on the municipal data to ensure the scaled variable ‘public acceptance’ is unidirectional, and, to ensure the validity of the variable. This is critical in calculating total individual scores. No latent variable was found indicating the items were measuring the same construct (See Table 5-4). However, since the factor analysis showed item statement variable “redevelopment activities have helped the section of the community where I live” being responsible for most of the variance (72.6%), it was used exclusively and as part of the total dependent “public acceptance” scale variable, in analyzing the a priori and other exploratory correlations. The choice was made to retain all the item variables in the measured scale since they were not expected to alter the results significantly. Additionally, to get a clearer perspective on citizens’ view of the livability of the neighborhood after redevelopment, and, to see if respondents believe their values were incorporated into the process and outcome, a separate analysis was done on three (3) item statements individually for each municipality. They are “redevelopment have helped the section of the community where I live”, “redevelopment have agreed with citizens’ values”; and “redevelopment have created a more livable community.”

Mean scores were calculated for each individual’s raw total score so that they could be constrained closer to the Likert Scale as well as being used in statistical tests

such as Kruskal Wallis (H) test that require rank computation. The means in this case, took on the characteristics of ranks. Kruskal Wallis test was used to discern if there were differences in how the municipalities accepted the outcome. However, the test did not indicate where the true difference lay.

To complement the respondents' answers to the question of 'observed changes' public officials were interviewed. Council Minutes in each municipality, dating before, during and after the redevelopments, including newspaper reports, were perused for mention of any relevant changes that could be attributed to the redevelopments. Citizens comment periods and Council responses were examined. Using "Google Earth" technology, attempts were also made to track changes in the landscape over a period of years before and after the sites were redeveloped.

Respondents were asked to rate reasons for favoring redevelopment initiatives in their municipalities. The rating was on a scale of 1 – 5, where 1 is not favorable and 5, highly favorable for the given statements. The purpose was to elicit what is most valued in the municipalities and that would contribute to a feeling of well being, possibly yielding a better understanding of their choice to accept or not accept the outcome. Each statement variable was analyzed separately for each municipality. Value scales 4 & 5 were collapsed to one (1) scale of 'favorable.' The number of times each statement was chosen as favorable was then counted and totaled to discover the most favored values. Since the focus is on a strong favored response because it indicates the degree of importance of the area of interest to the individual, only these two scales were valuable in collating the number of times this statement was chosen as being important and a

percentage obtained to discover its relative importance to the other statements.

5.4. Results

The Cronbach Reliability test output for the independent variable ‘Observed Changes’ and the outcome variable ‘Public Satisfaction’ is given in Table 5- I. Both results show that respondents were consistent and reliable in their responses to the item statements. Therefore they were considered highly acceptable for measuring both variables. The independent variable test score is .953 and the dependent variable is .906.

Table 5 -1
Cronbach alpha for ‘observed changes’ and ‘public acceptance’ variables

Variable	Cronbach alpha value	No. of persons	No. of items	Scale mean	Variance	Std. deviation
Observed change	0.95	13	7	28.77	50.52	7.1
Public acceptance	.906	129	5	15.22	31.93	5.65

Figure 5-1 shows the response to the question of any observed negative changes because of the redevelopment. Clifton respondents (58%) said they observed negative changes in comparison to 20% from Hawthorne and 30% from Paterson. Conversely, Hawthorne and Paterson respondents were more on the positive side with 80% and 70% citing no negative changes. Approximately 42% of Clifton respondents cited no negative changes.

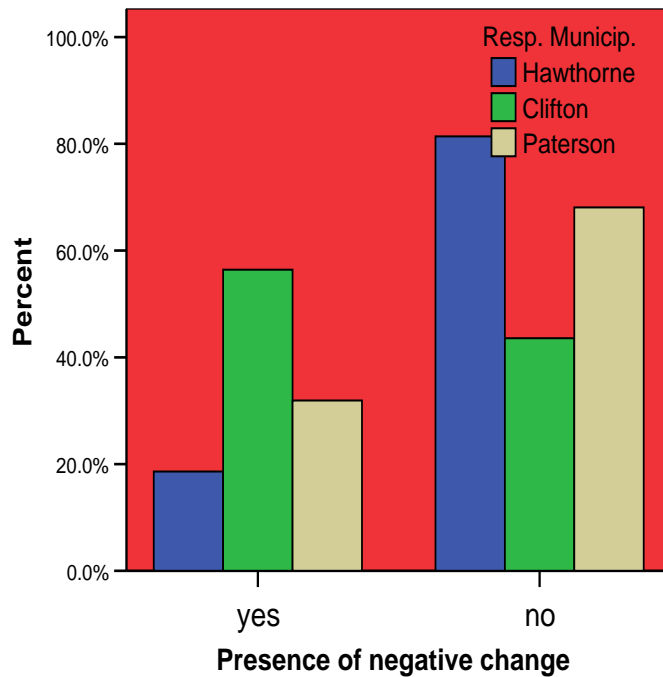


Figure 5 - 1 Observation of negative changes

Table 5-2 reveals that when approval of the number of ‘observed changes’ was analyzed by individual municipalities, the majority of respondents reported responses to changes in their neighborhoods in the 2 and over’ favorable changes category. Paterson compared to the others, have 31 or 66.0 % of 47 respondents in the 2 & over category. Hawthorne has 28 or 65.1% of 43 respondents in this category, and, Clifton, 21 or 66% of 39 respondents. On the other side, Clifton has the majority of respondents, 14 or 35.9%. in the ‘0-1’ category of positive changes. Looking at Figure 5 - 1 and Clifton responses to the presence of negative changes after redevelopment there is an apparent dilemma here, but, the observation of negative change/s does not mean that people in this category

cannot appreciate and observe other resulting positive influences. This may imply a measure of some objective assessment on their part.

Table 5-2
Number of favorable observed changes by number of respondents

Municipality	No. of 'observed changes' category	No. of respondents	%
Hawthorne	0-1	8	18.6
	2 and over	28	65.1
	Uncertain	7	16.3
Total		43	100
Clifton	0-1	14	35.9
	2 and over	21	53.8
	Uncertain	4	10.3
Total		39	100
Paterson	0-1	7	14.9
	2 and over	31	66
	Uncertain	9	19.1
Total		47	100

Table 5-3 shows the result of the intra-correlation matrix of the final total item scale of 'Observed Changes' in the neighborhoods in the municipalities. The highest correlation was found between observations of improved public health conditions and more recreational facilities ($r^2 = .941$). The next highest was between more recreational facilities with cleaner environment, (aesthetics) ($r^2 = .883$). The third highest correlation was between observations of new redeveloped project with additional recreational facilities ($r^2 = .878$).

Table 5-3**Inter Correlation Matrix of Perception of ‘Observed Changes’ Item Scale in the Municipalities**

Statements	CIEnv	ADReFac	RedCr	RedPr	ImpSafCo	ImpPubHth	ImpStrc.
1. Observe cleaner environment.	1.000	.833	.794	.794	.601	.748	.783
2. Observe more recreational facilities.	.833	1.000	.811	.878	.544	.941	.867
3. Observe reduced crime.	.794	.811	1.000	.750	.615	.716	.668
4. Observe redevelopment project.	.794	.878	.750	1.000	.615	.781	.869
5. Observe improved safety conditions.	.601	.544	.615	.615	1.000	.524	.777
6. Observe improved health conditions.	.748	.941	.716	.781	.524	1.000	.835
7. Observe improved streetscape.	.783	.867	.668	.869	.777	.835	1.000

For the outcome variable ‘public acceptance’, the factor analysis results are given in Table 5-4. The inter-correlation matrix in Table 5-5 conducted during the Cronbach Reliability test shows the most highly correlated item statements are “redevelopment has created a more livable community” and “redevelopment has improved quality of life” ($r^2 = .775$) indicating that people attributed increased livability with a better quality of life. There were good to high positive correlation among all items with the lowest value being between “redevelopment has improved social life” and “redevelopment agreed with citizens’ values.” ($r^2 = .497$). The scale shows unidimensionality and that item statement one (1) is responsible for most of the variance (72.6%). The factor analysis validates the

unidimensionality of the scale through its high loadings.

Table 5-4

Factor analysis for public acceptance

Item statements	Eigenvalues	% of variance	Communality	Factor loadings
1.Redevlopment activities have helped the community.	3.63	72.628	.758	.871
2.Redevlopment helped to create a more livable community and a sense of place	.577	11.537	.799	.894
3. Redevlopment change/s have agreed with citizens' values.	.335	6.696	.682	.826
4. Redevlopment change/s has improved social life.	.243	4.863	.605	.778
5. Redevlopment has improved my and my family's quality of life.	.214	4.276	.788	.888

N =129 NB. Only one component was extracted with Principal Component Analysis. The solution could not be rotated. In this case this is desirable to ensure the scale measures a single dimension.

Table 5-5**Reliability inter item correlation matrix for public acceptance**

Item statements	<u>Redhelpcomm</u>	<u>Redcrliv</u>	<u>Redqualife</u>	<u>Redcitvalue</u>	<u>Redimpsoclife</u>
Redevelopment 1 has helped community		.722	.699	.735	.541
Redevelopment .722 change/s create more livable community and sense of place	1		.775	.663	.629
Redevelopment 0.7 change/s has improved my and my family's quality of life		.775	1	.611	.684
Redevelopment .735 change/s agreed with citizens' values		.663	.611	1	.497
Redevelopment 0.54 change/s has improved social life		.629	.684	.497	1.000

N= 129

Table 5-6 concerns the cross tabulation relationship between the total measured scale of the outcome variable ‘public acceptance/satisfaction’ and the independent variable ‘observed changes’. Forty three (43) persons (53.8%) out of 80 in the majority category ‘2 and over changes’ had a positive outlook of the redevelopment impact whereas 37 (46.3%) had a negative view of the overall initiative. In the 0-1 category, six (6 or 20.7%) of 29 had a positive perspective, and 23 (79.3%) had a poor/uncertain perspective. The Chi-square value is 15.970 df 2, $p < .001$. The minimum expected count is 8.06. Cramer’s $V = .352$, $p < .001$. This is a very strong relationship. Respondents overall had a

more uncertain to poor view regarding neighborhood changes and their social impacts. (40.3% compared to 59.7%) The results also demonstrate that when people see positive significant neighborhood changes resulting from these projects they are more accepting of the changes. As positive changes increase, acceptance of the redevelopment projects increase.

Table 5-6**Favorable change/s observed by Public acceptance**

Favorable change Category		Public acceptance Category		Total
		Positive perspective	Uncertain/Poor Perspective	
0-1	Count	6	23	29
	Expected Count	11.7	17.3	29
	% within FavChangeCat.	20.7	79.3	100
	% within PublicAccpCat.	11.5	29.9	22.5
2 and over	Count	43	37	80
	Expected Count	32.2	47.8	80
	% within FavChangeCat.	53.8	46.3	100
	% within PublicAccpCat.	82.7	48.1	62
Uncertain	Count	3	17	20
	Expected Count	8.1	11.9	20.0
	% within FavChangeCat.	15.0	85.0	100
	% within PublicAccpCat.	5.8	22.1	15.5
Total	Count	52	77	129
	Expected Count	52.0	77.0	129.0
	% within FavChangeCat.	40.3	59.7	100
	% within PublicAccpCat.	100	100	100

In response to the item statement, “redevelopment has helped my section of the

community where I live” (RDH), Table 5-7 shows the respondents’ reaction to the redevelopment and its impact. Regarding Paterson and Hawthorne, on an average, respondents tended towards a more positive view with a mean of 3.51 and 3.53 respectively. Clifton respondents tended to be more uncertain of its effect. Overall, concerning the total scale ‘Public Acceptance’ (PubA), Clifton tended more towards the negative, with Paterson and Hawthorne both having a more neutral attitude towards the outcome of its effect.(See Table 5-7 below). At face value, Paterson and Hawthorne respondents believe that the redevelopment had been beneficial. When they were required to delve into pertinent issues that would clarify their stance, then their overall ratings became more uncertain. The Kruskal Wallis H Test (H) for detecting difference in means shows that when applied to the municipalities using the two variables RDH, and scale PubA, there is a significant difference between the municipalities. The results from the analysis showed the suburban town of Clifton’s mean differed from Paterson’s and Hawthorne’s. This is where the difference lay. For RDH, H results are $H = 7.62$, $df\ 2$, $p = .022$. It is significant at the .05 significance level. For PubA, results are: Chi square 7.317 , $df\ 2$, $p = .026$. Overall public acceptance for Clifton tended to be lower where observed positive changes are less whereas in Paterson and Hawthorne, public acceptance is greater because perceived observed positive changes are greater.

Table 5-7
Mean Values for RDH and PubA by Municipalities

Municipality	No. of repondents.	RDH	STDV	PubA	STDV
Paterson	47	3.51	1.53	3.2	1.32
Clifton	39	2.9	1.17	2.68	0.92
Hawthorne	43	3.53	1.32	3.17	1.01
Total	129				

The item statement assessing livability of the neighborhoods shows in Figure 5-2 that the majority of Paterson respondents fell at both ends of the scale. Paterson respondents felt more strongly about livability at each extreme ends of the scale with approximately 32 % strongly agreeing and 22% in strong disagreement. Overall, approximately 53% were on the ‘uncertain’ to ‘disagree’ end and 47% attributed increased ‘livability’ to redevelopment impact. For Clifton, approximately 40 % were in disagreement, whereas 22% were uncertain, 36% were in agreement with 2% strongly agreeing. For Hawthorne, approximately 28% were disagreement, 21% uncertain and 42% in agreement and 9% strongly agreeing.

When asked if the redevelopment agreed with their values, the responses corresponded somewhat with those of livability. Sixty four percent (64%) of Clifton respondents did not agree that redevelopment agreed with their values. Paterson respondents stated that redevelopment was consistent with their values, (now 56%), and Hawthorne, 53% were in agreement and 47% in disagreement.

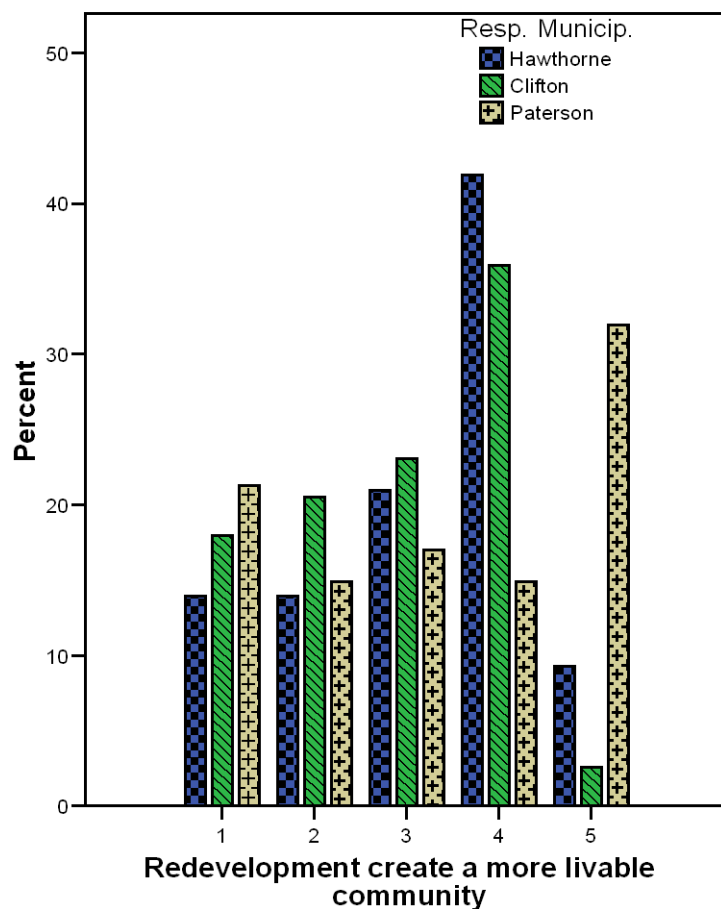


Figure 5 -2 Perception of livability after redevelopment

5.4.1. Important reasons to approve of redevelopment in the neighborhoods

On the question of the important reasons why the respondents reportedly would welcome redevelopment in their neighborhoods, Table 5-8 shows the results.

The most highly favored reason to approve of redevelopment projects in the municipalities is environmental aesthetics. Approximately seventy nine percent (78.8%) of respondents in Paterson ranked it favorably; Hawthorne, 79.1% and Clifton, 66.6%. Collectively, public health and safety was the next highly favored. Individually, Paterson sees public health and safety as most important, (38 persons or 80.9%) and secondly, both

environmental aesthetics and social relations take on equal importance (78.8%).

Hawthorne also gave public health and safety the highest approval rating, (37 persons or 85%) with 36 (83.8%) ranking job provision second. Clifton gave environmental aesthetics the highest approval, (26 persons or 66.6%) and property value increase second in importance. Regarding participation in the redevelopment process, this is more important to both Clifton and Hawthorne, being third in importance for Clifton and fourth for Hawthorne. For Paterson, it took fifth place along with historical values.

Table 5-8

Important Identified Reasons to Approve of Redevelopment Projects

Municipality	Reasons	Favor ranking	No. of persons	%
Paterson	Public health & safety	1	38	80.9
	Environmental Aesthetics	2	37	78.8
	Social relations	2	37	78.8
	Job provision	3	34	72.3
	Property value increase	4	33	70.2
	Crime reduction	4	33	70.2
	Participate in redevelopment	5	32	68.1
	Historical values	5	32	68.1
Hawthorne	Public health & safety	1	37	85.0
	Job provision	2	36	83.8
	Environmental Aesthetics	3	34	79.1
	Participation in redevelopment	4	29	77.5
	Property value increase	5	34	76.8
	Improve social relations	6	31	72.4
	Crime reduction	6	31	72.4
	Historical values	7	28	65.2
Clifton	Environmental Aesthetics	1	26	66.6
	Property value increase	2	25	64.1
	Participation in redevelopment	3	24	61.6
	Job provision	4	23	58.9
	Public health & safety	5	22	56.4
	Crime reduction	6	21	53.8

Table 5-8 contd

Municipality	Reasons	Favor ranking	No. of persons	%
	Historical values	7	19	51.3
	Improve social relations	7	19	51.3

5.4.2. Observed land use changes using Google Earth

In an attempt to complement respondents' answers about observed changes in the physical landscape that might be attributed to the redevelopment projects, Google Earth satellite images were used. The focus was on any changes in the vicinity of the projects. Therefore images prior to and after the redevelopment had to be observed. Verification of any noted changes was sought from a public official in Clifton and a municipal staff member in Hawthorne to ascertain if the change could have been attributed to the redevelopment project.

Hawthorne (150 Wagaraw Rd.)

From March 29, 1995 to January 1, 2002, noticeable land changes occurred (Appendix I). The first sign of change was on the January 1, 2002 images showing the demolition of the former BASF buildings were replaced by an empty lot. To the south east (S.E.) of the property there was an adjoining lot with few buildings. This is the former Colgon/MERCK site. The lot is approximately 0.12 miles to the S.E. The next 2007 image showed the construction of the Kohler company buildings. The S.E. lot is now bereft of buildings. In 2007, there were signs of grass on the empty lot. This site is now slated for redevelopment. Subsequently in the 2010 slide, there were no significant

changes from 2007. Overall, there were signs of landscaping. More trees were planted around the site creating a buffering effect. To the S.E of the previously mentioned empty lot, trees are planted and to the south of Kohler and on which was now open space leading to the riparian area of the river. Obviously, tree plantings etc were done to make the built environment aesthetically appealing, somewhat private and with the added benefits of being a carbon sink. The open space to the south also complements Council records about the stipulation that there be open space in this area. Another observation was on the bordering lot to the southwest of Kohler Distributing. The area had an updated appearance and appeared to have undergone changes around the same time as Kohler Distributing. This is a small shopping plaza. However, in speaking to a municipal employee, she said it is uncertain if any changes in that shopping mall area were spurred by the advent of Kohler. She however mentioned a craft shop in nearby Thomas Rd. that was constructed around the same time ('Mary', personal communication, April 2, 2012.)

Paterson (505 Ellison Pl.)

On March 29, 1995, the former Whitney Rand factory is on the site (Appendix II). About 0.10 miles to the S.E. of the site there were buildings on a lot near the intersection of Madison St. and Ellison Pl. There was also a lot to the west across the street with buildings on it. From this year onwards, no recorded changes were observed until April 14, 2003. On this date, Walgreen and Autozone both reside on the former factory site but on the lot to the S.E. the old building has been removed. From this time up to 2009, the images recorded no changes. On June 18, 2010, changes were observed. The empty lot to the S.E. was now open space covered with green grass which is in front of some homes.

Obviously, there were some activities to make this surrounding area of the neighborhood more attractive which may have been planned with the redevelopment activity or it may have provided the incentive. Removal of these old buildings may help to increase the livability of the area by minimizing the look of blight and possibly contribute to the idea of wellness because in addition to possibly harboring disease vectors, example, rodents, they may harbor illicit activity. These old buildings become more problematic when they are abandoned. Illicit activity in abandoned old neighborhood buildings was a noted concern of the public in the Herald News research and in Council records. Letang (2006, unpublished) also found an association between violent crime and abandoned buildings in Paterson in respective Ward areas including the one in which the former Whitney Rand is located.

Clifton (697 U.S. Route 46)

On March 29, 1995, the slides showed Shulton factory with large buildings present onsite (Appendix III). The July 26, 2006, image showed the lot covered with the housing complex buildings on the lot. There was evidence of open space and new recreational grounds for the housing complex to the east. There was a significant amount of trees on the property. The next and last recorded change in 2010 is that of the sloped open lot to the east from the apparent edge of the housing recreational grounds - about 0.02 miles away, which was devoid of a significant amount of vegetation and showed signs of being in the preparatory stage for construction. This is the site of a proposed new redevelopment slated for senior housing, open space, and recreation. It formerly housed the Athenia Steel Mills.

5.4.3. Community improvements information possibly influenced by the redevelopment as derived from Council Minutes and interview with public officials in the municipalities and a company representative.

Through examination of the Council minutes and interviews with public officials, and a Kohler company representative, an attempt was made to have some validation of the respondents' observation of community changes. The implications of these changes through likely benefits that can be accrued are stated. For example, benefits accrue from having parks and open spaces which encourage engagement in more physical activity, thus improving health. Moreover, they may also have created opportunities for building social relationships. This information was not forthcoming for Paterson. The following information in consecutive point form that was derived from the cities' Councils' minutes and pertaining to Hawthorne and Clifton is listed below.

Hawthorne

1. Kohler granted the municipality an easement to gain access to the Passaic River on the 7 acres of remediated portion of the property. (Planning Board Minutes, August 20, 2002:7) In this case pedestrians and bikers will both gain access. This has implication for recreational & public health benefits and building social relations.
2. The Caballeros a well-known Hawthorne musical band, was given the privilege to continue to have its musical practice on the 3 acres of the site granted to the municipality. Here the company was demonstrating sensitivity to cultural values and expression. This serve to benefit social relations between the company and the

residents, and also amongst the residents as it is an avenue for social gathering. It has implications for the sense of place and community attachment as it increases peoples' civic pride in belonging to Hawthorne and to revel in the accomplishments of their very own.

3. Kohler "donated" land for recreational fields including baseball, softball and a small soccer fields. The recreational field lease is for 99 years. A monetary donation was made towards infrastructural development. Here recreational & public health benefits and building social relations are enhanced. (Council Minutes, March 5, 2003: 9)
4. The municipality was granted parking facilities on the ball fields as well as the use of the owners' private road to gain access to the fields (Council Minutes, June 5, 2003: 3). The granting and improvement of this infrastructure will ensure access to recreation from which public health benefits can result. Additionally, it can enhance and maintain corporate social relations
5. There has been improvement in road infrastructure, that is, turning lanes and signalization on the corner of Wagaraw Road and Lincoln Ave. Kohler supported this venture through provision of its traffic report study. The signal is in both Passaic and Bergen County. However, widening of the road is needed on Passaic County side. (Council Minutes, November 6, 2002). This improvement in signage will facilitate safety.

6. Sidewalks and curbs were replaced on Wagaraw Rd after Kohler's construction. This will enhance aesthetics and safety. It also facilitates an improvement in streetscapes.
7. To preserve the wetlands, open space and wetlands delineation criteria were given to the company. (Council Minutes, May 3, 2000: 14). This was recommended by the Future of Hawthorne Committee, a citizen committee. An Ordinance was passed accordingly. This will help in enhancing and maintaining ecosystem integrity and help people to develop more appreciation of nature and its benefits.

Clifton

1. An entry signage was placed on the setback on the Colfax Ave. entry, which is the main entry to the housing complex. Whilst this is for commercial purposes and convenience, it has improved the streetscape.
2. These three specifications were implemented to improve traffic conditions. (a) Road widening on Colfax Ave. (b). Construction of a left hand turn lane from Colfax Ave to gain access to the property. (c). Implementation of measures to facilitate easy flow of traffic at the intersection of Colfax Ave. and Broad St. including the regulation of traffic light at the intersection. This has implications for safety.
3. Trees were planted on top of the berm along Colfax Ave. This has aesthetics implications and can help (even in a small way) to reduce greenhouse gases.
4. New Jersey Transit railway upgraded and expanded its services, including parking, to accommodate the excess commuters. The newspaper, "The Rec-

ord” (September, 17, 1997; Wednesday) said that this was an expected activity owing to the redevelopment. While there is no clear evidence directly relating this to the redevelopment, this was an incentive to do so in order to accommodate this excess migratory population into nearby metropolitan New York and elsewhere. The Mayor said the condominium’s residents were observed walking to the nearby train station to use the services. This has implications for environmental & public health benefits because of the provision of mass transportation.

5. In keeping with a Clifton Zoning Ordinance, the developer has to contribute financially to the Clifton’s affordable Housing Trust Fund. Whilst respondents may not have observed the tangible benefits to be derived, especially if they are already homeowners, this will benefit the municipality generally.

5.5. Discussion

Careful planning and impact studies including Social Impact Assessment (SIA) are very important to avoid or minimize negative impacts. These are critical to achieve sustainable initiatives. Whereas the expectation is that a redeveloped site will be beneficial, perception of negative impacts on the neighborhood can lead to locally unwanted land use (LULU) despite it increasing the municipal tax base (Cressers et al in Coenen et al, Eds. 1998). Herein lays a problem. Municipal authorities tend to view success of these redevelopments from a different perspective than citizens. Though local authorities may have some similarities of interests and values with those of the residents, especially if

they are citizens of the same locale they serve, the ultimate reality is that an improved living environment is seen through the lens of building a thriving economic base for sustenance of the city. (As discovered in “the Herald” newspaper report research, (Letang, 4). Therefore, the redevelopment policy initiative will be evaluated based on its economic viability measured in terms of increased ratable if it increases ratable and increases jobs. The ability to leverage private investment for the property, length of time from inception to project completion, are all critical variables to the success of the initiative from the municipality’s economic perspective. A good quality living environment is a beneficial derivative for local municipal officials whereas for the neighborhood citizens, this is paramount. Ho (2007) found financial outcome indicators from policy issues were of less importance to citizens than those assessing quality of life. Because they are the ones who have to live with the results of the initiative, this has prompted citizens to desire and demand better access to the decision making processes in the municipalities because the policy decisions taken and implemented by authorities affect their well-being. This was seen as the most important reason for 43% of the municipals’ respondents to desire access to the decision making process for brownfields redevelopment this research results found.

Despite the great emphasis on economic benefits, some questioned the projects’ initiatives ability to provide jobs to the local population which means the income generating capacity at the local level raises some concerns. Paterson’s local daily newspaper The Herald, informed that the Passaic County Building Trades Council comprising of 15 unions organized a city protest against a developer of the downtown

City Center redevelopment. They protested that Paterson unionized locals were being deprived of jobs because the developer hired outsiders (Herald News, July 27, 2008, Sunday pB01). Some Paterson respondents anecdotal report, (6.4%) concede to this saying that redevelopment does not particularly benefit their neighborhood because the locals do not get the project related jobs. The protest was at odds with an earlier statement made by another developer that he hires local labor, (12 men) and endorsed by a Councilman (Herald News, July 20, 2008, Sunday p B01). The unions and citizens were also protesting against the developer about payment of low wages (\$ 100 daily at \$12.00 per hour regardless of whether or not it was an 8 hour or 10 hour day), lack of health care benefits and labor practices that were unfair. Interestingly, elected officials such as a Freeholder was also part of the organized protest the paper reported. Conversely, the Passaic County Economic Development Authority Director reported that Paterson locals received redevelopment related jobs. For example, Walgreens employed 25 locals (Hoffman, D. Personal communication, April 21, 2010). Obviously, there is lack of a proper avenue for feedback to the community regarding these statistics. ‘Adam’ from Clifton expressed uncertainty too about local contractors getting the jobs. In fact, a major goal of brownfields redevelopment initiative is to create jobs for locals under the Community Benefits Agreement. Developers are given incentives like subsidies to do so. (Depass, 2006; Herald News, July 20, 2008, Sunday p B01). However, because this is not a binding agreement, it is based on the goodwill of the developer as the Paterson respondents found to their chagrin. Hawthorne Council had to “fight” to secure jobs at Kohler for unionized locals. Based on Council records, this was known to the citizens and

may have contributed to some respondents positive perception that “redevelopment has helped the community” in terms of prospective improvement. Information on local job acquisition was not available for Clifton. Job creation is however unanimously important to respondents in all municipalities with it being more so firstly in Hawthorne, secondly, in Paterson. First, Hawthorne respondents’ priority choice of job creation may be a reflection of the strong desire to maintain the economic base to which they are accustomed. It is the most affluent of the three municipalities with a medium household income of \$78,478.00 (United States Census Bureau, 2013). Secondly, the job negotiations between the municipality and Kohler would have highly sensitized them to the possibility of securing this economic incentive from private entities willing to establish businesses in their town. Thirdly, it may stem from the desire to leave a financial legacy for the next generation. Inter generational equity values are paramount to them because 31 (76%) of persons desired access to the town’s decision-making process out of concern for the next generation. Inter generational equity would be important to them because the town’s character is also built upon a rich family legacy of second and third generations. This cultural expectation and values of economic stability has implications for sustainable redevelopment policy initiatives that should be and can be realized through brownfields redevelopment.

In determining what was valued (from a list of supplied options to citizens for them to be favorable of redevelopment initiatives in their neighborhood), a Clifton respondent said *“Jobs should not be provided at the expense of the community if it makes the community less livable.”* This point of view reinforces Burdge’s & Vanclay’s (1996:

75) assertion among others, that evaluation of changes in a community from various individuals' perception contains elements of subjectivity. They said “..... *the same consequence of development is both a positive impact and a negative impact depending on the perspective of individuals.*” They offered what may be an insight into the reaction of Clifton's response to the redevelopment. The Record (October 7, 1998; Wednesday p A01) newspaper reported a positive response to the proposed site reuse (now the housing redevelopment project researched). Nevertheless, the survey results yielded a mainly negative response. Whilst the respondents had not experienced the impact of change when the newspaper report was written, the fact is that individuals can change their minds over time based on circumstances. The degree of change and the number of changes experienced in a neighborhood and the rapidity of changes can cause members of a community to change their perceptions over time. Another issue is how much impact the affected community is willing to accept and bear (Burdge & Vanclay, 1996). Their statement supports the research results that respondents had a more positive perspective of the redevelopments when they reportedly experienced significantly more positive changes in their neighborhood. This further validates the research result that the less problems people perceive themselves to have, and, the more positive rating each assessed individual factor receives in total, will improve quality rating. This would explain why Clifton respondents were more unaccepting of the actual and perceived changes resulting from the redevelopment. Furthermore, the problems of heavy traffic and areas that do not facilitate parking –have both been identified in a study that significantly decreased perception of neighborhood quality Greenberg, 1998). This is a disincentive for 18% of

Clifton survey respondents in this research and 14 % of Hawthorne's respondents, having in their opinion, implications for compromising neighborhood integrity and children's safety. In addition, three persons (3) or 8% of Clifton respondents mentioned problem with provision of parking infrastructure. Shaw et al (2008), also reported increased traffic and an increase in school population are undesirable changes in brownfields redevelopment, a fact supported by affected respondents' anecdotes. For Clifton, most of the displeasure incurred by the redevelopment stemmed from this combination as well as concerns of increased adult and particularly children population. However, the resiliency of a community to adapt to the impact of change must be considered.

In view of the desired and more favored outcomes from the respondents' perspectives, local public officials and developers should be cognizant that public health and safety is highly valued by the public as was realized by it being very important to both Hawthorne and Paterson respondents. This provides focus on one of brownfields redevelopment national priority goals. It suggests that citizens values are in tandem with this major goal and expect economic revitalization of their neighborhoods will minimize, control, or eliminate those factors (including social factors) that are deleterious to their general well being. Brownfields can impact public health through safety, social, economic and environmental impacts (The U.S. Environmental Protection Agency USEPA, 2006). Therefore, whereas before remediation, a site's overall impact may be negative, addressing its redevelopment from an integrated perspective should yield overall, positive individual and community health. Public health has received top importance for Paterson, which is the first highly industrialized U.S. city, because,

respondents have learnt through their lived daily experience of the sight and odor of smoke plumes, and exposure to possible other health nuisances etc. from the industries in their neighborhood and city that these can trigger health effects.

Regarding health status, in September 2004, 10,918 residents of the County were diagnosed with pediatric asthma, 28,088 with adult asthma, 16,093 with chronic bronchitis, and 5,503 with emphysema (Passaic County Brownfields Commission, 2004). These figures imply a heavy burden of disease and implications for environmental justice. Paterson being historically more industrialized than the other two, and, combined with a significantly challenging environment due to higher poverty rate, may account for a significant portion of this statistics. The New Jersey Department of Environmental Protection's (NJDEP, 2010) had this to say about an air monitoring program, "*Out of 132 air pollutants measured during the UCAMPP study, levels of p-dichlorobenzene were significantly elevated at one of the monitoring locations (176 Broadway) in Paterson for a two month period compared to the other monitoring locations in Paterson and around the state*". They further added that for seven other chemicals including benzene and carbon tetra –chloride at all three monitoring stations in Paterson and other monitoring stations in the state, there were elevated levels above the state's standard. For Hawthorne residents, choosing public health as a priority may be based on having experienced living with factories nearby (example the former BASF and Colgon factories). According to some of the Hawthorne respondents' anecdotes, relief from odor and particulate fallouts etc. results in conditions more favorable to better public health. This response necessitates an integrated holistic approach to attaining acceptable public health since it

incorporates not only the physical state but the mental and social state too, and they have direct influence on each other.

The high values that Paterson and Hawthorne set on public health and safety, contrasts with what was discovered in The Herald News research report of Paterson brownfields redevelopment. The public health theme was minimally framed in the brownfields discourse by the major sources who contributed to the reports - public officials, private developers and journalists suggesting a divergence in priority values between local public officials and the citizens. This may also be because public officials and developers expect that the remediation process will minimize public health risk, so it does not warrant discussion, unless there is a problem. The public health and environmental impacts of brownfields have been much discussed including cleanup standards and long term monitoring of redeveloped sites. Particularly, the negative socio-economic, environmental and public health impacts on vulnerable people living in the sites' vicinity, resulting from expeditious remediation processes have been a priority concern of brownfields remediation policies (Litt et al; 2001). Especially, there are ongoing concerns about health impacts on communities of color, low income and tribal groups (Lee, 2002). Concerning long term monitoring of remediated sites and public health, this was of concern in Hawthorne. Although the Shulton site in Clifton had significant contaminants and underwent remediation, the Mayor said no one voiced this concern (Anzaldi, J. personal communication on May 5, 2011 Thursday). This may explain the low priority rating the public health issue had for the Clifton respondents. Citizens may have been unaware that the site had contaminants, or its significance may

have been made low key by public officials and the developers who would rather not have “unnecessary”, undesired public obstruction.

Environmental aesthetics received overall priority as an important value because an unattractive environment, especially if marred by derelict buildings and vehicles, overgrown lots etc, detracts from the beauty of the surroundings giving the place an air of neglect. This conveys to residents and outsiders, an impression of an impoverished place which can be distressing and affect civic pride and sense of identity. The perception of attachment to the neighborhood is important, and heightened by perceived neighborhood quality Bonaiuto et al, (1999); Uzzel et al (2002) endorsed. Aesthetics, particularly buildings, social relationships, quietness in the neighborhood, green spaces, opportunities for cultural expression are particularly important in giving one a sense of attachment (Bonaiuto et al 1999:344). Developers should be cognizant of the importance of factors that foster place attachment and design attractive buildings that conform to the neighborhood or city’s character. Respondents validated this finding through the Principal Component Analysis (PCA) results that showed aesthetics and green spaces such as parks (recreational) accounted for the majority of variances observed. These examples of anecdotal reports showed that for respondents, aesthetics is important. A Hawthorne respondent said this about Kohler. “*The streetscape at the plant site has improved*”. A Clifton respondent also said this about the former occupant of the Clifton site. “*Shulton was a beautiful factory and beautified the place*”. Possibly, the former contrasts sharply to the architectural infrastructural features for the Housing Complex (dense look, gated appearance) that may give the appearance of a deterrence to social relations and sense of

neighborhood attachment. Uzzell et al, (2002) affirmed that aesthetics is an important criterion by which neighborhood improved quality of life is assessed. This is also evident by the high ratings given by experts in the SBR tool aforementioned. It was given a weight of 8.22 out of 10 (Wedding & Brown, 2007).

Another expected benefit and success indicator from brownfields redevelopment is, increase in property values realized in properties within a ¾-mile radius of the redeveloped site (Shaw et al 2008, in citing Northeast Midwest Institute, 2008). This is a socio-economic indicator. Values can see a 5-15% increase and up to 100% rise based on their benefits derived by proximity to parks. This research found that land values of the residential properties within the study areas in Clifton and Hawthorne, were relatively constant or on a downward trend. Apparently, this trend was more dictated by market forces reflecting the present economic downward trend in the U.S. and depends on the time when the general property assessment exercise was last conducted in the municipality. Respondents gave mixed opinions of increased property values. Those not favoring the increase stated the possibility of an accompanying rise in property taxes.

The importance Paterson respondents accorded social relations was in sharp contrast to the other municipalities. This concern could be understood because of the social challenges, which they have faced for years. The fourth and fifth wards have been especially riddled by crime, which has eroded the social fabric of the society. Council minutes showed this was a repeated concern of the citizens including Council members. They consistently spoke of a better quality of life and this is a high priority goal for revitalization projects. Other reasons for the importance the respondents ascribed to

social relations may be the feeling of having their sense of identity bounded up in the neighborhood which causes them to have an affective bond with the neighborhood. Also, there is the establishment of their roots within the psychological and physical community (rootedness) among people of shared values and colorful challenging history with whom they can identify (Brotherhood & Sisterhood). This may have strong cultural underpinnings. This suggests that both internal and external social processes may be mediating their feeling of attachment to their neighborhood (Manzo & Perkins, 2006, citing Riger & Lawrakas, 1981). This however does not imply that place attachment and social relations are of any less significance to Hawthorne and Clifton residents. It was given less importance than in Paterson possibly because compared to Paterson their societies had not experienced the degree of social upheaval experienced by Paterson. In this analysis, what was missing is an understanding of the importance of the relationship between peoples' self identification, core values, preferences etc. associated with significant places in the physical environment. Planners in community development, including brownfields redevelopment, should seek to facilitate these 'essentials' during the planning and implementation process. This is validated in the respondents' anecdotes in Hawthorne when they stated the importance of community integrity, which has implications for sense of place and attachment, as critical to a positive perception of the redevelopment. They were determined to preserve this treasure even to the extent of actually having a demonstration against a possible site reuse option for the adjoining Merck/Colgon site that is slated for redevelopment. Yet, this important dimension of place attachment is often overlooked in community redevelopment and revitalization

exercises despite having outcome goals of leveraging financial and time resources, social cohesion and control embodied in place attachment. Place attachment means people may have a greater reason to invest in social relations, time and money, and develop a ‘watch dog mentality’ in their neighborhood (Manzo & Perkins, 2006). Hawthorne citizens are a typical example of place attachment helping to cultivate a strong spirit of volunteerism and neighborly behavior in the neighborhood. Community changes as an outcome of redevelopment will be expected to preserve and possibly enhance this value.

Finally, Shaw et al (2008:20) indicated the concerns of municipal officials that brownfields’ redevelopment does not incur political risks. Benefits to be derived from redevelopment initiatives can minimize this political risk. One such benefit identified was the competitive advantage derived from the initiative. States, including New Jersey, compete for investment and a potentially highly productive population. What is desired is a population with characteristics such as professionals that will reside in the municipality and contribute significantly to the municipality’s economic base. Whilst the municipality may view this as a benefit, some citizens do not. Creating a competitive advantage in this case is subject to conflicts. On one side, it is advantageous and on the flip side of the coin, it is not. Differing perspectives and goals between municipal officials and citizens come into focus. Officials see this influx of investment and population as a way of creating more affluence, close budgetary gaps (Herald News, October 15, 2006 Sunday, p A01; October 23, 2006 Monday p B07) to improve quality of life. Citizens do not particularly favor such population changes as promoting a good quality of life in this case. They view this as an externality to the community’s infrastructure to absorb the

additional population. According to ‘Peter’ of Clifton in his evaluation of the new residential development, *“The population increase will overburden the existing infrastructure like sewers and they are old”*. This sentiment is not unique to Clifton, but shared nationwide, as can be realized from the literature and media reports. The challenge is getting municipal officials and citizens to come to an awareness of each other’s goals and values and develop a mutual understanding and to see how respective goals can converge to obtain the overarching goal of community development and thus citizens’ development. This can be achieved through increased sustainable interactive dialogue and actions to be derived from increased access to decision making processes, a more transparent process in which citizens can have more or better opportunities created to improve their understanding of how and why certain policy decisions are made, that is, the rationale of the decisions. Citizens must be able to either question, support or oppose decisions that have the ability to affect significantly, the social fabric of their lives, their community, and that of future generations. This is the essence of a participatory democratic process. Not all public officials are averse to public participation in policy decisions. Greenberg (2000:29) said, *“Many tax assessors believe that residents and local businesses want to be involved in deciding how to use the brownfield sites.”* This attitude is an important launching pad for the implementation of a participatory democratic process that is, discovering and harnessing a quota of flexible public officials, willing and determined to transcend barriers, including institutional ones to incorporate public sentiments in public decision-making. This can help to reduce political risks and increase the possibility of public acceptance of government policies effects.

5.6 Conclusion

There are powerful social factors influencing perceived and actual neighborhood changes and benefits resulting from brownfield redevelopment projects that drive public acceptance or dissatisfaction of the projects in their neighborhoods. Attributing factors are place identification and attachment with ones neighborhood, among others, that can be jeopardized, especially if individuals believe the change is fast paced, differs from the expected, or significantly alters the neighborhood's character. One of the ways these significant contributing factors can be better realized is through conducting more thorough social impact assessment studies of potential project impacts in order to minimize the impacts. In this regard, mainstream public involvement at all pertinent levels of the project stages is a critical avenue through which better insight can be gained about possible social , economic, health and environmental impacts of the projects. This offers scope for meaningful public participation. A SIA should be integral with the Environmental Impact Assessment (EIA) when it is being conducted instead of merely being a part because social impacts cannot be divorced from environmental impacts. In this sense, SIA sees a place for lay concepts to inform the experts doing the purely technical EIA and ultimately public policy. It can therefore assist as a policy guide as to the most feasible ways to mitigate potential impacts (Burdge & Vanclay, 1996).

People have high expectations from these brownfield redevelopment projects and expect that they will positively affect theirs and their neighborhood quality of life. This is said because they became more responsive and supportive when more than one observed positive changes in the built environmental were reported. Whereas observed changes in

the built environment that were significantly more positive were perceived to be generally, more conducive to a better quality of environmental and social life, including health benefits, the opposite was realized for more perceived negative changes. Brownsfield redevelopment project will receive ratings that are more positive if the end use enhances what citizens' treasure, that is, community development initiatives that will complement their values and lifestyles and not detract from it. However, these expectations can realistically be better realized from area wide initiatives like Bartsh, (2003) and Eisen, (2007) suggested, and not merely from single site redevelopments evaluation and should be further explored from this approach. Nevertheless, this research offers a foundation for further exploration of how peoples' values and worldview interact in their assessment of brownfields redevelopment success including the degree of importance placed upon their achievement of social attributes.

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Appendix I

Hawthorne land change

The following slides show changes in the landscape pertaining to the Redevelopment site in Hawthorne from 1995 – 2010. The site and nearby surveyed area and any noted changes are highlighted in the following pictures.



Figure 5-3. 1995 Un- developed site picture showing original factory and no redevelopment related land changes.

Hawthorne cont'd

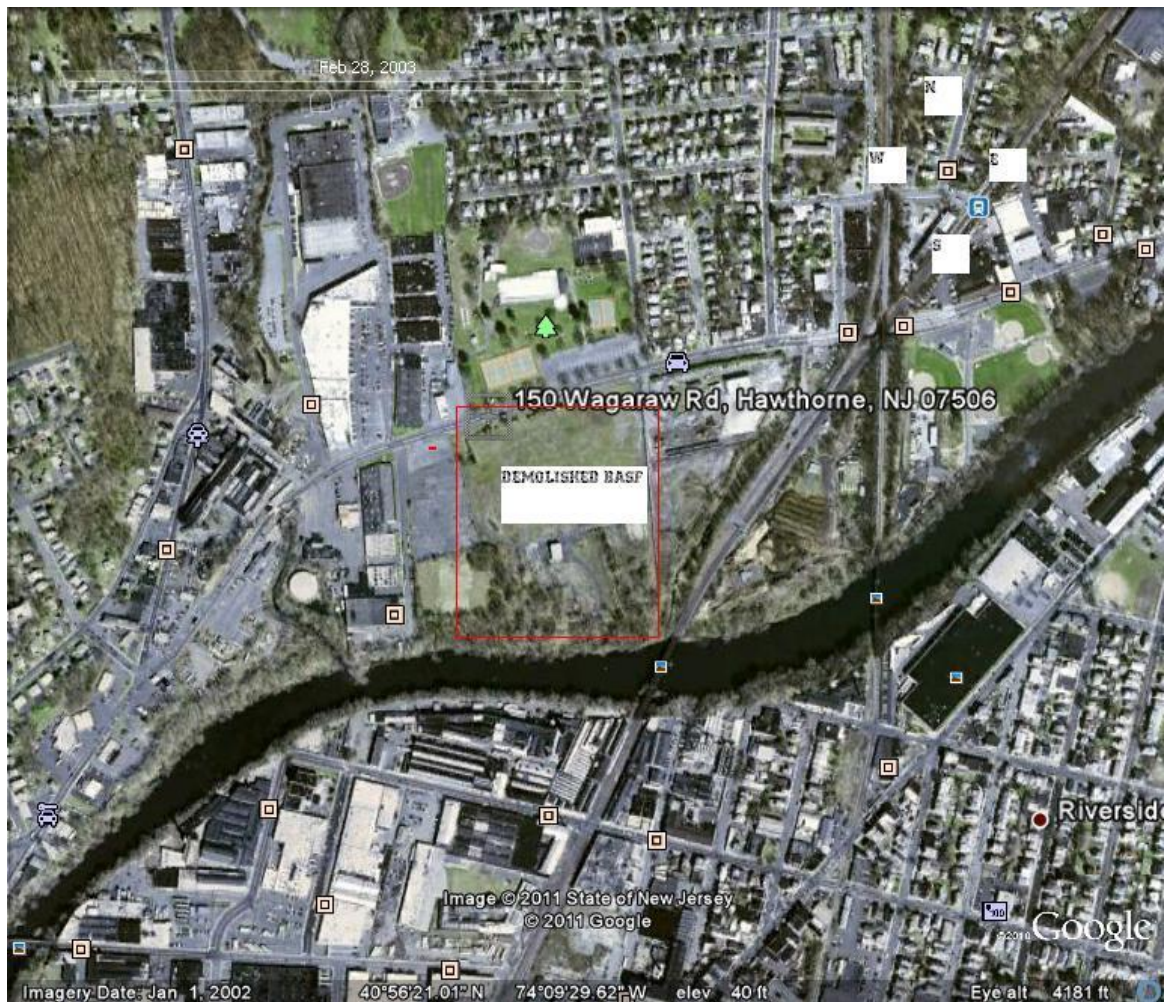


Figure 5-4. Land change (2002) showing the absence of the factory buildings onsite and the first sign of change.

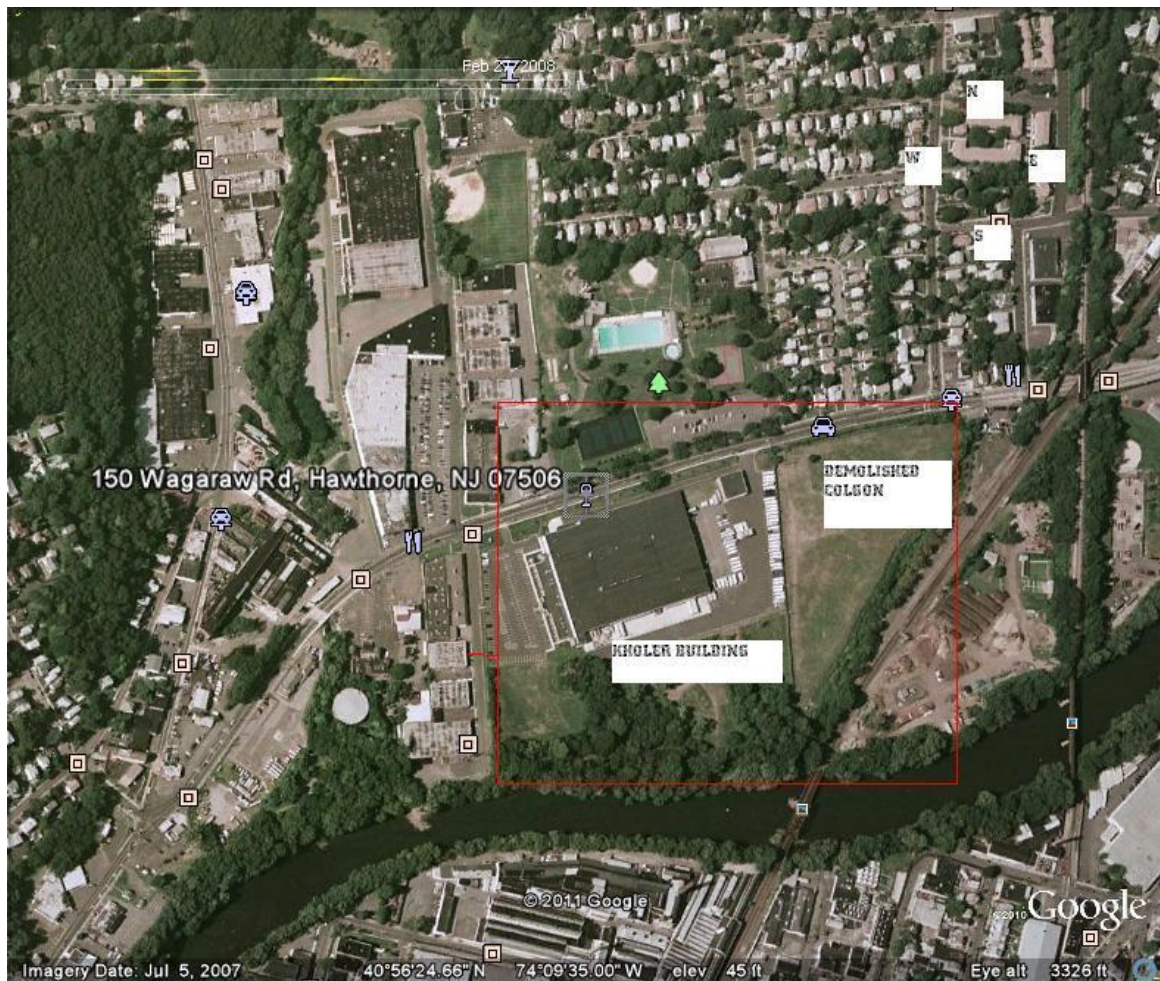
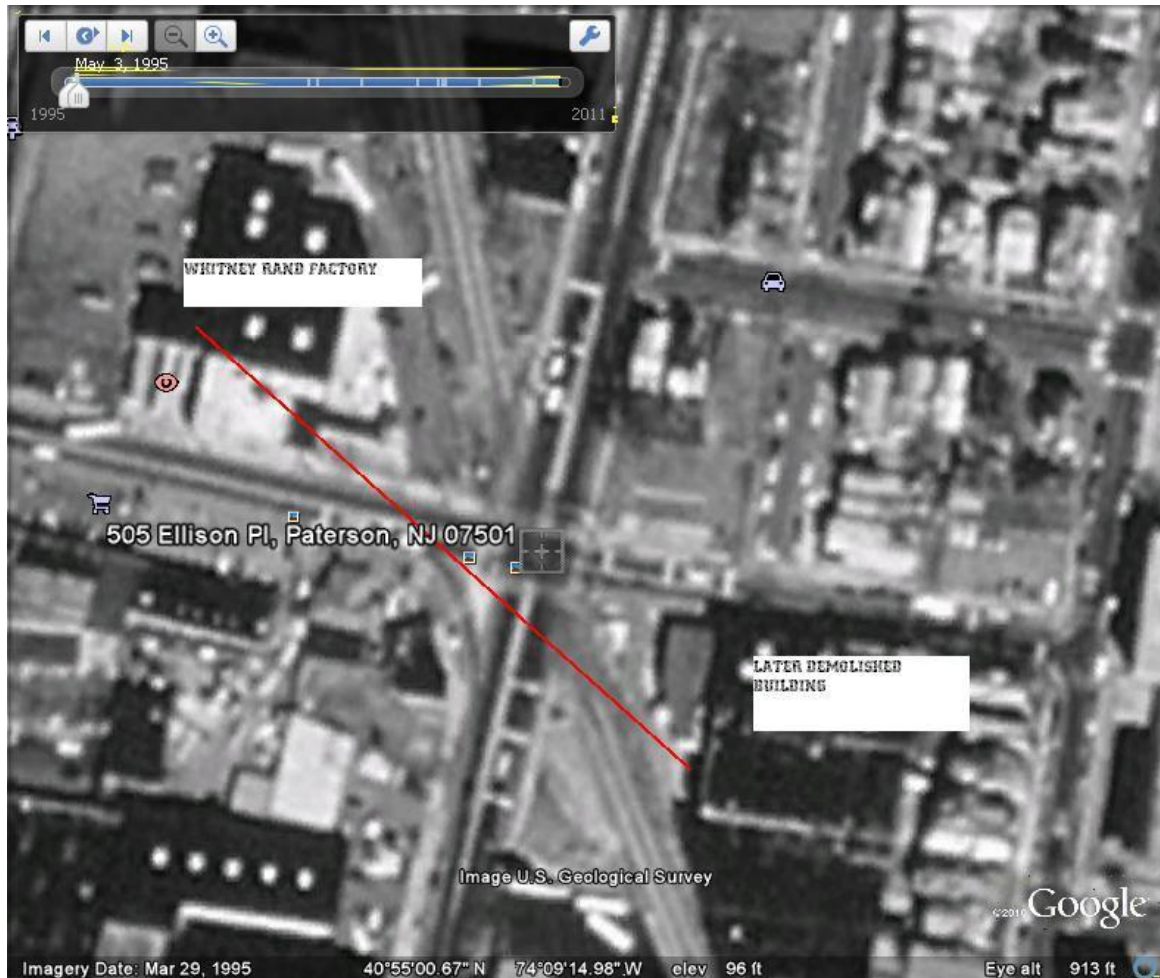
Hawthorne cont'd

Figure 5 – 5. Landscape change (2007) showing construction of Kholer, demolition of the buildings on the adjoining site and landscaping to the south of the Kholer site.

Appendix II

Paterson land change



**Figure 5- 6. Former Whitney Rand Factory onsite (1995).
To the south east at the end of the straight line is a building that will be later demolished.**

Paterson cont'd

Figure 5-7. Landscape changes in 2003 showing Walgreen and Autozone onsite to the north of Walgreen and demolition of the old buildings to the south east.

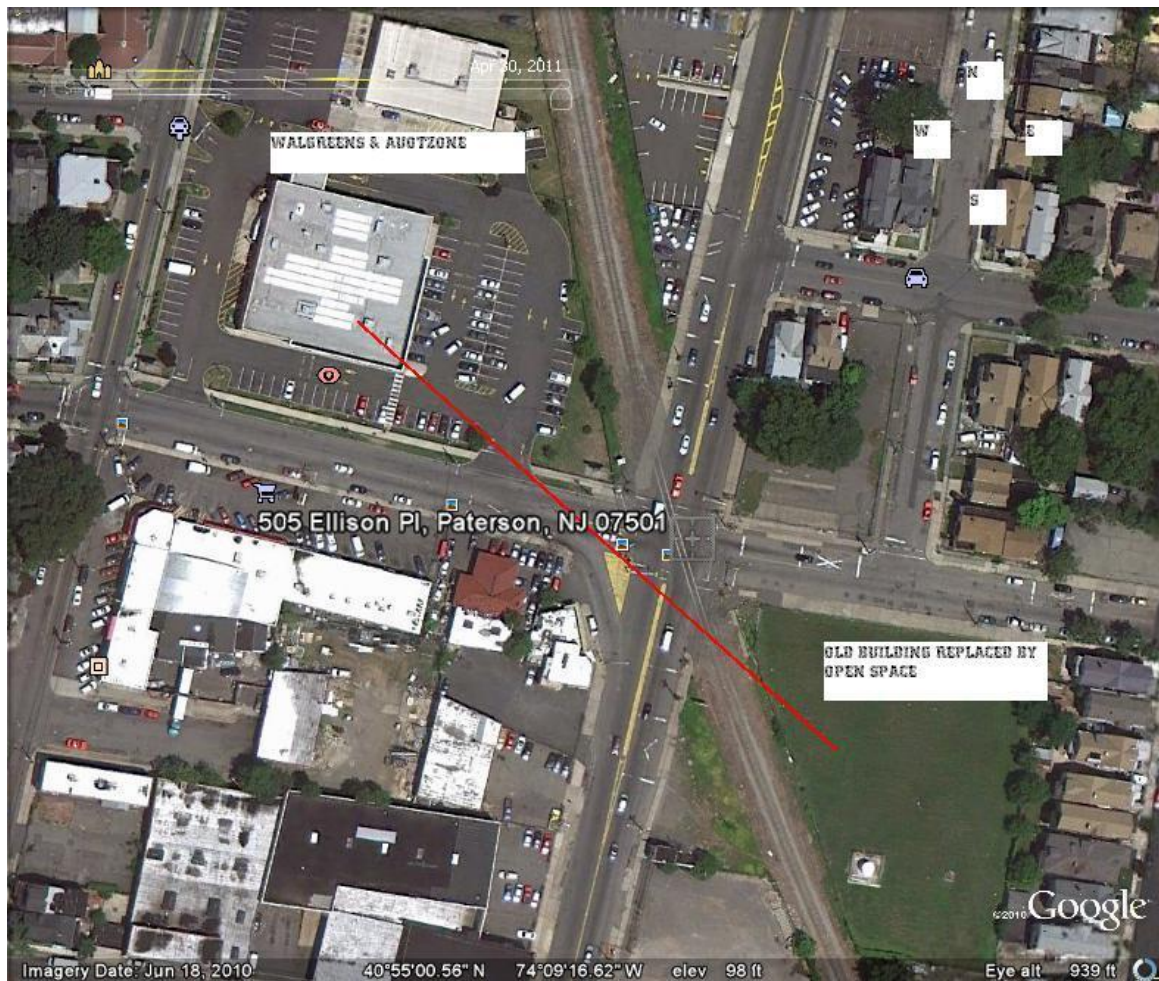
Paterson cont'd

Figure 5 –8. Landscape change in 2010 showing the demolished building replaced by open space to the south east of the redeveloped site.

Appendix III

Clifton land change



Figure 5-9. Landscape in 1995 showing former Shulton Factory onsite.

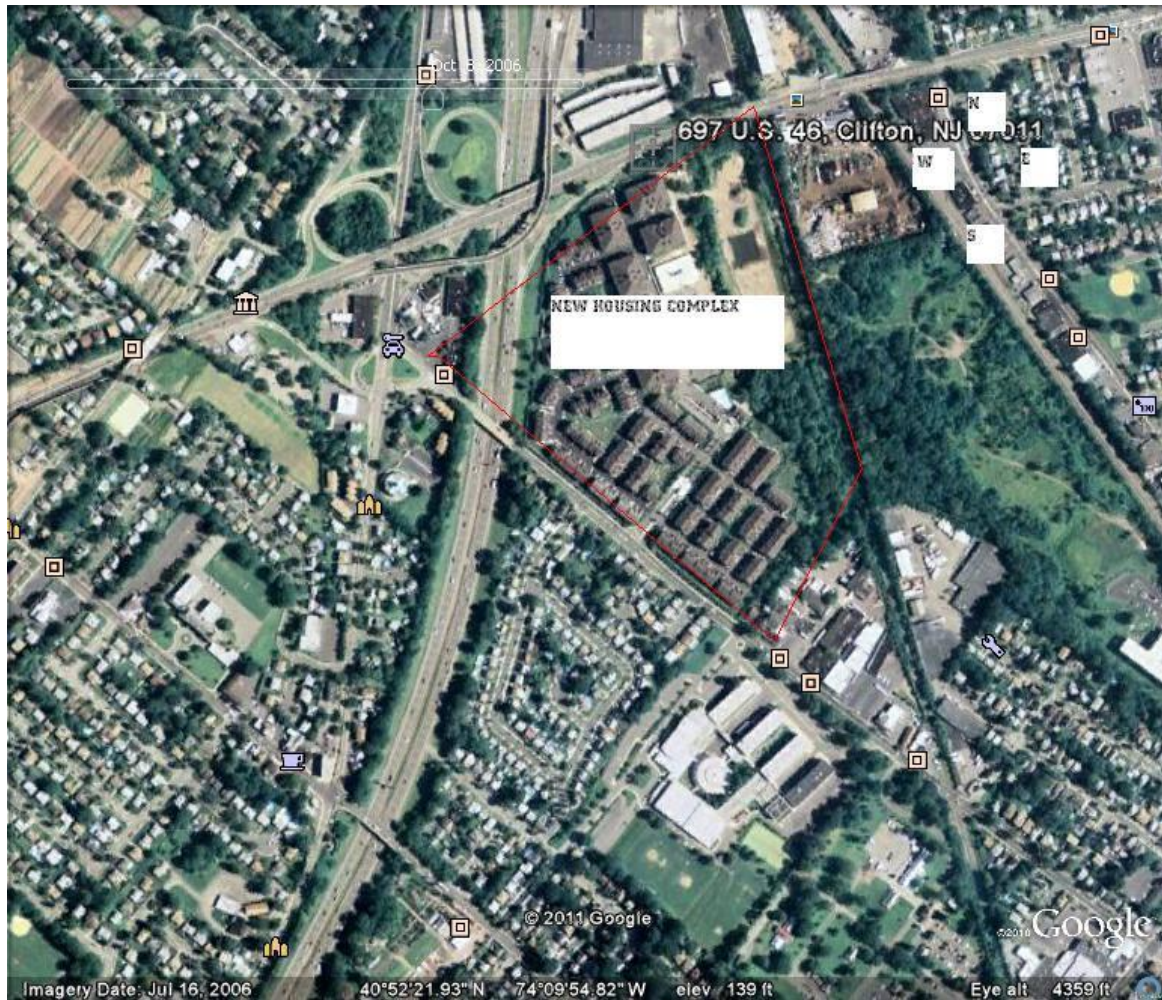
Clifton cont'd

Figure 5-10. Landscape in 2006 showing the housing complex redevelopment onsite.

Clifton cont'd

Figure 5-11. Landscape change (2010) showing recreational, open space east of the property, additional foliage and the cleared adjoining site of the former Athenia factory.

Chapter 6

Citizens' Qualitative Response to three Brownfields Redeveloped Sites and the Redevelopment Process in three Municipalities in Passaic County New Jersey.

Abstract

Brownfields redevelopment embodies the sustainability concept that this present generation as well as those of future generations' needs be met. As such, developmental projects that create and maintain social values in communities are highly desired by the public and public officials. To this end, sustainability requires that citizens' voices be heard and reflected in redevelopment processes and outcomes to preserve the highly valued social climate that contributes to the sense of community and an acceptable quality of life. This paper aim to discover and highlight citizens reported perspectives of the redevelopment initiatives, and, evaluative insight into the scope and intensity of their issues, values, and concerns about the projects during and after redevelopment. One hundred and twenty nine (129) residents in three municipalities in Passaic County New Jersey living within a quarter mile of three redeveloped sites were interviewed. Additionally, the anecdotal reports of the survey respondents are analyzed and reported as well as those of the citizens who attended the Council and Planning Board meetings in the municipalities to observe for any similarities and differences. Interview reports from public officials, including Mayors and those from Council and Planning records are compared to those of the citizens to discover if their reports corroborate with those of the respondents. Whilst the municipalities differed in their evaluation of prioritized issues,

there are some shared concerns such as job creation, traffic increase, and maintaining residential integrity. Overall issues that were a priority to citizens were the site's utility and institutional and individual empowerment. The major emergent thematic issues are economic, public and environmental health and safety, social cohesion, empowerment in decision making and public officials' responsiveness. This paper will provide decision makers, public and private developers' evaluative insight into the intensity and scope of public views about the redevelopment process and lived experiences after the redevelopment experience and the manner in which redevelopment impact the neighborhoods' quality of life. It is useful for assessing the strengths and weaknesses of the processes used to obtain the social outcomes of the initiatives from their inception to conclusion and as a building block for designing brownfields evaluation programs. The challenges lie in the strategies to develop and engineer an appreciation of opposing perspectives, how to build upon converging values, and appreciation of the time scale to arrive at this overarching goal of an improved quality of life.

6.1. Introduction

The possible effects of development policies should be considered based not only on their short-term impact but also on their long-term impact on the beneficiaries of these policies and the social fabric of society. Ultimately, these policies aim to improve quality of life, not decrease it. These policies should be crafted and implemented that benefits do not accrue disproportionately to individuals and groups but should benefit society eventually through positive externalities. Therefore, people as the beneficiaries of these policies should have an input in determining how these policies should affect their lives and their

neighborhoods. Their information is quite useful because it emerges from lived experiences. In my experience, as a public officer in the environmental field in the Caribbean, the lived experience was always used by affected citizens facing an environmental problem in their communities as a riveting defense in the environmental discourse. Weiss (1998) provides insight into the necessity of conducting evaluations of both process and outcome. Furthermore, the author highlighted the necessity for systematic assessment of process in evaluation. Citizens, have an important role in evaluation of policy actions especially if affected by the decision of the decision makers. Furthermore, evaluation is important because a program may have differential effects on the population.

6.1.1. A Community Vision and Citizens' Expectations

An important consideration for determining a brownfield site reuse is its compatibility with the community's vision. An evaluation exercise should be in line with the community's vision. This vision is generally incorporated into the existing municipality's Master Plan, inclusive of pertinent problems in respective neighborhoods. The vision also embodies the general socio-economic, cultural, and environmental, public health goals of the community, geared towards overall community development and improved quality of life. Since a Master Plan should comprise a community's shared vision, then a brownfield site reuse should be compatible with citizens' values and expectations for themselves and on a cooperate level. This encourages a sense of pride, commitment, ownership, and investment in the project. Instead of the project being "their project", it becomes "our project". This is essential to the acceptability of brownfields redevelopment projects and

the attainment of a sustainable community. A community vision creates a picture in the mind's eye of a community's desired features and functionality. To capture this collective vision, it is essential that interested and affected stakeholders reach a stage of heightened awareness as to both a site's reuse possibilities and the expected and actual difficulties experienced of the chosen municipal methodologies in the sites/s redevelopment (Bartsch, 2003). This vision must be clearly defined, articulated, formalized in order for it to 'come alive' and be accepted and harnessed as the community's vision. One way of 'breathing life' into the community vision and ensuring it goes 'viral' is experiencing it through its reality such as in the realization of the site success of an actual brownfield redevelopment (Bartsch, 2003). However, Bartsch cautioned that a sustainable vision at a broader geographical scale may necessitate more than a site-specific success.

6.1.2. Validation for Inclusion of Anecdotes in Evaluation

Renn (1999) sees a valid place for anecdotal knowledge reports in analyzing the possibility of risks; in other words, an overt expression of peoples' evaluation of their environment. Some brownfields and their redevelopment pose both public and environmental health risks. This statement is a valid inclusion in this paper because some respondents, through anecdotal reports during the interview, gave some indication as to their feelings observation, and concerns about the impact of the projects on their health and the environment before and after redevelopment. Renn (1999) further stated the importance of this informal body of knowledge to inform the decision process through peoples' contextual habits, mannerisms, and characteristics relating to the problem.

Zimmerman (1990) supports the logic of anecdotal reports in qualitative research because

they add a deeper dimension and understanding of a construct under research. This further enriches and validates the quantitative approach. This research concedes to this view because the anecdotes have provided a better insight into the citizens' perspectives as to why the redevelopment process and its outcome have generated feelings of acceptance and non-acceptance. The cognitive and motivational aspects of control unearthed through the quantitative results are also better realized and understood through these reports. Additionally, the critical importance of positive changes in the built environment to support and enhance a good quality of life in their neighborhood is better realized. Greenberg, (1999) in summarizing the results of studies of neighborhood change and the desired qualities of a neighborhood, reminds us of Maslow's hierarchy of basic human needs which he believes are critical contributors to achieving citizens' approval of their neighborhood. This reference is quite pertinent. A neighborhood can and should create a sense of well being and belonging. This becomes even more critical in the case where the individual has significant investment that would preclude migration from the neighborhood. Neighborhood changes are welcome, if they reportedly add to the sense of well being, as revealed in Chapter 5.

This paper aims to discover and highlight citizens reported perspectives of the redevelopment initiatives, and the scope and intensity of their issues, values, and concerns about the projects during and after redevelopment and how the redevelopment has contributed to the neighborhoods' quality of life. It is useful for assessing the strengths and weaknesses of the social outcomes of the initiatives from its inception to its conclusion. Brownfields redevelopment embraces the sustainability concept; therefore

citizens' perception should be an integral part of the evaluation of the built environment and its effect on quality of life. Marans (2003) endorsed the idea of a critical place for citizens' perception as a sustainability indicator. Citizens derive cherished social values from planning decisions involving their input. The reality of life is that it is people that reside in neighborhoods, some for their entire lives in the same location, so their anecdotal concerns and evaluation of redevelopment impacts and what is indicative to achieve holistic quality of life should not be ignored.

6.2. Methodology

Attempts were made to possibly obtain a broad based stakeholder reported perspective (including of the decision makers) of the scope and intensity of issues and concerns of the projects before and after redevelopment. The anecdotal reports of issues, concerns of disapproval and approval of community changes from the citizens were analyzed and reported with those of the citizens who attended the Council and Planning Board meetings in the municipalities, to observe for any similarities and differences in concerns and reasons for the concerns. In addition, special note was taken of the similarities and differences in issues encountered between the municipalities. Council and Planning minutes were reviewed in each municipality for a period before the redevelopments were undertaken to approximately four years after the actual implementation. The rationale for the before and after review is to allow a fair assessment period during which concerns/values would be noted and any noted recorded changes accorded to or likely to be accorded to the redevelopment could be grasped. The ensuing minutes were reviewed only if specific mention was made of the sites' former and present names as they

provided evidence that the subject under review pertained to the sites. The citizens' anecdotal reports in the Council and Planning Minutes might not fully reflect those of the majority of affected citizens because written reports were observed from only a few citizens and at times from a 'regular' attendee at the different meetings. Additionally, the citizens at the meetings might have been the same individual that was interviewed in the survey, since the questions did not seek to discover if the respondent attended any such meetings. Also, some people refrain from speaking at public meetings or on 'call in' programs for various reasons. However, these reports from the meetings might serve to give some credence to survey respondents' anecdotes and could provide complimentary and additional hint and understanding of the scope and intensity of the affected public.

Reports from the Mayor of Clifton, a past Mayor of Hawthorne, and the Director of the Passaic County Economic Development Commission, a Kohler Company executive, about relevant aspects of the redevelopment were cross-examined and compared with those from the minutes, and, citizens' reports, for similarities, differences, and discrepancies; in other words, seeking, and establishing a chain of evidence. Regarding Paterson, unfortunately, no public official involved in the site's redevelopment was available for interview because of retirement. These officials were in office during the redevelopment of the sites.

Respondents' anecdotal comment were necessary to adequately convey their felt sentiments about the redeveloped project, access to the decision making process, and or a future redevelopment initiative in their neighborhood. For this exercise, the developments' overall thematic issues of concern and importance to the municipals'

citizens are derived based on the total number of occurrences as expressed by the individuals. For ease of reporting, survey respondents' remarks will be presented in table form in Appendix I. Fifty two (52) individuals (40.3%) supplied the anecdotes analyzed in this qualitative report.

6.3 Results

Summary of the main issues in the redeveloped sites discourses in each municipality and their similarities and differences.

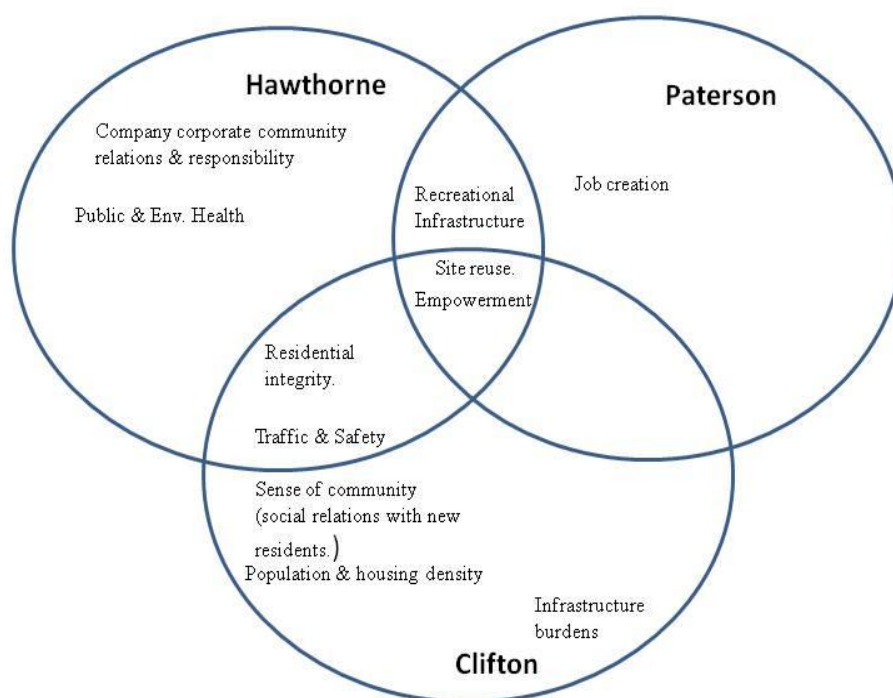


Figure 6 -1. Main issues identified concerning the redevelopments in the

municipalities.

Figure 1 summarizes similarities and differences between the municipalities in terms of their priority perspectives of the redevelopment projects.

The following evaluative perspectives and concerns as highlighted by the survey respondents in their assessments of the redevelopment's impact are listed below. Paterson respondents perspectives are listed first, then Hawthorne's and lastly, Clifton's.

Paterson's discourse

The following list of assessment of impacts and concerns was identified by Paterson's respondents.

1. Respondents felt job creation was lacking as well as the provision of supporting infrastructure to facilitate job provision.
2. Some felt there was an inappropriate reuse of the site. It was not relevant to the community's needs.
3. They highlighted the need for more recreational facilities.
4. Access to the decision making process was implied in terms of whether it is facilitated by the authorities or the issue of citizens taking advantage of the opportunity given for access.

Hawthorne's discourse

The following list of assessment of impacts and concerns was identified by Hawthorne's respondents.

1. It was important that the redevelopment did not disrupt the residential integrity

(livability) of the neighborhood.

2. Reduction of community exposure to toxic chemicals from the former plant owing to risk posed by water and soil contamination was a key issue.
3. It was essential that the site's reuse be compatible with neighborhood values.
4. Corporate social integrity to the neighborhood and town in terms of Kohler keeping its promise and providing recreational infrastructure and donating land for the same.
5. Increase in noise pollution and safety risk from traffic congestion and trucks because the new site owner Kohler Distributing Company daily truck trips were an irritant and potentially harmful.
6. Generally, respondents approved of the improvements to the recreational facilities and improved aesthetics of the environment. However, a small percentage felt Kohler fell short of its promise to supply some improvement in this area.
6. Empowerment in municipal decision-making was important and some respondents said the process was not facilitating to them.

Clifton's discourse

The following list of assessment of impacts and concerns was identified by Clifton's respondents.

1. There were concerns that the residential integrity was compromised by increased traffic and congestion.
2. Some citizens questioned the Planning/Zoning/Land use decision and these public officials' role in 'encouraging' increased population density.
3. Logistic infrastructural provision for housing complex residents and adjustment to

existing sanitary infrastructures to accommodate the added population load was critical.

4. Public officials' responsiveness to public opinions and values re issues including site reuse – Some residents' site reuse preferences were incompatible with those of municipal officials.

5. Lack of social relations and cohesion of condominium residents with surrounding neighborhood was of concern. This has implications for community capacity building.

6. Impact of site redevelopment on the school system.

Appendix I highlight the anecdotes of the respondents in the municipalities pertaining to the redevelopments. It gives more rich insight into their perspectives of access to the decision-making processes and the projects' impacts on their neighborhoods and quality of life.

6.4. Discussion

Citizens' anecdotal evidences suggest that the citizenry perceived that some of the choices that technocrats and locally elected officials made resulted in the developmental impacts that their neighborhoods had to bear. For example, despite the reports from the Council that preliminary traffic studies were done in both Hawthorne and Clifton to determine the potential impacts, some respondents asserted that the redevelopments increased traffic putting citizens' safety at risk. A Council member in Hawthorne shared citizens' concerns about possible impacts such as pollution problems; traffic patterns affecting the operations of the recreational ball fields and the infrastructural capability of the streets to manage the added trucks after construction activities of the site cease

(Council Minutes, February 19, 2003:26). Traffic noise was also a factor in Hawthorne for those who live on the street heavily traversed by the company's (Kohler) trucks. A warehouse company with a reported fleet of 50 trucks and 10 merchandizing vans with 50 daily scheduled routes will definitely increase the presence of heavy-duty delivery trucks especially in a case where more and expected profitable turnover is likely to increase daily trips. Notably, Kohler in the light of a prosperous year 2010, expected current sales of cases of beer to be exceeded by 6 million (Kohler, 2010) which would indicate the need for more truck trips. This would mean the potential for increased truck trips as production and sales increase. The past Mayor, who was the incumbent during the redevelopment process, said that the company had made arrangement through alteration of its trucks daily trip time schedules and their route of egress from the plant in the early mornings, and the *"arrangement is working out well"* (Chrisatelli, F., Personal communication, April 30, 2010 Friday). If this schedule was followed, then here it implies that the neighborhood complaints lacked some credibility. An individual validated the Mayor's report saying the trucks left early in the morning and came back late in the afternoon so they were not a nuisance. This implies an attempt by the company to honor this commitment, which would increase its credibility in the eyes of the officials and some neighborhood folks. Fourteen (14 %) saw increased traffic congestion as a problem.

Hawthorne respondents and those who attended the Council and Planning Board meetings showed they placed strong emphasis on gaining information about site contamination, remediation methodologies, and the impact on the public and

environmental health. Councilors, too shared the concern for the effect of the remediation methodology on public health. The Mayor was also concerned about ‘cancer clusters’ and if cleanup standards were protective enough of public health (Council minutes, September, 17, 1997). For example, at a Council meeting (May 3, 2000:34, during a discussion about site reuse, a Future of Hawthorne Committee member questioned the justification for placing a proposed supermarket on a contaminated site. The Mayor replied that area of the site was not contaminated. A question was also raised during an October, 3, 2001 Council Public Comment session about the progress of the remediation exercise. ‘Jane’ wanted to know if proposed construction activities would impede ongoing ground water remediation (Planning Board meeting, August, 2002:6). The queries implied that citizens are demanding accountability from decision makers, technocrats, and developers for their decisions and actions even in what is regarded as a highly technical area. They want to gain some control over decisions that affect their quality of life through access to information, despite its technicality, that make them more competent in the discourse. Also, they were indicating that if informed, in a manner appropriate to their level, they were capable of assimilating the information. They were also endorsing and demonstrating basic democratic principles. In response, the municipality demonstrated responsiveness to the civil rights overture by stipulating that the public be kept up to date on soil movement (evacuation and transportation) through public hearings. (Council Minutes, January, 8, 2003:7). Here Hawthorne citizens contrast significantly with those of Paterson and Clifton who did not emphasize remediation. The Mayor of Clifton said the Clifton residents never raised the issue. This might be because

they were unaware of any past/present site contamination and monitoring; the issue was given low prominence, or the citizens trusted that the remediation activity will adequately ensure theirs and the environment protection.

The Hawthorne respondent anecdotes and those in the records revealed a public who was highly zealous of their residential integrity. This trait was advantageous to local business interests who agitated the citizens to picket their objection to a prospective site reuse (Home Depot) for the adjoining site in the redevelopment process that was formerly owned by MERCK/Colgon). Its reuse as a shopping center or supermarket raised objection by local business interests who were concerned about the impact of these entities upon their own businesses (other concerns were also traffic, location etc.). Local business interests also opposed a zone change from Industrial to Commercial in this section where the two sites are located. However, the zoning was changed. This reveals the redevelopment process as a highly contentious political process, subject to interest group capture. Conversely, local businesses concern for the economic impact on their businesses could be understood. The disappearance of these long time businesses from the landscape meant that for long time residents, some of the sense of place may be lost in two ways. Firstly, because they have become part of a familiar landscape; secondly, long term social relationships have been established with the owners of these mom and pop establishments. This site reuse issue therefore had implications for the economic sustainability of both the local businesses and the community in that they faced the potential of a decreased customer base and sales. Here one can appreciate the dilemma faced by public officials in the paradox that is, brownfields redevelopment, which is,

trying to build a sustainable community whereby the decisions being made, could threaten its sustainability. However this could be minimized or prevented by planning and discussing possible solutions with the community including the business sector.

In Clifton, there were repeated complaints of parking problems as well as traffic increases caused by the increased population in the Housing Complex. The former factory site would have caused increased traffic and be disruptive to the neighborhood but the entrance to the property was off a busy state highway. The site reuse changed the current entrance to a street route within the neighborhood on which the Clifton High School is located. Parking issues centered on the housing complex's residents using neighborhood street parking spaces and depriving the residents of the same. A Council Minute (September, 1996) supported this concern. A condo resident in the then newly constructed housing development was concerned about the lack of parking spaces for the condos' visitors. The present Mayor said solutions were put in place to alleviate the problem with the passage of an Ordinance to restrict parking on the street in question (Kruger Ct). He also asserted that every housing unit has two (2) allocated parking spaces and there is a visitors' parking lot in the Complex. Most of the problem was during the construction phase and it was compounded by the school population also parking on the street (Personal communication, May 19, 2011, Thursday). Greenberg, (2003:1) puts this issue into perspective by pointing out the potential of congested traffic and parking as adverse effects on brownfields redevelopment. This issue has the potential for air quality impacts in the neighborhood from increased vehicular traffic and lack of credibility in the technical studies carried out by the technocrats. Council members also had this concern

about parking during the pre redevelopment phase of the process as evidenced by Council Minutes (September, 1996) and 'The Record' (The Record, September 17, 1997, Wednesday). A member expressed concern that the site reuse would not place an added burden on the crowded schools and create traffic congestion on Colfax Ave, the street of the main entrance. She called upon the professionalism of the developer to ensure that there would not be any adverse traffic impact, whilst expressing the desire for positive socio-economic impacts.

Clifton's respondents' concerns about the capacity of the school system and the capability of the wastewater infrastructure to adequately absorb the added population from the 'high density' complex could be understood as a valid concern. It is well known that rapid and uncontrolled population increase causes deleterious effects on municipalities' resources and rapid depletion of earth's resources. Council Minutes added interesting depth to this public notion by indicating there was a problem with overburdened schools and structural problems and the need for additional school was a pressing problem. If the schools capacity was a known problem in the municipality, then the citizens concerns could be understood. However, the study commissioned by the Council, revealed that there was no expected negative redevelopment impacts on the school system. The Mayor said (Personal communication May 5, 2011 Thursday) that in the process of considering the site's utility, this matter was alleviated based on the intended structural component, function and composition of the housing units. They are mainly one – two bedroom town houses and condominiums that would accommodate home ownership for mainly senior citizens and young couples. This should potentially

reduce the childbearing population, and the limited bedrooms available should be an added deterrent. To date, fears of overburdening the school system had not been realized the Mayor said (Personal communication, May 5, 2011 Thursday) because municipal statistics showed no real significant increase in the school population and there were few children living in the complex. Additionally, he said that a stringent municipal policy limits occupancy levels in houses and housing complexes to prevent people living in basements and to minimize fire incidents. This was considered in determining occupancy levels in the condominiums. Another limiting factor to the increase in the school population by the complex's children was the price of the units. A high-level education official mentioned that if the apartments were highly priced then it is more likely to have less children as occupants (The Record, September 17, 1997, Wednesday). Whilst there may be confounding factors associated with the issue, this statement was thought provoking and could benefit from a deeper evaluation of this variable on brownfields acceptance and school population size. The reports of some citizens' preferred use for the site as a school were counteracted by the Mayor who said that the issue of the former Shulton site being redeveloped as a school was settled through a voting process (personal communication, Thursday May 19, 2011). The vote was 76% of persons not in favor, versus 24% in favor (Clifton School Board of Education, April 19, 1994). However, for an issue to reach the voting stage indicated the importance of the issue, and that this particular reuse was a significant contender. The use of deciding votes in the site reuse issue showed some effort at involving the citizens in a decision critical to the well being of the entire municipality. The school issue was a priority problem for the city as it

grappled with accommodating an expanding school population including that of Clifton High School located in the site's vicinity. Recently, (2010) an annex was built to accommodate the added high school population. Greenberg, (2003:2) enriches our understanding of the reasons why, after a school impact study was done by a city (not Clifton), the neighborhood still questioned the ability of the school system to absorb the additional school population from a housing complex. Apart from the fact about the need for schools, which by its very nature, could not be obscured, one of the implications is trust in local officials claim making in the discourse that the redevelopment would not adversely affect local infrastructure such as waste water system and schools. In fact, the Council was cognizant of the burden that new residential developments could exert on existing infrastructure in terms of service provision and maintenance. It made a resolution (September 17, 2002) supporting passage of Assembly Bill S-556 for municipal collection of impact fees for redevelopment. *"For every \$1.00 collected in taxes, new residential development costs between \$1.04 and \$1.67 for basic life-sustaining and life enhancing local services"*. A disadvantage mentioned in the resolution was the resultant tax burden on community residents. Here insight was given into some of the respondents' concerns about tax increases because of the housing redevelopment and its impact on the aging sewerage system.

Concerning the aforementioned issue of some respondents (approx. 21%) concerns about the high density of the housing complex and its 'unattractiveness', Council Minutes (September 16, 2003 :6) revealed this concern. Apparently, this was a 'teaching' moment because the Council's decision was to restrict future residential density to eight

(8) units per acre. The technocrats' rationale was also apparently in question regarding the height of the buildings issues (code and legal violations concerns); they were initially too tall. This shows that even when making rationale technical decisions there is the possibility of error. Even the rationale decision-making model may be prone to some subjectivity and bias in planning and assessments. In this case, it shares some of the quality with the 'layman's' cultural model that is derided by technocrats. In fact there were a series of Council meetings where code, road infrastructure, beautification violations concerning the complex were discussed and in which blame was laid on the technocrats (Council minutes, September 21, 2003:3; October 5, 2004:4).

In obtaining the perspectives of Paterson citizens from the Council and Planning Board Minutes, the reviewed sources did not reveal information particular to the specific site. Citizens expressed concerns about the 4th Ward (the geographically political location of the site) were general in nature about the living conditions such as many abandoned lots and houses facilitating crime and aesthetically marring their neighborhood, overcrowded schools and an ineffective education system, lack of recreational facilities affecting the community's quality of life. This however, gave pertinent information about the social problems confronting the area residents in the site's redevelopment area and generates an understanding of the environment that frames the respondents' anecdotes and their question of the site reuse.

6.5. Conclusion

The brownfield redevelopment thematic discourse from the respondents' perspectives involve mainly economic, public health and safety, social cohesion, political,

empowerment in decision making. There are also matters of technical concerns in terms of the strategic remediation technology administered to the site as in the case of Hawthorne where somehow, residents were privy to this information. This indicates the multifaceted complex challenging nature of brownfields redevelopment and its prospective ability for generating conflicts and contentious solutions, based on the contextual issues involved. The municipalities shared both some similar and dissimilar perspectives, with the utility of the sites, and feelings relating to both institutional and individual empowerment being the common denominators.

A major brownfields discourse in Paterson is centered on job creation and bona fide residents' access to the jobs generated by the particular redevelopment. 'The Herald News' medium also mentioned that the unionized locals did not get the project related jobs and non-unionized laborers who did, were being paid low wages (Herald News, July 27, 2008 Sunday). However, these were affected unionized local workers. Sentiments expressed by respondents even suggested racial overtones and residents' crime history as contributing factors to this issue. This has implications for environmental justice. These respondents' suggestions could be explored at a later time in another study to see if their suggestions of racial overtone and crime history have any foundation. However, the present Director of the Passaic County Economic Development reported that 25 Paterson locals were employed by Walgreens, and in Hawthorne, Kohler employed 100 locals. Statistics were not available for Clifton (Hoffman, D. Personal communication, April 21, 2010 Wednesday). The anecdotes also specify the critical need for supportive infrastructure to make adequate preparation for the economically

challenged residents in Paterson who are or may be lacking job skills and acceptable educational qualifications to achieve a better quality of life through this medium. This, for them meets a criterion of success. This sets the stage for the municipality to access the Environmental Protection Agency's job grant so that eligible individuals in this Ward that is highly impacted by brownfields can develop the skills and competence they need to be employed in remediation projects. If there is such an opportunity available in Paterson, these respondents did not seem to be aware of it indicating the need for establishment of a readily accessible local clearing house of information about all aspects of brownfields redevelopment. The other mentioned critically perceived need for recreational infrastructure, could have been made more from the viewpoint that in this highly urbanized environment, with plenty of traffic, the children do not have many safe places to play than merely for its public health merits. This sentiment can be appreciated, that is, the need to protect and preserve the future generation. In fact, in Table 6-1, this response is overt. However, this does not suggest that they do not have strong public health values, because, in Chapter 5, respondents are highly appreciative of their neighborhood hosting redevelopments that encourages satisfactory public health conditions.

Hawthorne respondents are also highly responsive, to conditions more conducive to achieve acceptable standards of public and environmental health generated from the site reuse and its remediation strategy. They were also appreciative of the venture, when it produces tangible results such as much needed recreational infrastructure, and, intangible results. The intangible result such as a great social climate with the corporate entity/developer who apparently demonstrated an understanding of their need for

recreation and cultural expression and preservation was also critical. Prospective developers therefore have to be responsive and respectful of the traditional values and expressed needs of a community and seek to tailor a prospective redevelopment in response to those needs as feasible. This ensures a good relationship, which is valuable in the event that the developer/company wants to establish a business in the area, or undertake future redevelopment projects.

Some Clifton respondents were especially critical of a site reuse that in their estimation, added a burden on their school system, and municipal/neighborhood infrastructure, because of undesirable population increase. In addition to the aforementioned problems, there may be the concern that these perceived added burdens might add to their tax burdens. Seeing that the public officials' views of the outcome of this issue and environmental impact studies of the redevelopment are in sharp contrast to the respondents, there should be some dialogue between the two parties to clear up possible misconceptions with a view to reaching a common understanding. This is even more critical because the surveyed neighborhood is part of an area designated as a 'Redevelopment Area,' meaning more potential redevelopment will ensue, such as one that is currently in the pipeline (Former Athenia Steel). The citizens and the officials, through a dialogue of consensus, can develop evaluative criteria more likely to be acceptable by even the wider community.

The integrity of the residential area through its implication for maintenance of a sense of place was particularly important for Hawthorne and Clifton respondents. Anything that threatens this value, such as increased neighborhood traffic and parking

will not be welcomed. The responses show that people want to guard their suburban and exurban neighborhood characteristics, including neighborly behavior, and quality of life, with which they have been familiar for years. People can be creatures of habit and will not want to give up or compromise what is familiar and dear unless it is highly advantageous to do so.

The anecdotes points the way to developing a more critical insightful picture to some of the underlying social variables that drive public concepts and acceptance of redevelopment projects. Some of these variables may also be influenced by the geographical characteristics of the place, that is, whether it is urban, suburban, or ex suburban. For example, in a highly urbanized place like Paterson where a lot of traffic and population density is the norm, these issues may not generate complaints unlike in a typical urban and suburban neighborhood. It can also be said that people are resentful about increased traffic because of not only the congestion and noise but also the risk to public health and safety. The risk literature purports people are willing to accept tradeoffs if it perceived as fulfilling other goals, but, will resent the municipals' decisions if they feel their belief system was disregarded and the risk thrust upon them (Renn, 1999). These public reactionary sentiments are embedded in peoples' desire to improve and maintain a good or acceptable quality of life, which democratically is each individual's right. In this regard, their goals do not conflict with the municipals overarching objectives, neither those of brownfields redevelopment. The challenges lie in the strategies to develop and engineer an appreciation of opposing perspectives, how to build upon converging values, and appreciate the time scale to arrive at this overarching goal.

Here the stage is set for application of participatory democratic principles of community access to the decision making process.

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Appendix I

Table 6-1

Survey Respondents Anecdotal Reports in the Redevelopment Discourses by Municipality

Municipality	Anecdotes	Individual source	Thematic implication
Paterson	1. Job training & expansion opportunities needed more than Walgreens because it does not provide the infrastructure to improve quality of life.	Ben	1. Economics & Environmental justice.
	2. Developers do not give jobs to people who have been in jail.		2. Inappropriate site reuse.
	1. More recreational facilities needed instead of Walgreens.	Maria	1. Inappropriate site reuse.
	1. Respecting black history is very important in favoring redevelopment projects in the area.	Sam	1. Cultural values ('Rootedness')
	1. Community people do not get the jobs. There is no community ownership of the projects.	Mary	1. Economics & Environmental justice.
	2. Officials do not advertise the redevelopment meetings. They let the community know very little.		2. Decision making access & communication.
	1. There is lots of stealing at Walgreens but it is a better place to fill prescriptions.	Harry	1. Crime issue 2. Public health. 3. Dichotomy as to negative and positive changes.
	1. Council meetings are kept but people do not go to the meetings. They should go to voice their opinions. I cannot go because the time is inconvenient.	Mark	1. Access to decision making and citizens' role.
	2. Children have no place to play but on the streets. Redeveloped projects should provide recreational places.		2. Site reuse option
	3. More drugs, gangs, beggars on the street.		3. Crime issue

Table 6-1 contd.

Municipality	Anecdotes	Individual source	Thematic implication
Paterson	1. Academic tutoring programs are needed 2. There are more solar powered signs.	Beth	1. Educational empowerment & Capacity building. 2. Sustainability issues
	1. I am in favor of providing affordable housing. 2. There has been an increase in property taxes.	Diane	1. Economics & environmental justice 2. Site reuse
Hawthorne	1. I am generally very ambivalent about the overall impact. No Little League program has been instituted. 2. No company interaction with the community or town has been observed. 3. Quality of life issues are very important	Danny	1. Provision of recreational infrastructure 2. Corporate social relations 3. Sense of place
	1. Kholer did a small soccer field but more are needed because the available ones are prone to flooding. (Kholer had promised to do more) 2. Crime has increased. (Redevelopment did not help in crime reduction)	Peggy	1. Corporate social responsibility and recreation 2. Crime & quality of life.
	1. The Department of Environmental Protection (DEP) required soil remediation so the area is cleaner. 2. No more redevelopment is needed. The area needs to remain residential to avoid traffic increase.	Ralph	1 Minimization of public health risk 2. Residential integrity; Zoning/ site reuse; Sense of place

Table 6-1 contd.

Municipality	Anecdotes	Individual source	Thematic implication
Hawthorne	3. The town's decision to redevelop was based on economic constraints and short term vision.	Ralph contd	3. Political administration capability
	4. I do not feel left out of the town's decision making process. I do not want to be a part. The officials should be able to do the right thing.		4. Decision making access & citizen's apathy
	1. No emissions or chemicals are now present. The area is now clean. Conditions are now more favorable to public health because strippers were used to clean up TCE.	Joe	1. Minimization of public health risk and remediation.
	2. The streetscapes at the plant site have improved.		2. Aesthetics
	3. The parks are always improving.		3. Recreation
	4. Kholer has granted permission for the "Cabarelllos" (town's band) to use their parking lot		4. Corporate social relations & also responsibility
	5. The redevelopment has agreed with citizens' values because people did not want a shopping center".		5. Public Officials' responsiveness.
	6. This developer has created a lot of jobs in town. There is good fresh beer in town, this is most important.		6. Economics
	7. To be in favor of redevelopment projects, tax ratables are important.		

Table 6 -1 contd.

Municipality	Anecdotes	Individual source	Thematic implication
Hawthorne		Joe contd	
	8. Concerning early community awareness and involvement from the planning stage Joe said that engineering knowledge is not generally available to the public.		7. Doubt about citizens' competence
	9. Joe does not agree he does not have influence in the decision making process because the municipal officials also did not want a shopping center and so he has no complaints.		
	1. Public health has improved because BASF used to produce Agent Orange. There was a mercury spill and a chemical fire, the soil was contaminated and so it was transported away and replaced with clean fill.	Tom	1. Minimization of public health risk and through remediation.
	1. Public health has improved because BASF had a very bad smell that made people sick at times.	Elaine	Minimized public health risk.
	1. Traffic has increased. The truck drivers (BASF drivers) drive too fast. Children are at risk.	Rose	1. Public health and safety. 2. Residential integrity.
	2. Participation in the redevelopment process may not make any difference.		3. Empowerment in decision making.
	1 It is important that community integrity be maintained. Other citizens and I did not want big box development like Home Depot so the redevelopment is fine.	Hannah	1. Community and residential integrity. 2. Site reuse.
	2. I used to be involved in community affairs before but not anymore. My work keeps me busy.		3. Barriers to Community participation

Table 6 -1 contd.

Municipality	Anecdotes	Individual source	Thematic implication
Hawthorne	1. The redevelopment has raised my taxes. The town officials and the developers are working together to raise taxes.	John	1. Economics
	2. I am not sure about being left out of the decision making process. I could not go to meetings because my work keeps me busy. I am uncertain about officials not caring about my opinion about the reuse of the site. I want to be fair in my opinion to the officials about this.		2. Issue public officials' responsiveness. 3. Barrier to access to the decision making process.
	1 Formerly there was a bad smell because of the factory. Now the place is cleaner.	Janice	1. Aesthetics 2. Public health & safety.
	2. Now there is too much traffic.		3. Residential integrity
	1. Lots of trucks causing increased traffic congestion	Tim	1. Residential integrity.
	1. The changes in the area are neither good nor bad.	Elsa	1. Apathy towards community affairs and involvement.
	2. I am not interested in community affairs.		
	1. Traffic has increased	Gretchen	1. Residential integrity
	1 Because the trucks use Lafayette Ave as a route, there is more pollution.	Bill	1 Residential integrity
	2. There is more noise pollution		2. Public health
	1. Kholer did not keep a promise to make a ballfield , but there has been improvements.	Bob	1. Corporate trust relations.
	2. The jargon might be a problem in accessing the decision making process.		2. Competence in decision making

Table 6 -1 contd

Municipality	Anecdotes	Individual source	Thematic implication
Hawthorne	1. I was concerned about the dust and smell that came from the factory. There used to be dust on the cars.	Doris	1.Public and environmental health risk
	1.Air quality used to be a problem. There used to be a bad smell coming from the factory.	Ruby	1. Public and environmental health risk.
	2. There was a change in the road lane configuration near the site. Citizens' complaints solved the problem		2. Public Safety. 3. Citizen empowerment.
	1. About 300 people objected to having Home Depot on the site because of increased traffic. Kholer does not cause such safety concerns.	Richie	1 Site reuse and residential integrity 2.Citizen empowerment.
	2. Kholer is built on contaminated land. I am still bothered about on site water contamination.		3. Site remediation effectiveness.
Clifton	1.The redevelopment is a drain on public safety. The streets are too narrow.	Beth	1.Public Safety
	2. The residents in the condos isolate themselves from the community. They do not know what they are missing		2. Sense of community and capacity building.
	1. Jobs should not be provided at the expense of the community if it makes the community less livable.	Peter	1. Residential integrity & sense of place.
	1. The housing complex is too dense and crowded. Unattractive design.	Paul	1. Zoning/ Planning land use
	2. I would like to attend meetings to air my views and have officials listen		2. Public officials responsiveness in the decision making process.
	1. The area is more crowded	Arlene	1.Residential integrity

Table 6 -1 contd.

Municipality	Anecdotes	Individual source	Thematic implication
Clifton	1. There is more traffic congestion	Meg	1. Residential integrity. 2. Public Safety
	1. Shulton was a beautiful factory and beautified the place. It provided employment.	Alice	1. Nostalgia for sense of place.
	2. Public officials put notices in the paper all the time. (Regarding how she learned about the site redevelopment).		2. Notification for access to public meetings.
	1. Increased infrastructure for drainage is needed. There is more stress now on the sewerage system.	Randy	1. Infrastructural logistics compromised.
	2. Municipal officials advertise meetings but in reality they do not care about peoples' opinions. These meetings are kept as a 'show' just to say they have the meetings.		2. Public officials' responsiveness and trust of officials.
	1. There is more traffic and pollution. Dense development	Alicia	1. Zoning /Planning and land use. 2. Public and environmental risk
	1. There is more traffic	Darlene	1. Residential integrity. 2. Public Safety
	1. There is traffic congestion	Becky	1. Residential integrity. 2. Public Safety
	1. It has caused the area to be overpopulated. 2. It has brought capital to the area.	Nelson	1. Residential integrity 2. Economics

Table 6 -1 contd

Municipality	Anecdotes	Individual source	Thematic implication
Clifton	1. Redevelopment caused population increase and overburdened the school system. The housing complex was formerly intended for elderly people but the present age mix swelled the population and overburdened the school system.	Gary	1. Infrastructure capacity
	1. Officials don't want your opinion. When you give it they say well too bad.	Norma	1. Public officials' responsiveness
	1. I am not in favor of development because of increased traffic and overcrowding at the school. (High School)	Mary	1. Residential integrity 2. Infrastructure capacity 3. Public Safety
	1. The redevelopment got rid of wild life like rabbits that were roaming around when the building was abandoned. Therefore quality of life has improved.	Sue	1. Aesthetics
	2. I remember a discord re the reuse of the site. Citizens wanted things like parks, or an extension of the High School		2. Site reuse
	3. Parking facilities for the new project is limited. The new residents were parking on Van Breeman St causing opposition from residents on this street.		3. Inadequate infrastructure.
	1. The area is cleaner because it was formerly a dump site.	Samuel	1. Aesthetics.
	2. Traffic and the school population has increased.		2. Infrastructure capacity.
	3. There is no interaction with the condo residents.		3. Public Safety & residential integrity. 4. Social relations ; Sense of community

Table 6 -1 contd

Municipality	Anecdotes	Individual source	Thematic implication
Clifton	1. Redevelopment has brought no tax relief.	Adam	1.Economic
	2. Redeveloping the property has improved my family's quality of life because it is better than an empty lot.		2. Overall quality of life.
	3. Concerning reasons to be receptive to new developments he said that there is no guarantee that jobs will go to local contractors. He is uncertain about job provision.		
	4. The site is overdeveloped. There are concerns about fire trucks gaining access into the redevelopment.		3. Safety & Infrastructure
	1. Public officials did not care about what residents feel about the building of the condos.	Ariel	1. Public officials' responsiveness.
	2. I would like to be informed about any further changes being made to the school and community.		2. Decision making access.
	1. Residents on the periphery of the redevelopment are not allowed access inside the redevelopment. The condo residents are socially isolated.	James	1. Sense of community
	1. Traffic has increased.	Margo	1. Residential integrity. 2. Public safety
	1. The buildings are overdeveloped. You cannot get a fire truck into that complex.	Emma	1. Public safety and Infrastructure.
	1. Officials do not care about peoples' opinions.	Parker	1.Economic
	2. Someone got a payoff. Taxes should have gone down instead they continue to go up.		2. Trust in public officials.
	1. There was an issue with parking with the condo. I had gotten a petition for parking permit because condo tenants were parking on our street causing problem for us to get out of our driveways.	Gracie	1. Provision for Infrastructure.

Chapter 7

Citizens' Perspectives of Access to the Decision- Making Process as a factor in Acceptance of Brownfields Redevelopment Projects in Passaic County New Jersey.

Abstract

Brown fields' redevelopment aims to revive economic growth. However, public controversy concerning public and environmental health risk issues and community access to the decision making process among others, surrounds the exercise. The success of brownfield projects have traditionally been highlighted mainly from the developers and municipalities' authorities' perspectives to the exclusion as to "grass roots" peoples' perspectives about the redevelopment initiatives. In this study, citizens living in close proximity to three redevelopment projects in diverse municipalities were surveyed to determine the relationship between their perspectives of access to these decision making processes and their approval of the projects. The criteria for approval are based on the achievement of social goals. A content analysis of municipal public records and interviews with local public authorities show that the authorities' main criteria of success differ somewhat from those of the citizens. As we move amongst the three municipalities, statistical results reveal that there are differences in respondents' a) perception of access to the decision-making process and b) their acceptance of the projects. Mostly, respondents do not feel empowered in the decision-making processes. Those who felt they were more empowered to access the decision making process were more supportive of the redevelopments' outcomes than those who felt less empowered. Furthermore, how

they perceive access to the decision making processes is impacted by psychological/social factors which are reinforced by their perspectives as to how and the degree the municipality engaged them in the community participation exercises even to the extent of influencing some redevelopment decisions. This has influenced their opinions as to whether or not the exercise has helped the communities. What is lacking is the institutionalization of community participation for the affected and interested mainstream, within the municipalities.

7. 1. Introduction

There are three dimensions of social acceptance recognized by Wustenhagen et al (2007). They are socio-political acceptance, community acceptance and market acceptance. Brownfields redevelopment acceptance is highly relevant to these dimensions of social acceptance. However, the process leading to brownfields acceptance can be quite complex and controversial. Socio-political describes society acceptance of policies and technologies at the broadest level. Its relevance to brownfields acceptance is that although the brownfields program is complex and multifaceted, there has been general acceptance in society that the policy approach to redevelopment will and has benefited society in general. Abandoned and sometimes contaminated properties that once marred the visage of their area of location because of their appearance, and both threatened and negatively impacted environmental and public health and well- being are being put into productive use. This is because of policies geared towards neighborhoods revitalization. Community acceptance is in reference to local stakeholders including residents,

acceptance of specific projects at community level. However, while there is nationwide acceptance of brownfields redevelopment, community acceptance at the local level has been problematic at times. Perceived and actual impacts of redevelopments on a community, site reuse issues, and differing expectations among others are factors hindering acceptance. Market acceptance is from the general perspective of consumer adoption of innovations. To redevelop these properties, a real estate market strategy has been undertaken. These properties are marketed and tailored at times to specific consumers who have taken advantage of what the market has to offer, example in terms of location and easy access to public transportation and city centers. Jobert et al (2007) also informed that policy frameworks is a contributing factor to social acceptance. Here, it must be noted that public support cannot be taken for granted and an initial favorable response is subject to change.

In examining social acceptance in case studies of wind farm projects in France and Germany, Jobert et al (2007) identified some factors that increase social acceptance. A critical success factor was that key stakeholders' values and concerns be incorporated in the projects' implementation. Other important variables were supporting organizational and social networks, access to timely information and the contents of the information, people wanting a stake of ownership in the project and how integrated the local developer was with the community. The reports were primarily driven from a developer's perspectives and in Germany's case, there was absence of broad representation of stakeholders except at the public meetings for imparting information. Letang (5) also found that the integrity of the developer and the community relations with the people are

important to the citizens. Gross's (2007) case studies report is significant for this research and adds fuel to the main arguments and concerns advanced in this research. These arguments are : 1. The success of brownfield community projects has been mainly sought from the developers' and also public officials' perspectives. 2. Community access to the decision making process for the affected, interested mainstream and participation for the purpose of decision-making and incorporation of values and interests is important to brownfields' projects acceptance and therefore perceived success. Gross found that from the point of view of procedural and distributive justice, different sections of the community were influenced by varying perceptions of how fair the outcome was, how fair the process was, and how favorable was the outcome. This author provided valuable input into the subject of community perspectives and acceptance of environmental projects.

Another factor that is important to community acceptance is if it cultivates a sense of place attachment. The empirical literature supports the fact that development projects can disrupt or change the physical fabric of a place to such an extent that it negatively affects citizens' attachment to the place (Manzo & Perkins, 2006). Sense of place attachment gives individuals an emotional attachment to their sense of community and is integrally connected ((Manzo & Perkins, 2006). It is uncommon the authors said, to find revitalization projects that are sensitive to place meanings and identify sentiments. The aforementioned social characteristics in terms of perceived and actual access to the decision making process can be assessed in the light of the socio-political context and how it is embedded in the whole concept of community and place attachment. Bonaiuto

et al, (1999:332- 334, citing Altman and Ginat, 1992) recognized the importance of process and outcome in defining the attachment people have to place. Process in this regard, incorporates the social and psychological interactions the individual experiences with the place.

For the purposes of this research, public acceptance is defined as the affected community's approval of the project. Approval is clarified to mean citizens' perception of the extent to which the project has achieved social goals for the individual and neighborhood. This then is interpreted to mean success. Seeing that the decision making process is part and parcel of the public participation process, and having highlighted their relevance to community acceptance of environmental projects, the background to public participation pertinent theories and issues will be provided.

Arnstein (1969) has been foundational in the assessment and discourse about the extent of citizens' influence in public sector decision making. Others offered their input into the discourse of what constitutes effective and meaningful participation. (Pretty, in Coenen et al 1998; Renn et al, 1995; King et al 1998; Laird, 1993; Webler et al, 2001; Webler & Tuler, 2001; Abelson et al, 2003). Some offered thought-provoking questions as to its rationality in authoritative decision-making (Irvin & Stansbury, 2004). Others informed us of the critical importance of creating participation opportunities to facilitate citizens' empowerment. This empowerment, they argued, contribute to individual self-development, capacity, and community building (Rich et al, 1995; Perkins et al, 1996; Chavis & Wandersman, 1990; Zimmerman, 1990; Israel et al, 1994, Laird, 1993; Goodman et al, 1998). For this research purposes, the definition of Coenen et al Eds,

(1998:308) is appropriate. Participation is defined as “*involvement in environmental decision making with the purpose of influencing the choices being made*”. Perception of access is the perspectives of individuals as to the opportunities given, and their ability to enter the decision making process to communicate, discuss their values and concerns to municipal officials about site redevelopment issues to the extent of having these interests incorporated in the decisions. In other words, this is taken to be the opportunities given to them for the purpose of meaningful participation. When mention is made of public participation, inclusive is the affected mainstream, particularly the lay public and not just respective stakeholders like interests groups and unions. Participants in environmental programs, including brownfields redevelopment, can be wide ranging (all affected and or interested stakeholders) to that of a more narrow focused group of citizens based on the issue’s context.

Brownfields redevelopment is a formalized program within the Environmental Protection Agency (EPA) governed by the Small Business Liability Relief Act and Brown fields Revitalization Act (2002) also known as the Brownfield Act. Their redevelopment is actively encouraged and pursued at federal, state and local levels indicating the scale of their desired contribution to national development. Brownfields are real commercial and industrial properties with or without the presence of environmental contaminants that may preclude their redevelopment into useful entities. Brownfields redevelopments involve environmental problem solving even without them being impacted by contaminants because they also affect the environmental aesthetics of an area through their blighted appearances. Additionally, their redevelopments help to minimize the use

of undeveloped green spaces thus reducing environmental impacts. Brownfields are somewhat of a paradoxical urban redevelopment policy generating hot political and national debates. To some, brownfields are used as leverage to address issues of urban revitalization and social welfare, whilst on the other hand they are viewed as vital economic solutions to urban problems. Passaic County in northern New Jersey, having 300 identified brownfields (Passaic County Brownfields Commission, 2012) is aggressively pursuing brownfields redevelopment. Inclusive are, Paterson, Clifton, and Hawthorne, the three (3) municipalities selected for this research. Paterson, the location of the birth of the American Industrial Revolution, is the most impacted by brownfields of the three, accounting for 46.7% of the total, next, by Clifton with 17.7% and Hawthorne with 2%.

The literature informs of various strategic methods that are used to engage the various publics and the depth (quality) of the participation to which public officials including Mayors, with decision making power ascribe to the public. Here, participation may range from supportive administrative structures that encourages communicative interaction between the decision makers seeking to influence decision making, to those whereby participation is 'token', that is, the administrative structures do not provide citizens with any real power to influence decision making but they are merely recipients of government information. Pretty, in Coenen et al Eds, (1998) in looking at a case study in rural Africa, gave insight into the ranges of participation that is universally applicable.

7.1.2. Some legislation for citizen participation

The increasing importance of citizen involvement at all spatial scales that is,

international, national, state, and local is paramount. Citizen participation is critical due to the presence of the proliferation of environmental problems with far reaching consequences. These problems are presenting themselves in increasingly more complex ways because of the proliferation in advanced technology and their impacts on earth's systems, human system, and their sustainability. The advent of these technological solutions to respond to societies' wants and needs created more problems while solving other targeted set of problems. This fueled great controversy worldwide especially in the United States (U.S.) as a concerned bewildered populace tried to comprehend but did not, and could not, the full effect of these perceived vexing problems. These problems were at times shrouded in technical jargon, government and industry secrecy, uncertain origins, yet was creating havoc with the environment and their quality of life. Citizens' litigation seeking more knowledge about these effects, government transparency, and access to the decision-making processes to effect policy change was rewarded with both national and international policies for citizen involvement.

The advent of the 1960s -70s was a particularly fruitful period in the U.S. for the passage of environmental legislation that governed citizens' participation and public officials' transparency. Landmark legislations in the 1960s were the Freedom of Information Act (1966) and the highly significant National Environmental Policy Act (NEPA, 1969). NEPA mandates public involvement in Agencies (Example Environmental Protection Agency) planning processes regarding quality of the environment including the human environment. In the decade of the 1970s, there was the Federal Advisory Committee Act (1972), and Government in the Sunshine Act

(1976). Another landmark Act was the Federal Clean Water Act (1972) stipulating public participation in States' revision of water quality standards. The Emergency Planning and Community Right to Know Act (EPCRA) made its debut in 1986 to heighten public awareness and knowledge, provide access to information on the types of chemicals being used at individual facilities in their communities and their uses. Additionally, any releases in the environment are subject to public knowledge. In 1992, President Bill Clinton signed the Environmental Justice Executive Order mandating public access to information and Agencies' decision making. A major clause is that appropriated public funds must not fund projected and implemented decisions and projects on which there will be disproportionate environmental impacts, especially on minorities and low-income groups who will and seem to withstand the worst of the impacts.

At the New Jersey (NJ) state level, a recent passage of a New Jersey Department of Environmental Protection (NJDEP) rule (2008) regulates public outreach in the site remediation of brownfields redevelopment projects. The new rule stipulates a public notification process through administration of letters or signage to those within 200ft of the site and to administrators of schools and childcare institutions. If 25 persons within the 200ft criteria petition the municipal authorities showing they are interested in the remediation process, this indicates high interest and so additional outreach activities must be undertaken. On the international front, a United Nations Conference on Environment and Development (UNCED) in 1992, in Rio de Janeiro, instituted Local Agenda 21. Local Agenda 21 agreed that local authorities and groups must approach environmental problem solving as partners. Emphasis is placed on implementing most of

the activities locally with local authorities in a facilitating role.

7.1.3. *Public Participation Theories*

The concept of democratic governance brings into focus *two competing approaches*: a) *democratic access to the process* to improve the quality of mainly the process and possibly its ultimate end; b) the *technical approach* for improved planning for solutions wherein the administrators know what is best for the good of society. Laird, (1993); Coenen et al, Eds (1998); Clawson & Oxley, (2008) and Weber & Tuler, (2001) gave insight to these perspectives. Democratic theorists' main area of concern is citizens' capabilities to govern and their roles in a democratic system. These theories have many similarities and differences. The debate is on the question of the execution of power and influence, if any, of the citizenry and their competence in decision-making. These similarities and differences will be highlighted later. From the democratic perspective, there is the *pluralists* centered political democratic theory that is concerned with advancing the broad interests of competing diverse groups and the representation of these varying interests in attempting to influence policy. Pluralism advocates that when groups operate collectively, they are better able to effect change than merely as individuals acting alone are. They also posit that citizens lack attentiveness, knowledge and are apathetic to political issues so their interests should be best represented by groups in policy decisions. The interest groups therefore are the bridge between administrators, (including politicians) and the public. However, pluralists believe in a democracy that reflects public values. *Democratic elitism* theorists believe the only role the public has in policy making is electing officials (Democratic elitists) who are then able to analyze

complex policy issues and make the best policy choices among options for the general public good. Policies will somewhat be reflective of public sentiments to the extent the elites wishes. The public, they believe is consumed by self-interest and is barely interested in political affairs to competently choose the best policy options. The public should merely be passive receptors of policy education and should leave the decision up to them.

Participatory democracy (direct participation) emerged in the 1960s opposing the democratic elitism and pluralist governance. This model posits engaging individuals instead of just groups in meaningful open policy discussions about options and decision making to increase their competence in forming opinions, which is then conveyed back to the decision makers. Participatory democrats believe that it is critical for all persons to have equal access to the process and there should not be any bias towards those possessing more resources to do so. This theory believes that interests groups will lack representation of all viewpoints and not fully represent the publics' interests.

Governments also tend to do what they want if they feel the interests group has not endeared itself to the public. Clawson & Oxley's (2008) related the minimal influence that Amnesty International in 2003 had on the U.S. military to stop Iraqi prisoner's abuse in Abu Ghraib until it gained widespread public interest in the U.S. in 2004, as an example. On the issue of public apathy to being involved in policy matters and processes, direct participation theorists agree that apathy does exist in the public realm. However, whilst agreeing that citizens can be apathetic to policy matters and processes, direct participation theorists believe that unsupportive administrative structures, that allow the

mainstream minimal opportunities for access, are mostly to blame for this negative response, and can be resolved through more supportive structures. Participatory democracy therefore advocates organizational and individual empowerment. This should enable the individual to have a heightened sense of community to be fully developed citizens (Laird, 1993). This is a case for knowledge achievement and advancement of individuals to be better able to influence policy outcomes through heightened awareness and understanding of their values and interests.

This paragraph summarizes the similarities and differences gleaned from the preceding paragraphs. A difference is the emphasis pluralists place on outcomes, whereas direct participation theory's main concern is the quality of the decision process and its impact on the psychological and educational well being of the individual (Laird, 1993). What these theories have in common is a common foundation of the notion of popular sovereignty. Popular sovereignty is the belief that in the final analysis, democratic power is vested in the citizens (Clawson & Oxley, 2008) and they have a right to exercise their power.

Subsequently, others (Renn, 1999; Kinsella, 2002; Ansell & Gash, 2007) have advocated participation models of *collaborative planning* through a blend of the technical functional analytical approach with these democratic models in environmental discourses. This new increasingly popular approach believes there is a place at the negotiating table for lay epistemological and epidemiological knowledge, values, and concerns with that of resource expert knowledge to implement policies that aim to prevent, minimize, and or solve the problems, including environmental ones that affect society. Governments

worldwide and international organizations like the United Nations (U.N.) encourage enhanced community participation, based on a functional analytical premise that public participation will increase administrative effectiveness and efficiency. Coenen et al, Eds (1998) and Creighton, (1992) offered these perspectives from the literature. 1) Through the interaction of many groups, important information will be relayed; there is the propensity for innovative alternatives and problem solving techniques. Public officials may ‘suffer’ from polarized views and assumptions of which they are unaware, that may affect their problem solving abilities. 2) Capacity building in government is encouraged to enable major goal attainments. 3) Public participation encourages and strengthens government legitimacy. This is more conclusive in a win – win situation instead of a win – lose, or lose – lose, because involving the public in a transparent decision making process will yield a more perceptive informed public concerning the premise of the decisions. 4) It is important for support of passage for environmental laws and positioning environmental issues to be incorporated in the environmental agendas; also to encourage public support for local policy ordinances and implementation and a commitment to its implementation. 5) It assist in developing administrators’ cognizance and understanding of public values and concerns so that they can be better able to discern public response to administrative decisions.

7.1.4. Types of public participation identified

Pretty (in Coenen et al Eds, 1998) identified a range of distinct participation styles observed in agricultural case studies in rural Africa. They range from a case where the public is fully mobilized through their own initiation, but are resource dependent on

external institutions to those where the public occupies a passive quiescent role influenced by manipulative processes. The author observed satisfactory outcomes when the public was allowed access to the decision processes from the inception to maintenance stages. His typology includes: 1) *Passive participation*, in which there is mere pretense of involvement. 2) *Participation by consultation* in which participants' input are required only for answering questions about their views but these views are not necessarily incorporated in decision-making. 3) *Bought participation* where people are coerced through material incentives. There is no real commitment on the recipient's part. 4) *Functional participation* where peoples' participation is required to achieve agencies' predetermined goal. 5) *Interactive participation* in which participants are actively consulted through learning interactive group sessions in the analysis and development of action plans. 6) *Self- mobilization and self-reliance*. Here people are resourceful in taking ownership of initiatives, and seek external institutions assistance for needed resources.

Coenen et al Eds, (1998) raised pertinent considerations that arise in pursuit of public participation. The complexity of environmental problems with their socio cultural, political and economic implications has generated questions of democratic governance. This brings to mind the many sectors of society that will be involved in the definition of these problems. A major problem also lies in the solutions to these problems. For example, who should be involved in planning and implementing solutions and why. Should it be only the technocrats or should an array of stakeholders be involved including the lay public? To compound the problem, these stakeholders will bring to the table differing perspectives of the problem and its solution, values, biases, personalities etc that

may delay the planning process. Alternatively, should this be viewed as a potential resource to enrich the process and the capacity of the institutions, people and neighborhoods involved? Herein rests the foundation for the principle of democratic governance. Because it is accepted that problems and solution are accompanied by a great deal of uncertainty, all the answers are not vested in the technocrats who are not always in agreement about an issue, and are subject to their own value systems and worldviews. Coenen et al, Eds, 1998 said this uncertainty about “wicked environmental problems” may best be dealt with by exploring solutions with a wider array of stakeholders including individuals, to improve the effectiveness and efficacy of environmental problem solving. The idea behind including multi stakeholders’ perspectives is the achievement of social goals. These underscore the benefits of public participation collectively, and should enable a more competent public through institutional processes that educate and inform the public as to the rationale underlying the decisions, engender conflict resolutions among opposing factions, and discover shared goals and values. Additional benefits include improvement of decision quality, ensure public values are reflected in decisions, and facilitate trust in institution (Creighton, 1992; Beierle, 1999).

7.1.5. Community Participation & Social Capital

Poptapchuk, Crocker, Booguard & Schechler (1998), in their book emphasized the vital importance of social capital as a resource in building community capacity. Social capital embodies forging a network of social relationships/partnerships over a period of time that enables the building of reciprocated trust among various institutions of society, including the family, community residents, social organizations and civic institutions. From this

rich asset pool, both tangible and intangible strategies are available to better identify community problems and implement pertinent projects to minimize and alleviate them. It recognizes that citizens possess the “know how” to build necessary social relationships for valuable contributions to solve community problems and that all the answers are not vested in civic public officials. Social capital recognizes two types; *localized social capital* that describes existing relationships within families, neighborhoods, and social organizations, and *generalized social capital* that bring diverse stakeholders from diverse cultural, socio economic, denominational and organizational sectors to bargain and solve community problems. It is envisaged that trust and collaboration will be the outcome of a highly effective generalized social capital that recognizes and support the diffusing perspectives and assets found within the pool. For communities to be sustainable, social capital must work harmoniously with economic, human, political, and intellectual capital. Political capital is influential in acquiring resources, mobilizing stakeholders to action to increase social capacity building and in partaking in planning and problem solving processes. Because it is possible for reciprocity, mutual support and trust to be cultivated and developed, social cohesion (bonds) will be developed, facilitating the building of social capital. Community benefits, instead of just the neighborhood level are expected as a result. Governments therefore need to be cognizant of how social capital is built and their roles as well as those of prospective participants in the process (Ryden & Pennington, 2000). Decision making processes that generate social capital as a derivative should be the major goal of local governments. This may mean that goals and criteria policies may need redefining by instituting sustainable policies inclusive of representative

and participatory democracy.

Ryden & Pennington, (2000) encouraged a look at the problems of obtaining collective action in policy processes confronting administrators that may hinder effective community involvement and fail to build social capital. They also looked at the incentives for the public to participate. They said Institutional Public Choice theory purports that the public's commitment to collective action is very unstable and they rarely provide meaningful participation in the policy process. An example is in the case where large populations are affected. Here there is a tendency for others to free ride and the process to suffer from special interest group capture that uses the policy process for their own ends. From the perspective of conventional rational public choice theory, and in view of the problem of collectivism, they outlined some critical considerations when confronted with the issue of scale and the nature of public participation (See Rydin & Pennington, 2000: 159 – 160; Irvin & Stansbury, 2004:61 -62) and give recommendations to overcome this problem of citizens' incentive to participate. Building on the foundation of existing local social frameworks and institutions to reinforce positive incentives for both individuals and groups is seen as a solution. Referring to Ostrom's work (1990, 1996), they state local communities have their own incentive strategies to overcome collective action problems. In social networks, people hold each other accountable and impose sanction for participation. Additionally if some people feel their reputation is at stake, there will be more conforming behavior towards participation. These social networks should enable relationship building, conscientious behavior towards collective goals, thereby building locally sustainable social capital; *"Social capital therefore,*

constitutes the pre –existing elements, social structures, which social actors can use to obtain their objectives” (Ryden & Pennington, 2000: 161).

7.1.6. Rationale for this research

Public participation debates in the U.S. in a democratic environment centers around whether public participation should facilitate meaningful involvement, and not just ‘token’ participation for individuals as well as groups. This paper examines meaningful participation from three different (3) publics’ perspectives that were the recipients of brownfields redevelopment exercises in Passaic County New Jersey. It aims to discover if their acceptance of the redevelopment projects bears any relationship to how they perceive their access if any, to the decision making process, to make representation of their values and concerns; in other words, procedural fairness relating to, and their ability to influence the projects’ outcome. Because of the complex nature of brownfields, and their revitalization which is expected to spur community development and many public benefits, including improved overall quality of life, then citizens interests, concerns and values become quite paramount at all stages of the project from both process to outcome. Additionally, it is expected that brownfields redevelopment will and should reflect multi stakeholders, including affected and interested individual’s opinions. Evaluative perspectives are also included because of brownfields’ potential to impact multi sectors from neighborhood levels to national levels. Seeing that official evaluations are normally carried out by seeking the perspectives of public officials, and public and private developers, this study fills this gap by attempting to discover citizens’ perspectives of the projects’ impacts on their and their neighborhood’s quality of life. This paper identifies

five general issues:

- Citizens' perception of the participation model of access to the decision making process.
- Citizens' perception of the decision making model, and whether it indicates that, it was conducive to fairness and competence as it relates to project acceptance.
- The third issue examines if the process provided a sense of empowerment that is also a critical element to build social capital.
- The types of participation that emerged from the official written and speech reports.
- The factors contributing to the municipalities' perception of the success and potential success of the process and outcome and how they compare with the citizens' concept.

Webler and Tuler, (2001) noted the lack of studies exploring the various discourses relating to process. The discourse as to what constitutes an effective decision-making process includes five dimensions.

- *Legitimacy of the decision makers derived through democratic consensus.*
In others words when decisions are arrived at through a process of democratic consensus, then both the decision makers and the decisions will be seen as legitimate.
- *The enabling discussion of ideologies through a core of stakeholders' interaction.* This means that when different stakeholders come together

with differing ideologies, there is better opportunity for diverse ideologies to be discussed and a better appreciation for the respective views can be attained.

- *The enabling fairness of the process through broad representation from all interested members of the society in democratic discussions of high quality.* Here because attempts will be made to ensure that all affected and interested persons are represented in the discussion, the process is likely to be regarded as being fair and of good quality.
- *The empowering opportunities afforded to all the participants by the decision makers and not just elite groups.* This means that all the participants and not just elite groups should be provided with access to the relevant resources to increase their competence to be potentially effective in the process.
- *Leadership and compromise during deliberations and collection of insights in broad stakeholder interactions.* In other words, during deliberation leadership qualities in individuals can emerge and can be cultivated. Furthermore, broad stakeholder deliberations enable different perspectives to emerge. Here, consensus must be reached in order for a decision to be made

Webler in Renn et al Eds (1995) argued that the participation process should be reflective of individual's shared goals and interests. He endorsed Habermas's critical theory of society that encourages autonomy and free expression so that individuals will

be better able to come together and interact socially for the realization of shared goals. He therefore built on the foundational theory of Habermas's ideal speech situation in communication as a normative evaluation tool for discursive participation. The process must not reflect coercion in any way and the quality of the decision-making is critical for decisions to be more favorable to the many interests. Transparent, consistent well-defined rules for engagement are vital for public participation to be fair and engender competence. Therefore, two Meta criteria (*Fairness & Competence*) have been highlighted by Webler in Renn et al (1995). To assist in bringing about a better understanding of fairness and competence and their relevance to the Ethical- Normative and Function-Analytical theories, their criteria goals are highlighted in Table 7- 1. From the author's perspective, both theoretical lines of argument are suggestive of fairness and competence.

Table 7-1

Criteria goals of fairness and competence from both the ethical-normative and functional-analytical perspectives.

	Fairness	Competence
Ethical-normative	<ol style="list-style-type: none"> 1. Everyone participates on a level playing ground that is: equal opportunity in agenda setting; determining discourse rules in speaking and asking questions to defend personal values and interests. 2. Provision of equal access to knowledge and interpretation 	Both issues 1&2 should develop a competent individual able to contribute in defining the general community will. This answers to the functional- analytical perspective
Functional –analytical	<ol style="list-style-type: none"> 1. Participation is normatively right. 	<ol style="list-style-type: none"> 1. Individuals must be able to make contributions for the sustenance of social systems. 2. Individuals achieve personal development and skills in interacting socially with others and while defending their own self interests. Interactions enable contribution to defining the collective will. This facilitates social systems. 3. Listening and other communicative skills are developed, also psychological heuristics, self-reflection, consensus building

Fairness demands that citizens have a voice in the choice of an expert to represent them in the process and to have whatever information is necessary to assess validity in claims making. Each individual should be afforded equal opportunity for access. The key component of *Competence* is the process must foster an individual's knowledge development and understanding of the relevant issue through access to the pertinent and best knowledge sources available to make informed contribution to the decision-making processes. These Meta evaluative criteria are valuable insightful tools to assess the

democratic process of direct participation. However, some like Rowe & Frewer (2004); Beierle (1999) noted the lack of ²outcome measurements. Most evaluation tended to be “process –orientated and interest orientated evaluations (Bierle 1999:79). Bierle therefore called for evaluations that surpass a limited definition of substantive outcome - such as the decision to site a waste facility, to encompass social goals (mentioned before in environmental decision-making) that would serve the collective interests. This is inclusive of the regulatory system undergirding brownfields legislation and policy. He said *“How well they are achieved often depends as much on how participants feel about the decision making process as by the substantive decisions made during it”* (Bierle 1999: 81-88). Bierle called for an empirical evaluation that links the participation strategies to social goals. This research therefore focuses on the role of the affected public in decision-making. They can have passive or active roles due to the type or opportunities for access they were granted through participatory mechanisms. Laird (1993) endorsed the importance of evaluating process in the light of outcome. He stressed that participation helps to yield a more mature, empowered, less self-centered individual who is more sensitive to the collective interests. They are therefore more likely accepting of outcomes, which will ensure a perception of greater legitimacy of both the process, and its outcome. This research is based on this theoretical assumption, examining participation from the lens of the affected citizens. It is particularly interested in individual citizen’s perspectives of access for the purpose of participation and access as a

² In terms of brownfields redevelopment, intangible as well as tangible measurable goals should be considered.

channel for individual empowerment. Since public participation is the avenue through which peoples' concerns can be aired, then their perspectives of the process to the extent to which it facilitated them to contribute to the process outcome will affect their acceptance. It was then necessary to look at the process to see how facilitating it was, or not, in shaping their perception of the results. Using the municipals' public records and correspondences with public officials who were involved, a picture of the process emerged and the context in which the redevelopment took place. However, having supporting administrative structures are crucial to engender empowered citizens. These structures must design participation strategies that will encourage broad representation of citizens' views, and give citizens the confidence that their concerns/views are respected. These include outcomes of which citizens' are aware (King et al, 1998). King et al mentioned the possibility of conducive, supporting administrative structures having an influence on citizens' willingness to participate. Here the ball is back in the administrators' courts who complain of an apathetic public. They challenged the status quo by asking administrators to assess the methodological strategies commonly used to secure citizen participation (in addition to re-educating themselves) and to devise alternative innovative strategies. They gave the common public hearings a low rating in facilitating authentic participation. Beirle, (1999:92), acknowledged the weakness of this strategy, but highlighted why administrators endorse it. This process is suggestive of fulfilling four (4) of the six (6) social goals aforementioned. They include, allowing interaction between divided values, therefore allowing for conflict resolution, heighten administrators' awareness of peoples' values, preferences, and assumptions, thus allowing

for more substantive decision-making and facilitating trust in administration through transparency.

This research is also interested in capturing the municipals view of the success of the project in comparison to the citizens' views. Therefore, it will seek to capture and highlight the input variables in each of their models.

Beierle & Cayford's (2002) conceptual framework has been helpful as a guide for providing a summarized approach to the pertinent issues in the research paper. It has been modified accordingly for this purpose. Context describes the situation under which the redevelopment took place and process describes the actual events. Table 7-2 provides this summary.

Table 7-2**Summarized contextual guide to the research paper.**

Context	Process Elements	Results
- Brownfields redevelopment.	-Type of outreach strategies used.	-Public evaluation of achievement of brownfields redevelopment social goals.
- Sites specific.	-Type of participants- who participated; who involved them? Their roles.	- Public perspectives of social goals achievement compared to that of public officials' perspectives.
- Municipal level of government.	- Is access desired and why?	
- Affected and interested citizens' role and involvement.	-Type of participation deduced.	
	- Citizens' perception of individual influence and control in the process.	
	- Citizens' perception of fairness of the process and their level of competence.	
	- Citizens' perception of municipals' responsiveness to public values and concerns.	

Having pointed out the gap in the body of research, this research fills this gap. It adds to the body of knowledge, insight into the evaluation of both process and outcome of a critical redevelopment cross cutting program of both national and international significance from affected citizens' perspectives. This evaluation will provide this needed perspective to bring balance to those of the public officials and developers. In the light of present national and global challenges, if we are to build sustainable resilient

communities now and for future generations, then it is imperative that we seek to improve the resourcefulness of affected and interested individuals through seeking their meaningful input into and evaluation of community processes and projects for community building. In terms of policy evaluation, an empirical approach such as this paper that examines process in relationship to outcome would serve to validate the new NJDEP rule (2008) of public notification in brownfields redevelopment.

7.2. Methodology

Study area characteristics

Table 7-3
Demographic characteristics of survey respondents

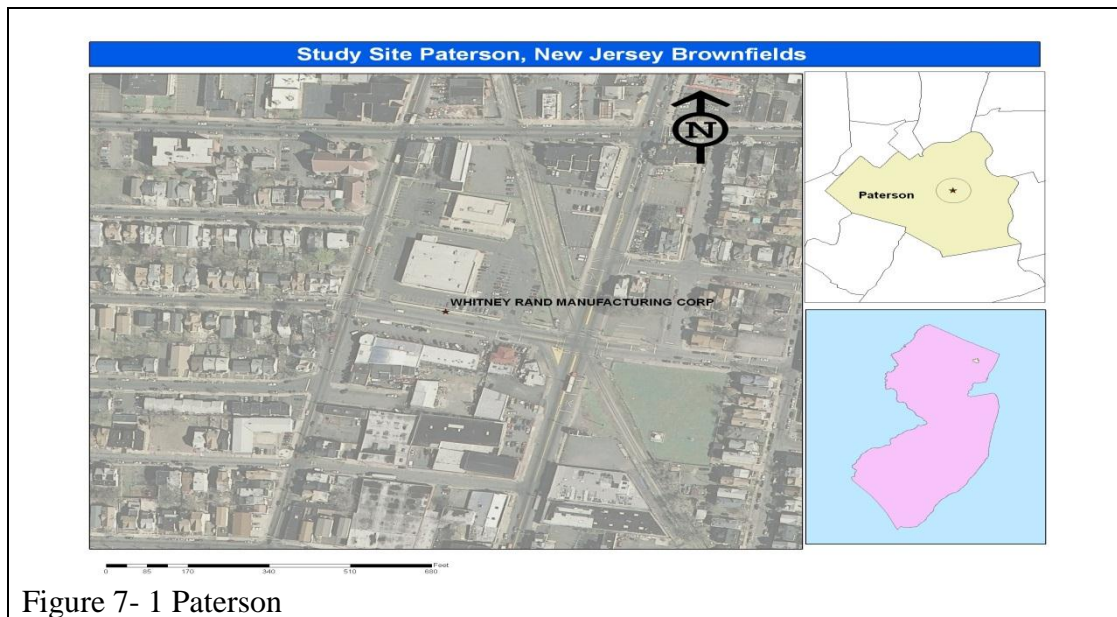
Municipality	Age group with highest frequency	Years of residency category with highest frequency	Main Ethnicity	Educational category with highest frequency
Paterson	30-39	10-20	African American (64%)	High school
Clifton	50-59	10-20	White American (90%)	College
Hawthorne	60 and over	Over 31years	White American (91%)	College

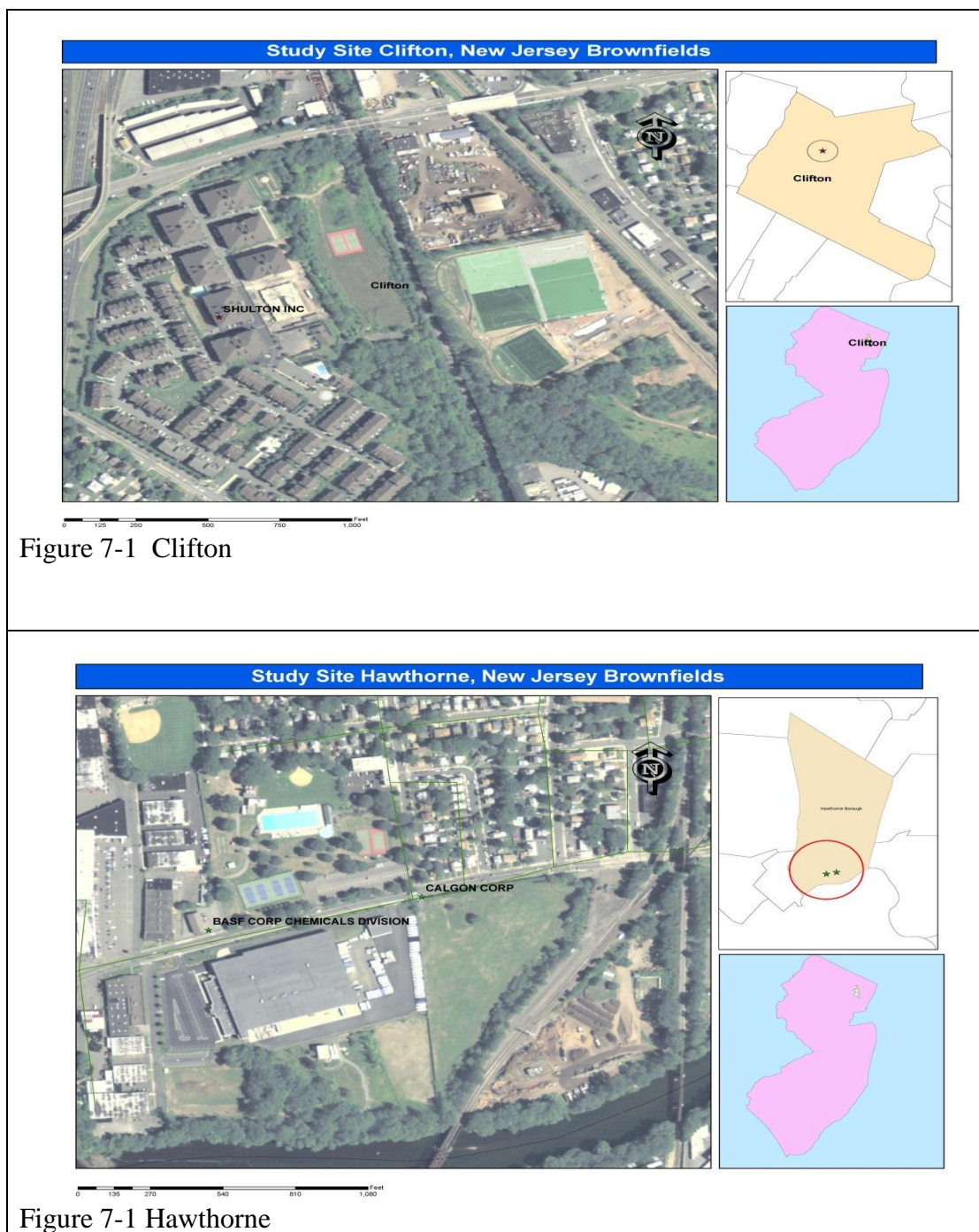
N=129

Table 7- 3 above shows the demographics for the area respondents in each municipality.

Figures 7 - 1 shows the graphic maps with the redeveloped site locations and the

surrounding neighborhoods in which the survey was conducted. Concerning Clifton, the majority of the residences are concentrated to the South and South West of the property. For Hawthorne, they are concentrated to the North and North, North East (NNE). The map also shows the location of each municipality in Passaic County and in Northern New Jersey. Clifton is the southernmost municipality in the County whilst the other two are more to the North West.





Source: Google Earth

Figures 7 – 1. Photographs and maps of the redeveloped sites and surrounding neighborhoods and locations in Passaic County and Northern New Jersey.

Sites background information

The former Shulton Toiletries Industries site in Clifton was redeveloped as a huge gated housing complex of over 600 one (1) and two (2) bedroom townhouses and condominiums. Both onsite groundwater and soil were contaminated with chlorinated VOCs, hydrocarbons, lead, and cadmium and the remediation method was soil excavation and engineering control. In Hawthorne, the former site was owned by chemical industries; first, Inmont Corporation (factory) then by BASF a chemical company, then the current owner, Kohler Distributing Company, a beer manufacturer. The property is now the home of a beer warehouse with a fleet of trucks and vans and an office complex. Contaminants on the property include contaminants such as volatile and semi volatile organic compounds such as benzene and aniline among others. Contaminated media include soil and ground water and remediation methods include soil excavation, and bioremediation of the extracted groundwater. Extraction and ground water treatment is currently ongoing and remedial options continue under scrutiny. In Paterson, the former Whitney Rand manufacturing site has been redeveloped into Walgreens pharmacy. Among the contaminants found in ground water and soil were chlorinated alkanes and chlorinated alkenes in dissolved phase such as toluene, benzene, methylbenzene, and xylene (BTEX). Soil Vapor Extraction and Air Sparging were used for ground water treatment and capping of the soil with asphalt and a vegetative cover (Engineering control). No monitoring of the groundwater is currently being done.

This research is a case study of three redeveloped brownfield properties in Passaic County purposively selected based on the desired criteria to choose sites in locations that

are urbanized, suburban and ex suburban. The research seeks to see how local perception of brownfields redevelopment and its local decision-making models and their relationship contribute to the projects acceptance, if any, and how they compare in these localities. The Passaic County Brownfields Commission provided access to the database of the redeveloped brownfield properties from which these three sites were selected from Paterson (urban), Clifton (suburban), and Hawthorne (ex suburban) municipalities. Prior to the implementation of any data collection methods in the municipalities, there was an Internal Review Board (IRB) process to ensure that mandated requirements were met for conducting ethical research with human subjects.

Household eligibility for inclusion in the research was determined through use of the New Jersey property tax records, an online database, to obtain the respective property addresses within each municipality. These properties were buffered within ¼-mile radius of the site using Geographic Information System (GIS) software. This specific distance was chosen because if people live closer to the site, they are more likely to be cognizant of the site, and its social, economic, and environmental impact on theirs and the neighborhood's overall quality of life. Additionally, they are more likely to be involved in participatory processes if any, relevant to the redevelopment exercise. In this regard, Planning and Zoning laws require consultation with property owners, within a 200ft radius of the property, but, the decision to extend this distance was made seeing that any spillover effects from the outcome is more likely to impact more people than only those within this distance. The extracted properties from the tax records were transported into the GIS program and addresses geocoded for those located on the streets in the buffered

area. The program also supplied parcel data of the buffered streets and gave information as to the number of properties on the buffered streets. Since it is very densely populated, and because of labor resource constraints, a distance of 900ft was arbitrarily selected for Paterson. In the case of Clifton, the distance was extended by 200ft in order to have a comparable number of houses to the other municipalities and an adequate number for statistical analysis considering that there would be the possibility of absenteeism etc. The validity of the database of listed addresses was verified during the process of collecting the data on the field.

Individuals' eligibility for inclusion in the research was based upon their knowledge of the presence of the targeted redeveloped project before and after the redevelopment. Therefore, they would be more likely to be more aware of neighborhood changes owing to the redevelopment. The length of time they were living near the site was important too. In addition, the prospective respondent in each household had to be 19 years and over at the time of the interview. It was predetermined that there would be one call back attempt if respondents were absent. Additionally, householders absent on interview days, including callbacks, were sent mailed questionnaires with instructions. The data was collected using a structured interview with primarily close-ended questions and one open-ended question. This interview schedule was first drafted using information gathered from a focus group discussion using participants from a municipality with similar characteristics to Paterson and in which participants were exposed to implemented redevelopment projects. The draft interview schedule was pre tested on focus group members and on Paterson residents who had been exposed to redevelopment

projects, but who are not in the survey location. The draft was also reviewed by the researchers' peers. They were also drafted as the interviewers and were trained before data collection. Quality control measures were undertaken on the field at the end of each field day to ensure the data was properly collected. Data entry was done solely by the researcher. Data collection activities took place over a period of four months in 2010, from April to July 2010. Secondary data from Council and Planning Board minutes were collected during May 2011 to August 2011. SPSS statistical software was used for the analysis.

Affected citizens' perception (evaluation) of *access to the decision-making* (authentic public participation) process was sought by analyzing normative statements measuring two Meta criteria – **fairness and competence** (See Renn, Webler & Wiedemann, 1995 Eds) and the concept of **Empowerment**. These normative statements indicate: a). Early involvement in the process.

b). Access to knowledge and resources.

c). Incorporation of citizens' values into the process.

d). Perception of influence.

They are by no means comprehensive but are believed to be sufficient for this exercise.

The outcome *Public acceptance* with the redevelopment was measured, firstly, mainly by the citizens' perceived achievement of social goals individually and collectively.

Secondly, a qualitative analysis of municipal records and personal correspondence to see how the participation and decision-making models contribute to the acceptance or rejection of the projects. Figure 7 -2 presents the interrelated methodological approach. It

shows that public participation in the brownfields program is the expected avenue through which citizens can express their needs and expectations for the redevelopment. Therefore, the context and background of the participation process must be discerned to see if it has any bearing on the needs for expectation and expression. Access to the decision making process falls within the auspices of public participation and the public perspectives of the access are input variables. The circle to the right describes a crucial outcome goal for brownfields redevelopment that is related to the participation variables and citizens' evaluative perspectives. In all, 129 interview schedule/questionnaires were analyzed from the three municipalities. SPSS statistical software was used for the analysis.

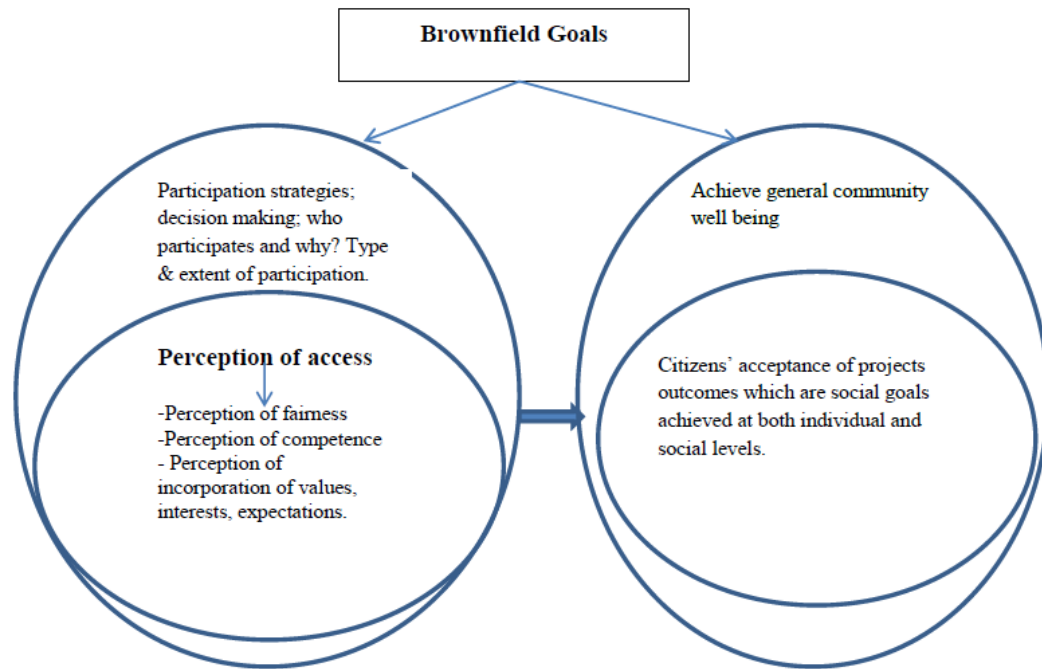


Figure 7–2. The inter-related approach to research variables and brownfields redevelopment goals.

Cronbach Reliability test analysis on the outcome variable “*Public acceptance*” yielded a result of .906. This shows good internal consistency of the answers to each item in the measured scale. To avoid statistical violations, this variable was collapsed into two (2) categories, ‘positive’ and ‘uncertain/poor perspective.’ Factor analysis was also done to ensure the item scales of the variable “*Public acceptance*” are unidirectional which is critical in calculating total individual scores and ensures the scale is appropriately measuring the variable. This ensures validity. No latent variable was found indicating the items were measuring the same construct. (See Table 7-8) However, since the factor analysis showed item statement variable “redevelopment activities have helped the

section of the community where I live” being responsible for most of the variance (72.6%), it was used exclusively, and as part of the dependent “*public acceptance*” total measured scale variable, in analyzing the a priori and other exploratory correlations. The choice was made to retain all the item variables in the measured scale since they were not expected to alter significantly, the results. Additionally, to get a clearer perspective on citizens’ view of the livability of the neighborhood after redevelopment, and, to see if respondents believed their values were incorporated into the process and outcome, separate analysis was done on three (3) item statements individually for each municipality. They are “redevelopment have helped the section of the community where I live” “redevelopment have agreed with citizens’ values”; and “redevelopment have created a more livable community.”

To ascertain unidimensionality of the measured scale ‘*Access to the decision - making process*’ and to discover any latent variables, factor analysis was also done on this variable. Additionally, to give each respondent a total score, the score has to measure the same construct. This scale has two (2) latent variables. Cronbach alpha reliability test was also done on the two latent variable scales (See Table 7-8). Three respondents’ scores were imputed for their municipality’s averages when analyzing for a relationship of this variable with the outcome ‘*public acceptance*’. This was necessary because of their non-response for only this critical variable.

Mean scores were calculated for each individual’s raw total score so that they could be constrained closer to the Likert Scale (scaled from 1 – 5 with 1 being the lowest end of the scale) while being used in statistical tests such as Kruskal Wallis H test that

require rank computation. The means scores in this case take on the characteristics of ranks. Kruscal Wallis test (the nonparametric equivalent of the T test) was used to discern if there are differences between the municipalities in their acceptance of the outcome. However, it does not indicate where the true difference lies. Spearman's rho is used to compute the correlation for the individual municipalities using the mean scores constrained to the Likert scale. Spearman's rho is the nonparametric equivalent of Pearson's r.

To ascertain respondents' priority reasons why they would like to have access to the decision making processes, they were asked to prioritize three (3) out of six (6) given statements by choosing from a rank order of 'the most *important*'; '*important*'; and '*somewhat important*' reasons. The number of times each item statement was chosen accumulatively by individuals, in each municipality, determined the degree of importance (priority) ascribed to it. However, for ease of computation, the categories 'most important and important' were collapsed into one category renamed '*important*'.

In addition to using Cronbach alpha reliability test and factor analysis, which results are indicators of the reliability and validity of the individuals' subjective states, information found in the municipals Council records, newspaper reports, and derived from interviews with public figures and a developer were cross referenced with the citizens' perspectives to establish a chain of evidence. Content analysis of these primary and secondary records was done to discover meanings obtained from associated patterns based on the responses and theoretical foundations.

A public official that was interviewed, and who also communicated with emails,

was the present Mayor of Clifton. He has been in this official capacity since 1990, and was a former Councilmember also before becoming Mayor. A former Mayor of Hawthorne who was in that official role for seven years, from 1998 – 2005 and was a former Councilor was interviewed also. The current Director of Operations for Kohler, the present company that owns the former Inmont/BASF site, was interviewed too. The Councilwoman of the 4th Ward in Paterson in which the redeveloped Walgreen site is located and who occupied this position since November, 1996 also consented to be interviewed. The present Economic Director for Passaic County was also interviewed. In the results section, while the information from the Economic Director and the company representative were very useful as supporting evidences and, their overall ratings of the projects successes, only the three Council members' responses were broken down for analysis. This is because they were in their official roles a significant period before the redevelopments and after, and were actively engaged in site specific/area revitalization activities. However, Paterson's public official was not as actively engaged site specifically as the other 'colleagues' but was engaged in an overall revitalization strategy for the Ward, that includes the site. In analyzing the interviews and emails responses, criteria questions derived from Coenen et al, Eds. (1998), and from other critiques in the literature (e.g. Pretty in Coenen et al, 1998; Creighton 1992) were useful as a benchmark to indicate the quality of the process and to provide insight to some possible underlying reasons for the publics' evaluation perspectives. According to Coenen et al Eds, (1998:309) *"treat participation as an independent variable by considering three (3) questions: Who participates? What types and extent of participation can be*

distinguished? Why is participation allowed?” Pretty’s useful definition will be used to discern the type of participation based on certain overt expressions and covert implications relating to the three analytical questions. Additionally, personal professional experience engaging in and observing many public participation initiatives enabled thoughtful discerning conclusion of the appropriateness of the definition. To determine public officials’ perspectives of the exercises and responsiveness, statements made during communication with the interviewees, and in the newspaper, were qualitatively assessed for positive comments, specifically for those indicating some achievement of goals concerning the processes and the outcomes. If clarification was needed concerning an answer, it was sought through another email, interview and public records. The respondents’ anecdotes were also very helpful in determining their perspectives of the process and its outcome and were used in their conceptual model of redevelopments acceptance highlighted later in the chapter.

7.3 Results

The Table 7-4 shows the responses to the question, “*how did you learn about the site redevelopment activity?*” This question was asked because it may give an indication of public officials’ commitment and aggressiveness in seeking public participation by looking at the strategic outreach activities to inform and engage the citizens. The outreach strategies are the opportunities citizens reported were created for access. Validation of the reports will be sought through examination of the responses from the public officials later in the document and from public records. Notification strategies can also restrict access and to meaningful participation. This was an identified issue for the focus group whose

answers were used as a guide in the research to formulate the survey instrument. Gross, (2007) also found this an issue in her research. Respondents were reminded that their answers must reflect when they first heard about the site.

Table 7-4

Initial communication methods of information about site redevelopment activity

Municipality	Communication Method	Frequency	%
Paterson	Informal	23	50.0
	Formal	15	31.0
	Formal & Informal	9	19.0
Total		47	100.0
Clifton	Informal	20	51.3
	Formal	12	30.7
	Formal & Informal	7	18.0
Total		39	100.0
Hawthorne	Informal	14	32.5
	Formal	17	39.5
	Formal & Informal	12	28.0
Total		43	100.0

Formal communication include community meetings; posters& leaflets; public official and community area representatives notification; media; Non Governmental Organizations (NGO). *Informal communication* include eyewitness; social network (neighbor/family member) other e.g. school.

A slight majority of Clifton respondents (51.3%) compared to half (50.0%) of Paterson's and 32.5% of Hawthorne's respondents, learned about the sites' redevelopment through

informal means only. Of the informal methods, eyewitness accounts accounted for the majority of informal methods in the municipalities. Hawthorne is the leader in informing the public through formal, and, both formal and informal sources, (67.5%) with Paterson, (50%) then Clifton (48.7%) following in that order. Hawthorne's 'open door' policy for discussions with the Mayor may have facilitated this. This 'open door' policy however, does not give enough information to ascertain at what stage they discovered about the site redevelopment, that is, whether it was early in the process, midway, or close to completion. Eyewitnesses are exempted from this uncertainty because they said they 'happened' upon activities at the site while going about their daily activities. The fact that they just 'came upon' the project implies opportunities for participation late in the process or not at all.

Table 7-5 further explores the theme of access to the decision making process by highlighting and describing the outreach strategies used in the municipalities by which citizens would gain access for the purpose of participating.

Table 7 – 5

The municipalities' outreach strategies for access to the participatory and decision making processes and their relevance in the research.

Outreach strategy	Advantages	Disadvantages	Research relevance
Public Hearings at Council Planning & Zoning Board sessions. Public meetings also.	1.They are low cost strategies and therefore are used extensively by authorities.	1. Citizens are not equipped with empowering capabilities.	1. They were the main avenue used to reach the affected and interested mainstream in all the municipalities.
	2. It is acceptable for participatory technical assessment issues.	2. Severe time constraints for citizens to express their opinions.	2.a. A Paterson resident complained that the allocated time of 3 minutes is not enough for the public to express their concerns to have adequate discussion of the same.
	3. It facilitates administrative accountability.	3. The scheduled time of day and their locations may not be appropriate for citizens. The hours and week days may clash with work hours.	2.b. Some respondents and focus group members perceive the meetings are mere pretense at seeking citizens' participation and views.
	4. <i>It is the most open in terms of access to the general public.</i> (Abels, 2007:108)	4. Child care arrangements may be needed.	3. A Paterson respondent said he could not take time off from his job to attend meetings.
	5. It gives legal protection for both affected persons and applicants.	5. The environment can present a formal courtroom appearance.	4. In all the municipalities, these meetings are televised.

Table 7 – 5 cont'd

Outreach strategy	Advantages	Disadvantages	Research relevance
Public Hearings at Council Planning & Zoning Board sessions. Public meetings also cont'd.	6. Access is available to everyone to impact the public discourse.	6. Meetings are and may be televised limiting shy people from expressing their concerns.	5. Expert testimony is the norm for the redevelopment initiatives in the municipalities.
	6. It allows for administrative and project developers' accountability through opportunities for their responses and clarification of issues raised.	7. The main actors are usually expert witnesses giving expert testimonies.	6. A Paterson resident said (during a Council public session) that citizens' input is sought when decisions have already been made.
		8. They generally limit didactic deliberative communication.	7. Concerning the opportunities afforded administrators and developers to clarify issues, to resolve a job dispute issue, the company representative asked for a public hearing.
		9. Public involvement is sought when some decisions have already been made and to seek support for decisions.	8. Final redevelopment decisions made in the municipalities was by public officials through normal routine procedures.
		10. It can be an adversarial process. 11. Meaningful discussion is limited and public does not have any say in the final decision.	

Table 7 – 5 cont'd

Outreach strategy	Advantages	Disadvantages	Research relevance
Survey of citizens.	<p>1. Population representation is broad based. The public considers the process transparent.</p> <p>2. Facilitates early involvement of interested and affected stakeholders.</p> <p>3. Value systems from which opinions are derived can be by obtained by decision makers.</p>	<p>1. Minimal involvement in the ultimate decisions and policy formulation.</p> <p>2. Absence of a formal structured mechanism for resource availability affects citizens ability to make competent decisions</p>	<p>1. A citizen survey to garner public opinion about area revitalization was done in Paterson.</p> <p>2. A formal structured mechanism for enabling the affected mainstream to have the relevant resources was not apparent in the municipalities.</p>
Citizen Group representation	<p>1. Citizen groups are the interface with local and elected officials, industry and the mainstream.</p>	<p>1 Citizen advisory groups may not achieve citizens' perception of legitimacy. They do not always have citizens' loyalty or trust.</p> <p>2. Representatives' motives for representing citizens may be driven by self interest.</p>	<p>1. A Citizen advisory Committee was established in Hawthorne to assist with identifying and mapping of properties for community revitalization efforts.</p> <p>2. Citizen groups were formed to assist in surveying citizens about area revitalization.</p>

Table 7 – 5 cont'd

Outreach strategy	Advantages	Disadvantages	Research relevance
Citizen Group representation cont'd.		3. The Group may lack representation as to who really comprises the truly affected people.	3. The Clifton official said area representatives were involved in the redevelopment process. Their role was not clarified.
		4. Groups ability to influence policy is varied. It is uncertain.	
Citizen vote	1 Citizens are instructed in their role in the exercise.	1 It is limited in terms of structured decision making and resource accessibility.	The Clifton official said a vote was used early in the redevelopment process to rule out a possible site reuse.
	2. The results have the ability to influence policy decisions because the results are binding.	2. It is variable in terms of early involvement.	
	3. It enables a transparent process and outcome.		

Sources : Rowe & Frewer, (2004, in citing Arstein, 1969); Rowe & Frewer, (2000 , in citing Smith, 1983); Rowe & Frewer, (2000, in citing Checkoway, 1981); Rowe & Frewer, (2003); Kathlene & Martin, (1991); Renn et al, (1995); Abels, (2007:18); Bierle, (1999); Middendorf & Busch, (1997); Weiss, (1998)

Table 7-6 shows the Cronbach Alpha result for the measured scale '*Public acceptance*' and the latent variables '*Influence Criteria*' and '*Normative Criteria*' of the '*Access to the decision-making process*' variable derived from the factor analysis result in a subsequent Table 7-8. Table 7-7 displays the inter item correlation of the variable scale 'Public acceptance' All the variables show good internal reliability.

Table 7-6**Cronbach alpha for 'normative criteria, 'influence criteria' and 'public acceptance'**

Variable	Cronbach . Alpha	No. of persons	No. of items_	Scale Mean	Variance	Std. Dev.
Normative criteria	.744	126	3	13.40	3.539	1.88
Influence criteria	.737	126	3	7.78	11.287	3.36
.Public acceptance	.906	129	5	15.22	31.93	5.65

Table 7-7**Reliability inter item correlation matrix for public acceptance**

Item statements	<u>Redhelpcomm</u>	<u>Redcrliv</u>	<u>Redqualife</u>	<u>Redcitvalue</u>	<u>Redimpsoclife</u>
Redevelopment 1 has helped community		.722	.699	.735	.541
Redevelopment .722 change/s create more livable community and sense of place	1		.775	.663	.629
Redevelopment 0.7 change/s has improved my and my family's quality of life	.775	1		.611	.684
Redevelopment .735 change/s agreed with citizens' values	.663	.611	1		.497
Redevelopment 0.54 change/s has improved social life	.629	.684	.497	1.000	
N= 129					

The inter-correlation matrix in Table 7-7 obtained from the Cronbach Reliability test show the most highly correlated item statements are “redevelopment has created a more livable community” and “redevelopment has improved quality of life” ($r^2 = .775$) indicating that people believe that a better quality of life is attributed to residing in a more livable community. There were good to high positive correlation among all items with the lowest value between “redevelopment has improved social life” and

“redevelopment agreed with citizens values.” ($r^2 = .497$). The scale shows unidimensionality and that item statement one (1) is responsible for most of the variance (72.6%). The factor analysis in Table 7 -8 validates the unidimensionality of the scale through its high loadings.

Table 7-8**Factor analysis for 'public acceptance'**

Item Statement	Eigenvalues	% of Variance	Communalities	Factor loadings
Redevelopment has helped community where I live.	3.63	72.628	.758	.871
Redevelopment change/s helped to create more livable community and sense of place.	.577	11.537	.799	0.89
Redevelopment change/s agreed with citizens' values.	.335	6.696	.682	.826
Redevelopment changes in area improved social life.	.243	4.863	.605	.778
Redevelopment in area improved my life and my family's quality of life.	.214	4.276	.788	.888

N = 129 NB. Only one component was extracted with Principal Component Analysis. The solution could not be rotated. In this case this is desirable to ensure the scale measures a single dimension.

Table 7-9**Reliability inter item correlation matrix for access to the decision making process**

Item Statements	ComEPar	DesLeDes	NoInflu	Leftout	ComVoDec	PubOff
Community should be given early opportunity to participate in municipals' planning decisions.	1	0.6	-0.08	-0.09	0.4	0.13
I want to learn more about how redevelopment decisions are made in the municipality.	0.6	1	-0.11	-.182	0.48	-0.16
People like me have little to no influence in local public officials redevelopment decisions and activities.	-0.08	-0.11	1	0.53	-0.04	0.41
I feel "left out" of local public officials' redevelopment planning activities.	-0.86	-0.18	0.53	1	0.52	0.52
Community residents want and need to have their voice heard in brownfields redevelopment decisions	0.4	0.48	-0.04	-0.15	1	-0.08
Local public officials did not care about my opinion concerning reuse of the site.	0.13	-0.16	0.41	0.52	-0.08	1

Table 7-9 above displays the inter item correlation of the measured scale '*Access to the decision making process*'. The "desire to learn about redevelopment decisions" has the strongest correlation with the belief that the community should be given early opportunity for participation. ($r^2 = .599$). Those who felt strongly about the desire to learn about how redevelopment decisions are made agreed that one of these decisions should be about the matter of community opinion regarding site reuse. ($r^2 = .482$). Some respondents who felt left out of the redevelopment decisions also agreed they had no influence in the decisions ($r^2 = .526$). Additionally, those who perceived that they were left out of the decisions, agreed they were not included because public officials did not care about their opinion of

the sites' reuses ($r^2 = .522$). Notably, 12% of individuals who felt that officials are uncaring about their opinions apparently felt officials' responsiveness should be shown by giving early opportunity for access. There are also individuals who perceive their decline in influence may have to do with their knowledge about how redevelopment decisions are made through the negative correlation results shown. (For example, -.182)

Table 7-10a

Factor analysis results for Access to the Decision making Process.

Component	Eigenvalues	% Variance explained	After Rotation
1	2.28	38.06	2.02
2	1.72	28.7	1.99
3	0.7	11.61	
4	0.57	9.44	
5	0.42	7.37	
5	0.29	4.83	

After three iterations, using Varimax with Kaiser Normalization the Table 7-10b below shows two components from the Principal Component Analysis extraction method

Table 7-10b**Factor analysis results for access to the decision making process**

Statement	Factor Loadings	
	Component 1	Component2
The community should be given the opportunity to participate in the municipality's planning decisions from as early as the planning stage.	0.85	-0.05
I want to learn more about how redevelopment decisions are made in the municipality.	0.85	0.14
People like me have little to no influence in local public officials' redevelopment decisions or activities.	0.05	0.78
I feel "left out" of local government officials' redevelopment planning activities.	0.15	0.83
Community residents want and need to voices their heard in redevelopment decisions especially close to where they live.	0.74	0.09
Local public officials did not care about my opinion concerning reuse of the site.	-0.02	0.81

Table 7-10b**Transformation Matrix**

Component	Factor 1	Factor 2
1	0.73	0.69
2	-0.69	0.73

Table 7-10a above shows the factor analysis results and Table 7-10b the results of the Varimax rotation. It resulted in two (2) extracted factors from the Principal Component Analysis (PCA) comprising this variable. Factor 1 is termed '*Normative Criteria*' because this is a normative procedure or 'rule' that is believed should underlie a

meaningful participation process. Factor 2 is named '*Influence Criteria*' because it indicates both psychological and institutional empowerment in the decision making process. As evidenced, both latent variables show high loadings on each factor.

Concerning the municipalities' mean value for Factor 2 '*Influence Criteria*', that is, the influence the survey respondents perceived they possess in the municipalities' redevelopment planning activities, respondents in Clifton felt very uncertain about their influence, with a mean of 2.56. Paterson respondents felt they had even less influence with a mean of 2.36 and Hawthorne, 2.86, showing the perception of having more influence than the other municipalities but, still falling short of the desired goal of influence. Five (5) is indicative of the highest value.

In response to the item statement, "*redevelopment has helped my section of the community where I live*" (RDH), Table 7-11 shows the municipalities' reaction to the redevelopment and its impact. Regarding Paterson and Hawthorne, on an average, respondents tended towards a slightly positive view with a mean of 3.51 and 3.53 respectively. Clifton respondents tended to be more uncertain of its effect. Overall, concerning the total measured scale '*Public acceptance*' (PubA), Clifton tended more towards the negative, with Paterson and Hawthorne both having a more uncertain to lukewarm attitude towards the outcome of its effect. Interestingly, at face value, Paterson and Hawthorne respondents believe that the redevelopment has been beneficial, but when they were required to delve into pertinent issues that would clarify their stance, then their overall ratings became more uncertain. The Kruskal Wallis H Test (H) for detecting difference in means shows that when applied to both the item variable RDH, and the total

measured scale PubA, there is a significant difference between the municipalities. It can be assumed, from the mean analysis results that the main difference lays in the suburban town of Clifton. **For RDH, results are: $H = 7.62$, $df\ 2$, $p = .022$. It is significant at the .05 significance level. For PubA, results are: $H = 7.317$, $df\ 2$, $p = .026$.**

Table 7-11

Mean values for RDH and PubA by municipalities

Municipalities	No. of respondents	RDH	STDV	PubA	STDV
Paterson	47	3.51	1.53	3.2	1.32
Clifton	39	2.9	1.17	2.68	0.92
Hawthorne	43	3.53	1.32	3.17	1.01
Total	129				

This research also examined the perception of access to the decision process by conducting some exploratory analysis. Correlation analysis (Chi –Square) sought to discover if there was a relationship in the municipalities, between the outcome, ‘*Public acceptance*’ and the item statement ‘Redevelopment has helped the section of the community.....’ and their perception of access to the decision- making process (*Influence Criteria and Normative Criteria*). Because there was violation of the Chi-square test, no correlation results using this method can be reported for ‘*Normative Criteria*’ and the outcome variable. However, the Spearman’s rho test revealed no relationship between ‘*Normative Criteria*’ and the outcome collectively for the municipalities. The Spearman’s rho test was used to determine if any correlation exists,

using the individual scores means. Demographic variables (education and race) were also explored to see if these variables might be mediating perceived influence. Additionally, a relationship was explored between race and acceptance of the projects outcome. Tables' 7-12a & 7- 12b both show the correlation exploratory analysis results.

Overall, in the municipalities, 26 persons (20 %) felt they have high influence in the redevelopment process; 37 (29 %) was uncertain, and 66, (51%) felt they have very little influence. Hawthorne respondents felt they have the most influence whereas Paterson respondents felt they had the least influence (29 of 66 or 43.9%).

Table 7-12a

Correlation results for exploratory analysis for the municipalities

Variables	Chi square value	P value	Cramers' V
PublicAccepCat.& InfluCrit.Cat	7.937 (df,4)	.047*	.175
InfluCrit. & Red.Help.Comm	15.960 (df,4)	.003*	.249
InfluCrit.Cat & EduLevelCat	11.378 (df,4)	.012*	.210
EthnicGrpCat & InfluCrit.Cat	6.107 (df,2)	.023*	.218
PublicAccepCat & EthnicGrpCat	5.708 (df,2)	.029*	0.21

* Correlation is significant at the .05 level

Table 7- 12b**Correlation results for exploratory analysis cont'd**

Municipality	Variables	Spearman's rho	P value
Hawthorne N= 43	Public AccpCat & InflucritCat	0.54**	<.001
	InflucritCat & Red.Help.Comm	.57**	<.001
	NormCritCat & PublicAccpCat	0.27	0.08
	NormCritCat & Red.Help.Comm	0.29	0.06
Clifton N= 39	PublicAccpCat & InflucritCat	-0.07	0.3
	InflucritCat & Red.Help.Comm	-0.06	0.33
	NormCritCat & PublicAccpCat	-0.11	0.49
	NormCritCat & Red.Help.Comm	-0.27	0.1
Paterson N= 47	PublicAccpCat & InflucritCat	.330*	0.01
	InflucritCat & Red.Help.Comm	.260*	0.04
	NormCritCat & PublicAccpCat	0.02	0.88
	NormCritCat & Red.Help.Comm	-0.12	0.41

** Correlation significant at .001 level (2 – tailed) * Significant at .05 level. (2 -tailed)

Table 7-12a shows a weak positive relationship (Cramer's V value = .175) exists between the measured scale '*Public acceptance*' of the redevelopment projects in the municipalities and the perception of influence. This relationship becomes much stronger (Cramer's value = .249) when assessed with the item statement from the measure scale "*redevelopment has help the section of the neighborhood where I live*". Previous findings show a strong relationship between perception of positive change and the outcome (Letang, 5). Notably, this variable (Red.Help.Comm) was responsible for most of the

variance in the factor analysis test for the measured *Public acceptance* scale. Cramer's V values of .210, .218, and .249 are considered a moderately strong relationship. This being said, then it can be seen that individual (education) and group characteristics (race) play a significant role in perception of influence. Non – whites perceived themselves to be less influential compared to whites, but it must be remembered that both parties each rated their influences as significantly low but there were more whites persons that perceived their influences to be high. This may however also have to do with their educational status, because whites had a higher-level educational level overall. Table 7-12b shows how this correlation analysis between influence and projects acceptance break down by municipalities. Interestingly, Spearman's rho shows the relationship between influence in the decision-making process and public acceptance becomes much stronger when applied individually especially in Hawthorne. As can be seen, no relationship was found in Clifton.

Table 7- 13 relays how each statement comprising the measured dependent scale renamed '*Influence Criteria*' bears relationship to the procedural meta criteria of *fairness* and *competence* through highlighting in essence, some attributes that are critical to participatory democracy in the decision making process. Though these criteria are not explicitly articulated by the citizens, is implied through the nature and theme of the statements to which they concurred or did not agree to, based on their perception of the process. This qualitative assessment of the process attributes is likely to have facilitated the relationship found with project acceptance. The implication of the process for the individual is how facilitating it is for psychological empowerment and how fair. For their

perspectives of public officials and developers, it is whether officials encourage their trust and how responsive they are to the citizens' values and interests. For the institutional decision making model within which the process occur, the implication is how it contributes to empowerment and how transparent it is.

Table 7- 13

Citizens' democratic model of access to the decision making process and perceived influence

Statement	Procedural Meta Criteria	Criteria Request Attribute	Implication of the Process
Local public officials did not care about my opinion concerning reuse of the site.	Fairness	1. Equal opportunity for agenda setting, setting discourse rules for speaking, asking questions and to defend personal values and interests and expectations. 2. Need for clear issue diagnosis and structured decision making	Facilitation of Institutional empowerment. Legitimacy of the process and officials.
People like me have little or no influence in redevelopment decisions and activities that local public officials make and undertake.	Competence	1. Accessibility to pertinent resources. 2. Clear definition of citizens' roles	Facilitation of Institutional and psychological empowerment. Legitimacy of of the process and officials.
I feel "left out" of local Govt. officials' redevelopment planning activities.	Fairness and Competence	1. Accessibility to pertinent resources. 2. Equity of access afforded in respect to time, language, technical jargon. Early involvement. Need for structured decision making, clear stakeholders roles definition and issue diagnosis.	Psychological and Institutional empowerment. Transparency and legitimacy of the process and officials.

Strong evidence shown by Table 7- 14 indicates people are concerned about access to the decision processes because they perceive that administrative decision making processes and outcomes will either positively or negatively impact their lives and ultimately that of

their neighborhood. The position it takes in rank show how critical this matter is for individuals. In addition, the plight of future generations is of major concern in all municipalities with Paterson taking the lead choosing this reason 59.6% of the time. This has implications for the sustainability theme in all aspects of brownfields redevelopment. *Knowledge of community affairs* ranked third in importance in all the municipalities and *desire to influence policy* was the fourth priority category. Notably, there is a wide choice of ‘importance’ gap between these two variables and also between these two and the other two most important preceding reasons. They were chosen far less than the other two statements in all three municipalities, and, in the same order of priority. However, the fact that individuals in all the municipalities want to influence policy, should be a reason not to brush this desire aside as being merely cursorily. Interestingly, Paterson respondents had greater interest in influencing policy than the other two, choosing it 29.8% of the time. Of note, one (1) individual in Paterson and one (1) in Hawthorne wanted no real involvement in the decision making process, the reasons being old age and work commitments.

Table 7-14**Desired reasons for access to the decision making process**

Municipality	Item statement	Rank importance	No. of times chosen	%
Paterson	Preservation for future generations	1	28	59.6
	Public officials decisions affect my life	2	25	53.2
	My knowledge of community issues.	3	22	46.8
	I want to influence policy	4	14	29.8
Clifton	Public officials decisions affect my life	1	30	76.9
	Preservation for future generations	2	27	69.2
	My knowledge of community issues.	3	13	33.3
	I want to influence policy	4	5	12.8
Hawthorne	Public officials decisions affect my life	1	32	74.4
	Preservation for future generations	2	31	72.1
	My knowledge of community issues.	3	11	25.6
	I want to influence policy	4	2	4.65

N = 47 for Paterson; 43 for Hawthorne and 39 for Clifton

7.4 Qualitative analytical report of public officials' responses regarding access to the decision making process.

The report analyzes the statements made by the public officials to aid in discerning the opportunities that the affected and interested population was given for access to the decision making process and for meaningful participation. It also highlights in brackets, the type of participation that could be discerned. Public records also helped in giving an idea of the reasons why public participation was sought. The report will be presented in the same format for all the municipalities.

7.4.1 Clifton (Mayor James Anzaldi, Personal Communication on July 29, 2010; May 19,

2011)

Who participates? : Economic Development Committee; Planning & Zoning Boards (County & city); City Administration and Neighborhood Representatives; Area residents.

Type & Extent of participation for citizens

Opportunities for access

It was reported that there were neighborhood representatives. This indicates that the mainstream affected population may have had a somewhat restricted participation because the neighborhood representatives may have been the bridge between public officials and them. It is not clear to what extent and in what matters and for what specific concerns they represented the mainstream. The matter of how representative these representatives were is hazy also.

- 1) **Question:** *What were the strategies employed to notify and involve the mainstream public about the planned exercise?*

Answer: *“All area residents within 200ft of the property got written notices of the project”*. This is a response to a formal legal requirement, so by itself it does not suggest commitment to affected citizens’ participation. This gives an idea why participation was sought. **(Type - Functional participation)**

“There were legal notices and publicity in all local newspapers”. This is also a legal requirement that has to be fulfilled in scheduling a Council meeting and a public meeting. This gives an idea why participation was sought. **(Type - Functional participation)”**

- 2) **Question:** *Was there a public involvement/participation component undertaken in the process? If yes, at what stage did they become involved?*

Answer: *“The public most especially the area residents were involved long before this project and the zone change took place”*. The reply is indicative of a process of early involvement that up this point in time was considerate of consulting the public in site zoning/reuse issues. It does not indicate however, if they were influential in the final decisions about the site, except in an early stage in 1994, when according to the Mayor, and a school district report, they voted against a school reuse. However, the Mayor also said, *“Housing was discussed as a possible use. The idea for housing was met with acceptance”*. There may have been a consultative process in latter years in which discussions took place, but implied also is that the idea was taken to them mostly for endorsement.

Concerning the votes, this is procedural democracy in action. (*Type –*

Participation by consultation)

“Housing was endorsed by most who came to every meeting for the project from the area. This shows that public meetings were kept. It is not clear if the meetings were well attended and if they were being attended by only the same ‘regulars’; nor how many meetings were kept; the convenience of the timing when they were kept. These are all factors that can affect meaningful access to and the participation process. (Type – Participation by consultation)

“We kept the area residents especially involved and informed. Many of their ideas were incorporated into the project”. The strategy/ies used to keep the people

informed is not clear, but the newspaper may have been relied on to give redevelopment updates. This was not specified but assumed from media coverage of the site. Implied is the awareness of the necessity for feedback. This implies that legitimacy for the project was taken into consideration. Here keeping the public informed does not necessarily mean a didactic interactive process where the opportunity for learning and knowledge exchange can take place. However, the result of the consultative processes was reportedly that many ideas were incorporated into the project.

- 3) **Question:** *Were end uses of the sites discussed with the residents and their inputs invited for consideration?*

Answer: *“Many questions were asked at every level of participation and taken into consideration before final approval”*. Although there is vagueness as to the relevant levels and depth of participation, this suggests that some attempts were made at more than one level to have some citizens’ involvement. Suggested too is that the public was given opportunities to stake their issues and have some measure of clarification. The sentence implies decisions were taken after consultation but not through a collaborative learning process. (*Type - Participation by consultation*)

Why was participation allowed?

Based on the above analysis and Council records participation sought to: **1)** Fulfill legal requirement about public notifications concerning rezoning etc. **2)** Talk about site reuse issues **3)** Get community ideas about the project and seek their endorsement. **4)** Address

continued traffic concerns the citizens had about having commercial reuse and its impact; also regarding parking problems that ensued after the new housing redevelopment was built. 5) Seek legitimacy.

7.4.2. Paterson (Councilwoman Ames, Personal communication, on November 9, 2010)

Who participates? Local Business Sector; Fourth & Fifth Wards Development Corps; Neighborhoods residents; City Administration. Of note is that the public participation component was not specifically geared towards the researched redevelopment, but on an area wide basis inclusive of the site.

Type & Extent of participation for citizens

Opportunities for access

- 1) **Question:** *What were the strategies employed to notify and involve the mainstream public about the planned exercise?*

Answer: a) *“The newspaper was the main source of notifying the public, churches, and community organizations. b) Several meeting. c) Door to door responses (survey) were used. d) Formation of development corps”.* Here a number of formal strategies were used to ascertain the mainstream values, problems and felt needs. This was somewhat more of an aggressive approach to “meet the grassroots people at their own level and on their own turf” to let them share in the vision of neighborhood revitalization. King et al (1998) endorsed this approach towards achieving authentic participation. Here the municipality strove for legitimacy of its plans. **(Types – Functional participation & by consultation)**

- 2) **Question:** *Was there a public involvement/participation component undertaken in the process? If yes, at what stage did they become involved?*

Answer: *“Yes there were several meetings, widely advertised but poorly attended by the public. The main participants were business partners looking to improve the district and remove the area from prostitution to a more business friendly environment.”*

This is a complaint of an apathetic public noted by administrators. However, other variables like inconvenient timing; work related issues; need for baby sitters; empowerment issues and trust in public officials among others may be involved. The municipality may have had an inkling of these setbacks hence their decision to use the door to door approach. The involvement of the business sector was advantageous because they stood to benefit economically through the expectation of having illegal activities that threatened their businesses reduced. (Councilwoman Ames, Personal communication November 9, 2010). They and the Redevelopment Corps therefore may have been among the drivers in the process. The value of community ownership of the revitalization vision may have been paramount. Hence the Councilwoman’s statement *“you cannot have true redevelopment without the community”*. Area residents/businesses were contacted with a view to collecting information on their values and concerns to develop an action plan and the Development Corps were formed. Here is an indication they would be involved fairly early in discussions about sites reuse, jobs & revenue potential, etc.

- 3) **Question:** *Were end uses of the sites discussed with the residents and their inputs invited for consideration?*

Answer: *“Yes, it was discussed and an action plan was developed for the whole area, you cannot have true redevelopment without the community. Fourth & Fifth Wards Development Corps was formed”.*

Consulting the citizens may have helped in redefining the problem since the survey was an exercise to have firsthand knowledge and assessment of their needs. However, the Master plan was developed by administrators, incorporating public values and concerns, not through a consensual interactive learning process. The discussions may have been conducted with the business sector and the Development Corps because it was said that the mainstream did not attend the meetings. Whilst it is not certain if the Development Corps were representative of the grassroots, (e.g. education level, race), the fact that a door to door survey was done, gave each contacted individual a fair opportunity to air his concerns and suggestions. Here, the municipality sought legitimacy of the process, implied responsiveness and governance which acknowledged the importance of community input. **(Type – Functional participation & by consultation)**

Why was participation allowed?

- 1) Participation was sought in keeping with the development of the Master Plan.

Councilwoman Ames said the specific exercise *“was part of the Master Plan not the redevelopment plan”*. The idea for urban revitalization originated in the Master Plan and so citizens were surveyed with this holistic view in mind. As stated before, because specific information could not be obtained about the redevelopment of the site except from very scanty Planning Board routine records, the survey exercise for the Master Plan development had to be used as proxy. Notably, a

targeted, specific redevelopment plan including area wide redevelopment was planned in later years for city wide urban revitalization 2) “*To get the true responses and to assess the needs of the community for input in the Master Plan.* 3) Seeking legitimacy and to demonstrate responsiveness (**Types – Functional participation & participation by consultation**)

7.4.3. Hawthorne (Personal communication with former Mayor Frank Chrisatelli on April 30, 2010)

Who participates?

Future of Hawthorne Committee (Formerly known as Economic and Industrial Development Advisory Committee - EIDAC); Planning & Zoning Boards (County & city); City administration; Mainstream; Kohler representatives.

The choice of this committee may already reflect a bias towards sites reuse primarily as an economic venture. Other issues such as some quality of life issues may not be paramount. It is not clear how representative they are of the area residents concerns and the process could be subject to interest group capture. This may have had implications for equity of opportunity for access to the decision making process and to influence decisions.

Type & Extent of participation for citizens

Opportunities for access

1) Question: *Was there a public involvement/participation component undertaken in the process? If yes, at what stage did they become involved?*

Answer: Early Participation – The Mayor said yes and that “*From early their participation was invited*”. He said different media outlets were used to announce and advertise meetings. The statement suggests that they were *invited* to listen to the televised meetings (**passive participation**) and come to public & Council meetings (as verified in Council minutes) to ask questions and express concerns.

(Participation by consultation) For the Advisory Committee (identified in Council minutes) later known as Future of Hawthorne Committee comprising of local businesspersons with the responsibility to identify, map and advice Council about vacant industrial sites and their prospects for redevelopment (including economic rationality) this suggests meaningful early involvement for this sector.

(Interactive, functional participation implied)

2) **Question:** *What were the strategies employed to notify and involve the mainstream public about the planned exercise?*

Answer : 1 a) Meetings and discussions with Future of Hawthorne Committee the the Advisory Committee. b) The Mayor used the television to inform and advertise through personal appearance; newspapers for public notices c) A Future of Hawthorne Committee meeting with the Kohler company representatives of the site was also televised.

2) Public meetings – “*Separate public meetings were held. At these meetings Future of Hawthorne Committee members was present*”. This suggests that the Committee was at these meetings as the bridge between the Council, potential developers, including the Kohler group and the mainstream. Suggested here are meetings

apart from those required for Ordinance hearings and business as usual. These targeted public meetings are for discussions, clarification, and for citizens to stake their claims, to avert possible conflict also. As an example, Hawthorne Council required two such meetings to deal with potential conflict situations. One dealt with job acquisition for unionized workers during the construction phase of the site and the other, one in which there was overt opposition concerning site reuse for the adjoining site. (Colgon/Merck) **(Type – Participation by consultation?)**

- 3) Open House Policy – *“On the 1st Friday of every month, the public is invited to have coffee and donut and discuss any problem they may have”*. People were also allowed privacy as requested. This general access policy was instituted during Mayor Chrisatelli’s tenure and was in effect during the redevelopment initiative. This setting suggests an informal atmosphere and could convey to the individual a message that his/her ideas and concerns matter. If the time was inconvenient, then it may have been possible for suitable arrangements to be made since it was an ongoing policy. In addition, if people may have been reluctant or embarrassed to publicly air their concerns in a formal setting, this allowed more equitable access to all concerned. Here is an attempt at legitimacy. This “one – on one” relationship is applauded by King et al, (1998) in seeking authentic participation. **(Type – Participation by consultation)**

3 Question: *Were end uses of the sites discussed with the residents and their inputs invited for consideration?*

Answer: The records and interview implies that meaningful discussions for the end uses of the sites were mainly conducted with the Committees. Mainstream citizens' input was suggested mainly through the questions leveraged at public officials, including Council, and developer during Council sessions and public meetings. The Mayor said that the informal meetings such as the "open house" were used to gain inputs for consideration.

Why was participation allowed?

- 1) For Committee advising on redevelopment options towards a stated municipal priority goal to increase tax revenues.
- 2) Mapping of areas for redevelopment.
- 3) To avert potential conflicts.
- 4) For discussion of identified issues/problem.
- 5) To obtain legitimacy.

7. 5. Public Officials' perspective of project success in the municipalities

- 4) Question *"What were yours and the municipality's expectation/s for the community participation process?"*

7.5.1. Clifton

- 1) **Revitalization mixed use goals being achieved.** – *"It was difficult for such an industrial city to see yet another plant moving. It became the story of so many New Jersey cities and their industry. Clifton filled the voids with many new uses including housing, retail and warehouse distribution centers always depending on public input especially from area residents and businesses. The redevelopment continues throughout the city today".*

- 2) **Public acceptance of project.** - *“The housing was endorsed by most who came to every meeting for the project from the area.*
- 3) **Public officials’ transparency & project legitimacy.** - *“We kept the area residents especially involved and informed. Many of their ideas were incorporated into the project.”*
- 4) **Collaboration between residents for community building.** - *“Most are great stories of local residents working together to make redevelopment in their neighborhood happen.”*
- 5) **Public opinion was also gauged from media responses.** During the interview (Personal communication May 19, 2010), the Mayor mentioned the newspaper reports showed a mostly favorable endorsement from the people.

7.5.2. Paterson

- 1) **Area revitalization.** 2) *“Clean up the neighborhood”* (Gentrification). 3) *“Build economic development”*. 4) **Community approval for further revitalization projects** - *“The community has approved a light rail that is coming soon”*.

7.5.3. Hawthorne

1. **Kohler contributed significantly to the tax base.** Here a municipal goal was achieved.

2. **Public acceptance** of the redevelopment. The Mayor said, “*The public was very responsive*” This was said because there was reportedly no public opposition to Kohler’s reuse option for the site.
3. **Good working relationship** between Kohler and the municipality.
4. **They (Kohler) kept their side of the agreement** in terms of the **tangible incentives** (e.g. soccer field and \$50,000 towards its development) they gave the municipality.
5. **Success in securing local unionized jobs for residents after negotiations.**

Figure 7-3 relays the summarized public officials’ report of community participation outcomes and identified redevelopment criteria of successes in the three municipalities.

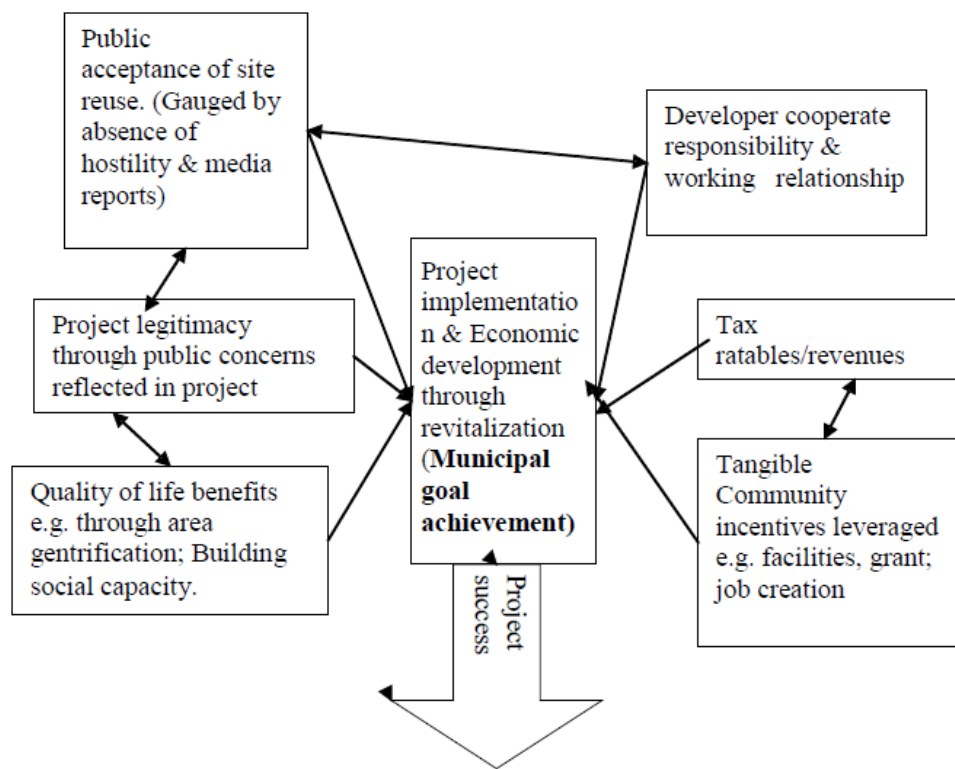


Figure 7-3 Administrative summarized report of community participation process and outcome and identified redevelopment criteria of successes in the three municipalities.

This shows that values in the political dimension of the process as well economic matters and other social variables are regarded in the decision about project successes. The primary objective is the achievement of a priority municipal goal particularly through urban economic revitalization and community development as it relates to the Master plans. The double arrows show interconnectedness. Further research using a prescriptive approach, can assess the priority given to these variables in each municipality to see the degree of importance each has compared to the others in achieving the projects' perceived successes and ultimately the municipals goals.

In contrast, Figure 7-4 summarizes the survey respondents' perception of the relevant criteria for acceptance of the redevelopment processes and their outcomes.

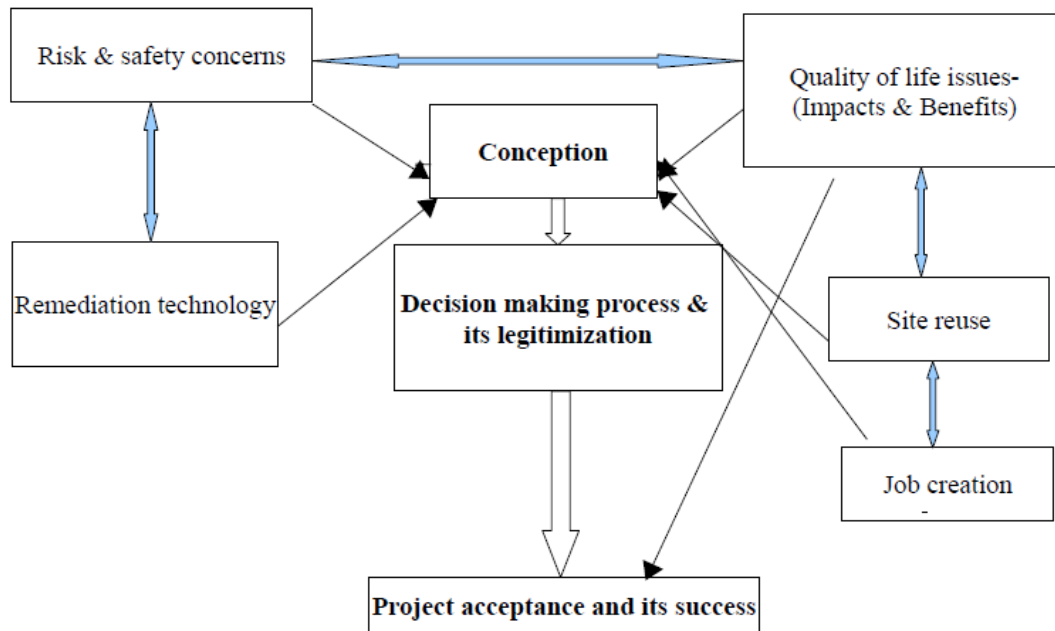


Figure 7-4 **Community concept of brownfields redevelopment project success.**

Information gathered from respondents' qualitative reports, Council and Planning Minutes and the close-ended question responses in the survey were synthesized to reveal the results above of the respondents' criteria concerns and values relevant to the projects' acceptance. The double arrows show interconnectedness. These criteria values and concerns and public officials and developers responsiveness to them gives legitimacy to the decision making process and are all relevant and important to their perception of success during the life of the project including its outcome. For example, some Paterson

respondents had issues with the perceived manner of how the jobs decisions were made citing that race and crime history biases relevant residents from getting redevelopment jobs. This also has environmental justice connotations. Notably, apparently for some respondents, particularly in Clifton, emphasis was more placed on actual impacts on quality of life for them to be accepting of the outcome, hence the arrow bypassing the ‘decision making process’ to actual outcome. This does not mean however, that officials’ actual decisions were not challenged during the survey. Furthermore, Table 7- 13 delves into the three critical close-ended questions that assessed respondents’ perceptions of influence in the light of the procedural Meta criteria of *competence and fairness* and the attributes of the request (requirements). This is to develop a better understanding of how these Meta criteria relates to their desire for empowerment, trust, transparency and thus legitimization of the process.

Public officials and citizens were both concerned about each others’ responsiveness. For public officials, public endorsement is very important. This may have to with their political as well as social objectives. Officials also see achievement of urban revitalization goal from an economic perspective and obtaining incentives as critical to project success. Based on citizens’ survey responses and public records, quality of life is prioritized whilst for officials this is a byproduct of revitalization.

7.6. Discussion

One of the goals of public participation is to increase legitimacy of political decisions with the expectation of promoting public acceptance of these decisions. In this case, those issues particularly surrounding the sites redevelopment and attendant infrastructure.

Furthermore, it has been said that procedural should possibly lead to a positive outcome goal – public acceptance. The results show that those who gave more credence to the authorities had a more positive perspective of the legitimacy of the process and a more accepting attitude towards the redevelopment exercises. There were also social characteristics (education and race) that were associated with respondents' perception of their influence in the process. These variables could have added fodder to the positive and negative perception of the legitimacy of the discourse and the perception of the substantive outcome. Here a reminder must be issued that the relationship between perceived influence and the project outcome was found only for Paterson and Hawthorne, and not Clifton. Rich et al, (1995:664) suggests that in addition to self esteem, having sufficient education as an intellectual resource needed to decipher technical matters can result in a more effective response to environmental threats and hazards. The findings validates this statement, showing those with higher educational status, were more confident in their abilities to impact the decision making process. Additionally, the authors stated these individuals may be more aware of their legal and procedural rights to access and are better able to converse with public authorities, including experts in different forums. This gives them the upper hand in being more persuasive. Highly educated people are also in control of most of the resources and abilities that are valued by public figures in political affairs and this makes them highly desired as citizen representatives. Examples are, cognitive skills, politically savvy, part of social networks comprising of influential people (Clawson & Oxley, 2008). Conversely, there were highly educated people who despite being instrumentally empowered (higher educated) said

officials conduct public meetings as a ‘front’ when in fact, the decision has already been made. This implies some analysis of the structure of the decision making process on their part and the subsequent conclusion indicating a perception of the lack of institutional empowerment to complement and or enhance instrumental empowerment.

Earlier on, respondents’ reaction to the project outcome was mentioned. I draw on the environmental psychology literature to better understand and interpret the reaction to the redevelopments in the municipalities. Hawthorne and Paterson are more receptive to the changes resulting from the redevelopments than Clifton, with both municipalities citing more observed positive changes respectively. Concerning Clifton, many of the citizens’ dissatisfaction stemmed from the negative substantive reported results observed by the citizens (See Letang , 5). Despite the traffic studies conducted by Clifton municipality to gauge the redevelopment impacts, this did not allay the concerns of the affected citizens; instead, they were exacerbated by the projects’ impacts. Here it is essential that the community be able to easily avail itself of these traffic studies reports at convenient locations they identify and in non-technical language. This transparency is essential in the event that there is mistrust of the results of government traffic studies. This could be an issue here. Another public concern about carrying capacity of the schools, and the ability to absorb additional school aged population from the housing redevelopment, was not assuaged by the project’s implementation. Additionally, the perceived density of the housing redevelopment is a constant irritant with its perceived substantial population increase creating a burden on the city’s infrastructure. All these factors will affect their sense of place and community. Pertaining to Hawthorne residents,

they were allowed concessions from the municipality in terms of their concerns about not allowing “big box” retail redevelopment in their neighborhood to compromise its integrity. Also, the unionized jobs among other incentives (enhancing their sense of neighborhood attachment) obtained from Kohler through their Council’s negotiating on their behalf. These concessions appeared to influence their lukewarm response that redevelopment helped their community. Lowenstein, (1989:439) is supportive in recognizing the importance of concessions in conflict negotiations in influencing outcomes satisfaction. Paterson’s, respondents’ sense of place is suggestively sensitive to social cohesion through social relations, socio political (their ability to effect positive and policy changes) matters among others. Social cohesion resulting from the redevelopment was also relevant in the other municipalities. Social interactions promote a sense of community. Importantly, it has been linked to community participation. When people through group interactions feel that they belong to the community and have a stake in the community, they are more likely to want to participate in community projects. Social interactions are likely to promote project acceptance. Recreational facilities including open spaces were also highly valued in the impression of favorable changes. This facilitates social interaction that helps one to develop a sense of place and community. Especially for Clifton residents, this is seemingly critical. It must be reminded that a sense of place attachment gives individuals an emotional attachment to their sense of community and is integrally connected (Manzo & Perkins, 2006). Developers and local authorities should be cognizant of this environmentally psychological factor and be responsive to such core values because of its link in encouraging community participation

and it is an important element of the revitalization projects' acceptance. Some respondents' anecdotes bring to mind the significant role that peoples' attachments to place have in the perception of the projects outcomes. For example, 'Arlene' said, "*The area is more crowded*"; 'Ralph' stated, "*No more redevelopment is needed, the area need to remain residential to avoid traffic increase*". They are peeved about the functional aspect of the redevelopment and feel another use could have been made for the site to increase its utility to the neighborhood while maintaining its residential integrity. Possibly, there was a feeling of "powerlessness" that their voiced concerns would have any influence in decision making on the outcome. For 'Arlene' and 'Ralph' and others like these, the matter is whether or not this tangible addition to the neighborhood is an asset or a liability and a reflection of a legitimately coordinated decision making process between affected and interested stakeholders and public officials. Outcomes are more likely to be accepted and approved if there is reasonably perceived agreement (legitimacy) and coordination between local officials and affected participants (Coenen et al Eds, 1998:314).

The aforementioned characteristics such as social cohesion, sense of community, place attachment and their application to perceived and actual access to the decision making process can be assessed in the light of the socio-political context and how it is embedded in the whole concept of community and place attachment. Process and outcome are important in defining the attachment people have to place (Bonaiuto et al, 1992:33). Process in this regard, incorporates the social and psychological interactions the individual experiences with the place. There is also a political dimension associated

with peoples' attachment with their communities (Manzo & Perkins, 2006). Place attachment and sense of identity are also socially constructed in terms of its spatial definition of people and groups. Gender, race, ethnicity, and class also affect our perception of and sense of identity (Manzo, 2006 citing Manzo, 2003, 2005). This can restrict us to a physical or psychological place that has been socially constructed. Spatial definitions of people and groups will affect socio – political relationships because these factors influence our sense of being empowered to participate in community programs and engage in negotiations. Based on Manzo & Perkin's (2006) argument, the politically correct terminology of "minorities" may be a reminder of being the ³'non – whites' and their 'position' in society and thus their perception of the flexibility of the administrative structure and their clout to influence decisions and policies. This is said because ⁴non-whites felt they had less influence in the redevelopment process. This relationship found between race and access to the decision making process is based on different life experiences including historical variables. Another factor is language barrier. How facilitating was the redevelopment process in accommodating those whose mother tongue is not English? One could argue that the aforementioned factors, such as language spoken, sense of identity can limit individuals' competency to make claims in the discourse. This could also preclude their selection and exclusion from the proceedings (Abels, 2007). Of note is that exclusion can be self - determined. The relationship found between race and influence in the decision making process has environmental justice

³ They were categorized as such, in this research for analytical purposes

⁴ Paterson respondents are a majority of non whites that include a significant black and Hispanic population

connotations. Interestingly, in evaluating the projects outcome, some Paterson respondents felt there was unfair treatment for redevelopment job opportunities. This warrants some investigation.

The strategies initially employed to sensitize, engage, and continuously inform citizens about potential redevelopment, can assist in encouraging or discouraging community participation. Strategies for access provide all persons affected by the redevelopment and other interested persons, equal opportunity/ies for access to the process from conception to conclusion, or at any pertinent stage, for inclusion. If some individuals were merely eyewitnesses as they claimed, this may preclude inclusion. Strategies, as well as the administrative structures through which they emerge and operate can also facilitate empowering or disempowering incentives. Paterson's data showed there was a wider range of strategies used to initially inform the mainstream community and seek their adoption of a community vision for revitalization of a blighted neighborhood, including its brownfield properties. The use of diverse strategies has positive implications for social networking and thus some individuals decision whether or not to participate in community projects processes and implementation. An example of these implications is, people may be encouraged to participate because of the influence of an informal network of associations such as neighbors, household members etc. An individual learning about the site redevelopment from this informal association is indicative of the messenger of the information being interested enough to talk about it and exchange ideas for its beneficial use to the community. This encourages the 'group think effect.' The issue is how effective is this informal communication channel in the

sharing and adoption of values? Can it be harnessed for the collective interest? Can it facilitate meaningful participation? It can be a low cost solution to engaging an apathetic public that is a general complaint of administrators and implied by Paterson's Councilwoman. Informal conversations have been known to birth successful community projects (Barton, 2000). Public officials can capitalize on this informal communication source to seek and encourage active cooperation by framing an issue in a manner that it generates the idea of 'neighborliness' and social networking as beneficial keys to developing socially and environmentally responsible behavior and thus community participation conducive to community development. In former community outreach activities, I have personally used this as an advantage. Seeing environmental problems are also socially constructed, then it is possible for community ideas, their solution, and securing community participation to be socially constructed too.

The opportunity to participate in decision-making has to do with popular sovereignty. It also helps the individual social development by improving and developing social skills, cognitive development and improving problem solving and communication skills. This builds social capital in a community. The fact that the statement "*public officials' decisions affect my life*" was chosen by the majority as the most important reason for access, indicate the issue is about people wanting to retain and maintain some locus of control over their lives and ultimately their destiny. This matches the egalitarian perspective that each individual has the right to be involved in local officials' decisions and make joint decisions that will impact the quality of their lives (Renn, Webler & Weidmann, 1995Eds). This is about empowerment. The primary methods for access to

the process in the three (3) municipalities were public hearings at Council and Planning & Zoning Board sessions and public meetings. The disempowering effects of public hearings and meetings have been well documented by Rowe & Frewer, (2000). These methods are executed to conform to mandates for public participation. In consideration of resources limitation, this is a viable option but conversely, because public participation activities can sometimes be resource intensive, this suggests that much attention some times, may not be given to the quality of the decision process, and, which could lead to citizens' dissatisfaction with both process and outcome. Paterson Council Minutes revealed repeated incidents when the citizens had to be reminded of time constraints and their 'lengthy expressive' concerns shortened to the fact, incurring their discontent. Suggested here is the necessity for other forums that are more conducive, and in which issues can be identified, clarified, and adequately discussed with a view to solution. Some focus group participants and survey respondents were concerned that authorities were merely pretentious of getting their inputs, and their concerns would be not be reflected in neither project outcomes nor policy. They felt authorities did not really care for public opinion and call these meetings for support when the decisions have already been made or close to being made. King et al (1998: 323) gave credence to this complaint by citing an *administrator* "*I think public hearings are definitely too late. It's a formal process. Citizens know that. They know that and come to public hearings, but they know that it is already too late*". Low-income citizens and minorities are particularly disadvantaged by this strategy because it limits access to participation (Rowe & Frewer, 2000 in citing Checkoway, 1981). They are restricted by economic constraints as endorsed by a

Paterson respondent who stated that a major barrier to his participation was his job because he could not afford to take “time off” to attend. These formal televised public meetings, also limit access to those who are shy and are unsure of their competence to cohesively express their concerns and seek clarifications especially if officials or other pertinent individuals, like developers are unfamiliar. This biases the discussions, and outcomes to favor those who are more educated. This is a reasonable explanation why more educated individuals felt they are more influential in the decision making process and were more accepting of the outcome.

Conversely, Abels, (2007) in analyzing the public hearing model in Germany shows that from a legal procedural standpoint, it is an acceptable model for participatory technical assessment. Despite Abel’s profession of the legitimacy of the public hearing and its high propensity for participation and deliberation, the fact that it calls for significant knowledge base for all concerned to stake their claim in the deliberation based upon factual scientific argument and standards, will definitely limit access to many individuals. This access will be limited for even highly educated ones who may not have the relevant knowledge and expertise in the scientific arena to advance sound arguments. Here its legitimacy may be compromised unless citizens have access to the resources, both human and material that will increase their competency in scientific and technical claims making. Of course, this resource should be available based on the nature of the issue, whether it is scientific or social in nature. However, it must be noted that the scientific and the social issues should not be divorced from each other since scientific technology triggers social impacts and policy. Therefore, the available resources should

reflect this interdependence. These resources did not appear to be forthcoming in all the municipalities.

Regarding the strategy of utilizing *citizen group representation*, information was not obtained from the municipalities as to the characteristics of the representative groups. Except for some minimal information in Hawthorne, no information was available in terms of how representative they are of the affected population. Additionally race and language is more of an issue in Paterson because of a more heterogeneous affected population. Citizen groups are the interface with local and elected officials, industry, including developers and the mainstream affected community. Representatives' motives for citizen representation may be driven by self-interest. In Hawthorne, the "Future of Hawthorne Committee" group membership tended towards a bias of comprising of business people. Brownfields redevelopment has been mostly economically driven in municipalities and these individuals were required to give input concerning sites possible reuse for redevelopment. Here the temptation could be involvement for the high personal stakes involved, not primarily for altruistic reasons, which may result in misrepresentation of the general will and interest group capture. Russel & Vidler, (2000) is supportive that interest group capture can be especially problematic and pervasive. Council minutes mentioned the business community petitioning the Council to reverse a Zoning Board of Adjustment zoning decision about the MERCK site that had implications for the site's reuse and later on rallied the community to have an overt protest about a considered site reuse option. Whilst it is uncertain if any of these businesspersons comprised the Committee, this is an example of possible covert self-

interest by a group cohort, despite the community's 'buy in' of the protest. However, the fact that they succeeded in rallying the community may be indicative of some level of citizens' trust or it may be leadership ability to mobilize citizens looking for leadership to quickly and strongly protest their disagreement. Rowe & Frewer (2000: 9) said that the Groups' clout to influence final policy is "*variable but not guaranteed*". The Council minutes in Hawthorne and public officials' reports in Paterson and Clifton indicate Citizens' Groups early involvement in the participation exercise but they did not appear to be influential in the final redevelopment decisions. Hawthorne's former Mayor Chrisatelli said this Committee's involvement was mapping of the areas in need of redevelopment, giving some verification to this statement. Summarizing, citizen groups representation while they do assume relevancy according to the issue and level of participation required, may fall short in terms of its perceived legitimacy, ability for true representation of the affected populace, and its subjectivity to interest group capture.

Clifton municipality reportedly used a ***citizen vote*** in 1994 to determine the sites possible reuse as a school. Regarding the variable 'early involvement', its rating in the literature was "variable" but Clifton's example indicate early involvement because the vote was cast in 1994, approximately three (3) years after Shulton's closure. This method is facilitating of overall equity of access and influence.

Respondents have shown that they desire access to the decision process primarily because the decisions that public officials make will of impact their quality of life (e.g. sense of place) and that of future generations. This is also a procedural right. The fact that the respondents' confidence in their knowledge of community affairs and the importance

of wanting to influence policy took the same sequence of lower priority in the municipalities may be an indication of peoples' perceived psychological and individual competence. The issue may be whether or not they feel they know enough about the day to day affairs, (socio economic, political, religious and educational) of the municipality, and being equipped to enter the redevelopment discourse to make and challenge claims, the authorities and developers advance. Zimmerman, (1990) reminded us of these influencing factors that undergird individuals' feeling of competence. An overwhelming majority in the survey, (over 72 %) said they would like to know how redevelopment decisions are made, which may indicate the necessity for an increase in knowledge base. Lachapelle et al (2004), reminds us that skills and feelings of confidence should not be divorced from feelings of empowerment. Zimmerman, (1990:172 - 174) heightened awareness of the role of public participation to obtain the relevant skills and information and which may be a factor in individual and psychological empowerment. This may explain why only 29.8% for Paterson, 12.8% for Clifton and 4.65% for Hawthorne felt any actual desire to influence policy despite the overwhelming majority wanting to know and understand more about redevelopment decisions. Psychologically empowered individuals have an understanding of the contextual factors within which the decisions are made, and those that influenced the public officials' decision-making (Zimmerman, 1990: 174 – 175). However, entering into the claims making arena with the intent to actually change or significantly modify policy also involve other variables than educational level and confidence level; it may also involve trust in administrators to competently do their job, and, transparency of their actions. In fact, a respondent in

Hawthorne said the public officials should be able to do their job. Here he subscribes to the elitist perspective of participation. In his apparent contextual analysis of the situation, his choice was to leave the decision up to the officials. Conversely, Lachapelle et al (2004) found that mistrust of public officials was disempowering to participants in a forest management study in Nepal. Another issue may be that people feel their opinions are not seriously considered by the officials to the extent of influencing policy. For example in her anecdote, a survey respondent said her *“participation in decision making will not make a difference”*.

Paterson respondents (29.8%) choice regarding the desire to influence policy compared to the other municipalities is noteworthy. This may be because they have been so significantly impacted by societal ills for a significant time that they strongly desire a change and want to voice strong demands that will receive strong consideration and actions in decision outcomes. Revitalization policies can be perceived as a viable avenue through which this change can occur. Letang (Chapter 5) found that improved social relations were high on their values for being receptive to redevelopment in their neighborhood. This suggests that sense of community is a strongly desired sentiment in their “block” neighborhoods. This may be enhanced in situations where peoples’ plights are perceived to be of a common source. In this case, the perception of the environment and its related problems is significant. We are reminded that social relations, environmental perception, sense of control, empowerment, and community participation are all building blocks to community development (Zimmerman, 1990). Paterson respondents are indicating that the motivational factors are present, fuelling the desire for

a better quality of life through community building. Additionally, the strong desire to erase the social ills and achieve a better quality of life in the neighborhoods was frequently raised in the Council minutes. The issue of how to tap into and harness these strong values to build, mobilize, and enhance mainstream community participation in decision making and therefore community development through brownfields redevelopment should be a priority focus of public officials.

In all the municipalities, the implicit cries for sustainable development principles are echoed. This is a call for decision makers to consider the wider social, economic, environmental, and political systems within which environmental decisions, such as site remediation and reuse are made. The concern for *preservation for future generations* is about what is morally right and citizens prioritize both intra and intergenerational equity. For example, some Paterson respondents requested that brownfields be converted to recreational safe centers to keep their children off the streets. A Hawthorne respondent said the increased truck traffic owing to the current site use has jeopardized the safety of children. This author's environmental field experience with communities revealed that people place strong emphasis on their children welfare and exert strong pressure on local authorities to remedy situations in which they perceive their children are susceptible to environmental ills. In this regard for generational equity, it is important that local and national brownfield policies continue to pursue and aggressively develop green development initiatives in communities in conjunction with citizens. As the effect of technological advances such as climate change and pollution become more overt, people are demanding more responsible corporate and public behavior to combat the threats that

are always present (Coenen et al Eds, 1998). Haughton (1999:236) suggested an appropriate point in the environmental decision making discourse to assure “*sustainable processes of regeneration*”, is at the interface of public and private partnership. Taylor & Carandang, (2011), revealed that citizens have some basic knowledge of sustainability issues and principles and there is the necessity for community “buy in”. Preservation for future generations also responds to a biological instinct for protection of the unborn and grounded in the need for survival of the human race and investment in future generations. It involves the principle of fairness realized through sustainable principles. People are very interested in leaving a legacy for the future generations and ask that brownfields redevelopment embrace these core values through sustainable development policies that embrace the essence of environmental justice.

The fact that citizens were sensitive to the belief of local officials’ decisions affecting their lives , and believe this is adequate reason to access the decision process speaks particularly to four (4) of the 10 goals of sustainable development deemed necessary for brownfields redevelopment to attain the overarching goal of sustainable communities. Sustainable communities are characterized by efficient infrastructure, efficient allocation, and utilization of resources, economic vitality, and maintenance of an enhanced quality of life (International Economic Development Council, 2002:165 -6).

The goals include:

- 1) Meaningful involvement in decisions that affect their lives.
- 2) Conditions in communities must be conducive to acceptable to good health.
- 3) In the pursuit of economic, social, and environmental well being, there should be

equity of access to resources.

4) Poverty reduction and or alleviation, job creation and maintenance of a vibrant economy geared towards quality of life improvement.

In keeping with the second goal, Letang (Chapter 5) also found that for Paterson and Hawthorne respondents this as a priority reason for approving of redevelopment projects in their areas. It was also highly regarded in assessing the redevelopment impact through their observation of some changes experienced in their neighborhoods.

Regarding the fourth goal, Paterson and Hawthorne also set high values on job creation implying the desire for development and maintenance of a vibrant economy conducive to an improved and maintained acceptable quality of life. Two (2) of the ten goals also speaks directly to intergenerational equity pertaining to stewardship of the environment and conservation of nature. Responsible stewardship of the environment entails a moral argument that everyone should be held accountable for their contribution to the ‘tragedy of the commons’. Seeing that national and local authorities have embraced the challenge for sustainable development that economic development should have the ability to meet current generational needs and consider those of future generations, (Brundtland Commission) whilst pursuing brownfields redevelopment, this is an opportunistic principle to garner mainstream community interests, input into decision-making, and acceptance based on an identified citizens’ priority. Strong sustainable principles have the ability to generate high interests and high benefits both individually and collectively, (Endorsed by Tonn , English & Travis, 2000) and to facilitate social learning and capacity that can result from the decision processes and outcomes.

Repeatedly it was mentioned that citizens are interested in increasing their knowledge base and be more cognizant of how redevelopment decisions are made. Suggested here is that they want to be involved in defining the related issues, instead of merely being told what they are. In other words citizens are seeking more detailed information as to the criteria used in these redevelopment exercises and the potential risks to the neighborhood among other issues. It is a request for power sharing because knowledge is power.

Accessing this information should help the individual become more adept at analyzing the identified problems (out of which the need for redevelopment arose) so that he or she can through more insight, feel more competent to sift information to discern what the critical and non-critical issues are and make informed decisions. This becomes more critical when the individual is faced with technical matters that challenge citizens' "popular epidemiology". This is a call for more interactive sessions that facilitate learning so that participants do not feel they are being coerced, and "talked down to" by relevant persons that have the pre-requisite knowledge to gain the upper hand in the discourse and to influence outcomes. Today, the openness of modern communication sources allow citizens to be more aware that experts do not always agree on technical matters and so more interaction with the experts will allow citizens to hear and develop a better understanding of the constraints, complexity of issues and values that undergird redevelopment decisions and policy. Participants should then have more awareness to structure and guide their opinions and evaluations. Because brownfields redevelopments cover a wide swath of policy issues, its complexities require more access to information to enable a more informed public to make analytical assessments. This should enable

high quality contribution to the decision process and ultimately legitimate policy decisions that are cognizant of the communities' needs and values in the discourse.

7.7. Conclusion

Although the research was conducted among a relatively small number of persons, it adds value to the body of research by revealing that citizens do want a meaningful place at the table of brownsfield redevelopment projects' processes in their neighborhoods. They are emphatic about what their values are in terms of the redevelopment and the importance of both institutional and psychological empowerment in the process in order to be fully developed citizens. Critical to this perception of empowerment is a sense of control over their destiny. Also, critical to their self-development, is the matter that their opinions are considered and respected by public officials. This reflects on their self-identity, affects their dignity and moral rights as citizens, and has fairness connotations. Although the decision making process was very important in the determination of project acceptance, this was not the 'end all' for some individuals in determination of project approval. This was evident from Clifton's respondents' results. The results suggest that their focus was mainly on how favorable the outcome was to them and their neighborhood.

Some case study research have reported successful participatory processes when citizens were evaluated to have had exerted significant control over the process to the extent of influencing decisions (Beierle & Konisky, 2000). However, the authors, although suggesting caution in the conclusions, did not see this as a hindrance in other success reports when citizens did not have similar extent or levels of control. The deciding factor was the presence of a responsive institutional structure and processes to

facilitate citizens' value systems and needs. This research leans towards a mixed conclusion. The majority of respondents rank the statement that 'public officials' decision affect their lives' as the number one (1) reason indicating a desire for access to decision making, while 'influencing policy outcomes', ranked 4th among choices. Although the importance of their influencing policy cannot be underestimated, they were seemingly more interested in having a voice to make expressive claims, and having their values and opinions seriously considered during the process. The ultimate objective of their access was to guide decisions and have their values and interests reflected in redevelopment decisions rather than exerting direct control on local policy. Paterson respondents however, were more expressive about changing this status quo. This may have to do more with the severity and frequency of the social ills they experience, and which, tweaking of some local redevelopment policies could address. Here, echoing Beierle & Konisky, (2000) the importance of a responsive administrative structure must be reiterated, and, appreciating the complexity of citizens' influence in decision-making. This suggests a host of underlying factors involved, including contextual issues that needs to be more explored. Despite the hierarchy of reasons for wanting access to the process, it may not be merely linear because of possible contextual empowerment and other issues that may cause an apparent acquiescent public to become quite reactive as in Hawthorne's example. This is reactive empowerment, because they acquired leadership and organizational capacity to respond to a perceived threat (Rich et al 1995:665). The whole matter of the complex interaction between the individual, environment, cultural and the contextual underpinnings of empowerment can be realized from this research.

Zimmerman, (1990:170) aptly reminds us “*Empowerment at all levels of analysis can have different intensities that change over time*”. Community participation issues are an ideal forum to analyze and try to understand this interplay because of the ever-changing dynamics involved in both the procedural and distributive dimensions.

Intergenerational justice is another driving force underlying citizens’ desire for access to the process. This has fairness and sustainability connotations indicating that citizens, whilst appreciating the economic benefits such as job creation to be derived from brownfields redevelopment, are not essentially driven by economic values in determining the value and acceptance of the projects to their neighborhoods. This shows that sustainability in all contexts must be, and maintained as a substantive portion of brownfields redevelopment policies.

Looking at the strategies by which citizens reportedly learn about the sites redevelopment, suggests that the informal communication network can play an important role. Future studies can assess how enabling this network is in contributing to citizens’ perception of access to the decision making process, its implication for encouraging participation and the overall importance of the initiative. If environmental problems are socially constructed, then it is likely that evaluative aspects may also be socially discerned.

Diverse strategies employed by local officials can be an effective tool in community mobilization. They create a sense of equity in participation, and the number and types of strategies can indicate the perseverance, of local officials as averse to ‘token’ efforts to secure the communities’ cooperation and access to local decision making. The

pros and cons of the identified methodologies used in the municipalities were highlighted and discussed as well, to obtain more insight into how they could have facilitated respondents' perception of no, to minimal and actual empowerment in the process. The study results suggest minimal existence and or absence of an institutionalized program for facilitating mainstream public participation for the mainstream. Such a program should enable essential resource availability and effective, efficient utilization of such, and evaluation strategies to guide and inform present and future activities. The implications for resource availability is that affected and interested citizens' abilities can be improved to competently enter the discourse, make, evaluate expressive claims and make competent decisions. The manner in which activities for access to participatory decision making are structured by the institution must enable citizens to develop and build a sense of self-confidence. This is formal empowerment. Enabling formal empowerment structures also assist in building administrative trust as individuals develop self-confidence. The research supports Rich et al (1995) and others postulation that an individual with perceived minimal or no influence to address relevant problems in a decision making process, will view the substantive outcome unsuccessful and lacking fairness in the matter. Herein lays the principle of substantive empowerment that embodies a partnership approach between the formal institution and the citizen in problem solving. This factor has influenced their lukewarm response to the participation processes such as in the case of Hawthorne and Paterson and lukewarm acceptance of the redeveloped projects. However, community participation exercises have to be carefully considered and crafted and cannot be approached from a 'one size fit all' perspective, and

also assessed in terms of social variables such as the propensity for strong public reaction, the issue, scale and severity of the problem, who is affected etc. In this case some of the main issues were; “What will be the end use of the site?” “Is it necessary and relevant to the community?” “How will it impact us, our neighborhood, and future generations?” “What are the risks involved?” This brings to mind Irvin’s & Stanbury’s (2004:62) ‘litmus test’ for administrative consideration in determining the advantages and disadvantages of community participation in environmental decision making so as to determine the best approach. This has implications for how resources are allocated.

This research finding will enable decision makers involved in brownfields redevelopment to see how citizens conceptualize brownfields redevelopment success and what they particularly value. The results can be used as an aid to inform, design, and include more effective public participation components in the brownfields programs to secure public acceptance of the projects. Public officials’ responsiveness in the decision-making process as well as individual empowerment are critical ingredients to achieving public approval of the projects.

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Chapter 8

An Analysis of the Brownfields Redevelopment Decision Making Models and their Influence in Facilitating Community Participation in three Brownfields Redevelopment Initiatives in Passaic County New Jersey.

Abstract

This research aims to discover what model of decision making facilitated citizen participation in the brownfields redevelopment process. It also seeks to evaluate the social factors driving the decisions in the decision-making processes that may have contributed to shaping public perception of three brownfields redevelopment processes in three municipalities in Passaic County NJ. The research is interested in which decisions were made and the role of the municipals officials, developers, and other social factors that drove the decisions and their influence on community participation processes. Tonn et al's, (2000) framework is useful as a guiding principle. Models of decision-making and community models are also used as benchmark to understand the organizational framework within which these decisions are made. Through a content analysis of newspaper records, interviews records, municipal records, the research gives valuable insight into the issues and people that shape the decisions. The decision processes were formally structured to follow standard routine procedures and decisions made by adhering to each municipal's priorities and objectives for community development. In this process citizens' may tend to be more influential in decision processes if it does not run counter to public officials' desires and goals. This tendency is more readily realized

in salient situations when there is conflict around issues that are more important to the community. Their involvement is greater when there are high stakes involved which result in citizens' protest and project delay. This research should assist relevant stakeholders in rethinking priorities about the value of public participation in community development programs, provide a better understanding of weaknesses, build on its merits and provide a deeper appreciation of the environmental, social and political contexts that shape the redevelopment processes.

8.1. Introduction

When citizens felt empowered about their perception of access to the decision-making processes in both Hawthorne and Paterson they were more accepting of the social outcomes of the brownfields site redevelopment. This relationship was not found in Clifton. This author purports that Clifton respondents' perspective is based on observed community changes in the built environment resulting from the redevelopment. Clifton respondents reported significantly more negative changes in the built environment than the other two municipalities. Overall, both Hawthorne and Paterson are more accepting of the outcome, and approximately 72% of citizens in all the municipalities, desired to achieve more competence through opportunities provided for learning, in the brownfields redevelopment decision-making processes. The main reasons for desiring access or feeling that access should be granted are the feeling that public official decisions affect their lives (43.3% of persons of 129) and their concern for the sustainability for future generations (29.5%). Some reported that public officials are not genuine in seeking their

input. This research aimed to discover what model of decision making best facilitates citizen participation in the brownfields redevelopment process. It sought also to evaluate the social factors that drove the decisions in the decision-making processes that may have contributed to shaping the publics' perception of three brownfields redevelopment processes in the three municipalities. Particularly the research is interested in the context in which the decisions were made and the role of the municipals officials, developers and any relevant others in shaping and driving the decisions. Of interest too were the social factors that drove the decisions and their influence on community participation processes. This research would recommend that relevant stakeholders rethink priorities about the value of public participation in community development programs, provide a better understanding of weaknesses, build on its merits and provide a deeper appreciation of the environmental, social and political contexts that shape the redevelopment processes.

The literature is pervasive regarding the ailments of environmental decision-making processes and offer antidotes of evaluation models to administrators for improved and enhanced decision-making processes. Webler, (1995, in Renn, Webler, & Weidmann Eds.) called for a model that evaluates public participation at the micro level. These models, Renn et al, (1995) argued, should foster a more competent and legitimate decision-making process. Tonn et al, (2000) in their critique of the present state of environmental decision making, offered suggestions for an improved framework to assist administrators and planners to make flexible and adaptive decisions cognizant of stabilizing environmental and social systems. Webler & Renn (1995:28, in Renn, Webler & Weidmann Eds.) outlined some difficulties that may be hindrances in the decision

making process. Whilst collective will is important, Webler (1995, in Renn, Webler & Weidmann Eds.) reminds us of the difficulty in assessing, and knowing the collective will because of individual subjectivity, and the whims of the collective will. Therefore, as a framework to evaluate competing values, the editors described a Meta criteria model of ‘fairness and competence’ to assist in democratic decision making. However, to respond to this challenge of knowing the collective will, some objective techniques to assess combined priorities have been discovered. They are Concept Mapping, (Trochim, 1989, cited by Weiss 1998), Multi-attribute utility methods, (Edwards & Newman, 1982, cited by Weiss, 1998) and Decision Tree analysis (Rome & Frewer 2004).

Decision makers, however, have the responsibility to devise ways of knowing the collective will in instituting policies and programs in governance. They are challenged to involve the public and engender fair and equitable processes that facilitate competence in communicative discourse in program planning, implementation, and evaluation (Renn et al, 1995; King et al, 1998). Yet, while recognizing the validity of this stance, some are resistant to change the status quo counter arguing that the irrationality of public views hinder objective, scientific based decision making (Deficit model). Some raise the issue of citizen participants’ legitimacy in environmental policy making (Sharp, 2002). Citizen participation theories (Renn et al, 1995; Corburn, 2003; Coenen et al, 1998) countered with the position that citizens lived experiences and local anecdotes can enrich the decision making process by providing valuable solutions to environmental problems. Corburn, (2003: 429) states, “*Local knowledge can help identify low –cost policy options and implementation strategies that more closely align with “street level” realities*”.

Bonnes et al, (2007) agreed with the potential value in lay knowledge when they found that lay people's assessment of air quality was conceptually similar to experts. When conducting environmental site assessments on brownfield properties, the value of grassroots citizens' participation must be and has been seen as a source of valuable information thereby contributing to environmental planning, solutions, and policy.

The aforementioned suggest that citizens' input is contextual. This is one of the barriers to authentic participation that decision makers face. This issue can cause access to the decision-making process to be quite complex depending on the nature of the issue. Administrative questions like these are paramount. 1. "How technical is the problem and its solution/s?" 2. "What is the spatial scale?" 3. "What resources are available?" 4. "What is the administrative framework?" 5. "Who and how will the program benefit the community, in addition, how many will benefit?" 6. "Who and what environmental media is at risk?" These questions and more, have to consider the problem of scale, cost – benefit analysis, ⁵equitable distribution of costs and benefits (environmental justice), socio cultural norms and values, stages of citizen involvement/participation (Example, should it be at the remediation or other stage?). Other questions might consider the definition of affected public (Coenen et al 1998), and decision among alternatives. Development of institutional rules governing stakeholder participation is also critical. (Cowie & O'Toole in Coenen et al, 1998, Eds).

Administrators also raised the issue of an apathetic public and resource intensive factors affecting environmental decision making processes. Some political scholars

⁵ This embodies the whole concept of environmental justice

contend with the participatory democratic view saying that the apathetic public is averse to deliberative processes that generate high levels of disagreement (Clawson & Oxley, 2008). In understanding this dilemma, Irvin & Stanbury (2004) raised the troubling question of the citizens' effectiveness and validity in decision making and offers administrators a guide of cost benefit indicators in assessing allocation of resources for participation in environmental policy decisions. Cowie and O'Toole (1998, in Coenen et al, Eds.) recognized the complexity of stakeholder participation, and provided policy makers and interested others valuable insight on how to evaluate the effectiveness of decision-making processes in view of four (4) dimensional value perspectives. The dimensions are Consensual, Political, Empirical, and Rationale Effectiveness of the decision process. This means having a flexible and adaptable administrative structure, particularly attentive to internal stakeholder values and concerns and the quality and efficiency of the process. (Substance valued over outcome). In the light of the complexity of diverse stakeholder views, environmental and social context issues associated with participation and environmental problems, Institutional Rationale Choice Theory (IRC) advocates administrative boundary rules relevant to the case that will generate more efficient and effective management of resources. It is the hallmark of procedural rationale decision and its emphasis is on achieving organizational goals through analytical processes to minimize uncertainty. IRC theory is challenged to incorporate local residents' lay contextual experiences within the framework of scientific decision making (Corburn, 2003) and as such, provide them with the relevant materials, such as, access to pertinent information sources, expert knowledge, and time (Rowe & Frewer, 2000). This

will increase their competence in the decision making process, assist in arriving at consensual decisions and challenge authority (Rich et al, 1995), enhance the political process, and enhance trust and credibility of the decision makers, which has been a troubling issue in the past and present.

Local officials have been accused of taking consultative participation merely at face value without intending to incorporate citizens' recommendations and concerns into policy and project decisions (Rowe & Frewer, 2004). Some respondents in this research, including the focus group, had this perception about public officials. While the literature argue for inclusion of the public at "*all aspects of environmental planning decisions*" (Corburn 2003:423), others argue the complexity and technicality of environmental problems, especially those in the risk arena, may warrant constrained citizen participation in planning and decision making at the appropriate level. According to Rowe & Frewer, (2000:14, in citing Chakraborty, and Stratton, 1993), this can create a stage of confusion, negatively impacting the decision making exercise. Administrators in environmental planning, corporations and developers in brownfields redevelopment have complained about this stage of confusion. Administrators may also be restricted in some situations by legislative mandates. The possibility of interest capture of the decision process by groups or individuals pursuing their own selfish agendas is also real (Haughton, 1999). The reality is that outcomes will not satisfy everyone (Coenen et al, 1998). On the other hand, some, such as a few private developers see the utility of involving citizens to minimize conflict and time loss, thereby increasing project efficiency.

8.1.2. Examples of Citizens' Role and Influence in Official Environmental Decision

Making Processes.

The literature shows that public participation can influence decision makers, policy formulation and output albeit even in small ways. However, the influence of public opinion is varied and is more likely to be effective in policy decisions if the issue is more salient (Clawson & Oxley, 2008). The result is that local authorities' image and the legitimacy of their actions in environmental policy making are improved. Public participation's main intent is to inform policy decisions from a bottom up perspective.

Sharp (2002: 18) analyzed a stakeholder participation exercise (which also included lay citizens) concerning implementing Local Agenda 21 geared towards incorporating more environmental activities in a United Kingdom's new Council's agenda. Sharp stated concerning the outcome, *"There were some substantial and innovative developments in the Council's activities, particularly in energy and nature conservation policy."*

This author has found value in lay persons' knowledge when seeking solutions to environmental problems in affected communities while working in Jamaica and Dominica in the Caribbean. Citizens' anecdotal reports displaying their knowledge and understanding of 'lived' environmental problems proved invaluable in developing and implementing strategies for solution. Community residents offered human and material resources after being trained to implement surveys based on the relevant issues in their communities. In Dominica disaster management activities, they were involved in planning processes and mitigation activities. They had knowledge of potentially hazardous areas in their communities; routes of egress, where critical equipment such as

backhoes, tools, and 'useful' personnel could be found that would be needed in the event of a disaster and helped in identification of possible shelters. They supplemented scarce government resources that could be diverted elsewhere such as in policy implementation. They were therefore useful in risk analysis, resource identification, and utility, which complemented expert knowledge. Additionally they assisted in choosing amongst shelter options after they were informed of the relevant criteria. Grassroots citizen participation in this critical area became the norm in the yearly update of Health Districts' disaster management plans. They also assisted in the iterative process. Devas's (2002) report also gives some examples of increasing collaboration between citizens and local government in Kenya resulting in more efficient, effective and transparent allocation of land use resources. This was a highly positive change in a somewhat rigid top down local government administrative structure.

Corburn's (2003) example places emphasis on the rationale and benefits of incorporating local contextual intelligence into a decision process for environmental planning and problem solving involving the United States Environmental Protection Agency (USEPA). The agency conducted an exposure assessment to hazardous air pollutants exercise in a New York neighborhood. A local organization named 'Watchperson Project', insisted that the USEPA's air dispersion model did not adequately capture many polluters that were unaccounted for in its database. The basis of their argument was that the agency's methodology of coarse data combination at the level of the census tract would miss these polluters. The organization's GIS mapping exercise revealed these small polluters on the respective land parcels. They also did a community

survey and helped to discover that dry cleaning operations accounted for a significant amount of the air pollution problem and specifically to highly exposed residents. The fact that the EPA decided to report the community's results in a 'cumulative exposure project report' (EPA, 1999, in Corburn, 2003) attests to the validity of lay knowledge in planning and implementation. Corburn further highlights EPA's acknowledgement of citizens' lived experience incorporated in community exposure assessments. The director of the organization said lived experiences and not database information was instrumental in arriving at the results and acknowledged the EPA's responsiveness to their concerns. These actions resulted in a heightened perception of credibility and trust for the EPA. This included a level of transparency as the EPA involved them in "assessing" its methodological approach. They were even allowed to analyze results and run a counter investigation creating a sense of psychological empowerment. Corburn gave other examples when citizens challenged the EPA's decisions, their suggestions were heeded, and their expertise sought. This is evidence of action about facilitating the building of social capital through active involvement in decision-making and implementation and community mobilization.

8.1.3. Theoretical foundations of Administrative Decision-making

The multidimensional faces of environmental problems present many challenges requiring a multi faceted methodological approach to devising solutions. In decision-making, the problems have to be considered in the light of the contextual, geographical and social systems in which they emerged as well as the social construction of their meaning. Because these problems are socially defined, it is necessary that quality

decision making seek to use all available information from all relevant sources and not from a select few (Coenen et al, 1998, Eds; Tonn et al, 2000; Rowe & Frewer, 2000). Here lies the basic tenet of public participation as a democratic right. As the various publics interact, there is an exchange of information that facilitates building educational and democratic skills. In the exchange, it is purported that ⁶people will also learn to tolerate the views, values of others through a consensus process. Critical to this process too, is the identification of constraints and definition of expectations for and about community participation from both administrators' and citizens' perspectives. Kathlene & Martin, (1991), in citing Rosener, (1998) stressed the importance of policy makers clarifying their expectations about community participation in order to realize the full potential of the exercise. This statement makes clear that defining expectations assist in defining the problems of community participation and will provide focus to achieve a better understanding of the issue at stake. This raises the question of the possible options the community may face. Public officials' role in the process may be technical support, passive or a more proactive role leading to more effective, quality public participation (Creighton 1992; Kathleen & Martin, 1991). If both citizens and officials know each party's expectations, then attempts can be made to see where these goals converge or vary from expectations. Through a period of consultation, a consensus can be 'ironed out'.

In the light of justification for citizens' participation as an integral part of environmental decision making including brownfields redevelopment and policy decisions, various decision making theories and strategies used by public officials will be

⁶ The literature refers to this as interactive knowledge.

highlighted. Firstly, public officials and private sector industries, seek to justify public participation in decision making from a functional analytic perspective. (Coenen et al, Eds.1998). This perspective is one that defines the ability of the public to adequately process the information regarding technical decisions in order to contribute to rational decisions, that is, efficiency of public performance in the participation process. This ability is usually vested in the technocrats who according to the rational planning model, make ideal rational decisions through identification of all possible options and their effects, categorizing the decisions based on pre determined criteria (Coenen et al, Eds.1998). This model aims at maximizing efficiency and effectiveness using cost benefit analysis. Coenen et al, Eds. 1998 mentioned two challenges to the model. They are, firstly, it does not factor in the issue of uncertainty during the rational planning process. Secondly, citizens' participation is of minor importance. This theory of rationality also identifies the administrative decisions to be made in the case when the issue is judged to be driven primarily from an economic standpoint, as in the case of a majority of redevelopment exercises. In view of the stance taken by the rationale planning model, a decision maker, who is completely informed and rational, and able to make the optimum choice out of all possible alternatives in order to maximize utility, is seemingly influenced by the theory of 'economic man' However, utility entails subjective value (Edwards, 1954). Economic man is however criticized by economists, who state that, because his knowledge is regarded as 'perfect', he does not consider the issue of uncertainty in decisions. Therefore, attempts were made to replace him with later models like 'Satisficing man'. This man's decision is driven by bounded rationality, content with

the feasibility of the program, and with 'enough' instead of maximum results. He is bounded by cognitive, environmental, time, and limited information constraints in decision making. Others emphasized making decision processes that are sequential to factor in uncertainty and limited information (Shubik, 1958). Shubick, in assessing articles describing the different theories of decision making, noted that in all articles examined, there were group discussions to facilitate decision making, suggesting that one person does not have perfect knowledge in order that each would learn and benefit from each other. This will elicit more quality discussions. This sets the foundation for consensus planning. Consensus planning also called participatory planning is considered as a legitimate process that is more likely to be accepted by the participants because it is representative of a multi perspective of vested stakes.

Justification for rational planning is also advanced from the standpoint of the need for the sustainability of social systems. In organizational management theory, rational decision process is advocated as a necessary ingredient in strategic decision making to achieve organizational goal (Dean, JR. & Sharfman, 1996). Therefore, administrators and policy makers with the deductive reasoning of strategic choices, derived through appropriate analysis, may view the public whose knowledge is derived from causal empirism and commonsense analysis, rather as a hindrance, than an asset. Coenen et al, Eds. (1998) reminded us that the uncertain contextual situations surrounding the rational decision will engender elements of subjectivity in planning and therefore lacks objectivity. A rational choice is considerate of equity, values, preferences, in the choice of the best of all competing options bearing in mind, the consequences of the choice.

Furthermore, Coenen et al (1998) asserted that one's rationality may be another's irrationality. These individual rationalities can have political ramifications in the environmental discourse. They built on Habermas's deduction of the existence of a three (3) dimensional faceted rationalization namely science, law/morality and art/criticism and concur with his argument saying that rationale knowledge should not be advanced mostly from a scientific perspective, but should be inclusive of knowledge gleaned from the norm of law/morality and the arts. The argument of individual rationality is valid because the varying contextual issues governing definitions of environmental problems, and which will influence the strategic decisions for their solutions, may benefit the discourse by enriching the scientific base. For example, environmental problems and their solutions are culturally defined. In fact, political culture can be an influence even in groups and nationalities acceptance of decisions made by authorities. Coenen et al, Eds. (1998) mentioned the example of people in the United Kingdom being more tolerant in accepting decisions even in the absence of direct involvement versus a less tolerant United States (U.S.) citizenry. In this author's experience in Dominica in the Caribbean, this diversity has been observed where groups of people in different localities are more assertive than others in protesting against decisions made by public authorities whom they feel are not particularly considerate of their concerns.

8.2. Methodology

To deduce how the redevelopment decisions were made in the municipalities, I have used Tonn et al, (2000) 'framework' as a guiding principle. It describes various deduced decision modes and their attributes in the decision making process. Theoretical models of

decision-making are also used as benchmark to understand the organizational framework within which these decisions are made. Council minutes, Planning, and Zoning Board minutes in the municipalities have been invaluable in giving insight into the issues and people that shape the decisions. (Review period, May, 2011 – August 2011). Any mention of the sites' former and present owners' names, or the respective developers were clues that the sites were under discussion. Information as relevant, obtained from interviews, email and mail correspondences with the Mayor of Clifton, former Mayor of Hawthorne, a Kohler company representative, and an incumbent Council member in Paterson are also used to discern these factors that shape the decisions and contribute to citizen engagement. Newspaper records also provided valuable background information as to the factors and stakeholders driving the decisions. A content analysis was done on all these sources and synthesized into relevant information.

Tonn et al, (2000: 175) stated *“The ultimate value of this framework will rest on its ability to improve environmental decision making. To make this assessment, it would be necessary to collect data from numerous environmental decision making situations, some of which followed the path set out and some which did not. Hypothesis would need to be developed to predict the outcomes of the decision processes given the extent to which the framework was implemented”* This paper is an evaluative response because it assesses the decision processes retroactively after the outcome instead of before and concurrently. However, the retroactive approach is valid because firstly, it traces the step back to background factors of the decision process that may have possibly led to the citizens' minimal acceptance and non-acceptance of the redevelopment initiatives.

Secondly, it is not predictive of the outcome but nevertheless, will give valuable insight into possibly predictive factors as it seeks answers to a proven correlation between the brownfields redevelopment decision processes in Paterson and Clifton and their tendency to facilitate empowerment and the outcome of public satisfaction. Tonn et al, (2000) acknowledges the weakness of their framework by pointing out the lack of a systematic approach to discerning the appropriate mode but are quick to point out that the complexity of the social definition of environmental problems presents a challenge to the choice of the appropriate mode. The final solution to a problem may require a series of ‘sub’ solutions requiring a multi modal approach specific for each problem.

The reviewed Paterson Council and Planning Board minutes provided minimal information about the issues indicating the factors and characteristics of the site-specific decision process. The general concerns highlighted regarding the 4th ward in which the site is located, will be used to give an idea of the existing social factors that may have had some influence in the decision to redevelop the site. A discussion pertaining to citizens’ general opportunity for access to the decision process of another issue was used as a case study proxy to determine the characteristics of a decision making process in the municipality.

8.3. Findings

Factors considered by municipalities in the redevelopment decision processes, including site reuse issues.

Table 8-1 gives a summarized snapshot of the main themes driving the public officials’ decisions surrounding the sites redevelopment processes. Subsequently, detailed

narratives of the processes in the municipalities provide rich insight into the underlying factors and give information as to the structures, actors and theories influencing the processes and outcomes.

Table 8- 1

Thematic factors underlying the sites redevelopment decision processes

Municipality	Main theme	Other themes
Clifton	Economic	Infrastructural impact on schools and public utilities. Need for housing and affordable housing
Paterson	Economic Sense of place Public safety	Environmental aesthetics Gentrification
Hawthorne	Economic	Recreation and open space Company social relations Council legitimacy

8.3.1. Clifton's process

Below are the deduced factors in Clifton that drove the decision making process indicating how and why the decision was made for the site's reuse and its redevelopment. In brackets are the implications of the identified issues.

1. ***Because large commercial entities have the potential to create heavy traffic,*** their ***bid*** for redevelopment of the site was ***refused***. These entities include a large store retailer and the United States Postal Service. (USPS) Area residents were therefore concerned about traffic. (USPS) (Personal communication with Mayor

Anzaldi, July, 29, 2010) – (**Effect on Infrastructure which in turn generates economic, safety & health issues**)

2. *The housing development*, (the eventual site reuse) having condos without basements, will *limit occupancy level and therefore limit overcrowding*. The municipality has stringent rules about this. Secondly, lofts cannot be used for bedrooms. This was expected to spill over to limit school overcrowding. Town houses sizes were considered as a factor relative to increased school age population too. (**Implication for design features necessary to accommodate fire safety and to limit overcrowding with its attendant ills.**)

3. *Job creation from redevelopment*

A municipal Planning Commissioner in the decision process was concerned about no or minimal job creation. However, this may not have been a major concern because this commissioner subsequently approved of the housing project without any evidence given of follow up enquires. Notably, to date, there is no data to support job creation. The Mayor said (Personal communication, May 19, 2011) if jobs were created, it may have been during construction. (**The implication is the economic well being which will impact quality of life overall.**)

4. *Potential to generate revenue* from increased ratables to offset the city's eroding tax base. The assessed value of Shulton was \$20 million when it was closed. Currently, the housing development is valued at \$121 million (Personal communication, Clifton Municipality Tax Assessor's Office, 2011). It was expected to bring in tax revenues of \$2.6 million annually (The Record, October 7, 1998, Wednes-

day). There was also municipal concern about the effect of the closure of the former site on the taxpayer. – **(This has economic implications for the economic stability of the neighborhood and municipality)**

5. ***Fiscal impact on city.*** The project should not jeopardize the economic development of the city. According to a front-page article in ‘The Record’ (October 7, 1998:AO1) Wednesday) *“Some warned that continued large– scale residential construction will force homeowners to shoulder more of the city’s tax base which is now about 30 percent commercial and industrial”*. - **(This has economic implications for the economic stability of the neighborhood and municipality)**
6. ***Community Impact*** including the school impact. A school impact study was commissioned by the Council and a traffic study was done by the developer. – **(Quality of education for school age population- teacher to student ratio; Infrastructure burden which in turn impacts economics, health & safety)**
7. ***Limited access*** (Entrance from Route 46 and Garden State Parkway) precludes redevelopment as a business or industrial entity. The former City Manager, said *“This project was really recognition of the inherent difficulty in trying to develop the site for anything other than residential”* (The Record, October 7, 1998, Wednesday) – **(Restrictions on infrastructural development)**
8. ***Building density and development per acre.*** - Zoning stipulations limited the project to 637 units. The Mayor said the Request for Proposal (RFP) that had the least amount of housing units was selected. **(Implication for burden on infrastructure)**

8.3.1A . *Elements of the Clifton decision making process*

There are three elements that were important to the Clifton decision – making process. These elements are important because they have a direct bearing on the outcomes of the decision –making process.

1. Routine technical decision approach

“In the best interest of the city” three combined blocks comprising of three (3) former industrial sites (including former Shulton) were designated a ‘Redevelopment Area’. Subsequent investigations were undertaken by the Planning Board at the Council’s request. Evidence of public involvement at this stage was at a public hearing conducted by the Planning Board. The Council gave its approval based on the Planning Board’s recommendation and a zoning change to ‘residential’. Expert witnesses like traffic experts, also testified before the municipal and County Planning Boards and their reports were reviewed by these public technocrats. Technical routine decisions regarding the school population in question was also based on a study report. On July 18, 2000, the Council gave formal approval to the developers to redevelop the property as a gated residential complex, and, with subsequent approval again, after one (1) year based on technical alterations to the plan. The vote was 6 -1. The single negative vote did not support residential use because he is a proponent of simultaneous area wide redevelopment of the vacant industrial properties. (The Record, October 7, 1998; Wednesday)

2. Municipal priority

It is well established that brownfields redevelopment is regarded by municipalities

foremost as an economic revitalization program with additionally derived benefits such as beneficial public and environmental health conditions. However, it is not clear if the linkage between health and economic productivity is prioritized by municipalities, including Clifton in decision making as to the end use of a site. ‘The Herald News’ content analysis research (Letang, Chapter 4), showed economic values takes precedence for Paterson, and seems to be the case for Clifton. During the planning phase for proposed site reuse, Mayor Anzaldi regarded the housing proposal as the *“best project we ever had”* (The Record, July 18, 1997: LO1, Friday) and subsequently said it is *“a big plus for the taxpayers of the community”* (The Record, September 17, 1997: AO1 Wednesday). In fact, Council members approved because the town houses could generate sales at the going market rate (The Record, July 18, 1997: LO1, Friday).

On the other hand, other variables assume added importance based on the municipal’s overarching goals. In Shulton’s site reuse, the need for affordable housing, especially for seniors is an apparent priority. Shulton’s conversion into gated condominiums and townhouses resulted in 220 out of 637 units for senior accommodation. Plans are also in place to convert a portion of the adjoining Athenia property (part of the redevelopment area) into affordable housing units for seniors. Interestingly, there were some Planning Board members concerned about the economic viability of the planned residential complex. Bearing in mind the demographic transition and the American population structure, it can be assumed that this choice may have been undergirded not merely by tax generation of tax ratables

but that this population structure should somewhat guarantee an adequate supply of tenants thus promising a sustainable economic yield on investment.

Of note, is that the expansion of Clifton High school to accommodate a growing school population was apparently a major public contender for the site reuse. The mainstream and even Council members and school administrators had concerns about the residential development's impact on the schools that were near their carrying capacity. The Mayor said this issue was subjected to a public vote in 1994 and was defeated. Records were shown to substantiate his report. What was not entirely clear is what percentage of the residents in the delineated survey area comprised the voters. To date, anecdotal reports from 5% of surveyed respondents felt the site's reuse would have better serve in their estimation, an expanding school population and many still has serious concerns over the school's carrying capacity. An annex to the school was subsequently built in another section of the city.

3. Financing type and developer's role

The Shulton factory was closed in 1991 and construction of the housing complex began in 2000, the same year approval was granted by the authorities. The first sets of condominiums were completed in 2002 indicating that the process from the permitting stage was fairly short. Private developers were the main drivers and there was not any indication of a financial partnership with the municipality (Public – private economic model of community development). There is also no recorded information indicating that the private developer made any effort to gain the community's input.

Community Representation

There is evidence of seeking mainstream citizen participation in decisions during a Planning Board discussion as to the traffic impact of the redevelopment and seeking solution to the parking problem of condo residents parking on nearby residential streets because they lacked parking facilities at the time. The Mayor suggested consulting with the relevant neighbors. However, the records do not show if the suggestion was implemented. This means participation was sought by consultation. The Mayor said, *“The public, most especially the area residents, were involved long before this project and the zone change took place.”* (Personal communication, Anzaldi, J. July 29, 2010). This is suggestive of early involvement. Area residents are interpreted to mean those who live within 200ft of the site, as legally required, and who received written notices informing about the intent to redevelop the site. This should include some survey respondents. The newspapers were also used as an information source. Neighborhood representatives were also involved as apparent liaison between the public officials including the Council and the mainstream.

The main avenue for mainstream public involvement was at Council meetings and traditional public hearings as revealed by the public records. Interestingly, the high majority of reviewed minutes showed repeated comments about the site from a lone individual whose major concern was economically related. He desired information about the economic return benefits of the project and apparently the economic costs to the neighborhood of the then undeveloped property. As such he was also interested in the ongoing status of the project. The Planning Board minutes also showed public

access through public hearings. Notably, in this review from 1996 – 2003, there were public comments mainly from two individuals, one in agreement with the already planned use of the site and the other opposing it. ‘The Record’ (October 7, 1998:AO1, Wednesday) mentioned the proposed use gained significant support from many citizens living nearby. The Mayor also endorsed the matter of community support. However as said before, in an interview with the Mayor (Personal communication, May 19, 2011) there was a public vote in 1994 to determine if the site should be reused as a school. The vote was 76% not in favor and 24% in favor. This is indicative of the early involvement the Mayor hinted at before.

Political process

The main drivers in the decision-making process were the developer, technocrats, including public officials and expert witnesses at the Planning Board meetings, School Board officials (as realized from newspaper reports) whose concerns helped to commission the school impact study, neighborhood representatives and the Council members. Neighborhood representatives’ overt role in the discourse was not specified so the effectiveness of their representativeness cannot be fully ascertained. Because the Mayor said “*the idea for housing **was met** with acceptance by most but there were concerns for additional students in the public schools*” (Personal communication, July 29, 2010) it is possible they adequately represented the area citizens concerns during the planning discourse. Anecdotes from the survey, and review of public records indicate there may have been some initial controversy as to the site’s reuse as a school. This possibly may have initiated the voting process. However, the newspaper report of

citizen's approval and also the Mayor's of a majority of area citizens' (who attended every project related meeting) acceptances of the site's proposed reuse during discussion indicate absence of, or minimal conflict. Additionally, the Mayor reported, "*we kept the area residents especially involved and informed. Many of their ideas were incorporated into the project and taken into consideration before final approval*" (Personal communication, July 29, 2010). Giving feedback to the residents and considering and incorporating their ideas, some of which may be ingrained values, before project approvals will give the public the perception that their opinion are valued and have bearing on municipal decisions. Interestingly, no correlation was found between Clifton survey respondents perspectives of municipal's decision-making access and success of the redevelopment process. Their acceptance, suggestively, was primarily based on the perceived project related changes and their impacts in their neighborhood.

8.3.1B. Paterson's process

Below are the general and relevant discussed factors in the meetings that may have had direct bearing on the decision to redevelop the site.

1. ***Need for a better quality of life for citizens in the communities.*** This recurrent theme rose in the Council meetings. This was especially regarding areas that are economically challenged and with unappealing aesthetics. **(The implications are economic well being for the communities; fostering of sense of place through an improved aesthetics and quality of life).**
2. ***Revitalization of the neighborhoods.*** Repeatedly citizens agitated for the Council representatives to do something about the abandoned homes and buildings in their

community that encouraged crime activities and defaced the neighborhoods. Letang (2006, unpublished) found a relationship in Paterson between crime and vacant buildings. This was a problem especially in the 4th and 5th wards. The vacant former Whitney Rand factory being in the 4th ward would no doubt be included. Council members on more than one occasion were accused of being negligent about providing services for the solutions and asked to give accountability. **(The implications are economic well being for the communities; fostering of sense of place though an improved aesthetics, quality of life and removal of stigma)**

3. **High taxes.** Citizens complained incessantly about high taxation. Obviously, if a municipality has a declining tax base, especially in the light of cessation of many of these manufacturing entities in Paterson, then citizens and businesses may have to withstand the worst of the effect in higher taxes. **(The implication of this issue is economic well being).**

Elements of the Paterson decision making process

The factors listed below were important in assisting in a determination of how the decisions were made and who were the stakeholders involved.

1. Routine technical decision approach

Like Clifton, the Planning and Zoning technocrats conducted their routine job analysis and made recommendations to Council to approve the site's reuse and development. As usual, a public hearing was kept by the Planning Board for relevant interested citizens. Expert witnesses also testified regarding specific impact

assessment.

2. *Municipal priority*

According to the Councilmember for the study area, the municipality had high expectations to “*clean up the neighborhood, build economic development and revitalize the areas as well*” (Personal communication, November 9, 2010). She has been a Councilor in Paterson since 1986. These goals are also the goal of the Master Plan which incorporated redevelopment initiatives. Whilst aesthetics and the reduction of illicit activities may be fundamental goals, (Clean up the neighborhood) it can be seen that the exercise was primarily economically driven because of the need to jump start the reduced municipal tax base. From the Council minutes, it is seen that the public had these same expectations in their concerns for a better quality of life to be achieved possibly through redevelopment initiatives. A ‘Herald News’ content analysis (2004- 2009) also revealed that brownfields redevelopment is mostly prioritized from an economic perspective by the city’s officials. However, regarding the site and the specifics of a preferred reuse, there may be significant differences in opinion between the municipal officials and citizens as was indicated from survey respondents’ anecdotes. For example, out of nine anecdotes reports, 19 % felt the site should have been used as a recreation center and for job skills training. Despite this sentiment, the Councilmember implied that their involvement in a general community needs assessment was actively sought through door-to-door solicitation after failing to get the mainstream attention through a series of public meetings (Personal communication, November 9, 2011). Notably, affordable housing is also a major

priority for Paterson and a significant amount of brownfield sites are being redeveloped for housing to fill a serious shortage. Two (2%) of respondents said the site should have been redeveloped into affordable houses.

3. *Financing type*

Funding for the redevelopment was through private financing. There is no indication that the developer sought public input in any form at any stage. The former NJDEP case Manager for the site also said that there was no public involvement during any part of the remediation stage because it is not mandated by the organization.

4. *Community Representation*

The reviewed public records do not indicate any public participation exercise that was specifically related towards the site's redevelopment exercise. According to the Councilmember's report, the public outreach activity was directed towards getting community input for development of the municipal Master Plan and not specifically connected to the site's redevelopment. Since the site was one of these vacant buildings in the area giving it a blighted appearance, and, a municipal priority was area revitalization, then it can be suggested that this issue might have been brought up with residents for their input during the door-to-door survey. In fact, the Councilmember said the matter of the site was discussed with the grassroots. She also said, "*An action plan was developed for the whole area; you can't have true development without the community; fourth (4th) and fifth (5th) Wards development corps were formed* (Personal communication, November 9, 2010). The statement suggests that it was community representatives that were

used to define and refine these expectations for inclusion in the Master Plan, despite the mainstream being surveyed for their input.

8.3.1C. *A report of a discourse of a proposed Ordinance in Paterson and its decision making process.*

One example of a general official decision making process during a Council meeting in Paterson is analyzed. This is very relevant to the issue of public participation and so is used as a proxy to the brownfields redevelopment process. The example provides insight into underlying key opinions and issues as stakeholders interacted in the discourse and the dialogue centered on empowering citizens in a decision making process that had the ability to interfere with the quality of their participation at Council meetings. The process had implications for the Council's responsiveness regarding changes of an existing policy which was felt to be a hindrance to the Council hearing citizens' concerns. The implication is that it indicated whether and how the public get involved in public decision-making.

The issue was discussed during a Council meeting on July 26, 1997:⁸⁷ the year prior to the Planning Board's approval of the Walgreens development. Any concerns about this redevelopment would be subjected to the rules of this Ordinance. The Ordinance proposed to amend the existing agenda structuring how City Council meetings were conducted in order to facilitate public input. There was a formal rule governing the order of events at Council Meetings for about 20 years. The order did not facilitate the public hearing portion of the meeting until Council voted on **all** resolutions. However, this policy structure of the agenda as ordained was not followed for many years in

Council meetings, and was brought up for discussion and consideration that the existing agenda remains the same. According to the Councilman who proposed the Ordinance, *“We have the public hearing before we vote on resolutions so that in case the people have any input they wish to give us for or against a particular resolution, they can do it at that time and have some influence on how we cast our vote. If the way it is in our book is followed, they would not talk until all of the decisions have been made. I don’t think that’s right. I don’t think it will be acceptable to the public”* (Council minutes, July 26, 1997:87). This is an overt expression that citizens’ inputs had the potential to influence this Council’s policy decisions on particular issues which demonstrated Council’s responsiveness.

The Council president, despite having the power to change the agenda was willing to give the citizens the choice in influencing how the agenda is set, and thus the conduct of the public portion of the Council meeting. The Council recognized that citizens had this democratic right. The Council proposed that a survey be administered in the city to include the viewers who watch the televised Council meetings as well the attendees at the meetings. This proposal to seek broad based participation was challenged and debated by some Council members as unnecessary but was overruled by a majority. One factor was the cost of issuing survey documents to a multi-lingual population of approximately 23,000 viewers. Nevertheless, the final decision was that the public opinion would be the deciding factor for the proposed Ordinance because they were the ones most affected by the provisions. During the debate, the Council president disputed that citizens can object to Resolutions (despite its passage) even at the end of a meeting. Council should then

make this objection a consideration on the next agenda of the following meeting to ensure citizens were not deprived of their voice or right to make their claims. They were still being facilitated. He further stated that Council could overturn previous decisions. Another Council member suggested that, so as not to inconvenience the people, Council members should offer some flexibility by shortening the time taken to give their reports. This would enable the public to come earlier to the microphone to voice their opinions. This was suggested by the Councilor for the 4th ward in which this research site is located, and was endorsed by some Councilors and citizen attendees. (Council minutes, July 26, 1997:120- 121) Recognizing that the “*the public input is very important here,*” she earlier advocated seeking the opinion of “*the Committee that deals with the meeting*”. This suggested her willingness to commit to meaningful community participation and to secure cooperation and commitment from the staff coordinating the meetings. Additionally she acknowledged them as influential stakeholders. Getting them involved may engender more acceptances because they feel their input is valued. Solutions concerning underlying issues of which the Council may be unaware and which could be facilitated by the staff could also be more targeted.

In support of the suggestions, a Council member said the matter of timing for the public portion of the agenda has been brought up and discussed on more than one occasions with previous administrations. Meetings were conducted during early afternoon hours (2:00 pm) for many years and the public felt isolated from the meetings (Council minutes, July 26, 1997:105). This would not be a convenient time for many reasons such as the fact that citizens would be at work. Finding the appropriate time for the public

portion of the meeting was best decided by the targeted audience. A Council member stated, *“Yes, there are people who would like to see the public portion move forward. But I’m almost sure that a week after it’s passed, there will be another group of folks who will say, put it back to another time or move it to another time”* (July 26, 1997:99 - 100). The differing perspectives of multi – stakeholders which can make a process complicated, conflict ridden, and time consuming is a ‘bone of contention’ with which public administrators grapple. Additionally there are individual and environmental factors that could impinge on the individual that can cause him or her to be perceived as indecisive. This could be a disincentive for administrators and takes commitment to follow through with public participation processes. The issue of the agenda and the citizens’ apparent indecisiveness has to be competently managed and analyzed to arrive at a consensus that is considerate of the various views. Solutions arrived at must be in the best interest of the targeted community in general. Taylor & Carandang, (2011) in assessing sustainability issues in Manila Philippines, with the intent to implement sustainability initiatives, attested to the issue of differing stakeholder views in the project’s evaluation. Consensus between differing stakeholders was also critical to the project’s implementation. A community participation exercise is more manageable when a community is more homogeneous and with similar views on an issue.

In Paterson, local officials were willing to make the administrative system more flexible to incorporate citizens’ desires. The institutional arrangement for this policy initiative was becoming more open and democratized to allow broad based input. Council’s responsiveness will result in a more effective and legitimate decision process

and its outcome. A citizen participant summed up the discussion with a plea for recognition of the value of genuine public participation, which would bring about desired change and an impression of a legitimate responsive Council. He said *“Don’t just put a survey together that benefits you”* (July 26, 1997:105). Information as to whether or not the survey was implemented was unsuccessful because of the inability to obtain more information from the incumbent Councilmember who was present at the meeting and made some of the suggestions that were considerate of the public. This member remains responsible for 4th Ward in which the study area for this research is located.

8.3.1D. Hawthorne’s process

Some factors giving insight into the whys and whose of the decision making process surrounding the research site in Hawthorne are highlighted below. Subsequently, there are two redevelopment activities highlighted. The first one is Kohler, the main site of interest that is already developed. The second is currently in the deliberation of site reuse stage as a proposed supermarket. The researched site was a former Inmont factory comprising about 31 acres and later 22 acres was sold to BASF chemical factory owners that preceded Kohler the present owner. The adjoining 8.78 acres that was owned by Colgon/MERCK is the other one being mentioned. Both were the subjects of discussion in the municipal public records, and those of the NJDEP’s. Some of the controversy surrounding the MERCK’S site redevelopment was mentioned by some survey respondents in gauging public officials’ responsiveness to their concerns. Whenever mention is made pertaining to a citizens’ demonstration, it is in reference to the Colgon/MERCK portion.

Factors considered by the municipality in the redevelopment discourse process, including site reuse issues.

There were eight identified factors ranging from tax ratable to open space preservation that were instrumental in the municipality's decision making surrounding the site's reuse and redevelopment.

1. Tax ratable. The municipal's expectation is that neighborhood property values would rise, and, to raise money for infrastructure e.g. school. Kohler's assessed value (revenue) to the community was \$10 - \$12 million (Council minutes, January 22, 2003:6). Former Mayor Chrisatelli said it is a win – win situation (Personal communication, June 29, 2011). However, the tax records show that property values in the neighborhood surrounding the site has basically not changed. Some even showed a bit of a down turn reflecting the current state of the market. **(This has economic implication for the municipal's budget.)**

2. The impact of the site's reuse on local businesses – This is in response to the suggestion of its reuse as a supermarket. (Council minutes, September 17, 1997:6) **(This has implication for the economic viability for the small businesses.)**

3. Access to the decision making process for locally affected population to express their concerns about site reuse. (Council minutes, September 17, 1997:6) **(Council legitimacy)**

4. Type of redevelopment – BASF was insistent that the property not be redeveloped for residential purposes. (Council minutes, July 2, 1997) The contamination history restricts some development. **(This has implication for the site utility and receptivity of the community)**

5. Community impact studies conducted. The *Borough's experts did not expect traffic to be a bother* for commercial reuse such as a supermarket. (Council minutes, September 17, 1997:5) However, Council minutes (November 6, 2002) said Kohler provided its traffic report study for its reuse. Also, a County traffic studies was done for an area in the site's vicinity where three Counties, including Passaic, converge. **(This has implication for public safety and health and infrastructure logistics)**

6. Kohler Company's role and incentives- a. The municipality was more receptive to Kohler because of the company's willingness to give off-site incentives including those having to do with its involvement in infrastructural improvement to Wagaraw Rd on which it is located. Wagaraw Rd problems included congestion and signalization problem. b) Kohler had to be compliant with municipal stipulations not to be a contributor to an existing road congestion problem by devising and establishing a truck schedule for its trucks traveling operations. c) Kohler promised to provide and improve recreational facilities such as baseball fields, easement for bike paths. d) Jobs were promised for unionized workers. Councilors being concerned about the workers union's reaction conducted a series of negotiation over a period of weeks with Kohler to hire local unionized workers. Kohler did not see this requirement in the law and so this was a major issue. Apparently, the resolution granting the permit for soil movement was withheld until the workers issue was sorted out. According to a Kohler representative, this had implications for stalling the project. Eventually, Kohler hired the unionized workers (Council minutes, October, 15, 2003). **(These factors have implications for the economic well being of the municipi-**

pality, corporate social relations and legitimacy with the municipality and citizens and public health)

7. *Company's former history with the municipality* – Mayor Chrisatelli said that Kohler had former business interest in Hawthorne and had developed a good relationship with the town. Of note the Mayor said the residents did not oppose having Kohler redevelop the site. **(This is about maintaining continuous corporate social relations)**

8. *Open space preservation* – An ordinance was developed stipulating that a significant section of the land adjoining the river (the river boundaries the property) should not be developed. Included was a wetlands limit line. **(This has implications for ecological integrity)**

Elements of the Hawthorne decision making process

The following information was found to be important in Hawthorne's decision-making process. It gives an indication of how the decision was made and the extent of involvement of the affected neighborhood.

1. Routine technical decision approach

A committee was put in place called the 'Economic and Industrial Development Advisory Committee (EIDAC). It was later named Future of Hawthorne Committee. It was included in a group of primary parties brought together in consultation to determine and evaluate the best reuse options for the vacant commercial and industry sites to offset a \$2,000,000.00 debt and increase tax revenues. Obviously the administrators were confident that the Committee would adequately represent the citizens' interests and values. The Committee identified and evaluated 25 properties that could be redeveloped

(Council Minutes January 1, 1996). A Council Committee was appointed by the Council President to liaise with the Industrial Redevelopment Committee and advise the Council (Council minutes, September 17, 1997). The Committee obviously was formed considering the members' area of business expertise because of the nature of the problem identified, its goals, and them functioning in an advisory analytical capacity to help the Council make decisions.

This Committee apparently played a role in deciding the utility of the site. During the Council meeting a prominent member of the Committee asserted that a supermarket would be reciprocally beneficial to the neighborhood residents because of the potential services it can offer to the neighborhood and receive from them because of the initiative. The intent is that people will be accepting of such reasoning because of the functional economic utility the business could bring to the area (Council minutes, September 17, 1997:6). A community representative from the Industrial Redevelopment Committee acknowledged difficulty in assessing the economic impact of a commercial site reuse option like a supermarket. In other words, its impact on the local merchants will be hard to quantify. This admits to the limitation of a technical group formed to advise Council on the making of rational decisions.

The technocrats and the Planning Board and the Zoning Board of Adjustment in their normal routine work were very instrumental in the decisions in making recommendations to the Council who had vetoing power over the decisions. The technocrats were operating based on measured outcome goals. Furthermore, concerning the Planning Boards decision making role, King et al (1998:320) gave us insight into the behavior of

technocrats in decision making saying that technocrats are territorial in their capacity. They argued that technocrats “*rely on their technical and professional expertise justify to their role in administrative processes*”. The decision to have Kohler was done basically from the viewpoint of technical witnesses during a ‘working session’. “*After further discussion, a motion was made, seconded and unanimously approved to authorize the Board attorney to prepare a draft resolution of approval, to carry the hearing until the August 20, 2002 Board meeting and to allow further public comment at the continued hearing*” (Planning Board minutes, August 2002:4, 5, &6). However, oftentimes board decisions are made without public input and the public hearing was merely to initiate support. Possibly, the decision was made with some input from the Economic and Industrial Development Advisory Committee, (Future of Hawthorne Committee) a somewhat technical community grouping, thus underscoring the technicality of the decision making. (This ascribes to the Rationale model). This draft resolution was at the urging of Kohler’s representative. Granted, the Board desired continued review of an expert report, and the Hawthorne Environmental Commission’s request for residential access on the company’s property to the Passaic River, and to establish bike trails along the river. A subsequent Council record showed that this request was acknowledged, indicating that some community values for recreational infrastructure was under consideration for incorporation into the process. Mayor Chrisatelli, said the bike trails have not yet been implemented, but will be. To preserve the wetlands, open space and wetlands delineation criteria were given to the company. (Council Minutes, May 3, 2000: 14). This was recommended by the Future of Hawthorne Committee, a citizen committee.

An Ordinance was passed accordingly.

2. *Hawthorne's priority*

Similarly, as with the other municipalities, Hawthorne's priority was to redevelop into profitable entities, the vacant sites that had declined the tax base, reduced property values; affected the municipality's image and quality of life. This would reverse neighborhood negatives (Council minutes, January 1, 1996). In keeping with the Master Plan and a court mandate in 1988, affordable housing is also a priority.

3. *Financing type and its impact on public participation.*

The Kohler Company solely financed its initiative. There was no reviewed record showing any evidence of public – private partnership economic model. Despite some public perception that the company received tax break to invest in Hawthorne, a company's representative said Kohler did not receive any tax incentive (Kohler representative, personal communication, May 14, 2010) which was endorsed by the Mayor. The representative also said the company did not seek to have a community participation component. This is not uncommon in the absence of subsidized public financing and public-private partnership. However, evidence of Kohler seeking the mainstream public interaction (apart from that required by law for the municipality's permitting process for soil movement) is during the actual public hearing when a representative requested meeting with the public to avoid a potential conflict. (Council minutes, January 22, 2003:5) Kohler had notified the public within 200ft of the property about a public hearing to inform of the intent to move approx. 13,000 cubic yards of soil onsite during the construction phase (Council minutes, January 8, 2003:15, January

22:10). The amount of soil was later determined to be about 19,844 yds³. Subsequently, two public hearings were conducted.

4. *Community representation*

The main stakeholders in the process driving the decisions were the technocrats, Council, the Economic and Industrial Development Advisory Committee which was later renamed Future of Hawthorne Committee, and the developers. The community was represented by this working task force group. The Future of Hawthorne Committee's role was to provide visionary perspective for the future development of Wagaraw Rd including redevelopment options for the BASF site. They are a group of Hawthorne businesspersons in the municipality who were actively involved in consultations with the developer (Council minutes June 7, 2000:3). They arranged televised public meetings that were well attended by the public. Another example when the Committee had an active role was when it recommended wetlands and open space delineation criteria to preserve the wetlands and open space be, given to the company (Council Minutes, May 3, 2000: 14). An Ordinance was passed accordingly.

The timing of the notification of the project can indicate public officials attempt at meaningful citizens' participation. Mayor Chrisatelli mentioned residents within 200ft of the site were notified of the intent to approve the project indicating that attempt to actively engage this specific group who may be most impacted from the development may have been done at a late stage, or it may have been a way of keeping them continuously informed. Conversely, the Future of Hawthorne Committee was engaged very early in the process. However, Mayor Chrisatelli said citizens did not oppose this

project indicating that the time that they were notified of the project may not have any impact on their responses. The Mayor also instituted an informal open door policy, once per month at 8:30am, inviting residents to come, have coffee and donuts with him, and air any general concerns they have. Here is an opportunity to relay project related concerns, display Council responsiveness, but the time of day could have been inconvenient for many.

BASF, the former property owner of the redeveloped site, was also a very significant driver in the future development of the site because of its insistence that the property use should omit residential developments therefore limiting that option. This may have been because of fear of liability issues because this stance was taken during the latter part of the 1990s prior to the introduction of the Brownfields Revitalization Act (2002). The Act relaxed liability penalties to encourage redevelopment of these sites. Of note is that 15 of the 22 acres of the site, that was subsequently owned by Kohler meets residential standards criteria.⁷ A company representative said its non-residential use criteria would not be changed in subsequent years therefore imposing the use restriction for an indefinite period of time.

The records revealed the mainstream public was invited for input, mainly through public hearings and at the Council and Planning Board public comments and public portions at the end of the Council meetings and otherwise. These records show the Hawthorne residents, including some from the neighborhood surrounding the site, airing their concerns, talking about site remediation and reuse issues and demanding public

⁷ A no further action letter was received from NJDEP in 1999 for this portion.

officials' accountability. In the literature it is criticized for not encouraging meaningful public participation because most of the times, the decision is already made, may be under serious consideration, or in the final stages and it does not allocate much time for discussion of citizen's concerns. This, as well as an indication of a developer's potentially strong influence is affirmed when a resident asked, "Who invited Home Depot to Hawthorne?" (Council Minutes, July 15, 1998:5) The former Mayor's reply was, "*the developer did*". This citizen learned of the proposed redevelopment after the newspaper and the Zoning Board of Adjustment had already received Home Depot's application, indicating the matter was already under consideration and use variances were being considered so that Home Depot could proceed. This example describes the controversy surrounding the adjoining site owned by Colgon/MERCK. The intent to convene town meetings was mentioned when the conflict arose about the site's reuse. In the end, a citizens' protest resulted in the outcome they desired – no Home Depot in Hawthorne.

5. *Political process*

Kohler was faced with a conflict that had reached a deadlock during its negotiations with the Council. Kohler then took the opportunity during a public hearing for a soil movement permitting process, to present its arguments and to request "*an opportunity to meet the people and see what can be done.*" (Council minutes, January 22, 2003:5) The issue was that the Council asked Kohler in "good faith", to make a commitment to hire local union labor from the inception of the construction phase, and felt that Kohler was not responding to this overture. The Council had made this request about 3 – 4 weeks prior to the 1st public hearing. Kohler's stance was that it reserves the right to "*choose a*

contractor to build the building with or without union labor” in the absence of any law stipulating the use of union labor. Therefore, there were also two other major contentious issues facing the Council in which Kohler had an interest. Firstly, Kohler felt that the Council was deliberately withholding the soil movement permit and secondly the Council was using the soil permit as a leverage to control the other and was not being fair. Kohler had met all its legal obligations that were required to begin the project in addition to giving the town incentives. They desired to make significant financial contribution to the community and to be a member once more of the community, like they were before they formerly migrated. These incentives included, job creation among others for many town residents. Kohler noted that in return, they received nothing from the town.

Hawthorne’s decision –making process also gave insight as to the stage when public involvement was discerned to be necessary and the appropriate role for their involvement in possibly influencing decision-making. Kohler sought active input from the public to “*see what can be done*” when the process had the possibility of becoming an open conflict as suggested by a council member. He asked, “*If Kohler was willing to foot the bill for time involving police if the building is built with non-union workers*” (Council minutes, January 22, 2003:4). This statement makes reference to the expenses and inconveniences that Kohler would incur should the union and its members protest. However, because the building was far from complete, Kohler felt that affected citizens would have more opportunity to air their concerns than at this first public hearing. Council responded that Kohler was misleading the public about when negotiations started. It was more rational to engage the people earlier than later for problem solving.

In this interaction, Kohler appealed to the town's sentiment and sense of fairness, and showed how the town stood to benefit. This was a strategy to meet the residents for them to mediate between Kohler's and the Council's positions in order to dissuade a demonstration. This was an indication that the public could possibly have influenced the outcome.

The public was being asked to exercise judgment in a very salient situation based on Kohler's presentation, and the stance taken by the Council. There were major issues at stake here. The first issue was whether the role of the public was properly defined. The second issue was that Kohler expected the public to be more understanding than their representative body. The third issue here is whether persuasive arguments, attitudes from opposing parties are intended for manipulation or guidance of the public in a highly salient issue where the stakes were potentially high. The fourth issue was whether or not the people had the all the necessary facts, example, about basic labor law to make adequate assessments. The fifth issue was if the public would be fully cognizant of the implications of the possible outcomes if they chose to be sympathetic to Kohler's stance or not, e.g. how it affects them economically individually and as a municipality as was suggested, and in social relations. For example, Kohler already mentioned that other Hawthorne residents who were not union members had the chance of getting a job. This was a response to the Council's stance that *"when union workers wind up on the unemployment line because of no job, the taxpayers are going to be paying for it anyway"* (Council minutes, January 22, 2003:4). Kohler's representative wanted to highlight the company's credibility in the whole matter of the decision at stake *"without*

being misleading” whereas the Council countered that “*the public should not be misled*” about the time when the plea for the workers’ concession began. Here Council was implying that they had been making representation for the public’s good, thus seeking legitimacy.

Implications of the process and its outcome for Kohler.

There are six factors that characterized the process and its outcome for Kohler.

1. Kohler felt and implied the process was subject to manipulation by municipal institutional organizational forces.
2. There was a fear that there would be an explosive hostile situation between the company and powerful union forces. This could cause bad publicity and breed ill will. To avoid this, Kohler was “trying not to pick a fight with the unions”
3. There was the distinct fear of delay for the construction process that would seriously undermine the economic wellbeing the company.
4. There was the threat of Kohler not being able to have and maintain good social relations with the municipality and the affected citizens. Kohler previously enjoyed good social relations with the municipality when its business was formerly located in Hawthorne before it moved to another location.
5. Negative economic repercussions, would jeopardize a long-standing family business. This was mentioned during the negotiations. This of course could lead to intergenerational sustainability implications.
6. Loss of Kohler’s credibility with the municipal officials and citizens was a real concern to Kohler.

Implications of the process and outcome for the Council (decision makers)

There were three implications of this conflict for the Council that could impact the process outcome.

1. The Council feared loss of legitimacy from the public in terms of the Council's perceived inadequacy to represent affected citizens in their cause; and from Kohler in terms of how they perceived the Council in the exercise of its power.
2. The Council's ability to fulfill a major brownfields economic goal, which is local job creation, was at stake.
3. The Council could lose its acceptable social relations with the company. Kohler reminded Council that it had good relationship with the municipality when its former business was housed in Hawthorne. The Council could possibly acquire a reputation among private developers in brownfields redevelopment economic circle of not being fair.

Implications of the process and outcome for citizens

The implications for citizens' role in the dispute are as follow.

1. Citizens could gain insight into the negotiating process and an opportunity to seek access to the relevant information to increase their knowledge base. This increase in knowledge would assist them to make an informed assessment and 'judgment' about the issue, and to analyze its possible effects on them and their community.
2. Citizens' need clarity of their roles in the process concerning the dispute in accordance with the expectation of the Council and Kohler and how their input could influence the outcome.

Kohler eventually hired unionized workers. However, the public's specific role in

possibly influencing the outcome was not made available through the records. Their role in the outcome was more overt in the site reuse issue for the adjoining site formerly owned by Colgon/MERCK, that was still in the early redevelopment phase and that Home Depot was interested in acquiring. They spoke proudly of how they prevented Home Depot from coming to town and how they picketed against the proposed site reuse. This demonstration was mainly engineered by a group of businesspersons. One businessperson spoke overtly in the minutes about garnering community support to protest a proposal by the EIDAC (Council minutes, September 17, 1997:22). The businesspersons had their own agenda and framed the ‘movement’ that it appeared quite salient to the relevant population. Residents had concerns about the utility of the site as well as traffic and some remediation concerns. These businesspersons did not want the area to be rezoned to allow Home Depot to build and one said he wants no retail of any kind. They appealed to Council to prevent the zone change. The Council’s response was to promise to convene town wide meetings so that the citizens could air their views (Council minutes, July 15, 1998). This strategy was unsuccessful in the face of an already escalated situation. A citizen’s protest was implemented. In this situation, the community used the ‘**conflict model**’ of community development to influence a desired change. In this model, local effective groups organize around a common cause to confront the local authority that is believed to be hindering problem solving. It emphasizes the redistribution of power (Flora et al, 1992).

8.4. Models of the decision making processes in the municipalities

Based on the above findings, Table 8-2 summarizes the model of the processes using a

modified version of Tonn et al (2000:163,176) typological framework analysis. Their framework is used to analyze the administrative context in which the decisions were made in the municipalities during the redevelopment decision processes and to decipher the roles of affected citizens in the decision processes. The modified framework takes into consideration whether or not the municipals' officials executed their duties in decision making in the typical prescribed routine ways or if some measures of adaptability was employed that varied considering the circumstances. The authors described the methods called **Decision Modes** and stages usually employed by public officials in conducting environmental problem solving. They stated that Decision Modes are "*typical ways of conducting an environmental problem solving process*". According to Tonn et al (2000), the modes may be used simultaneously and not just individually, depending on the issue. In this research, citizens' roles are mentioned according to how they apply to specific decision actions. **Decision Actions** are activities undertaken to make the decisions in employing the decision modes. Decision Actions include *issue identification* and *familiarization*, *criteria setting*, *option construction*, *option assessment* and finally, *reaching a decision*. *Issue familiarization* includes a clear explicit *identification* of the problem (which may be influenced by other underlying issues) and *familiarizing* all those involved as stakeholders in making the decision, with the problem. The familiarization stage involves discussions and may involve minimal or significant problem redefinition. *Criteria setting* establish specific evaluative criteria of the variable options. In *setting criteria*, consideration should be for both present and future concerns and these criteria precede identification of a range of realistic decision options (*Option*

construction). Complex problems with the potential for serious environmental, health and social impacts will include taking this action in incremental strategic and iterative steps, monitoring and making adjustments as necessary. It involves brainstorming. *Option assessment* evaluates each option against set criteria. Simple routine matters may require only experience to make decision on options, whereas those of a more complex nature will require both qualitative and quantitative analytical models and, considering uncertainties. Options are derived based on bounded rationality (satisficing strategies). *Reaching a decision* is based on who has the ultimate authority, institutional variables, e.g. structure, and the mode used in the decision process.

Table 8-2

Models of the redevelopment decision making process in the municipalities

Municipal	Main issues	Decision modes	Decision body	Mode attribute	Decision actions	Citizens' roles
Paterson	A. Proposed modification of Council meeting agenda. B. To develop the Master Plan goals	Analysis centered.	Technical and policy Analysts	Recommendations developed for Mayor & Council	1. Issue diagnosis & familiarization (ID & IF)	For IF, citizens are surveyed about revitalization. and attend public meetings. Information not available about their actual input into the agenda.
	Revitalization	Routine Procedures	Developer and expert consultation	Highly complex matter. Potential for social, environmental, public health impact & conflict.	2. Setting criteria (SC) 3. Construct options (CO)	Ward Development Corps. formed. They may have been involved in both ID and IF.
	Clean up neighborhood & removal of blight		Planning and Zoning Officials; Administrators Mayors / Council final decision maker.	Administrative & technical staff make routine decisions for specified standardized information. Policy analysis skills are not necessary.	4. Assess options (AO) 5. Reach a decision. (RD)	Mainstream roles not indicated in SC, CO, AO and RD.

Table 8-2 cont,d

Municipal	Main issues	Decision modes	Decision body	Mode attribute	Decision action	Citizens' roles
Clifton	1. Designation of redevelopment Area. Boosting of tax base.	Analysis centered.	Technical and policy analysts.	Recommendations developed for Mayor & Council	1.Issue diagnosis & familiarization (ID & IF)	Area representatives meet with officials in ID & IF. Mainstream attend public meetings and hearings.
	2. Affordable housing	Routine procedures.	Planning and Zoning Officials; Administrator	Administrative & technical staff make routine decisions for specified standardized information. Policy analysis skills are not necessary.	2.Setting criteria (SC) 3.Construct options (CO) 4. Assess options (AO)	At SC stage, officials may have incorporated public ideas into the project.
	3. Site reuse		Developer and Expert/ Consultant	Highly complex matter. Potential for social, environmental, public health impact & conflict.	5. Reach a decision. (RD)	Not indicated in CO
	4. Infrastructural impact on neighborhood/ municipal services.		City Manager. Mayor/ Council final decision maker.			4. Voting on the option for reuse as a school. (AO)
	5. Density of housing redevelopment.					Not indicated for RD.

Table 8-2 cont,d

Municipal	Main issues	Decision modes	Decision body	Mode attribute	Decision action	Citizens' roles
Hawthorne	1. Identify, evaluate properties for redevelopment	Analysis centered.	Technical and policy analysts.	Recommendations developed for Mayor & Council	1.Issue diagnosis & familiarization (ID & IF)	Advisory Committee in ID & IF.
	2. Site remediation; reuse; rezoning.	Routine procedures	Planning and Zoning Officials; Administrator	Highly complex matter. Potential for social, environmental, public health impact & conflict.	2.Setting criteria (SC) 3.Construct options (CO) 4. Assess options (AO) 5. Reach a decision. (RD)	Advisory committee was used to evaluate proposed brownfields. Mainstream attend public meetings and hearings.
				Administrative & technical staff make routine decisions for specified standardized information. Policy analysis skills are not necessary.		In Mayor's open door policy-mainstreams' chance to air concerns
	3. Secure jobs for unionized workers.	Conflict management	Developer and Expert/ Consultant City Manager. Mayor/ Council final decision maker.	Some negotiating skills necessary.		Citizens' protest about site reuse. Advisory Committee; Environment Commission. (CO & AO stages) Not indicated for RD.

8.5. Discussion and Conclusion

The analysis of the decision making processes in the municipalities show that the processes were more formally structured to follow prescribed routine procedures and decisions made by adherence to municipals' priority objectives for community development. In Hawthorne, the model was somewhat more adaptive to offer citizens an informal approach to air their views to the decision makers through the continuous 'monthly coffee meetings open door policy'. Paterson also had a somewhat flexible approach to gain citizens' input about general area revitalization through the citizens' survey that was reportedly conducted from door to door. However, in all three municipalities, the mainstreams' main access, including the affected population was mainly through public hearings, meetings, and public comments sessions at Council meetings. Citizens were also represented by a citizens' advisory group in Hawthorne that was charged with the responsibility for advising Council on general redevelopment of Hawthorne, and, reportedly by area representatives for Paterson and Clifton. Their role was not particularly made clear in the reports in Clifton but is surmised, based on context. The Mayors of Hawthorne and Clifton and the Council member who were actively involved in the redevelopments initiatives claimed that the citizens were involved early in the process, their ideas were incorporated and their concerns considered in the process of decision-making. It is not clear how representative of the affected population values and opinions were those of the community representatives.

The clout that the community representatives possessed to influence the decision makers and the outcome was not quite clear but is merely suggestive and speculative. For

example, Hawthorne's Council records stated that the advisory committee received formal recognition from the municipality for their work. Whilst it seemingly appears that their advisory work was highly valued in its contribution to community development, this recognition could simply be more a matter of protocol. The role of the mainstream in influencing public officials' decision making also bears consideration. The citizens' protest in Hawthorne helped to prevent an undesired site reuse option from materializing and the risk of another protest in Kohler's job dispute issue possibly helped to garner the desired jobs for the unionized citizens. Mayor Chrisatelli concurred with citizens when he admitted he was not in favor of having Home Depot (Personal communication, Friday, April 30, 2010) In this site reuse matter, a top decision maker's values were closely aligned with the mainstream. In this process citizens' tended to be more influential in decision processes if it did not run counter to public officials' desires and goals. This tendency is more readily realized in salient situations when there is conflict around issues that are more important to the community. Their involvement is greater when there are high stakes involved such as those resulting in citizens' protest and project delay. The redevelopment process in Hawthorne indicated how intriguing and sometimes difficult public participation processes can be. Involved is the same municipality, a portion of the same affected population, a former industrial property with another adjoining former industrial property scheduled for two potentially different reuses in the same neighborhood. The properties, although adjoining, and impacted by some of the same contaminants have different site reuse issues among other issues but both require some technical knowledge and understanding from the citizens to enable better competence,

that is, labor law, traffic impact study report, and remediation assimilation. One issue had the potential for conflict with a powerful outside organization (union) and the other actually generating conflict in house. One of the sites' redevelopment process had overtures of the process being subjected to some form of local interest group capture from a local group with vested interest and with the other site redevelopment, the possibility of interest group 'domination' from a powerful national organization- the Labor Union.

In Clifton's example, the casting of votes to determine if the site should be reused as a school may have some bearing on the initial decision as suggested by the Mayor. The Mayor's statement, of "*always depending on public input especially from area residents and businesses*" (Personal communication, July 29, 2010) suggests a municipality that is highly responsive to public input in redevelopment exercises. The statement's framing is suggestive of public influence, public officials' legitimacy, and high salience of matter conducive to public acceptance. The respondents' mostly negative responses to the perceived and actual changes from the housing redevelopment project suggest that they perceived their concerns such as those relating to traffic, were not dealt with to their satisfaction.

Paterson's example of a decision making process contemplating the pros and cons of revising the agenda of the Council meetings, and the issue of facilitating public input, has given us some valuable lessons on the decision process and public participation. The lessons are:

1. Administrative policies need to be adaptive based on the circumstances. This means

that they and their impacts have to be reevaluated periodically as feasible. Citizens' input can be invaluable in these assessments to initiate change as necessary.

2. The Council attempted to bring the administrative process and issue closer to the people by attempting to bridge the administrative gap. This is necessary to meaningful participation.

3). There are some issues that may not require broad based participation, whereas some may. It is a matter of context such in the case where there are multi-stakeholders involved with diverse ethnicities, wide disparities between socio economic groups such as the case with Paterson, the issue, and spatial geography. Paterson had to consider all these variables and so a broad based input into the decision was necessary.

4. Popular sovereignty was recognized by giving the public a say in governance. In this matter, this will enhance the legitimacy of both the Council and the process.

5. Citizens can and should be allowed to have inputs into the agenda setting as feasible.

6. Adequate resource allocation may be necessary to achieve meaningful participation. It may also entail high costs depending on the strategy. In this case, the minutes mentioned a survey of about 23,000 viewers. This should mean consideration of how the survey will be conducted or alternatives that may be less resource intensive.

7. Flexibility in administrative staff's attitude is critical to effect relevant policy revision and change. This may mean a change or modification of the administrative model.

8. Differing stakeholders could make a process very contentious because they have different stakes in the process. Common priorities can be determined through measures such as concept mapping (Weiss, 1988).

9. Attempts were being made to make the participation process and decision fairer. All concerned would have equal chance to influence the agenda and some discursive rules established so that the citizens could voice their concerns and perspectives.

In the matter of actually making a decision, local decision makers and even advisory groups may believe that they are actually making the best decisions for the community by embracing the institutional rational theoretical perspectives, until citizens' objections forces a reconsideration of the strategies and outcomes of organizational and project goals. In Hawthorne, in spite of the overtone of interest group capture, the citizens' protest provided check and balance that the process needed reevaluating. In Clifton, anecdotal evaluation (See Letang, Chapter 5) revealed significant dissatisfaction among survey respondents (59%) of negative changes in their neighborhood perceived to result from the site's redevelopment. This may have led them to believe that the local decision makers were not responsive, or may have conducted studies with questionable conclusions. This could affect their confidence in the public officials. On the other hand, the Mayor said "*it is the best project we had*" (The Record, July 18, 1997: LO1, Friday) suggesting that options were assessed, iterations conducted, and the decision based on bounded rationality. It is not clear to what extent the affected mainstream public was involved in the decision making process, and their roles, apart from apparent inclusion in the voting process in 1994. Additionally, from the data obtained from the public records and the Mayor's responses, it was not clear about how much and what information was given to them so that they could make informed assessments and inputs that would let them feel it is "our project and our decision" and so take responsibility for the reported

results. Of note is that the Mayor claimed that the people were kept informed.

Brownfields redevelopment process involves decisions being made at multiple stages by different organizations. Some citizens may not be cognizant of this nor understand the intricacies of the connectedness of the different departments and their functions relating to community revitalization and development. On September 17, (Council minutes, 1997:22, during the public session of a Council meeting in Hawthorne, a resident sought clarification of this relationship to help in understanding a redevelopment issue under discussion. Providing opportunities to increase knowledge of these fundamental issues like departments' roles and functions in community revitalization projects can equip citizens to be more competent and confident to access and be involved in decision-making, and to make informed input. Although their input may at times be contextual, democracy dictates that meaningful efforts are made to keep them thoroughly informed through relevant means as to project matters and updates. This individual's request may be a reflection of the larger community's desire for more competence. Letang, (7) reported that 72% of survey respondents are interested in learning about how redevelopment decisions in their municipalities are made, that is, the 'who', why, when and where of the process. This may mean ignorance of or uncertainty of their role/s in the redevelopment and its decision processes, even the fact that they can and should have a part in deciding the agenda. For successful participation processes, involvement in agenda setting is a valued requirement of the United States (U.S.) public because of a general distrust of agendas that have been designed without their initial contribution. In this matter, the motives of government officials are regarded as suspect

(Renn, 1999 in citing Lynn, 1996).

In brownfields redevelopment, developers in general have developed a reputation as individuals who are out for quick fix strategies, excessive financial gain from redevelopment projects, and generally uncaring about how the projects and chosen remediation methods impact the communities some New Jersey newspaper reports revealed. This perceptual framing has also engendered public distrust of developers and government agencies, including local agencies, concerning if they really do care about the public's interests. Risk assessment decision processes in the U.S, decisions were often made ultimately by elected officials based on the recommendations of experts and purported to be in consideration of public values and concerns. However, citizens' preferences are for direct access to managers of risk. Citizens are interested generally in remediation choices and that the choices do not impact their health as was revealed by the Hawthorne Council minutes and respondents' anecdotes. Eighty five (85%) of respondents in Hawthorne, and 80.9% in Paterson, chose public health as being highly valued when redevelopment comes to the neighborhood. This value reveals that strong emphasis should be placed on the developer's role in community participation exercises and risk communication, which will result in contributing towards acceptance of the projects. It is therefore advisable that developers who are aware of public sentiments towards them seek community input in the process from inception (Eisen, 2007). Some perceptive developers are aware of this as in the case of the Honovian redevelopment project in Clifton NJ. The developer engaged the affected community and incorporated their concerns into the project thus garnering public support (Shaw et al, 2009). In

evaluating brownfield policies Eisen critiqued policies that tended towards favoring developers instead of being community development centered. He envisaged initiatives that prominently featured community engagement in negotiations concerning site redevelopment versus one in which negotiation is primarily an interaction between local officials and developers (Eisen, 2007:754). This puts developers into an advantageous position in determining the terms of the negotiating process and its outcome.

The New Jersey Department of Environmental Protection's (NJDEP) responded to Eisen and the media by seeking to remedy the challenge of developers' attitude towards public participation and their dominance of the negotiations by enabling a more empowered voice for citizens' concerns (NJDEP, N.J.A.C.7:26 E-1.4. 2008). This site remediation legislation requires citizens within 200ft of the site to be given information periodically about the remediation process and activities over which the department has oversight. Information should be provided through signage or letters to affected parties including those in charge of institutions housing vulnerable populations. Additionally, if a specific site generates highly significant and excessive public interest, extra efforts, through additional information supply and exchange beyond the 200ft must be expended to create opportunities for community involvement. The obtained results must reflect citizens' concerns/opinions in the entire process of remediation including the method. (Environmental Law Institute, 2010). This is mostly a form of participation by consultation because public opinions are sought prior to the developers making decisions about the type of remediation technology. However, the implications of this policy are; ensuring procedural democracy through legitimacy of the decision, developer

accountability, government responsiveness, increased trust in public officials and developers, a citizenry that is more receptive to the redevelopment project's outcome and a more informed citizenry. This is an implicit attempt to ensure fairness and competence through outreach strategies, through the remedial action process, in keeping with the theoretical foundation about process. This can be seen also from the perspective of establishing a role for the general affected interested public in the remediation exercise but the importance of this role to the decision process must be made explicit to the public in addition to overt feedback mechanisms to enhance their general acceptance of the strategy. These public opinions and preferences will be value orientated at both the individual and collective level. Here is an attempt to involve the lay public in decision making in a very technical area that must involve rational choices from among options. To assure clarity of the publics' stance in this technical risk area, and which has the potential for conflict, Renn's (1999) advice for a systematic approach of value determination must be heeded.

The aforementioned NJDEP policy was in response to a highly salient public issue, made even more so, by the attention given by the media, environmental groups like the Sierra Club and mainstream interested and affected population. This new rule seeks to involve the mainstream through participatory democracy that expects that the public will be given relevant, meaningful information so that they can deliberate about the options and its significance on their health and ecosystem.

This example shows that the public preferences and opinions do matter and can effect policy alterations and introduction in the redevelopment process. The literature

have shown that there is a relationship between policy and opinion in the U.S. but the influence is relative to the salience of the issue as well as income and individuals' attentiveness to policy matters (Clawson & Oxley, 2008). Yet, the literature relates the sentiment of some administrators and elite democratic theorists that the public is somewhat unresponsive and inattentive to overtures of community participation attempts in official public matters and thus decision making. This new rule challenges this perspective. The fact that over 72% of respondents are interested in knowing how redevelopment decisions (which may include site remediation matters) are made in their municipalities, indicates some measure of attentiveness to this issue, and the need for competence. The challenge lies in them following through on this request to seek active participation in decision-making opportunities in their municipalities. Clawson & Oxley, (2008:211) raised the question "*Are citizens knowledgeable enough, interested enough, and attentive enough to function effectively in a democracy?*" This research shows that survey respondents reportedly are interested and desirous of acquiring pertinent information to do so. An evaluation of the NJDEP rule, using this as a research question, would be a good place to start further investigation.

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Chapter 9

Research Conclusion

Citizens' core values such as sense of place, achieving sustainable outcomes can be harnessed as a common ground and motivating tool to encourage dialogue and participation in brownfields redevelopment. Their values and desire for redevelopment success are consistent with the state's major goals for sustainable communities and sustainable development to which brownfields redevelopment subscribes. Their values for improved quality of life are conventional and pragmatic and their values for their communities are not disharmonious with local officials too; but, each parties place emphasis on different priorities. It is possible for citizens and local officials to come together in an analytical process to ascertain where the similarities and differences lie and establish mutually agreed upon community development goals and criteria determined through consensus. The results suggest that there is the need for a more heightened awareness and sensitivity to each other's values, concerns, challenges, and priorities and how to prioritize and streamline these issues for the overall well being of the communities. This will contribute to building and increasing social capital. The results suggest also that there is the lack of general will among public officials to stray from doing business as usual above the basic and legal requirements because of time constraints among others. The challenge lies in establishing an efficient and effective process to achieve consensus.

Since the respondents were very much concerned about how these

redevelopments impact their lives, they should also officially be part of the evaluation process especially if brownfields redevelopment has to contribute to the mission of building sustainable communities. For them to be able to make valuable contributions, they must also be involved in all relevant stages from issue diagnosis and familiarization to even the choice of the remediation strategy. The research shows that citizens had an interest in remediation and its association with their health. Evaluation results throughout the entirety of the redevelopment process could facilitate its improvement and contribute to its legitimacy. To achieve the goal of sustainable communities it is essential that environmental decision-making must be geared towards achieving long-term stability of both the domains of the physical and social ecosystems. Nevertheless, the appropriate stage for participation of the relevant affected and interested parties and the appropriate strategies for ensuring this participation must be considered in evaluation processes.

City officials' administrative view of success of the redevelopment projects differ from the citizens. The citizens' view related procedural democracy of the process to its outcome. Their desire was for a process that facilitated both institutional and psychological empowerment and which would accommodate their values and concerns about the redevelopment process. They hoped that through its outcomes, they would enhance theirs and the neighborhoods quality of life. The municipal public officials viewed success mainly through an economic lens; mostly the ability to leverage financing to clean up and redevelop these sites to assist in revitalization and sustenance of the cities' economic bases. They also evaluated the success of the project through media reports and the absence of overt hostility. The additional social and health benefits were

desirable but were secondary to the prioritized economic goals.

Some Paterson respondents who reside in the economically challenged area in which the study was conducted did not perceive one of the outcomes, that is, redevelopment related job allocations, to be fair. They perceived the allocations to be disproportionate. Clifton residents were mostly concerned with the outcome, that is, the impact of the project results than with the actual process and the manner in which the decisions were reached.

Psychological empowerment is a driving force for participation behavior therefore, if participation processes are not conducive to an empowering environment the processes will be perceived to be deficient in legitimacy and will deter those who wish to be involved. The perception of empowerment in the decision processes in the municipalities was one in which respondents overall did not feel particularly empowered. The municipals decision making including how the participation mechanisms were structured, have seemingly fueled this perception of minimal empowerment. Nevertheless, results show that this perception also have a relationship with how capable an individual perceives himself or herself to be. People are highly concerned that the redevelopment decisions that public officials make will impact their lives and so the perceived limited access to the decision process will result in a limited sense of control over their destiny. Perkins et al, (1996:107) in referencing Zimmerman (1990) states, *“locus of control and participation are both integral dimensions of psychological empowerment”*.

Environmental justice for intergenerational equity and legacy is of utmost importance especially to a citizenry who have resided in communities for many years

with second and third generations such as the case with Hawthorne residents for example.

Sustainability of a historical legacy and social culture are highly treasured too.

The research had a few identified limitations. However, they did not negatively affect the results. They are highlighted below.

9.1 Some limitations to the study

1. The reviewed Paterson Council and Planning Board minutes provided minimal information about the issues surrounding the factors and characteristics of the site-specific decision process. Therefore an area wide revitalization initiative and a Council meeting which sought public opinion about a specific matter had to be used as a case study proxy to gauge community access to decision making process and public officials' responsiveness to citizens' concerns and values.
2. Whilst the number of survey responses analyzed was enough to be acceptable for statistical hypothesis testing and other pertinent statistical requirement, it was desirable to obtain a greater return to greatly increase the research generalization.
3. Regarding citizen group representation, except for some minimal information in Hawthorne, information was not obtained from the municipalities as to the characteristics of the representative groups engaged in the participation process and, how representative they were of the affected population.
4. The citizens' anecdotal reports in the Council and Planning Minutes might not fully reflect those of the majority of affected citizens because written reports were observed from only a few citizens and at times from a 'regular' attendee at the different meetings. Additionally, the citizens at the meetings might have been the

same individual that was interviewed in the survey, since the questions did not seek to discover if the respondent attended any such meetings.

9.2 Lessons learnt from this case study research

Based on the observations of this research, some valuable lessons were learned. Some of these lessons generated some recommendations that will improve and enhance citizens' responses to brownfields redevelopment projects in their neighborhoods and their participatory processes.

1. The decision mode and strategies employed for access to the decision making process will affect the quality and perception of the outcome of the initiative.
2. It is important to involve all affected and interested persons more in the actual planning (early participation) of these projects to foster a sense of ownership in the activity. One of peoples' greatest needs is to be heard. They want to know local authorities are listening to their voices.
3. To establish a set of guidelines for evaluation of public acceptance of brownfields projects redevelopment projects, this must be decided and agreed upon between the target community and local authorities.
4. Participation strategies are critical to the perception of empowerment. Evaluation of these strategies should be considerate of contextual issues. Participation strategies that are conducive to more interactive didactic sessions between officials, (including developers and experts) may be seen as more empowering, especially if they facilitate learning and clarifications. Because the institutions did not empower the people, community empowerment was perceived to be absent or minimal by some respondents, and, local

officials and developers conducted the decision process in mostly the same formal prescriptive consultative manner, which may be an indication of their lack of motivation to deviate significantly from the norm. This observation builds the foundation for future research.

5. A regular, consistent communication flow from public officials (e.g. newsletter) to the public is necessary in order for them to see how their values and opinions were considered and or incorporated into the final decision. This makes the public feel that their suggestions were respected while keeping them adequately and reliably informed and fosters credibility and transparency. This can be part of the evaluative framework. If public participation were institutionalized then steps would be taken to have this mechanism in place. This will also answer to the problem of the absence of critical information in the municipalities such as the number of outreach activities attempted and held, attendees, more in depth information on issue discussions among others.

6. Building a sense of community through the individual's sense of place attachment is important to citizen participation and should be an integral goal in program planning. Planning must therefore be approached holistically.

7. There should be the establishment of a clear structured decision making protocol considerate of the scales of participation required. This can be adapted to suit contextual issues. It should also enable roles for differing stakeholders to be defined and understood by all involved and interested. This enhances the quality of the participation process.

8. Citizens' apathy towards involvement can be discouraged by facilitating an empowering environment and creation of continued incentive schemes to encourage and

maintain a satisfactory level of participation. For example, awards functions and other municipal public recognition schemes can be low cost established methods for active involvement.

9. A formal Social Impact Assessment (SIA) as distinct from a socio – economic impact assessment is important when planning for the redevelopment project especially one with potentially significant impact. SIA should be inclusive of monitoring activities during and after project completion for a significant period of time (Burdge & Vanclay, 1995). This should contribute to more informed decision making and can minimize negative community social impacts.

10. It is necessary to establish an educational repository of information as relevant in convenient sources/strategic locations to upgrade citizens' knowledge and competency levels through these avenues.

11. The negative impact resulting from these redevelopments can bring a feeling of helplessness and anger as citizens grapple to accommodate and devise coping mechanisms for impacts exacerbated by these projects.

Finally future research could build on this research's foundation by examining the role that public officials and staff motivation plays in enhancing community participation processes to facilitate individual and community empowerment to achieve brownfields redevelopment social goals.

