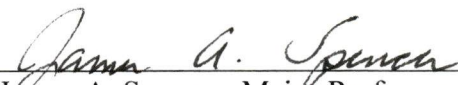
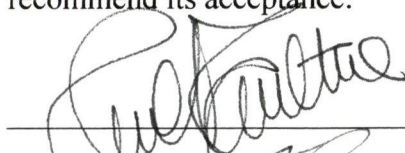
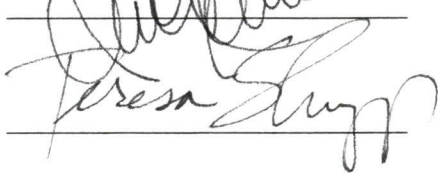


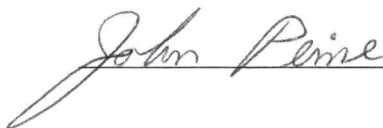
To the Graduate Council:

I am submitting herewith a thesis written by Daniel Evan Johnson entitled "Perceptions of Safety and the Physical Environment: a case study of the Old City in Knoxville, Tennessee." I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Planning.


James A. Spencer, Major Professor

We have read this thesis and
recommend its acceptance:



Accepted for the Council:


Associate Vice Chancellor and
Dean of the Graduate School

**Perceptions of Safety and the Physical
Environment: a case study of the Old
City in Knoxville, Tennessee**

A Thesis
Presented for the
Master of Science
Degree
The University of Tennessee, Knoxville

Daniel Evan Johnson
December 1997

Dedication

This thesis is dedicated to my family,
whose support for all my crazy ideas and antics
throughout the years has led to the creation of
many things I can be proud of, this being one,
surely not the last.

It is also dedicated to my dog, Reese, the only
family member who can afford to spend her whole life
traveling with me wherever I go.

Acknowledgments

The School of Planning at The University of Tennessee, Knoxville not only made this project a requirement . . . it made this project possible. The psychological motivation of doing my part to help maintain the school's long tradition of excellence was very strong encouragement.

I need to first thank the faculty members on my thesis committee: Chairman James Spencer, Dr. Cecilia Zanetta, Dr. John Peine, and Terry Shupp. Without their direction and assistance, completion of this project would not have been possible. I also owe a great deal of gratitude to Jessica Michaels and Micheal Collins. Their assistance with the survey portion of this study reduced my anxiety to a manageable level.

Abstract

This study examines the relationship between safety enhancing environmental design attribute analysis and perceptions of safety using the Old City in Knoxville, Tennessee as a case study. A detailed examination of the physical attributes of the area was used to divide the area into zones from relatively unsafe to safe. Then an on-site survey was done to evaluate actual perceptions of those same areas relative to one another. The results of the environmental evaluation were then compared to the actual perceptions. The results of the study were not sufficient to prove that safety enhancing environmental design attribute analysis is unquestionably predictive of actual perceptions of safety. The study concludes with the recommendation that the safety enhancing environmental design analysis not be used in lieu of completing an actual perception of safety survey where possible because of the amount of effort involved and the accuracy of results.

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Chapter 1

Introduction

The Problem

Fear of crime is a problem for practically everyone. None who live in a society can escape the fact that others do not always share the same values and codes of behavior that they do. It is always possible that a person may become the victim of a crime. The amount of fear that one feels may be a function of many factors including personal characteristics, previous victimization, location of residence or employment, the physical environment, the time of day or night, beliefs about true crime rates, fears about specific types of crime, and familiarity with an area. Whatever the level of fear that exists and whatever the cause, it is important to understand that it is a problem not only for the individual, but also for his or her society.

While the fear an individual feels may not *directly* affect anyone but the individual, it is the effect of such fears that can have a drastic effect on the society. "Fear of crime keeps people off the streets, especially after dark, and out of parks, plazas, and public transit. It is a substantial barrier to participation in the public life of the city" (Wekerle and Whitzman, 1995, 3). When fear of crime is significant enough to cause people to modify their behavior, the effects can be extensive. Not only does society lose a degree of social interaction, but feared areas, particularly downtowns, can also suffer an associated economic loss. In a 1985 study of downtown safety and economic development Laurence

A. Alexander, a downtown development consultant, said, “[Crime and fear of crime] severely undercuts the economic vitality of downtowns, . . . drives shoppers away, . . . frightens workers, . . . causes businesses to look toward the suburbs and . . . stifles the interest of investors and developers relative to downtown projects” (Citizens Crime Commission of New York City and Regional Plan Association, 1985, 2). The magnitude of such economic loss could be dramatic, considering possible loss not only of individual spending, but also of businesses that therefore do not hire as many employees, of businesses that do not enter the market because of stagnant demand, and of lower than possible property values, associated unrealized tax dollars, and so on. “When downtown streets are empty of life at nights or on weekends, they are avoided, with disastrous social and economic consequences for cities.” (Wekerle and Whitzman, 1995, 61)

Purpose of the Study

Because of the possible impact that fear of crime has on downtown urban areas, planners and other responsible public agencies must recognize this, strive to understand its causes, and seek solutions. While certainly not the *cause* of crime, the physical environment provides the setting in which crime occurs. Criminals and potential victims consciously and subconsciously read the environment for cues that signify environments in which crime is more or less likely to occur. The study seeks an answer this question: “Can safety enhancing environmental design attribute analysis accurately predict relative perceptions of safety in downtown entertainment/retail redevelopment areas?” The remaining sections of this chapter explain the perceptions that are tested, the type of area

studied, the meaning of 'safety enhancing environmental design attributes', and the importance of answering this question for planning professionals.

Perceptions of Safety

This study makes a subtle distinction between perceptions of safety and fear of crime. Fear of crime may include fear of property crime including auto theft or loss of other personal possessions. While fear of property crimes may be relevant to other studies of downtown crime, this study attempts to focus on the fear of personal crime. Fear of property loss does not reach the most basic level of psychological environmental analysis and that which thus has the greatest chance of causing people to alter behavior (Maslow, 1982). This study attempts to measure only "... crimes associated with personal attack, the crimes that make people fear the streets" (Jacobs, 1961, 32).

The tenets of much of the original literature in this field deal primarily with reduction of levels of property crime. While there is certainly more room for study in this area, the psychology of property crime is different from that of personal crime. Professional recognition has grown that "... street crime, assault, and harassment may be less 'visible' than broken windows and stolen property, but have higher economic and social costs" (Wekerle and Whitzman, 1995, 18). Much of the more recent literature has reflected this realization and placed a higher degree of importance on the relationships between the environment and personal crime.

The intended meaning of 'perceptions of safety' or fear of crime refers to perceptions or fears of criminal acts where the victim is present and may be subject to bodily harm as a direct result of the criminal act. Although the test does not attempt to explain in detail what is meant by 'personal crime', it is likely that test subjects will be able to intuitively respond with a high degree of accuracy. "Fear of crime is often associated with fear for one's personal safety, especially safety from violent crime and harassment in public when alone, especially after dark" (Wekerle and Whitzman, 1995, 2-3).

Downtown Entertainment/Retail Redevelopment Areas

The suburban boom and associated loss of businesses from central cities caused many larger downtowns to develop blighted areas in sections that previously housed activities including housing, retailing, or industrial uses. Years of disuse, lack of maintenance and abandonment, and low property values have made some of these central downtown locations attractive to investors. Favorable financial incentives offered by some city governments have also contributed to the attractiveness of property use and redevelopment in such areas.

One form of adaptive reuse involves creation of an area or district that houses a large number of specialized and festive retail shops in combination with restaurants, bars, and nightclubs. Success of specialized and unique establishments often relies on their ability to draw consumers from a very wide area instead of a nearby residential base. Central place theory (Christaller, 1966) suggests that central locations in or near the

downtown are a proper geographic location for such activity. This combination of favorable location and an ability to obtain reasonable rents or land make downtown locations a wise economic choice for investors interested in this type of development. Many such areas have realized a degree of success, but they may not have reached full economic potential. Recognition of and reduction of fear of crime are important factors that, if adequately addressed, may help improve the likelihood that these areas thrive to the highest degree possible.

Problem of Existing Urban Form

When these areas are redeveloped primarily with reuse of existing buildings and as single parcels, the area's exterior physical environment remains largely unaltered. While individual business owners may not view this situation as a detriment, it does create problems of parking and access that businesses and their patrons do not face to the same degree in suburban developments. Subdivision of land and development in suburban locations takes place after suitability analysis of open lands, planning for access to a site, and design of buildings and parking facilities that fit the site and are appropriate for the planned use.

Many central urban areas were platted during a time when the automobile did not play a significant role in transportation. Therefore, land was subdivided, streets were laid out, and parcels were developed in ways that do not provide a significant amount of space for parking. Unless present-day property owners purchase adjacent parcels and remove

existing structures, they are often unable to provide enough on site parking to satisfy the needs of their patrons. The majority of space available for parking is on public streets, in public lots, or in private but unassociated lots. Therefore patrons of an establishment in a downtown entertainment/retail redevelopment area must often park some distance from their ultimate destination and walk the remainder of the way. This indirect access, in most cases, forces people who visit the area to traverse public and sometimes private property that is part of the area but unassociated with their destination. People may be compelled into situations and environments that introduce an unwelcome, unpleasant, and undesirable perception: fear of crime.

Safety Enhancing Environmental Design Attributes

People have been subconsciously aware of relationships between the physical environment and incidence of crime and perceptions of safety as long as people have been aware of their surroundings. Academic recognition and study of this relationship though is more recent. Perhaps the serious beginnings of such recognition came with Jane Jacobs' *The Death and Life of Great American Cities* (1961). Oscar Newman introduced a more technical analysis in his book *Defensible Space* (1972) that linked design elements to crime rates in New York City's public housing. Since Newman's publication and recognition of the importance of his findings, Crime Prevention Through Environmental Design (CPTED) has become an industry in and of itself (Wekerle and Whitzman, 1995, 13).

Most of the initial work in this field deals with physical design in the residential environment. More recent studies and proactive CPTED techniques attempt to address crime in other environments including commercial, retail, and educational for example. Later studies also attempt to understand how fear of crime is linked to true incidence of crime and how it is affected by specific micro environmental indicators in specific environments. A study was done, for example, on a university campus that attempted to link students route choices to physical elements such as possible hiding spaces, path width, and the distance from the path to hidden spaces (Nasar, Fisher, and Grannis, 1993). While many, if not most, studies mention the importance of fear of crime, few involve more than anecdotal evidence of its importance. A thorough literature search has not uncovered a previous attempt at the predictive environmental analysis undertaken in this study.

Defensible Space and Crime Prevention Through Environmental Design research indicate that physical environments can and do play a role in relative amounts of criminal activity. Previous research, however, does not adequately address how safety enhancing environmental design attributes affect perceptions of personal safety, especially in primarily non-residential areas such as downtown entertainment/retail redevelopment areas. While true incidence of crime is very important, success of such areas may depend more heavily on perceptions than on reality. “. . . Many studies . . . showed downtowns were not necessarily high-crime areas . . . nevertheless, shoppers, workers, bosses, and bankers were all convinced that crime was rampant downtown” (Citizens Crime

Commission of New York City and Regional Plan Association, 1985, 2). No matter how effective good environmental design may be at affecting the true incidence of crime, it is perceptions that determine whether or not people will be willing to use a particular environment. "In urban areas, fear of crime is as much a problem as crime itself . . ." (Wekerle and Whitzman, 1995, 2).

Importance for Planning and Planners

Planners and other public officials should be particularly attuned to the role that perceptions play when considering the vitality of any public focus area. Underestimation of the importance of the physical environment's effect on perceptions of safety and associated behavior patterns can lead to inefficient or misguided allocations of time, money, and other resources. To most effectively support and enhance the growth of downtown entertainment/retail redevelopment areas, planners need to understand the value of safety enhancing environmental design attributes and their relationship to perceptions of safety.

The goal of a public planner should be to improve the state of the community for which he or she works. He or she must learn the facts about an area, know the rules and standards of design and human interaction, and realize the best way to apply those standards to a particular place. The results of this study should enhance planners understanding of the rules and standards of design and human interaction.

A second reason planners need to understand the necessity of dealing appropriately with physical design and human interaction is because of the possibility of legal action. Society has become more litigious and the possibility that cities, planning departments, planners and other public officials will face civil lawsuits based on negligence has increased. "Practitioners who neglect to include design for urban safety in new or retrofitted facilities leave themselves open to litigation. There is a responsibility to take steps to prevent attacks if such attacks are foreseeable. Otherwise, design practitioners and planners may be liable for negligence and assessed damages" (Wekerle and Whitzman, 1995, 153). While the possibility of a lawsuit arising from *fear* of a crime is highly unlikely, fear of crime can itself affect true crime rates. "Research suggests that fear of crime through its negative effects on sense of community, social order, and informal social control can increase actual crime" (Nasar, Fisher, and Grannis, 1993, 163-164). Actual criminal attacks are much more likely to lead to lawsuits based on negligence.

The next chapter examines the literature and identifies safety enhancing environmental design attributes that pertain to downtown entertainment/retail redevelopment areas. It also outlines the procedure that this study uses to evaluate the relative presence or absence of these attributes.

Chapter 2

Safety Enhancing Environmental Design Attributes

Introduction

This chapter identifies the physical manifestations of safety enhancing environmental design concepts. The result is guidelines that provide insight into how specific safety enhancing environmental design attributes are to be examined, especially as they apply to downtown entertainment/retail redevelopment areas. While the result is not an exhaustive and comprehensive list of safety enhancing environmental design attributes for all situations, it does provide guidance for examining specific attributes in any setting.

No existing work provides a comprehensive list of physical attributes that make a place safe. Such a list would be infinite. Instead, the concepts include elements that describe the nature of what makes an attribute good or bad regarding safety. At times it may seem that the theoretical discussion drifts far from the physical attributes but the discussion of why a physical attribute is significant is as important as recognition of the attribute itself.

For the purposes of this study, the safety enhancing environmental design attributes are divided into the four primary conceptual elements identified in Oscar Newman's book *Defensible Space* (1972). Because the functional effects of specific attributes are inseparably intertwined, and each supports and helps define the effectiveness of others, this categorization is for simplicity only. The four categories used are *territoriality*,

surveillance, image, and setting. Other studies have different categorizations such as the Comprehensive Approach to Security Planning created by William Brill Associates (1977). This technique includes a Site Security Analysis which calls for examination of six criteria of a site: penetrability, territoriality, opportunities for surveillance, unassigned space, design conflicts, and neighborhood influences. The categorization chosen for use in this study is not the only way to define the conceptual elements, but it provides an adequate framework for the discussion.

An important consideration must be kept in mind as one reads the following discussions. The reason for this study is to determine the applicability of safety enhancing environmental design attributes to the levels of perceptions of safety in a primarily public environment. Since the original work in this area was done in relation to public housing, a residential environment, many explanations are framed for a residential environment. The strength of reactions to intruders or potential offenders in a residential environment is likely to be the strongest. "It is common knowledge that the most meek person is fiercely protective of the homefront" (Crowe, 1991, 99). However, that does not entirely discount the potential reactions when a similar threat enters a permanent or temporary nonresidential environment. "Humans . . . have a need to establish both temporary and permanent ownership of space . . . Temporary custody of space is nearly as important as permanent ownership" (Crowe, 1991, 98-102). People can spend considerable amounts of time away from home either at work or during an evening of entertainment.

The following sections introduce the four conceptual elements and detail the specific attributes of each one. For each element the theory behind the importance of each one is considered, the attributes are listed and discussed, and the method to examine the presence and strength of the attributes is explained.

Attributes

Territoriality

Theory

Territoriality describes the psychological manifestation of people's desire to protect their own property or ideas. It is based on the assumption that people will exhibit behaviors that physically or psychologically display proprietary attitudes toward those things or ideas that they possess. It is the physical element that defines the boundaries, both real and metaphorical of territorial possession. "The physical definition of ownership sets the stage for the user's enforcement of territorial prerogatives" (Crowe, 1991, 100).

There are several keys to the operation of such possessive behavior: possession, identification, recognition, and action. Possession requires that something be possessed, valued, and worth an effort at protection. Second, there must be some identification of the possession so that outsiders realize that something is possessed. Third, whoever possesses a thing or idea must be able to recognize when and if that thing or idea is in jeopardy. Fourth, they must be able to initiate and follow through with some action that

attempts to stave off an impending negative situation or to stop a negative process that has already begun.

As important as the territorial influence on the psyche of those that seek to protect something is the effect that the physical elements representing this attitude have on those who may violate its integrity. “. . . physical design can create or extend a sphere of influence so that users develop a sense of proprietorship -- a sense of territorial influence -- and potential offenders perceive that territorial influence” (Crowe, 1991, 31). Potential offenders need to be aware of another’s possession, be wary of any offense being detected, and be afraid of the potential actions of the possessor.

While the psychological basis of this conceptual element is somewhat self-evident, it is the elements of the physical environment that make its manifestation possible. While the actual elements will differ in categorically differing environments and in different places within the same category, the ability to describe the functional features is not beyond reach. Whether physical or psychological, overt or subtle, the essence of all the physical elements is the representation of some kind of barrier that helps define the edges of territorial influence. Barriers provide “. . . environmental suggestions as to how the site should be entered or how traffic should move through it: . . . crossing . . . barriers suggest[s] that [people] are entering someone’s environment” (William Brill Associates, 1977, 27).

Elements

For purposes of this study, physical barriers are those that are either impassable or passable only with overt permission from those in control. Defensible space calls these 'literal barriers' (Newman, 1972, 64) while the CPTED literature classifies them as 'mechanical access controls' (Crowe, 1991, 30). In a distinctly public environment, such as a downtown entertainment/retail redevelopment area, the use of many levels of physical barriers is necessarily severely limited. Encouraging movement of all types throughout designated public and quasi-public areas is important to the maintenance of a desired atmosphere and for the support of surveillance, both of which will be discussed in further sections of this chapter. Physical barriers can be man made and functional, man made and additive, or natural.

Man made functional physical barriers are those whose primary function is not as a barrier. The best example of this is a building. A building or buildings define very strong edges of territorial zones. Man-made additive barriers have access control as their primary purpose. Examples include high walls, fences, and lockable doors and gates (Newman, 1972, 63; Crowe, 1991, 30; William Brill Associates, 1977, 28). Natural physical barriers include dramatic topographic changes and sizable bodies of water.

Psychological barriers serve the same primary function as physical barriers - "they force an outsider to the realization that he is intruding on semiprivate domain, [they] prove very effective in restricting behavior within the defined space..." (Newman, 1972, 63).

Defensible space calls them 'symbolic barriers' (Newman, 1972, 63) and CPTED refers to them as 'natural access controls' (Crowe, 1991, 31). Psychological barriers are " . . . interruptions in the sequence of movement along access paths [that] serve to create perceptible zones of transition . . . " (Newman, 1972, 63). They can also mark edges not meant to be crossed, in places that have no relationship to intended access paths. Examples of such barriers include low walls (Newman, 1972, 64), open gateways, light standards, runs of steps, trees and bushes, flowers or gardens (William Brill Associates, 1977, 28), changes in surface texture (Newman, 1972, 63; William Brill Associates, 1977, 31), material, or color, audible cues (Crowe, 1991, 79), narrow water, and slight changes in topography. Unlike the use of physical barriers, psychological barriers are much more welcome in areas where movement is desired through multiple public spaces. While the effectiveness of physical barriers depends almost entirely on physical attributes such as strength, height, breadth, etc., the effectiveness of psychological barriers depends on a more subtle mix of psychological operations. Newman describes four elements that determine the effectiveness of a psychological barrier: "(1) the capacity of the intruder to read the symbols for their intended meaning; (2) the evident capacity of the inhabitants of the internally defined space, or their agent, to maintain controls and reinforce symbolic space definition through surveillance; (3) the capacity of the internally defined space to require that the intruder make obvious his intentions--that is, the space must have a low tolerance for ambiguous use; and (4) the capacity of the inhabitants or their agent to challenge the presence of the intruder and to take appropriate subsequent action if need be" (Newman, 1972, 64).

The simple existence of barriers does not necessarily create a place where positive territorial control exists. Wekerle and Whitzman (1995) identify a situation in which enclosure creates a potential problem. "Entrapment spots are small, confined areas, adjacent or near a well-traveled route, that are shielded on three sides by some barrier, such as walls or bushes" (Wekerle and Whitzman, 1995, 33). Small yards, rear building access doors, loading docks, small undeveloped lots, and doorways of unoccupied buildings could all be entrapment spots.

Examination

In examining the state of evident territoriality for a particular area, several factors must be carefully considered. The focus of this paper and the first element that should be examined is the existence of barriers. Secondly, the barriers need to be examined to determine their strength, that is, to determine how effective they are at defining a zone of influence and supporting the territorial influence within. The physical elements of such an examination need to include the physical strength of the boundary including completeness and the strength of each component, and the appropriateness of the internally defined area. Examination of these elements of the physical environment requires a basic understanding of the purpose and use of the particular study area. Thorough examination of such factors, though important, is beyond the scope of this study. An extremely precise understanding of psychological and social use and attitudes is unlikely to yield results much different from those based on a simple understanding of the same factors.

Surveillance

Theory

Surveillance describes “. . . the ability to observe the public areas of one’s . . . environment and to feel continually that one is under observation by [others] while [in public areas] . . .” (Newman, 1972, 78). It both supports the ability to exhibit territoriality and acts alone as a psychological aid in signifying a safe environment. As with territoriality, the underpinnings of this element are based on the human psychological reactions to what is essentially a physical situation. Surveillance features “. . . have important security implications because they provide ‘eyes and ears’ that can hear or see if help is needed; they reassure people that they are not alone and isolated” (William Brill Associates, 1977, 27). People feel safe when they believe they are under the observation of others that share their interest in a safe environment or may sympathize and come to their aid if a negative situation were to arise. The ability to observe one’s surroundings, and others that use those spaces, allows people to gage and enhance the safety of the public areas that they must also use. Just as important is the effect surveillance has on the mind of a potential offender who may, rightfully, feel that he has a higher probability of being caught or having his actions otherwise stymied if he is under continual observation. “[Surveillance] features also deter criminal or anti-social behavior, because, in many instances, people will not commit such acts where they can be observed by others” (William Brill Associates, 1977, 27). This, of course, relies on the belief that the criminal is rational and experiences the same psychological reactions as other members of society.

The net psychological effect may be greater than the sum of the beliefs of the three actors: the potential victim, the observer, and the potential offender. “. . . surveillance has a demonstrable effect in reducing irrational fears and anxieties in [people]. This may have some self-fulfilling attributes in that [people], feeling that an area is secure, will make more frequent use of it and so further improve its security by providing the safety which comes with intensive use” (Newman, 1972, 78).

However great the potential implications of surveillance seem, there are conditions that determine its overall effectiveness in any situation:

- “The extent to which the observer has a developed sense of his personal and proprietary rights and is accustomed to defending them.
- The extent to which the activity observed is understood to be occurring in an area within the sphere of influence of the observer.
- Identification of the observed behavior as being abnormal to the area in which it occurs and therefore warranting response.
- The observer’s identification with either the victim or the property being vandalized or stolen.
- The extent to which the observer feels he can effectively alter (by personal or collective response) the course of events being observed” (Newman, 1972, 78-79).

As discussed previously, the importance of temporary ownership of space ensures that all of the above conditions have applicability even in primarily public spaces.

Elements

Where the manifestation of territoriality is primarily in placement of physical forms that define boundaries of influence, surveillance relies less on the placement of physical objects and more on the organization of the physical environment. The thrust of surveillance is that people will be able to observe public spaces and the activity that occurs there, during the course of normal human activity. Therefore the primary concern is the location of places from which human monitoring can occur in relation to other places where activity does or may occur. Monitoring involves the ability to detect activity through sensory perception including both “. . . visual and auditory . . .” means (Newman, 1972, 79).

In the physical sense of a public environment, this means that the placement of activity streams, activity nodes, transition zones, intermediary objects, distances among all of these, and ambient and sporadic sounds and sound levels are important. The environmental situations that allow unaided ability to monitor based on organization of activity and things are referred to in the CPTED literature as ‘natural surveillance.’ (Crowe, 1991, 30) The importance of the physical elements that contribute to surveillance are not solely based on organization however. There are occasions during which the organization of systems and elements are not enough to promote surveillance unaided. ‘Mechanical surveillance’ (Crowe, 1991, 30) elements are additive physical elements that enhance human sensory perception. The most obvious of these is lighting to enhance visibility during non-daylight hours. Defensible Space literature makes no descriptive

distinction between the two surveillance elements, but it does discuss the significance of each concurrently.

While natural elements can stand alone, at certain times their effectiveness is altered by variables such as ambient light, and depends directly on the additive effects of mechanical elements such as man-made light. "Street and project lighting can establish, by the intensity and quality of lighting, nighttime walking zones through the project site that will increase security and lengthen the time the site is used for . . . activities" (William Brill Associates, 1977, 33).

Lighting alone is not necessarily sufficient to make a dark place safe. The appropriate location of lighting is significant because it can play a large part in directing the movement of individuals during non daylight hours. Lights that draw pedestrians along paths that are in other ways unsafe may be more of a problem than an absence of lighting in a particular space. Light levels should also be reasonable so that they do not blind pedestrians or create contrastingly dark shadows in potential hiding spaces that would otherwise be easily visible (Wekerle and Whitzman, 1995, 29).

Examination

Examination of the surveillance element begins with visual perception because it is the most relevant. The limitations of lines of sight must be identified. This is done by determining the locations of human activity and the areas that will naturally be visually

monitored as a result of this activity. Next, it should be determined if the surveyed areas fall under the influence of the nodes or paths from which they are observed. The existence of mechanical elements needs to be noted and determination needs to be made of the degree to which they supplement monitoring abilities that are reduced during times when ambient conditions reduce the effectiveness of natural surveillance. After a complete examination of the capacity for visual surveillance, a similar analysis should be done to determine the capacity for other sensory monitoring, particularly auditory.

Image

Theory

Newman defines image in the context of the defensible space concept as “the capacity of design to influence the perception of a project’s uniqueness, isolation, and stigma” (Newman, 1972, 102). Because the overall images of public housing projects were viewed as negative, the discussion of the ‘image’ element is primarily framed negatively in the defensible space literature. If a project’s “. . . distinctive image is . . . negative, the project will be stigmatized and its residents castigated and victimized” (Newman, 1972, 102). Basically, this literature argues that the most desirable physical image for public housing is one that blends seamlessly into the existing urban residential fabric because such integration minimizes the capacity for negative action based on the sociological stigma attached to public or publically assisted housing. Newman lists four ingredients that account for the physical differentiation of housing projects:

- “The distinctiveness resulting from interruptions of the urban circulation pattern;

- The distinctiveness of building height, project size, materials, and amenities;
- The distinctiveness of interior finishes and furnishings;
- Design and life style symbolization” (Newman, 1972, 103-106).

Elements

Because of the purpose of a downtown entertainment/retail redevelopment area, the elements noted as negatives above should not necessarily be viewed in the same manner. By design, image enhancement of a downtown entertainment/retail redevelopment area seeks differentiation from the surrounding environment. Some ingredients viewed negatively in the case of public housing can be viewed positively in an environment that seeks differentiation.

There are many cases where the distinctiveness that comes from interruption of vehicular circulation patterns (street closures) is a major factor in the success of a designated downtown entertainment/retail redevelopment area. Pearl Street in Boulder, Colorado, Church Street Station in Orlando, Florida, and the 16th Street Mall in Denver, Colorado are just a few examples of such places. In such areas, the safety lost through the loss of constant vehicular traffic (Newman, 1972, 103) is replaced by that provided by intense pedestrian use.

Distinctiveness also comes in the form of developments that “. . . stand out very clearly and identifiably from their surrounding community . . . ” (Newman, 1972, 103). Such

visual differentiation in non-public housing and in developments carrying other uses does not share the same stigma. Developments or buildings treated “. . . with high-quality materials -- an expensive brick, precast concrete, or stone facing . . . [and] outdoor balconies . . . ” (Newman, 1972, 104) can lend a distinctiveness that breeds a positive image or one that is at least no worse than that of the surrounding community.

Interior physical elements in a downtown entertainment/retail redevelopment area are of primary importance only to those who own or operate the buildings or their uses. In public housing these spaces are still public and can be controlled as such. Beyond the effects of historic preservation and design ordinances, the control of interior elements in privately owned structures by the public is virtually nonexistent. In a downtown entertainment/retail redevelopment area, the overall importance of interior elements is negligible in the creation of a positive overall image. It is likely that private businesses will provide exceptional or at least adequate interiors because they need to attract patrons through creation of a positive impression.

The last of the four ingredients, design and life style symbolization, in its negative sense refers to the institutional image created by traditional public housing design and the inability of its residents to adequately personalize their residential environment. Because a downtown entertainment/retail redevelopment area is not primarily residential, the application of such concerns is negligible. Businesses are by definition more institutional. Also, the market will drive businesses to provide design, both interior and

exterior, that adequately symbolizes the environment that visitors expect. "A store that is attractive, well-lighted, and open is more appealing to customers . . ." (Crowe, 1991, 44).

Examination

Examination of the physical elements that create image is necessarily a fairly subjective endeavor. While the importance of physical elements that create the image of a place are obviously important, difficulty arises in objectively labeling such features as good, bad, or neutral. Analysis must begin with an understanding of the desired nature of the area under study. This is difficult because, unlike a large public development, a downtown entertainment/retail redevelopment area includes a mix of many private and public interests that are likely to be divergent in many respects. Uniform expression of a single desired image is highly unlikely. Therefore, analysis of the study area must begin with a generalization of desires and realities that are most prevalent in the area.

Even after a consensus has been made on what image is desirable, recognition of appropriate supporting elements is not simple. However, adequate explanation can support the categorization of specific elements with respect to their contribution to a chosen image. Examination and categorization of specific elements should begin with the largest and most obvious, including building size, shape, number, etc. and progress to smaller and less obvious elements such as fixtures and treatments such as paint or trim quality. Examination of building interiors is unnecessary except in cases where interiors

are easily visible from exterior locations and to a degree where some level of detail is commonly discernable beyond color.

Setting

Theory

“If particular urban areas, streets, or paths are recognized as being safe, adjoining areas benefit from this safety in a real sense and also by association” (Newman, 1972, 108).

Essentially setting refers to the geographical situation of a place, that is, the placement of an area in the urban environment relative to other places. The position of the defensible space literature is based on the assumption that geographically contiguous places and places that share easy access can share in the perceptions of safety that each exhibits alone. The real and perceived safety of two adjacent areas are intertwined, especially at the adjoining fringe. Newman discusses three physical elements that describe setting:

- “Juxtaposition of . . . areas with other ‘safe’ functional facilities: commercial, institutional, industrial, and entertainment;
- Juxtaposition with safe public streets;
- The dimensions of juxtaposed areas” (Newman, 1972, 109-114).

Elements

Generally it is the nature and activity levels of adjacent functional areas that determine whether a spill over effect will be positive or negative. “The reason identified for their being safe involves the presence of many people engaged in like activities; thus providing

a number of possible witnesses who might choose to come to the aid of a victim” (Newman, 1972, 109). Areas identified as safe include “. . . heavily trafficked public streets and arteries combining both intense vehicular and pedestrian movement; commercial retailing areas during shopping hours; institutional areas; and government offices” (Newman, 1972, 109). Depending on the size of the area, it may only be those areas or buildings on the fringe that people identify as having enhanced safety as a result of the adjoining use.

‘Safe public streets’ share the same safety enhancing properties as safe institutions for the same reasons. In the residential environment, people rated buildings that have entrances facing directly onto the street as safer than others, including those that face internal project pathways (Newman, 1972, 114). Because of the pedestrian oriented atmosphere in a downtown entertainment/retail redevelopment area, buildings facing internal pathways may be viewed the same as public streets, at least during regular operating hours.

The dimension aspect is primarily concerned with the size of adjacent public facilities and its effect on surveillance. Areas that exhibit the positive elements of surveillance internally also provide users of adjacent areas increased ability to monitor those areas. Specifically, parks that are too large in all dimensions without crossing vehicular traffic diminish the ability of people to visually monitor the activities in their most internal areas. “The success or failure of a particular configuration depends as much on the

degree to which residents can identify with and survey activity in the related facility as it does on the nature of the users of that facility and the activities they engage in” (Newman, 1972, 114).

Examination

Examination of the physical setting requires a basic understanding of the uses of adjoining areas, their size both physically and metaphorically, their intensity of use, and the extent (distance) to which their effects penetrate the study area. Essentially, such examination involves a cataloguing of these features of adjoining areas and a rational analysis of their activity relative to the study area and its specific features including location of buildings, building facings, vehicular and pedestrian access paths, and ability to survey adjacent areas.

Chapter 3

The Old City

Introduction

This chapter identifies the study area and justifies its inclusion in the study as a downtown entertainment/retail redevelopment area. The following sections briefly describe the geographical location and setting of the Old City, its history, its current makeup and some indications that fear of crime is worthy of attention in the area.

Location and Setting

The Old City is a four block area that is located in the northwest part of Knoxville's downtown (figure 1). It is part of the Metropolitan Planning Commission's Central City Sector, is zoned as part of the central business district, and is within the boundaries of the Central Business Improvement District. It is bounded on the north by rail lines, on the east by the James White Parkway overpass, on the south by Summit Hill Drive, and on the west by Gay Street (figure 2). The majority of the area is topographically uneventful, except for the area closest to Gay Street which has an elevation approximately 30 feet higher than the rest of the Old City. There are seven points at which vehicular traffic can enter the area, one of which is a small alley.

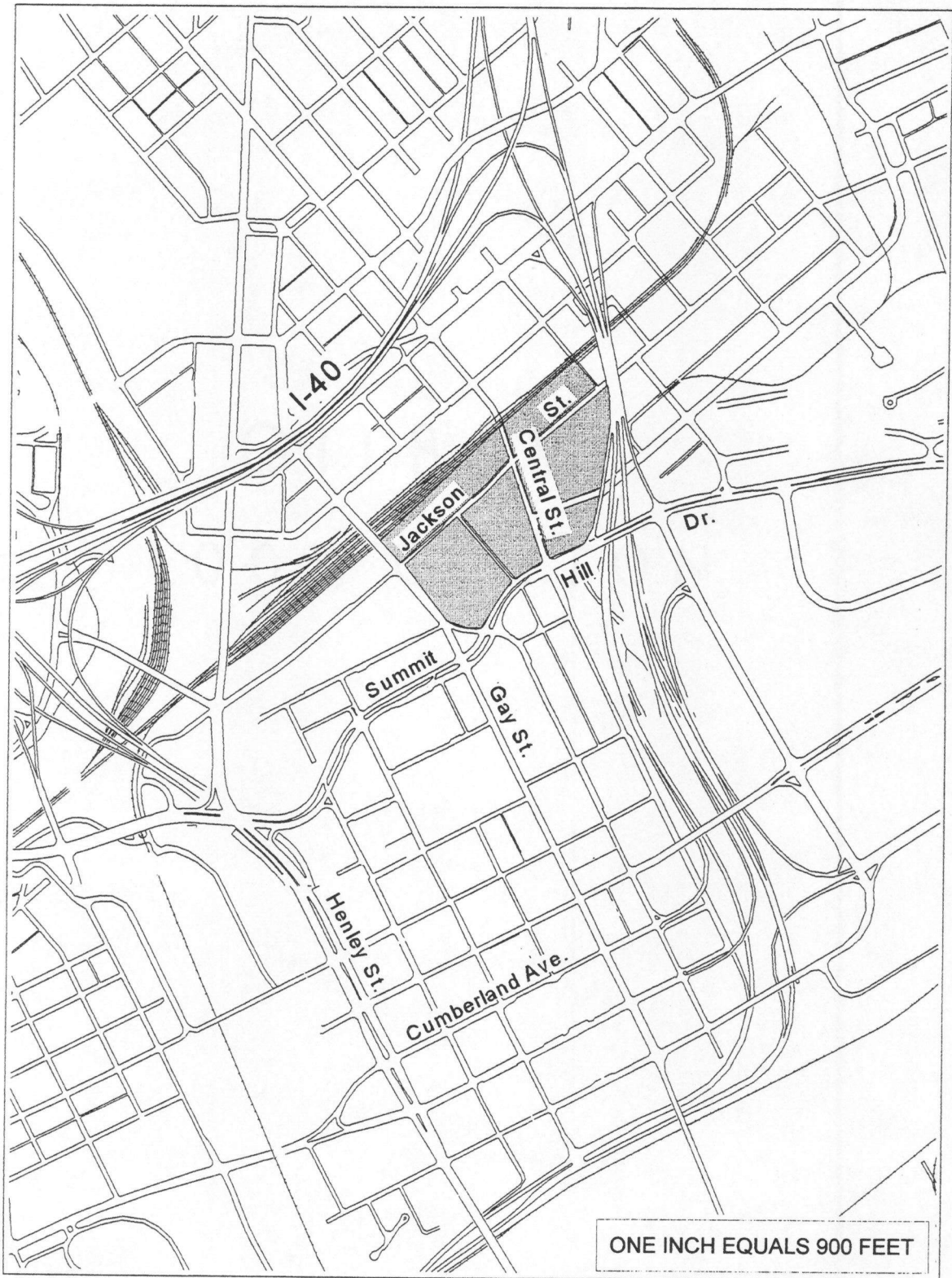


Figure 1: Location of The Old City.

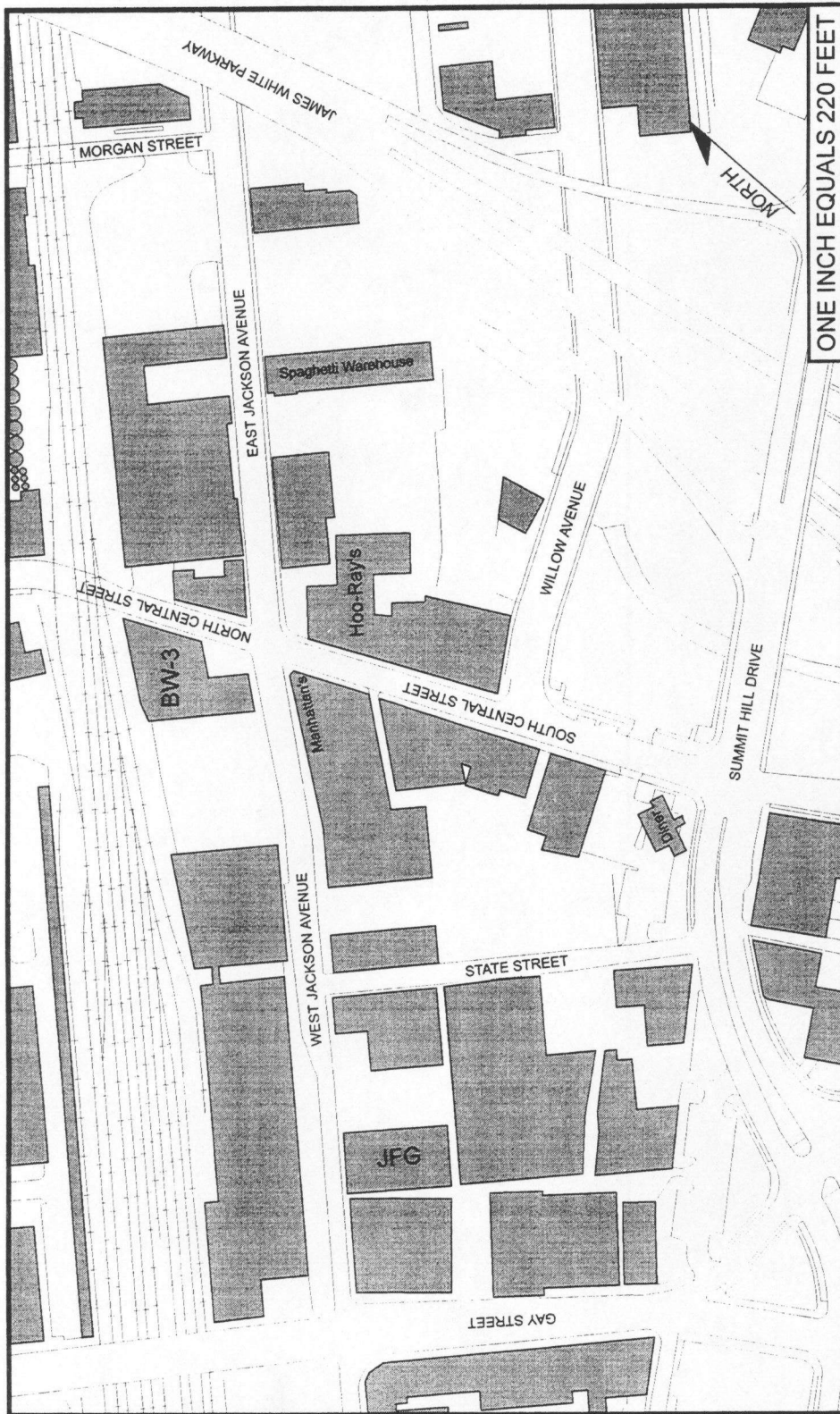


Figure 2: The Old City.

History

The area now known as the Old City was originally developed after the civil war, mostly around the 1880s, as a warehousing area focused on the railroad that serviced growth in the wholesale trade and textile industries. The buildings that face Gay Street were part of Knoxville's market center and included such impressive structures as the 13 story Sterchi Building (furniture company). The area fell largely into disuse and disrepair as the railroads declined in importance and the importance of downtown commerce declined throughout the suburban boom of the middle 20th century. Redevelopment in the area began in the mid 1980s as developers realized the area's potential value.

Current Status

Today, the area includes more than 15 restaurants, bars and nightclubs, and approximately 20 specialized retail and service shops (Old City Neighborhood Association, 1995). In 1995, after the area had grown in size and popularity, owners created a voluntary non-profit public corporation called the Old City Neighborhood Association to help further the goals of the area (Knoxville Police Department, 1996, 14). This group is commonly recognized as the representative of the interests of the area and for the area's historic district. A majority of the structures in the Old City are included in the National Register of Historic Places Southern Terminal and Warehouse Historic District designated in 1985 (Bennett, 1997). The area is recognized as one of the most lively nightspots in the Knoxville and includes a wide variety of opportunities for patrons.

“The area is a party atmosphere where many special events (St. Patrick’s Day, New Years Eve, Keemba, Folk Festival, and Mardi Gras) are held” (Knoxville Police Department, 1996, 8a).

Indications of Problem

“Strong-arm robberies, vehicle burglaries and assaults have increased to the point that police are ready to label the Old City a high-crime district, and merchants are worried about public perceptions” (Jacobs, 96, A1). While the existence of crime is not necessarily a good indicator of fear of crime, it does point to the fact that there is a good possibility that fear does exist. Newspaper articles and other media reports about the existence of crime in the area contribute to the possibility that the public may have a perception of fear of crime in the Old City. Also, in studies unrelated to this area specifically, people reported that they are afraid of conditional situations and places in general (Wekerle and Whitzman, 1995, 4). Some of these exist in the Old City. Lastly, 61 percent of the respondents of a 1994 Security Survey by the Central Business Improvement District reported that they felt the downtown area is not safe. Many of the areas specifically cited by respondents in open ended questions are located in the Old City (CBID, 1994, 1-2).

In addition to the academic suggestion that a problem does or may exist, personal experience proves the most convincing to the author. Many personal conversations have led to an unwavering belief that the fear of crime is a very significant problem in the area.

The remaining chapters outline the methods used to test the relationship between safety enhancing environmental design attributes and perceptions of safety, and discuss the results of the study.

Chapter 4

Research Methods and Findings

Introduction

This chapter describes the method used to perform the test in this study. The introduction summarizes the entire process. The second and third sections provide detailed description of the analysis of the Old City and the survey used to gather people's perceptions. The fourth section provides an overview of the data handling, manipulation, presentation, and analysis procedures.

An outline of the entire procedure follows:

1. The first part involved an analysis of the Old City based on the safety enhancing environmental design attribute concepts studied. This is called a safety enhancing environmental design attribute analysis or SEEDA analysis.
 - a. The study area was examined for the presence of safety enhancing environmental design attributes.
 - b. The area was then divided into safety enhancing environmental design attribute zones, based on a logical similarity of presence or absence of attributes as discovered in examination of the study area.
 - c. Each zone was then classified 1, 2, 3, 4, or 5 based on its richness of safety enhancing environmental design attributes *relative* to all of the other

zones. The zones most rich in safety enhancing environmental design attributes were classified as a 1, those most lacking were classified as a 5. An equal number of zones were classified in each category.

- d. This information was then plotted on a map of the Old City.
2. The second part of the study involved a survey to gather information on people's perceptions of safety in the study area. This is called a perceptions of safety survey or POS survey.
- e. Sixty two visitors to the Old City were asked to complete a survey in which they identified personal characteristics and identified those areas of the Old City in which they feel the most unsafe. They did so by outlining the areas on a map of the Old City. The safety enhancing environmental design attribute zones are *not* shown on the survey map.
 - f. After all the surveys were gathered, the survey maps were compared to the safety enhancing environmental design attributes zone map. Each survey was individually compared with the safety enhancing environmental design attributes zone map by overlaying the survey map onto the zone map. Each zone encircled by a response on the survey map was given one negative response mark. This process was repeated for all of the survey responses individually.
 - g. After all of the completed surveys had been compared to the safety enhancing environmental design attributes zone map, the total number of

negative response marks were summed for each zone.

- h. The zones were then classified 1-5 based on the total number of negative response marks recorded for each zone. Those with the most marks were categorized as a 5, those with the least were categorized as a 1. An equal number of zones were assigned to each category.
 - i. This information was then plotted on a map of the Old City.
- 3. Once completed, the safety enhancing environmental design attributes zone map and the perceptions of safety map were compared with one another. Such comparison shows the relative relationships between the presence of safety enhancing environmental design attributes and people's perceptions of safety in the Old City.

Safety Enhancing Environmental Design Attribute Analysis

The discussion in chapter 2 introduced the intuitive examination procedure that this study follows to analyze the safety enhancing environmental design attributes of an area. A significant part of this study involves analysis of the physical features of individual zones within the study area. Quantifying physical features in this regard is no simple task. Difficulties arise for several reasons: because of the differing roles that specific features play in different situations, because of the variability that the effect of simple human presence has on the relevance of certain physical elements, and because of a lack of concrete objective measures for the existence of certain elements.

While these difficulties admittedly cause concern for the *precision* of the test in this study, they do not substantially affect the *validity* of the study. Other studies have shown that a relationship between environmental design and perceptions does undoubtedly exist. *Reliability* is addressed by using relative categorization of zones. Because the safety enhancing environmental design attribute analysis is done based on the perceptions of an individual, in this case the researcher, the *absolute* recognition of the degree to which contributing elements exist may be different if the analysis were done by a different individual. However, because this study analyzes each zone *relative* to other zones within the study area, the safety enhancing environmental design attribute analysis process should be replicable with a good degree of reliability (Babbie, 1994, 122-129).

Zone Creation and Categorization

The method used to create, analyze, and categorize zones within the study area combined use of a plan view map of the Old City and personal observation within the study area. The initial creation of individual zones was based on a simple examination of logically similar areas delineated by buildings, streets, or other boundaries, including a rational separation of very large, unbroken spaces. The final delineation of zone boundaries was arrived at after an iterative process based on the original zones but altered as necessary to reflect the results of the detailed safety enhancing environmental design attribute analysis of each zone. This process resulted in a total of 40 zones (figure 3).

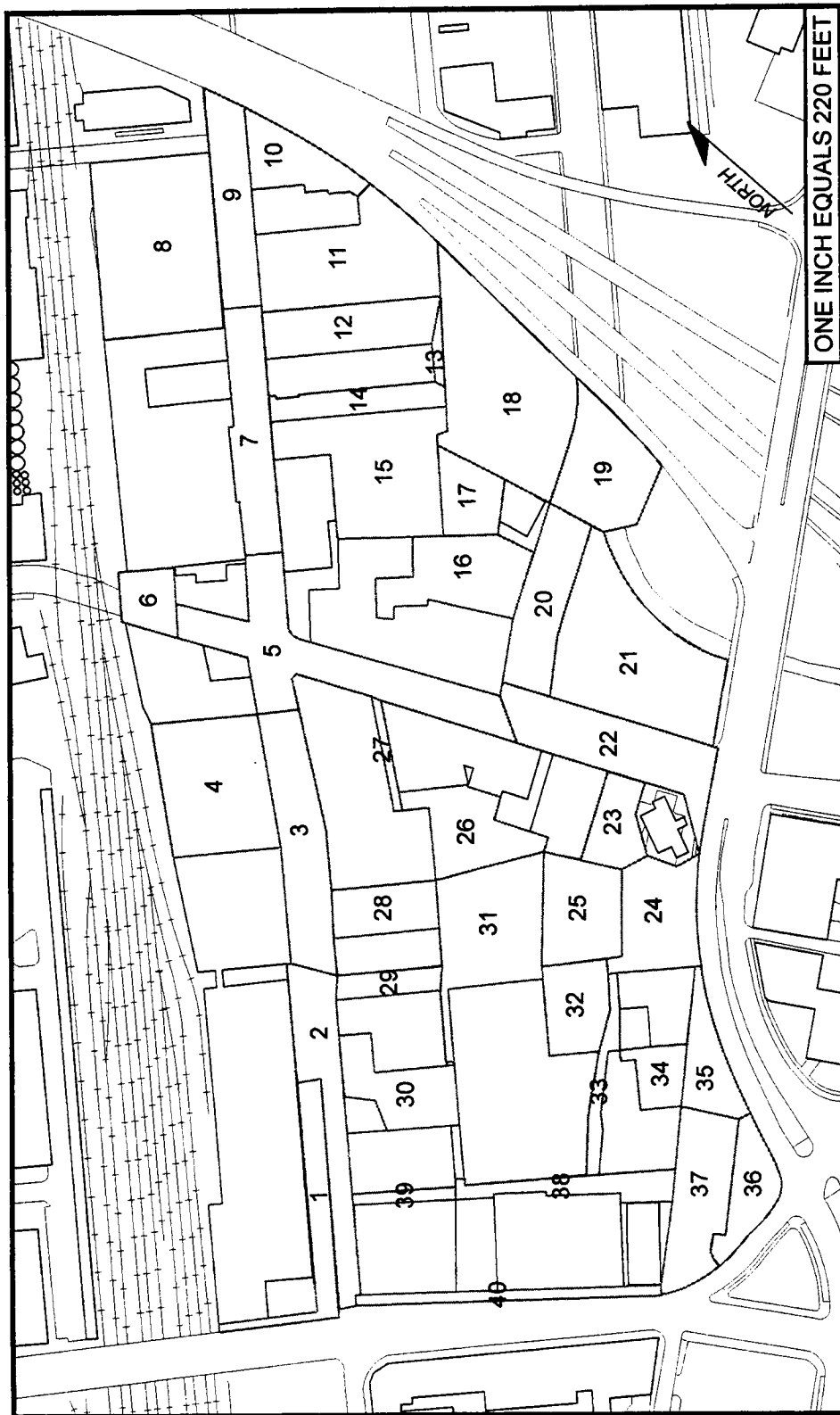


Figure 3: Zones Used for Analysis.

Analysis of the zones was based on personal examination of each zone by the researcher while present in the Old City. Part of this analysis was the completion of a sheet for each zone that answers all of the questions found on the Zone Analysis Sheet (figure 4).

Although the answers to these questions alone certainly do not display a complete picture of each zone, they do reflect a significant amount of detailed examination and are sufficient to provide a basis on which to compare the zones. Examination of these forms *alone* may not necessarily bring a reader who has not personally examined the area to the same conclusions (appendix 1).

The analysis discussed above allowed the categorization of the zones. The 40 zones were equally divided into five categories, 1, 2, 3, 4, and 5, resulting in eight zones per category. A categorization of 1 represents the zones richest in safety enhancing environmental design attributes. A categorization of 5 represents those most nearly devoid of safety enhancing environmental design attributes. A table was created to show this relative categorization of zones (table 1). Next a map was created that uses shades of grey to visually represent safety enhancing environmental design attribute categorizations (figure 5). A 1 is represented by a 10 percent shade, a 2 by a 30 percent shade, a 3 by a 50 percent shade, a 4 by a 70 percent shade, and a 5 by a 90 percent shade. The darkest areas on the map, therefore, are those that the safety enhancing environmental design attribute analysis determined to be the most unsafe.

Zone Analysis Sheet

- What percent of the zone is surrounded by a physical barrier? _____
- How many openings are there towards the primary activity area? _____
- How many openings are there away from the primary activity area? _____
- What percentage of the zone is surrounded by a psychological barrier? _____
- What elements are present that contribute to the psychological barrier (circle)?
 Low walls/open gateways/light standards/runs of steps/foliage/ground
 surface/water/topographic changes/other
- What percent of the zone seems to have little or no effective barrier? _____
- Rate relatively how well is the internal activity defined by physical elements. 5 4 3 2 1
- What are the primary activities of the zone? _____
- Does the zone appear to exhibit a sense of private permanent ownership? Y N
-
- Rate the relative internal visibility. 5 4 3 2 1
- Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 1
- What blocks visibility into zone (circle)? Buildings/fencing/other structures/foliage
- How many windows offer view into zone? _____
- How many blind corners are there in zone or entering zone from primary activity area? _____
- What percent of zone is adequately lit? _____
- Does a street pass through or immediately adjacent to the zone? Y N
- If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1
- Does pedestrian traffic pass through or adjacent to the zone? Y N
- If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5 4 3 2 1
- Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
- Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
- How many significant entrapment spots are in the zone? _____
- If there are entrapment spots, are they adjacent to pedestrian paths? Y N
- Is natural auditory ability notably diminished? Y N
- If YES, by what? _____
-
- If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? Y N
- Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
- If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area? most geared toward study area/about equal/most passes through
- Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? Y N
- Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? Y N
-
- Does this zone share substantially in the activity generated by the DERRA? Y N
- If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? Y N

Figure 4: Zone Analysis Sheet.

Table 1: Safety Enhancing Environmental Design Attribute zone categorizations.

Zone	SEEDA
1	4
2	2
3	1
4	1
5	1
6	1
7	1
8	2
9	4
10	5
11	3
12	3
13	5
14	2
15	3
16	5
17	5
18	5
19	4
20	2
21	1
22	1
23	2
24	2
25	3
26	4
27	3
28	2
29	3
30	4
31	3
32	4
33	5
34	5
35	2
36	3
37	4
38	5
39	4
40	1



Figure 5: Safety Enhancing Environmental Design Attribute (SEEDA) Zones.

Testing Perceptions of Safety

The method used to measure perceptions of safety in this study is the creation of a perceptions of safety map. It is based on the concept of a fear map (Newman 1972; Nasar, Fisher, and Grannis, 1993, 166). Test subjects are given a plan view map of an area and asked to indicate those areas in which they feel the most unsafe. All responses are compiled onto one map with each response represented by a light shade of gray. Those areas on the final map where responses overlap appear darker, showing the places feared by the most people as the darkest. An example is the result from Newman's *Defensible Space* of a survey done of a New York City housing project (figure 6). The perceptions of safety map was used in this study because it provides information that can be graphically displayed and spatially analyzed.

Sampling Procedure

The population for this study is anyone who currently patronizes the businesses in the Old City that are part of the downtown entertainment/retail redevelopment area. All sampling was done on-site during evening and nighttime hours. Admittedly this procedure allows for the possibility that a large portion of the population, those people who visit the area very infrequently or during the day only, may be unaccounted for in the sampling procedure. However, this method was chosen with good reason. All sampling was done on-site in the Old City because it is likely that a *much* greater percentage of possible respondents are able to give answers based on accurate knowledge of the environment. Simple presence in the area proves that respondents are at least *slightly* familiar with the

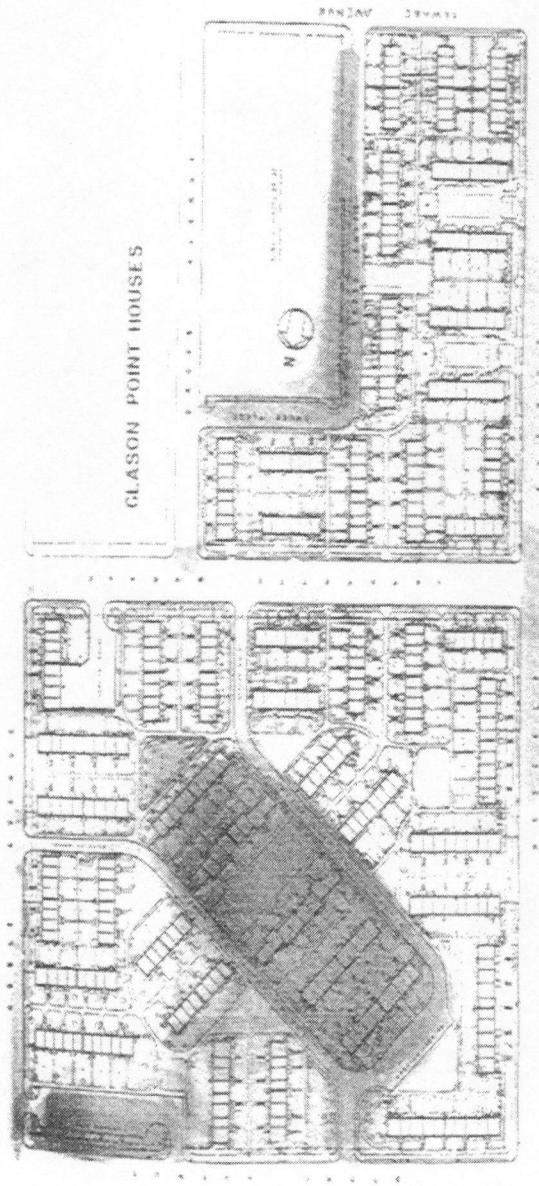


Figure 6: Fear Map of Clason Point Gardens.

environment and that their perceptions are based on *very* recent experience (since they are *in* the environment about which the survey inquires).

Sampling was done during evening and nighttime hours because of the likelihood that people are more attuned to their environment during non-daylight hours. They “. . . have a heightened concern for their personal safety . . .” (Nasar, Fisher, and Grannis, 1993, 166) during these times. Other studies have used surveys focused on non-daylight hours for the same reason (Nasar, Fisher, and Grannis, 1993).

To combat the potential problem of time (or event) bias, all sampling was done during a single Friday night (through Saturday morning). This was to reduce the possibility that something different about the environment of the Old City would change the baseline perceptions from one survey response to the next. For example, if half of the sampling was completed on a Friday and on Saturday the news media reported that a serious crime had been committed in the study area later that night, then any sampling done on Saturday or at any later time could be biased by the media coverage of that event.

To ensure gender based statistical validity, the minimum sample size desired for this study was 30 males and 30 females. A random sample was attained by selecting 6 different regions in the Old City, staying at each for approximately 20 minutes, and asking every passing pedestrian to complete the survey. The regions were selected because of their locations relative to parking availability and attractions within the Old

City (figure 7). The six regions were then randomly ordered. Research began at approximately 9:30 PM Friday in the first randomly chosen region and ended shortly after 12:30 AM Saturday. Approximately 20 minutes was spent in each region. The time varied somewhat because there was either a lack of pedestrians to survey or so many that those who agreed to fill out the survey within the 20 minutes were still doing so several minutes later. There was about a ten minute break between the first two regions, the third and fourth regions, and the fifth and sixth regions. The breaks between the second and third regions and the fourth and fifth regions were approximately 20 minutes each. Because there were fewer than 30 female responses at the end of this planned sampling period, one of the six zones was chosen at random to sample again until then minimum number of responses was obtained.

Every passing pedestrian was asked to complete the survey, individuals and those in groups. They were told that the survey was for a research project dealing with perceptions of safety, that their responses would remain anonymous, and that the survey would only take a couple of minutes to complete. Three people, the researcher and two assistants, solicited possible respondents so that pedestrians would not be skipped. This method seemed to be effective, although a majority of pedestrians declined participation. The Old City Perception of Safety Survey was used to collect information (figure 8). The first part asks respondents to identify their gender, age, previous criminal victimization, and familiarity with the Old City. The second section of the survey involves completion of the perceptions of safety map and an approximation of the location where the



Figure 7: Six Survey Regions.

Old City Perception of Safety Survey

What is your gender (circle one)? MALE FEMALE
 What is your age? under 20 20-29 30-39 40-49 50-59 60 or over
 Have you ever been the victim of a personal crime? YES NO
 How familiar are you with the Old City? NOT FAMILIAR FAMILIAR VERY FAMILIAR
 If you have any additional comments, please write them on the back of this sheet. All information, including additional comments will remain anonymous.
On the map below, please outline those areas in which you feel the most UNSAFE. Please be AS SPECIFIC AS POSSIBLE.
Please draw an X on the map approximately where you parked today.



This survey is being done as part of a thesis that is a requirement for graduation from the School of Planning at the University of Tennessee, Knoxville. The purpose of this study is to examine the relationship between attributes of physical design and people's perceptions of safety. If you have any questions, please ask. If you have any comments, please make them. If you are interested in reading the results of this study, please contact the School of Planning. Thank you for your participation.

Day _____ Time of Day _____ # People in Group _____

Figure 8: Old City Perception of Safety Survey sheet.

respondent parked. The map does not show the safety enhancing environmental design attribute zones. The last section asked for the day, time of day, and the number of people in the group that the person was with. Questions about the nature of the research, about how to fill out the map, and about orientation on the map were answered in full detail. However, to avoid bias, questions about the meaning of the word “unsafe” were answered by saying, “Just answer based on whatever *you* think unsafe means.” (Babbie, 1995).

An attempt was made to ensure that all of the information was filled out on every survey. However, five chose not indicate where they parked. The information in the last section on day, time, and group size was answered very sporadically, primarily because people thought they were finished after they filled out the map. This information was considered largely unimportant anyhow, so attempts to ensure its collection were halted after the first 20 minutes.

Data Handling

All of the data analysis and presentation was handled using a computer and various software packages including Macromedia Freehand 5.0, Microsoft Excel 97, and Corel WordPerfect 7. The steps involved were input of the raw data, conversion of the data into zone specific responses, compilation of responses, categorization of perceptions of safety zones based on compiled responses, comparison of perceptions of safety zones with the safety enhancing environmental design attribute zones, display of the appropriate statistics and comparisons on maps and in tabular format, and analysis of the results.

After the sampling was complete, the information from each survey sheet was individually entered into the computer (figure 9). A different layer was created for each of the response sheets coded by gender, age, victimization status, and familiarity. All of the outlined areas were accurately redrawn on the layer using the same base map that was used to create the survey sheet map. This method allows the creation of maps isolating the responses of individuals with any combination of personal characteristics (figures 10, 11). All of the spots where respondents indicated that they parked were then entered on a separate layer (figure 12). This provides a map showing only parking spots that could be compared to any of the other maps created from the survey information.

The next step involved conversion of outlined areas into zone specific responses. Each of the individual survey responses was overlain on a map that shows the safety enhancing environmental design attribute zone boundaries, also contained on a separate layer in the same computer file. Where approximately 50 percent or more of a zone was encircled by a survey response, the zone was given a negative response mark. Each outlined area could encircle no, one, or multiple zones. Each survey response sheet could therefore result in negative response marks for no zones, very few zones, or many zones.

After all responses had been coded in this way, the number of negative response marks for each of the zones was totaled and entered into a spreadsheet that also breaks down the totals by gender, age, victimization status, and familiarity (table 2). The variable specific

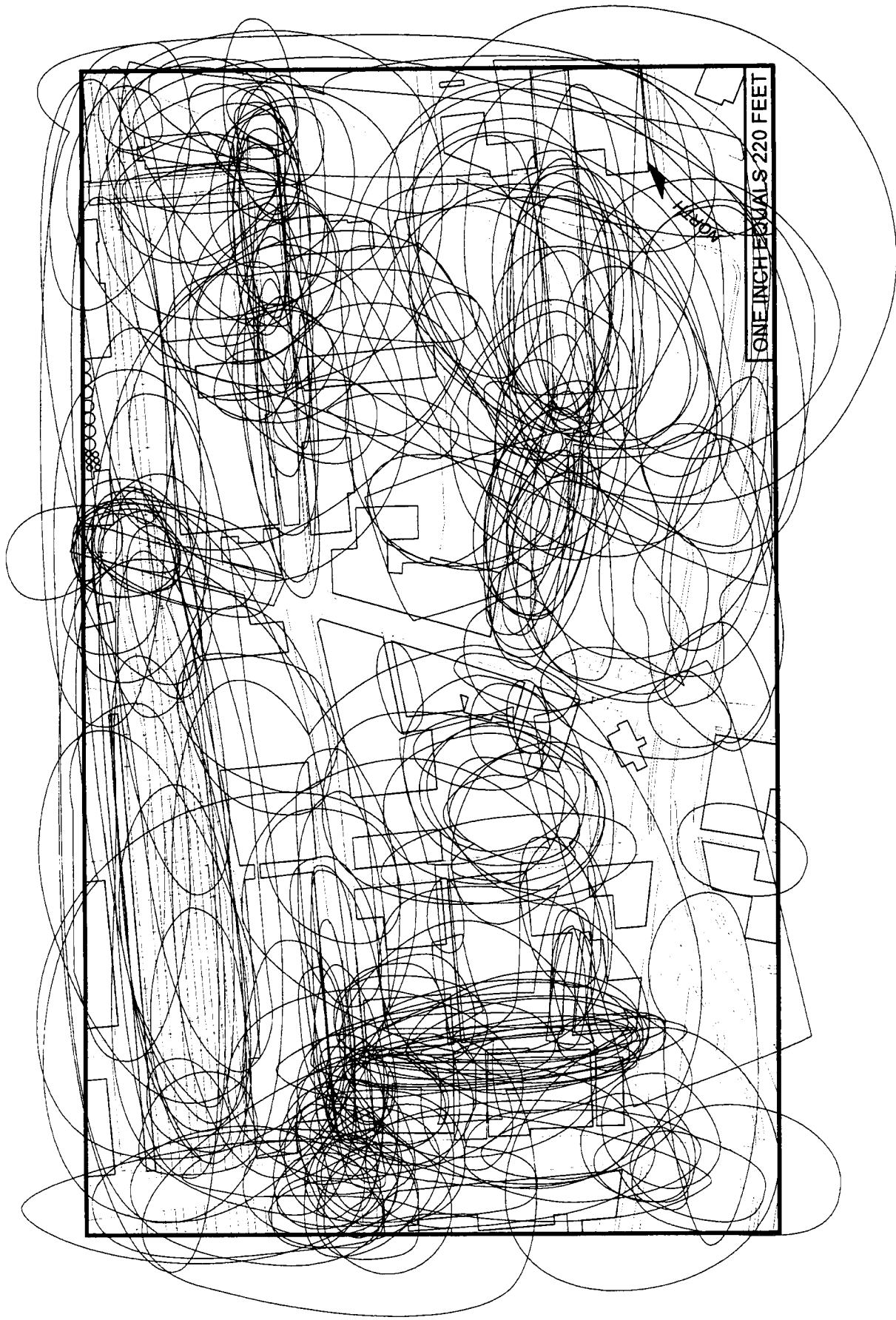


Figure 9: Areas Identified as Unsafe by All Survey Respondents.

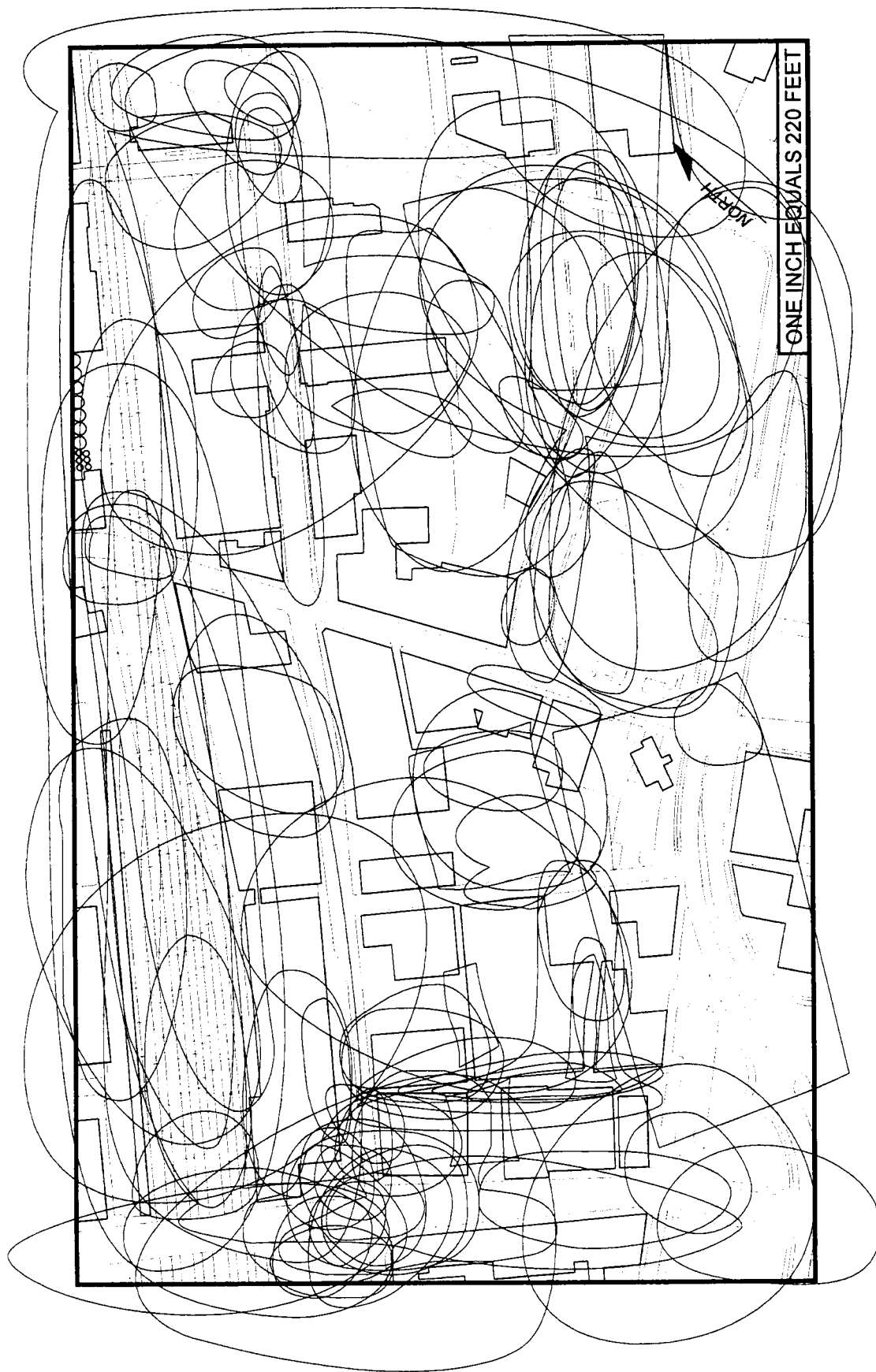


Figure 10: Areas Identified as Unsafe by Male Survey Respondents.

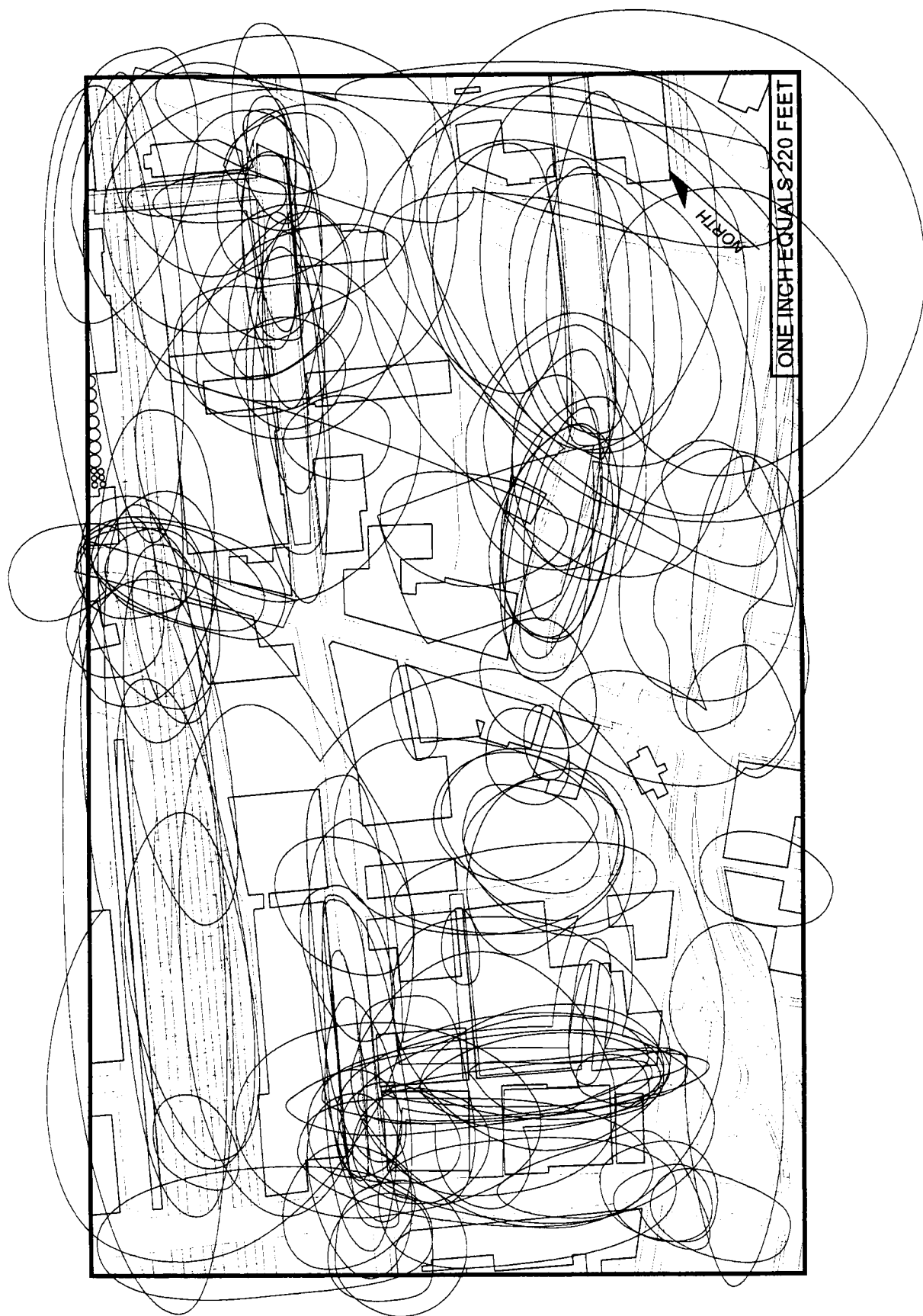


Figure 11: Areas Identified as Unsafe by Female Survey Respondents.

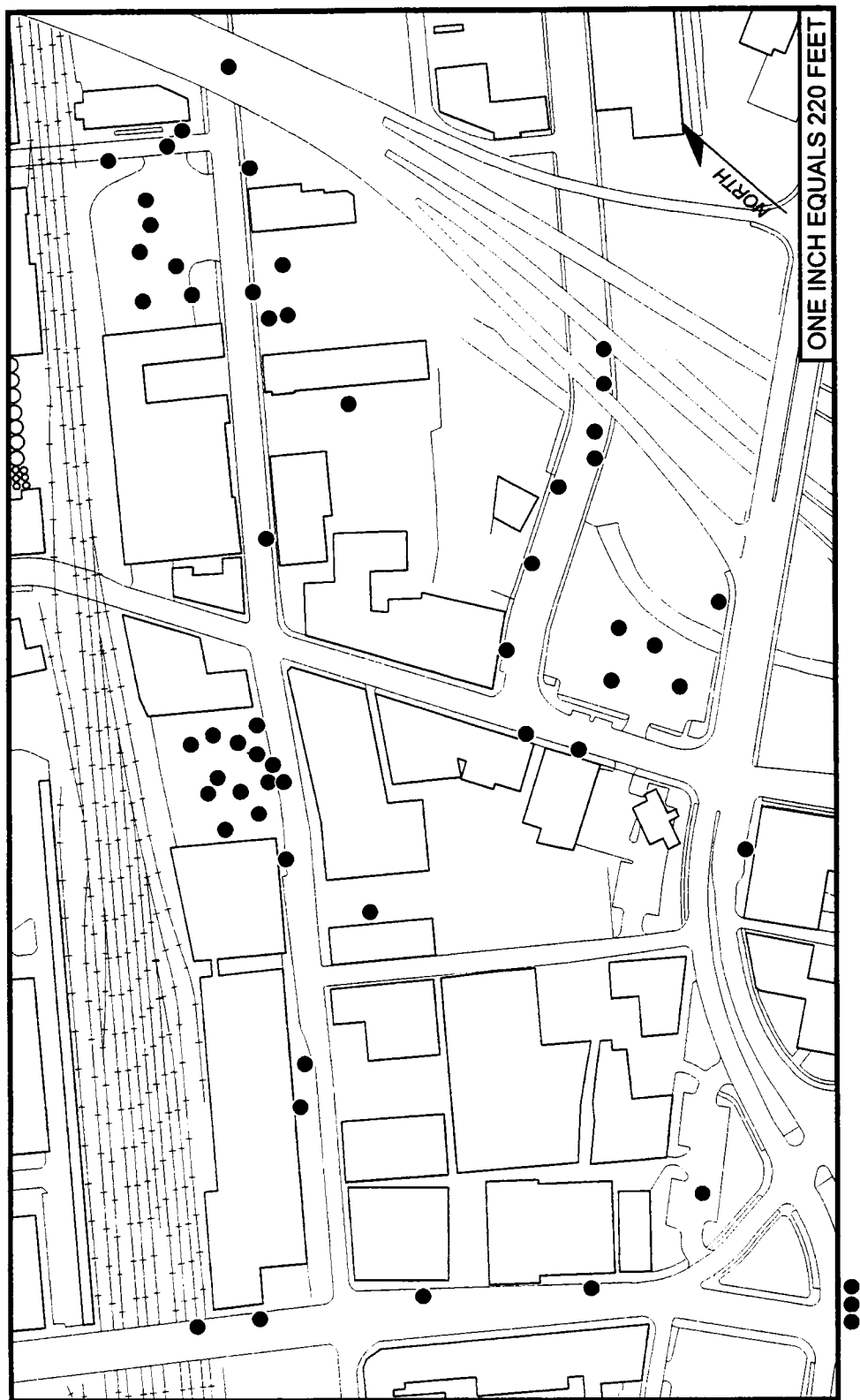


Figure 12: Parking Locations of Survey Respondents.

Table 2: Negative Response Totals for Each Zone by Variable.

Zone	Combined	Gender		Age					Victim		Familiarity	
		Male	Female	Under 20	20-29	30-39	40-49	50-59	Yes	No	Not/Somewhat	Familiar/Very
1	20	8	12	0	11	7	1	1	8	12	6	14
2	13	3	10	0	9	1	2	1	3	10	4	9
3	3	0	3	0	2	0	1	0	2	1	1	2
4	5	3	2	0	3	1	1	0	1	4	3	2
5	0	0	0	0	0	0	0	0	0	0	0	0
6	10	3	7	0	8	2	0	0	3	7	4	6
7	11	4	7	0	6	3	1	1	3	8	3	8
8	8	2	6	0	5	1	2	0	2	6	3	5
9	21	5	16	0	14	3	3	1	5	16	6	15
10	6	2	4	0	6	0	0	0	1	5	3	3
11	8	4	4	0	5	1	1	1	2	6	2	6
12	11	6	5	0	7	2	1	1	3	8	4	7
13	10	8	2	0	8	3	0	1	3	7	3	7
14	8	5	3	0	4	3	0	1	3	5	2	6
15	5	4	1	0	3	1	0	1	2	3	1	4
16	4	2	2	1	2	1	0	0	2	2	0	4
17	6	2	4	1	4	1	0	0	2	4	2	4
18	16	8	8	0	13	3	0	0	5	11	4	12
19	21	7	14	0	14	5	1	1	3	18	8	13
20	14	5	9	1	9	2	1	1	1	13	6	8
21	4	4	0	0	3	0	0	1	0	4	2	2
22	2	0	2	0	1	1	0	0	0	2	0	2
23	3	1	2	0	1	2	0	0	2	1	1	2
24	2	1	1	0	1	1	0	0	2	0	1	1
25	12	4	8	1	6	4	1	0	4	8	2	10
26	8	4	4	1	3	3	1	0	4	4	1	7
27	2	0	2	0	1	1	0	0	1	1	2	0
28	4	2	2	0	1	1	2	0	1	3	1	3
29	7	2	5	0	3	1	2	1	2	5	2	5
30	7	3	4	2	2	1	1	1	1	6	3	4
31	12	5	7	1	6	4	2	0	4	9	2	11
32	8	3	5	0	5	2	1	0	1	7	2	6
33	13	5	8	1	5	5	1	0	4	8	5	7
34	2	1	1	0	1	1	0	0	2	0	1	1
35	3	1	2	0	2	1	0	0	2	1	2	1
36	3	2	1	0	1	1	0	1	1	2	1	2
37	4	2	2	0	1	2	0	1	2	2	1	3
38	20	6	14	1	9	9	1	0	6	14	5	15
39	21	7	14	3	12	6	0	0	4	17	6	15
40	11	3	8	0	9	2	0	0	3	8	4	7
Total	348	137	211	13	204	88	27	16	100	248	109	239

response totals were then converted into percentage scores to facilitate comparison (table 3).

The next step involved categorization of the perception of safety zones (table 4). At this point the study focuses only on the combined total responses and on gender based total responses. The zones were sorted based on the total number of times each was cited.

The cumulative percentage of total scores was then determined beginning with the most cited zone. This was done in order to allow examination of any clustering of total responses in a small number of zones. The intent was to categorize perception of safety zones by dividing the total number of zones into categories 1,2,3,4, or 5 based on their relative position in the sorted list which would result in a total of eight zones per category. The eight most cited would be categorized as a 5, the next eight (9-16) as a 4, the next eight (17-24) as a 3, the next eight (25-32) as a 2, and the final eight as a 1. The reason for this categorization is to convert the perception of safety responses into the same *relative* categories that were used for the safety enhancing environmental design attribute zones. Because of the response patterns however, intermediary perception of safety categories had to be added. Where the eighth and ninth most cited zones were cited the same number of times, for example, those zones were categorized as 4.5. Then the next seven (10-16) were categorized as a 4, etc.

This information was then compiled onto a perception of safety map for all responses combined (figure 13), for males (figure 14), and for females (figure 15). The maps show

Table 3: Percentage of Negative Responses Totals for Each Zone by Variable.

Zone	Gender		Age					Victim		Familiarity	
	Male	Female	Under 20	20-29	30-39	40-49	50-59	Yes	No	Not/Somewhat	Familiar/Very
1	40	60	0	55	35	5	5	40	60	30	70
2	23	77	0	69	8	15	8	23	77	31	69
3	0	100	0	67	0	33	0	67	33	33	67
4	60	40	0	60	20	20	0	20	80	60	40
5	0	0	0	0	0	0	0	0	0	0	0
6	30	70	0	80	20	0	0	30	70	40	60
7	36	64	0	55	27	9	9	27	73	27	73
8	25	75	0	63	13	25	0	25	75	38	63
9	24	76	0	67	14	14	5	24	76	29	71
10	33	67	0	100	0	0	0	17	83	50	50
11	50	50	0	63	13	13	13	25	75	25	75
12	55	45	0	64	18	9	9	27	73	36	64
13	80	20	0	60	30	0	10	30	70	30	70
14	63	38	0	50	38	0	13	38	63	25	75
15	80	20	0	60	20	0	20	40	60	20	80
16	50	50	25	50	25	0	0	50	50	0	100
17	33	67	17	67	17	0	0	33	67	33	67
18	50	50	0	81	19	0	0	31	69	25	75
19	33	67	0	67	24	5	5	14	86	38	62
20	36	64	7	64	14	7	7	7	93	43	57
21	100	0	0	75	0	0	25	0	100	50	50
22	0	100	0	50	50	0	0	0	100	0	100
23	33	67	0	33	67	0	0	67	33	33	67
24	50	50	0	50	50	0	0	100	0	50	50
25	33	67	8	50	33	8	0	33	67	17	83
26	50	50	13	38	38	13	0	50	50	13	88
27	0	100	0	50	50	0	0	50	50	100	0
28	50	50	0	25	25	50	0	25	75	25	75
29	29	71	0	43	14	29	14	29	71	29	71
30	43	57	29	29	14	14	14	14	86	43	57
31	42	58	8	50	33	17	0	33	75	17	92
32	38	63	0	63	25	13	0	13	88	25	75
33	38	62	8	38	38	8	0	31	62	38	54
34	50	50	0	50	50	0	0	100	0	50	50
35	33	67	0	67	33	0	0	67	33	67	33
36	67	33	0	33	33	0	33	33	67	33	67
37	50	50	0	25	50	0	25	50	50	25	75
38	30	70	5	45	45	5	0	30	70	25	75
39	33	67	14	57	29	0	0	19	81	29	71
40	27	73	0	82	18	0	0	27	73	36	64

Table 4: Perception of Safety Numbers Assigned to Zones Based on Number of Times Cited in Survey.

Combined				Male			Female				
Cumulative Percent	Combined	Zone	POPS	Cumulative Percent	Male	Zone	POPS	Cumulative Percent	Female	Zone	POPS
6.0%	21	9	5	5.8%	8	1	5	7.6%	16	9	5
12.1%	21	19		11.7%	8	13		14.2%	14	19	
18.1%	21	39		17.5%	8	18		20.9%	14	38	
23.9%	20	1		22.6%	7	19		27.5%	14	39	
29.6%	20	38		27.7%	7	39		33.2%	12	1	
34.2%	16	18	4.5	32.1%	6	12	4.5	37.9%	10	2	4.5
38.2%	14	20		36.5%	6	38		42.2%	9	20	
42.0%	13	2		40.1%	5	9		46.0%	8	18	
45.7%	13	31		43.8%	5	14		49.8%	8	25	
49.1%	12	25		47.4%	5	20		53.6%	8	33	
52.6%	12	33	4	51.1%	5	31	4	57.3%	8	40	4
55.7%	11	7		54.7%	5	33		60.7%	7	6	
58.9%	11	12		57.7%	4	7		64.0%	7	7	
62.1%	11	40		60.6%	4	11		67.3%	7	31	
64.9%	10	6		63.5%	4	15		70.1%	6	8	
67.8%	10	13	3	66.4%	4	21	3	72.5%	5	12	3
70.1%	8	8		69.3%	4	25		74.9%	5	29	
72.4%	8	11		72.3%	4	26		77.3%	5	32	
74.7%	8	14		74.5%	3	2		79.1%	4	10	
77.0%	8	26		76.6%	3	4		81.0%	4	11	
79.3%	8	32	2.5	78.8%	3	6	2	82.9%	4	17	2.5
81.3%	7	29		81.0%	3	30		84.8%	4	26	
83.3%	7	30		83.2%	3	32		86.7%	4	30	
85.1%	6	10		85.4%	3	40		88.2%	3	3	
86.8%	6	17		86.9%	2	8		89.6%	3	14	
88.2%	5	4	2	88.3%	2	10	2	90.5%	2	4	1.5
89.7%	5	15		89.8%	2	16		91.5%	2	13	
90.8%	4	16		91.2%	2	17		92.4%	2	16	
92.0%	4	21		92.7%	2	28		93.4%	2	22	
93.1%	4	28		94.2%	2	29		94.3%	2	23	
94.3%	4	37	1.5	95.6%	2	36	1.5	95.3%	2	27	1.5
95.1%	3	3		97.1%	2	37		96.2%	2	28	
96.0%	3	23		97.8%	1	23		97.2%	2	35	
96.8%	3	35		98.5%	1	24		98.1%	2	37	
97.7%	3	36		99.3%	1	34		98.6%	1	15	
98.3%	2	22	1	100.0%	1	35	1	99.1%	1	24	1
98.9%	2	24		100.0%	0	3		99.5%	1	34	
99.4%	2	27		100.0%	0	5		100.0%	1	36	
100.0%	2	34		100.0%	0	22		100.0%	0	5	
100.0%	0	5		100.0%	0	27		100.0%	0	21	
Total	348			Total	137			Total	211		



Figure 13: Perception of Safety Map for All Respondents.



Figure 14: Perception of Safety Map for Male Respondents Only.



Figure 15: Perception of Safety Map for Female Respondents Only.

each zone shaded to represent its relative perception of safety categorization. A 1 is represented by a ten percent shade of grey, a 1.5 is a 20 percent shade of grey, a 2 is a 30 percent shade of grey, etc. The darker the shade and the higher the perception of safety categorization, the more unsafe the zone was perceived. The map uses the same shades that are used on the safety enhancing environmental design attribute zone map to facilitate comparison.

The next step involved comparison of the safety enhancing environmental design attribute and perception of safety zone categorizations. A table was created showing the zone numbers, their safety enhancing environmental design attribute numbers, their perception of safety numbers, and the difference between the two (table 5). The results of this table were then copied into a single table listing the difference for the combined total, for males, and for females (table 6). This table allows easier comparison of the combined and gender based responses as they relate to the safety enhancing environmental design attribute analysis.

Two additional tables were then created from this information (table 6). One shows only those zones that were perceived relatively more safe than the safety enhancing environmental design analysis predicted and the second shows only those zones that were perceived more unsafe. In both cases all of those zones that showed a difference of either -0.5 or 0.5 were dropped. Any absolute difference less than 1 is categorically indistinguishable from 0 because of the way frequency ties were handled when

Table 5: Differences Between SEEDA and POS Categorizations for Each Zone.

Zone	Combined			Difference
	SEEDA	POS		
1	4	5		-1
2	2	4.5		-2.5
3	1	1.5		-0.5
4	1	2		-1
5	1	1		0
6	1	4		-3
7	1	4		-3
8	2	3		-1
9	4	5		-1
10	5	3.5		1.5
11	3	3		0
12	3	4		-1
13	5	4		1
14	2	3		-1
15	3	2		1
16	5	2		3
17	5	3.5		1.5
18	5	5		0
19	4	5		-1
20	2	5		-3
21	1	2		-1
22	1	1		0
23	2	1.5		0.5
24	2	1		1
25	3	4		-1
26	4	3		1
27	3	1		2
28	2	2		0
29	3	3		0
30	4	3		1
31	3	4.5		-1.5
32	4	3		1
33	5	4		1
34	5	1		4
35	2	1.5		0.5
36	3	1.5		1.5
37	4	2		2
38	5	5		0
39	4	5		-1
40	1	4		-3

Zone	Male			Difference
	SEEDA	POS		
1	4	5		-1
2	2	3		-1
3	1	1		0
4	1	3		-2
5	1	1		0
6	1	3		-2
7	1	3.5		-2.5
8	2	2		0
9	4	4.5		-0.5
10	5	2		3
11	3	3.5		-0.5
12	3	5		-2
13	5	5		0
14	2	4.5		-2.5
15	3	3.5		-0.5
16	5	2		3
17	5	2		3
18	5	5		0
19	4	5		-1
20	2	4.5		-2.5
21	1	3.5		-2.5
22	1	1		0
23	2	1		1
24	2	1		1
25	3	3.5		-0.5
26	4	3.5		0.5
27	3	1		2
28	2	2		0
29	3	2		1
30	4	3		1
31	3	4.5		-1.5
32	4	3		1
33	5	4.5		0.5
34	5	1		4
35	2	1		1
36	3	2		1
37	4	2		2
38	5	5		0
39	4	5		-1
40	1	3		-2

Zone	Female			Difference
	SEEDA	POS		
1	4	5		-1
2	2	5		-3
3	1	2.5		-1.5
4	1	1.5		-0.5
5	1	1		0
6	1	4		-3
7	1	4		-3
8	2	4		-2
9	4	5		-1
10	5	3		2
11	3	3		0
12	3	3.5		-0.5
13	5	1.5		3.5
14	2	2.5		-0.5
15	3	1		2
16	5	1.5		3.5
17	5	3		2
18	5	4.5		0.5
19	4	5		-1
20	2	5		-3
21	1	1		0
22	1	1.5		-0.5
23	2	1.5		0.5
24	2	1		1
25	3	4.5		-1.5
26	4	3		1
27	3	1.5		1.5
28	2	1.5		0.5
29	3	3.5		-0.5
30	4	3		1
31	3	4		-1
32	4	3.5		0.5
33	5	4.5		0.5
34	5	1		4
35	2	1.5		0.5
36	3	1		2
37	4	2		2
38	5	5		0
39	4	5		-1
40	1	4.5		-3.5

Table 6: Comparison of Differences Between SEEDA and POS Categorizations for Each Zone.

All Differences				Positive Differences				Negative Differences			
Zone	Combined	Male	Female	Zone	Combined	Male	Female	Zone	Combined	Male	Female
1	-1	-1	-1	1				1	-1	-1	-1
2	-2.5	-1	-3	2				2	-2.5	-1	-3
3	-0.5	0	-1.5	3				3			-1.5
4	-1	-2	-0.5	4				4	-1	-2	
5	0	0	0	5				5			
6	-3	-2	-3	6				6	-3	-2	-3
7	-3	-2.5	-3	7				7	-3	-2.5	-3
8	-1	0	-2	8				8	-1		-2
9	-1	-0.5	-1	9				9	-1		-1
10	1.5	3	2	10	1.5	3	2	10			
11	0	-0.5	0	11				11			
12	-1	-2	-0.5	12				12	-1	-2	
13	1	0	3.5	13	1		3.5	13			
14	-1	-2.5	-0.5	14				14	-1	-2.5	
15	1	-0.5	2	15	1		2	15			
16	3	3	3.5	16	3	3	3.5	16			
17	1.5	3	2	17	1.5	3	2	17			
18	0	0	0.5	18				18			
19	-1	-1	-1	19				19	-1	-1	-1
20	-3	-2.5	-3	20				20	-3	-2.5	-3
21	-1	-2.5	0	21				21	-1	-2.5	
22	0	0	-0.5	22				22			
23	0.5	1	0.5	23		1		23			
24	1	1	1	24	1	1	1	24			
25	-1	-0.5	-1.5	25				25	-1		-1.5
26	1	0.5	1	26	1		1	26			
27	2	2	1.5	27	2	2	1.5	27			
28	0	0	0.5	28				28			
29	0	1	-0.5	29		1		29			
30	1	1	1	30	1	1	1	30			
31	-1.5	-1.5	-1	31				31	-1.5	-1.5	-1
32	1	1	0.5	32	1	1		32			
33	1	0.5	0.5	33	1			33			
34	4	4	4	34	4	4	4	34			
35	0.5	1	0.5	35		1		35			
36	1.5	1	2	36	1.5	1	2	36			
37	2	2	2	37	2	2	2	37			
38	0	0	0	38				38			
39	-1	-1	-1	39				39	-1	-1	-1
40	-3	-2	-3.5	40				40	-3	-2	-3.5

categorizing perception of safety zones. Individual maps were then created that use shades of grey to represent these absolute differences. Three maps showing positive differences only were created for combined (figure 16), male (figure 17), and female responses (figure 18). These maps facilitate viewing of patterns of differences between the perception of safety results and the safety enhancing environmental design attribute analysis. A table verbally analyzes the patterns found on these maps (table 7). The same series of maps and the associated table were also created to analyze the negative differences (figures 19, 20, and 21; table 8).

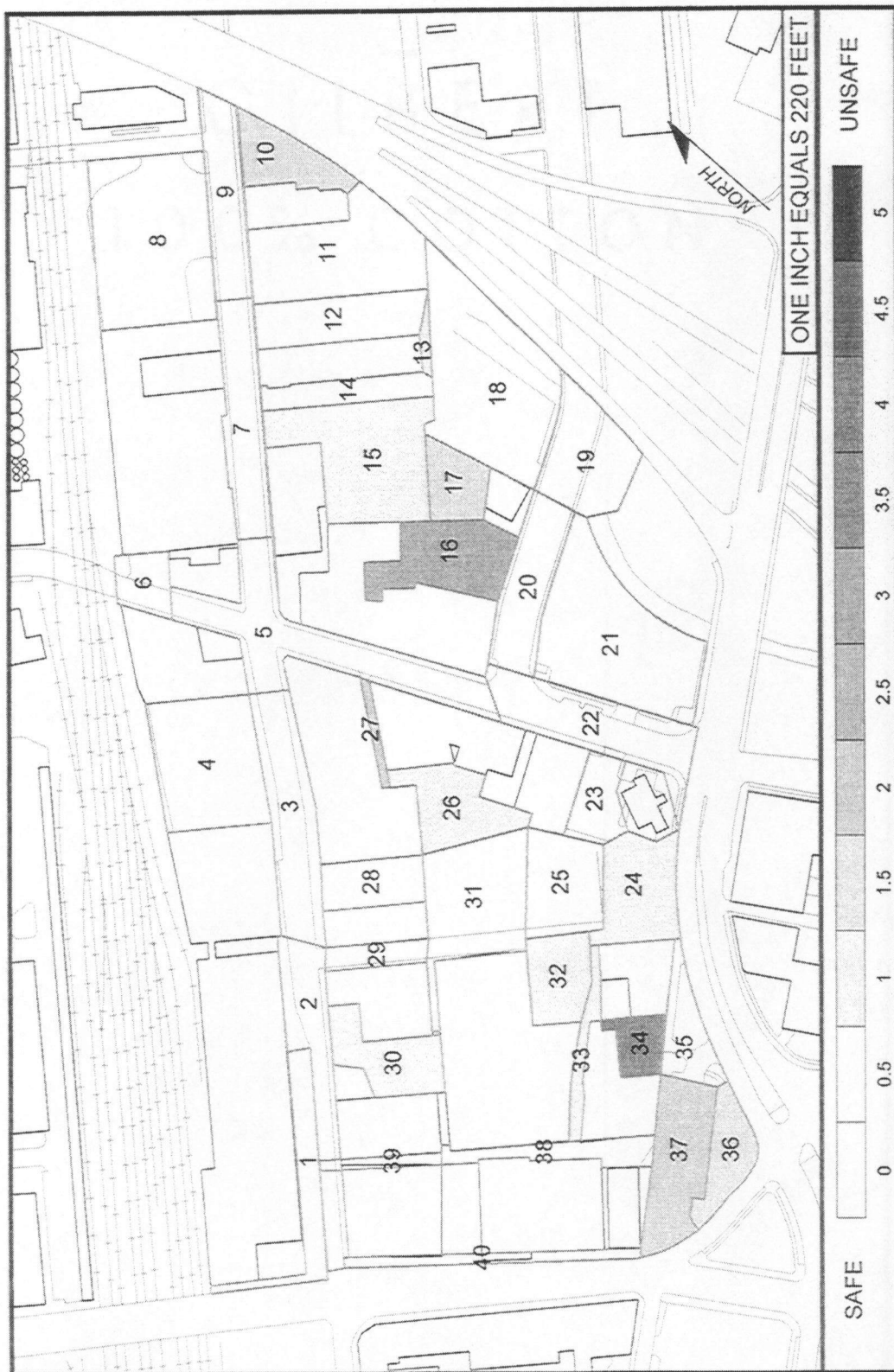


Figure 16: Zones Perceived More Safe by All Respondents Combined than SEEDA Analysis Predicted.

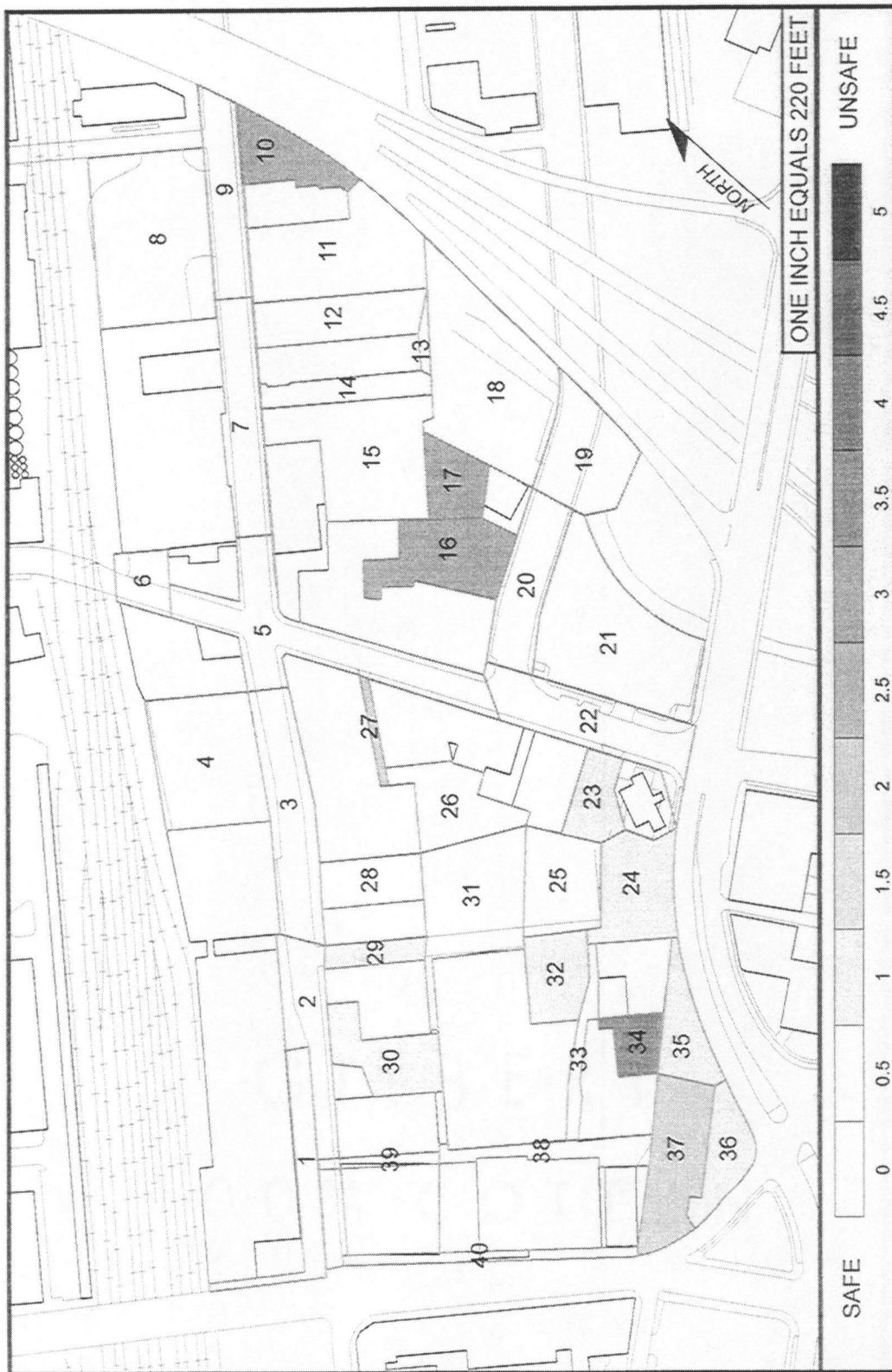


Figure 17: Zones Perceived More Safe by Male Respondents than SEEDA Analysis Predicted.



Figure 18: Zones Perceived More Safe by Female Respondents than SEEDA Analysis Predicted.

Table 7: Notable Characteristics of Zones Perceived Relatively More Safe than SEEDA Analysis Predicted.

Zone	Combined	Male	Female	Notable Characteristics
10	1.5	3	2	distant from primary activity area; more distant than zones perceived more unsafe; lack of immediately adjacent entrance to activity generator; only one entrance towards primary activity area
13	1		3.5	more distant than areas perceived more unsafe; lack of immediately adjacent entrance to activity generator; lack of visibility from primary pathways
15	1		2	more distant than zones perceived more unsafe; lack of visibility from primary pathways; only one entrance towards primary activity area
16	3	3	3.5	more distant than zones perceived more unsafe; lack of immediately adjacent entrance to activity generator; lack of visibility from primary pathways; only one entrance towards primary activity area
17	1.5	3	2	more distant than zones perceived more unsafe; lack of immediately adjacent entrance to activity generator; lack of visibility from primary pathways; no entrance towards primary activity area
23		1		immediately adjacent to primary pathway; immediately adjacent to activity generator
24	1	1	1	immediately adjacent to primary pathway; immediately adjacent to activity generator
26	1		1	more distant than zones perceived more unsafe; lack of immediately adjacent entrance to activity generator; lack of visibility from primary pathways
27	2	2	1.5	immediately adjacent to primary pathway; immediately adjacent to activity generator
29		1		more distant than zones perceived more unsafe; only one entrance towards primary activity area
30	1	1	1	more distant than zones perceived more unsafe; lack of visibility from primary pathways; only one entrance towards primary activity area
32	1	1		more distant than zones perceived more unsafe; lack of immediately adjacent entrance to activity generator; only one entrance towards primary activity area
33	1			distant from primary activity area; more distant than zones perceived more unsafe; lack of immediately adjacent entrance to activity generator; lack of visibility from primary pathways; only one entrance towards primary activity area
34	4	4	4	distant from primary activity area; more distant than zones perceived more unsafe; lack of immediately adjacent entrance to activity generator; no entrance towards primary activity area
35		1		distant from primary activity area; immediately adjacent to primary pathway
36	1.5	1	2	distant from primary activity area; lack of immediately adjacent entrance to activity generator; immediately adjacent to primary pathway
37	2	2	2	distant from primary activity area; more distant than zones perceived more unsafe; lack of visibility from primary pathways



Figure 19: Zones Perceived More Unsafe by All Respondents Combined than SEEDA Analysis Predicted.



Figure 20: Zones Perceived More Unsafe by Male Respondents than SEEDA Analysis Predicted.



Figure 21: Zones Perceived More Unsafe by Female Respondents than SEEDA Analysis Predicted.

Table 8: Notable Characteristics of Zones Perceived Relatively More Unsafe than SEEDA Analysis Predicted.

Zone	Combined	Male	Female	Notable Characteristics
1	-1	-1	-1	at boundary of study area; lack of barrier to outside areas; primary pathway out of study area; heavily used zone
2	-2.5	-1	-3	at boundary of study area; lack of barrier to outside areas; primary pathway out of study area; immediately adjacent to activity generator; heavily used zone
3			-1.5	primary pathway out of study area; immediately adjacent to activity generator; heavily used zone
4	-1	-2		at boundary of study area; lack of barrier to outside areas; immediately adjacent to primary pathway; immediately adjacent to activity generator; heavily used zone
6	-3	-2	-3	at boundary of study area; lack of barrier to outside areas; primary pathway out of study area; immediately adjacent to activity generator; heavily used zone
7	-3	-2.5	-3	primary pathway out of study area; immediately adjacent to activity generator; heavily used zone
8	-1		-2	at boundary of study area; entirely enclosed by boundary to outside areas; immediately adjacent to primary pathway; heavily used zone
9	-1		-1	at boundary of study area; lack of barrier to outside areas; primary pathway out of study area; heavily used zone
12	-1	-2		immediately adjacent to primary pathway; little activity
14	-1	-2.5		immediately adjacent to primary pathway; heavily used zone
19	-1	-1	-1	at boundary of study area; lack of barrier to outside area; primary pathway out of study area; heavily used zone
20	-3	-2.5	-3	primary pathway out of study area; immediately adjacent to activity generator; heavily used zone
21	-1	-2.5		at boundary of study area; immediately adjacent to primary pathway; immediately adjacent to activity generator; heavily used zone
25	-1		-1.5	adjacent to little used pathway; little activity
31	-1.5	-1.5	-1	adjacent to little used pathway; little activity
39	-1	-1	-1	immediately adjacent to primary pathway; immediately adjacent to activity generator; heavily used zone
40	-3	-2	-3.5	at boundary of study area; lack of barrier to outside areas; immediately adjacent to primary pathway; little activity

Chapter 5

Analysis of Results and Conclusions

Introduction

The first section of this chapter reports some of the more interesting statistics resulting from the completed test, data manipulation, and comparison described in chapter 4. The last section draws conclusions about the thesis in this study introduced in chapter 1 and examines the effectiveness of the study technique.

Report of Results

The perceptions of safety survey involved a total of 62 responses, 32 male and 30 female. There were a total of 225 areas identified as unsafe by the respondents, shown in figure 7. Although there were two fewer females in the sample, the majority of these identifications were made by females, who outlined a total of 124 areas (figure 9), or 55.1 percent of the total. Males identified only 101 areas (figure 8).

Not only did females indicate a higher number of areas, the areas they indicated resulted in a higher number of individual zone identifications. The total number of times a zone was identified as unsafe was 348. Females identified 211 of these, or 60.6 percent.

Males identified only 137 zones (table 2). These statistics corroborate the evidence of other studies that suggest that women tend to be more fearful than men especially because of the danger of sexual violence, and especially in urban public spaces (Wekerle and

Whitzman, 1995, 3; Nasar, Fisher, and Grannis, 1993; Warr, 1990).

Responses tended to be highly clustered towards identification of those zones that were classified as most unsafe. One hundred and three out of 348, or 29.6 percent of the combined zone identifications indicated the top five zones. This clustering was slightly greater for females (33.2 percent) than for males (27.7 percent).

Visual examination and comparison of figures 15 and 16, and 18 and 19 reveal very similar patterns of differences between the survey results and the safety enhancing environmental design attribute analysis. For the zones that were perceived relatively more safe than the safety enhancing environmental design attribute analysis suggested, two distinct types of characteristic patterns emerged (table 7). The first type are zones that are generally not immediately adjacent to activity generators, are more distant from primary activity areas than zones that are perceived relatively more unsafe, and are not particularly visible from primary pathways. These characteristics suggest zones that are not often cited as unsafe because visitors have no reason to use the areas, don't know they exist, or they exist outside of what the individual considers the boundary of the area. The second general type are zones that are immediately adjacent to primary pathways and activity generators, but are not heavily used. This characteristic pattern suggests that the zones are not often cited as unsafe because they are not used but if they were a user would be very visible.

Three distinct zone types emerged for those zones that were perceived more unsafe than safety enhancing environmental design attribute analysis suggested (table 8). Those that exhibited the greatest negative difference are generally heavily used, are at or near the boundary of the study area, and partly consist of a pathway that connects to areas outside the Old City. These characteristics suggest that they are cited as unsafe because they are heavily used and because escape for a criminal offender would be relatively unimpeded. The second type is generally also heavily used and borders the boundary of the study area. This suggests zones that are cited because of their possible association with those unknown areas outside the Old City boundary. The third type is little used zones that do not border the Old City boundary and are somewhat visible from adjacent pathways. This suggests that they are cited as unsafe largely because they are somewhat visible yet largely unused by others. It seems that they lack primarily an impetus of initial use.

Conclusion

The results of the test in this study were not sufficient to provide a definitive answer to the research question introduced in chapter one, "Can safety enhancing environmental design attribute analysis accurately predict relative perceptions of safety in downtown entertainment/retail redevelopment areas?" The test method showed that 10 of the 40 perceptions of safety zones exhibited no relative difference from the safety enhancing environmental design attribute analysis zones. It is evident though that the safety enhancing environmental design attribute analysis done in this study could not substitute for the relative accuracy gained through the perceptions of safety survey.

Should safety enhancing environmental design attribute analysis be used in the future to examine perception of safety issues when creating policy in downtown entertainment/retail redevelopment areas? Probably not. The time and effort taken to attempt an accurate safety enhancing environmental design analysis is greater than that involved to do a perceptions of safety survey. Additionally the results of a well done survey are undeniably statistically accurate and reliable while the results of a safety enhancing environmental design attribute analysis are not.

However, if a safety enhancing environmental design analysis were undertaken, the results of this study could be very important for improving the accuracy of the analysis in this type of area. The generalized characteristic patterns of those perceptions of safety zones that exhibit a difference from the safety enhancing environmental design attribute analysis zones (tables 7 and 8) could be used to refine the importance of specific conceptual attributes during the safety enhancing environmental design attribute analysis. For example, it appears that the importance of the surveillance element is not as strong as the literature suggests, at least in this type of area. It also can be assumed that more distant or secluded areas within the study area that lack safety enhancing environmental design attributes will not be perceived as unsafe if visitors have no reason to use these areas.

The study of environmental effects on perceptions in general, and perceptions of safety in particular, is valid. However, this study points to the fact that environmental analysis

alone is not enough to predict perceptions. Planners, other government officials, and concerned individuals need to attempt to understand the relationships between environmental design and perceptions of safety. They need to use proper design concepts to enhance perceptions of safety in places that are safe and to encourage safety in places that are not. Professionals need to realize what proper environmental design can do . . . and what it cannot do.

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Appendix

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 80
 How many openings are there towards the primary activity area? 2
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 10
 What elements are present that contribute to the psychological barrier (circle)?
 Low walls/open gateways/light standards/runs of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 10
 Rate relatively how well is the internal activity defined by physical elements. 5 4 3 2
 What are the primary activities of the zone? street/parking
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 5 4 3 2
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2
 What blocks visibility into zone (circle)? Buildings/fencing/other structures/foliage bridge
 How many windows offer view into zone? > 20
 How many blind corners are there in zone or entering zone from primary activity area? 2+
 * What percent of zone is adequately lit? 100%
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 3 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant entrapment spots are in the zone? 15+
 If there are entrapment spots, are they adjacent to pedestrian paths? YN BAD!
 Is natural auditory ability notably diminished? YN
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
quite geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers: psychic - Gay St bridge

Description of zone.
 Bounds: N BLDG E Jackson S Jackson ramp to Gay St. W Gay St Bridge
 Primary uses in area include: street/parking/access to alley
 Other notes:
 - very bad entrapment spots under ramp
 - Gay St not strong boundary
 - very poor maintenance

Appendix 1: Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 60
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 10
 What elements are present that contribute to the psychological barrier (circle)?
 Low walls/open gateways/light standards/runs of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 30
 Rate relatively how well is the internal activity defined by physical elements. 5 4 3 2 1
 What are the primary activities of the zone? Street/Eden walk/parking
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 5 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 1
 What blocks visibility into zone (circle)? Building/enclosure/other structure/foliage
 How many windows offer view into zone? 20 ±
 How many blind corners are there in zone or entering zone from primary activity area? 5 ±
 * What percent of zone is adequately lit? 30
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant extrapoint spots are in the zone? 3
 If there are extrapoint spots, are they adjacent to pedestrian paths? YN
 Is natural auditory ability notably diminished? YN
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
 most geared toward study area/about equipment passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers: electronic/bldg

Description of zone:
 Bounds: N bridge/bldg E old zone S bldg W boundary/lot
 Primary uses in area include: (above)
 Other notes:

- strange area
- underground/Boiler room
- most most contributing bldgs
- close to Gray St. overpass

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 50
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 20
 What elements are present that contribute to the psychological barrier (circle)?
Low walls/open gateway/tight standards/runs of steps/foliage/ground surface/water/topographic change/other / primary line
 What percent of the zone seems to have little or no effective barrier? 5
 Rate relatively how well is the internal activity defined by physical elements. 3 4 3 2 1
 What are the primary activities of the zone? Street / sidewalk
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 3 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 3 4 3 2 1
 What blocks visibility into zone (circle)? Buildings/fencing/other structures/foliage
 How many windows offer view into zone? 20+
 How many blind corners are there in zone or entering zone from primary activity area? 6
 What percent of zone is adequately lit? 80%
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 3 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 3 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 3 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 3 4 3 2 1
 How many significant entrapment spots are in the zone? 3
 If there are entrapment spots, are they adjacent to pedestrian paths? YN
 Is natural auditory ability notably diminished? YN
 If YES, by what? _____

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN NA
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 3 4 3 2 1
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
 most geared toward study area/about consistent passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers: _____

Description of zone:
 Bounds: N bldgs E O Z S bldgs W O Z
 Primary uses in area include: Street / sidewalks
 Other notes:

- several parking off area
- between prime area and other areas (underground)

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 50
 How many openings are there towards the primary activity area? 3
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 25
 What elements are present that contribute to the psychological barrier (circle)?
Low walls/open gateways/light standards/runs of steps/foliage/ground surface/water/topographic change/other attended bldg.
 What percent of the zone seems to have little or no effective barriers? 25
 Rate relatively how well is the internal activity defined by physical elements. 3 4 3 2 1
 What are the primary activities of the zone? parking lot
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 3 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 1
 What blocks visibility into zone (circle)? Buildings/fencing/other structures/foliage
 How many windows offer view into zone? 30 ±
 How many blind corners are there in zone or entering zone from primary activity area? 0
 What percent of zone is adequately lit? 50 ± 1
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 3 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 3 4 3 2 1
 How many significant entrapment spots are in the zone? 1
 If there are entrapment spots, are they adjacent to pedestrian paths? YN
 Is natural auditory ability notably diminished? YN
 If YES, by what? _____

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 3 4 3 2 1
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
most parked toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers: rail

Description of zone.

Bounds: N rail E bldg S street W bldg

Primary uses in area include: parking lot

Other notes:

- very heavily used lot
- attended and closest to Jackson/Central intersection
- bad rail lines

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

#5

#5

What percent of the zone is surrounded by a physical barrier? 90
 How many openings are there towards the primary activity area? NA
 How many openings are there away from the primary activity area? 4
 What percentage of the zone is surrounded by a psychological barrier? 0
 What elements are present that contribute to the psychological barrier (circle)?
 Low walls/open gateways/light standards/runs of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 10
 Rate relatively how well is the internal activity defined by physical elements. 3 4 3 2 1
 What are the primary activities of the zone? street/edge entrance/street
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 3 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 3 4 3 2 1
 What blocks visibility into zone (circle)? entrance/foliage/other structural foliage
 How many windows offer view into zone? 20+
 How many blind corners are there in zone or entering zone from primary activity area? 5
 * What percent of zone is adequately lit? 90%
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 3 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 3 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 3 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 3 4 3 2 1
 How many significant entrapment spots are in the zone? 1
 If there are entrapment spots, are they adjacent to pedestrian paths? YN
 Is natural auditory ability notably diminished? YN
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 3 4 3 2 1
 If a street or streets pass through or adjacent to the zone, assuming what portion of the traffic is related to the use of the study area?
 most geared toward study area/other zone/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers:

Description of zone.
 Bounds: N other zone/edge of zone E other zone S other zone W other zone
 Primary uses in area include: street/street
 Other notes:
 - primary activity area in OC

5

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet ~~7527~~

What percent of the zone is surrounded by a physical barrier? 50
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 50
 What elements are present that contribute to the psychological barrier (circle)?
 Low walls/open gateways/high standards/runs of steps/foliage/ground surface/water/topographic changes/other car
 What percent of the zone seems to have little or no effective barrier? 20
 Rate relatively how well is the internal activity defined by physical elements. 3 4 3 2 1
 What are the primary activities of the zone? Street parking
 Does the zone appear to exhibit a sense of private permanent ownership? Y N

Rate the relative internal visibility. 5 3 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 3 3 2 1
 What blocks visibility into zone (circle)? Buildings/other structures/foliage
 How many windows offer view into zone? 5+
 How many blind corners are there in zone or entering zone from primary activity area? 4
 * What percent of zone is adequately lit? 90%
 Does a street pass through or immediately adjacent to the zone? Y N
 If YES, rate the relative amount of natural observation from vehicle into zone. 3 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? Y N
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 3 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 3 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 3 4 3 2 1
 How many significant entrainment spots are in the zone? 2
 If there are entrainment spots, are they adjacent to pedestrian paths? Y N
 Is natural auditory ability noticeably diminished? Y N
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? Y N
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
 most geared toward study area/street equipment passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? Y N
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? Y N

Does this zone share substantially in the activity generated by the DERRA? Y N
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? Y N
 Does this zone border the edge of the study area? Y N
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? Y N
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? Y N
 If YES, are there substantial barriers to interaction with activity from external areas? Y N
 If YES, list barriers:

Description of zone:
 Bounds: N railroad E blvd S other zone/line W blvd
 Primary uses in area include: Street parking
 Other notes:

- post bridge where most business are open and active

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet ~~#22~~

What percent of the zone is surrounded by a physical barrier? 80
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 0
 What elements are present that contribute to the psychological barrier (circle)?
 Low walls/open gateways/light standards/runs of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 20
 Rate relatively how well is the internal activity defined by physical elements. 3 4 3 2 1
 What are the primary activities of the zone? street/sidewalk
 Does the zone appear to exhibit a sense of private permanent ownership? Y N

Rate the relative internal visibility. 5 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 3 3 2 1
 What blocks visibility into zone (circle)? Building/foliage/other structures/foliage
 How many windows offer view into zone? 5+
 How many blind corners are there in zone or entering zone from primary activity area? 3
 * What percent of zone is adequately lit? 90%
 Does a street pass through or immediately adjacent to the zone? Y N
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? Y N
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 3 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 3 4 3 2 1
 How many significant entrainment spots are in the zone? 4+
 If there are entrainment spots, are they adjacent to pedestrian paths? Y N
 Is natural auditory ability notably diminished? Y N
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? Y N NA
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 3 4 3 2 1
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
 most geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? Y N
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? Y N

Does this zone share substantially in the activity generated by the DERRA? Y N
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? Y N
 Does this zone border the edge of the study area? Y N
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? Y N
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? Y N
 If YES, are there substantial barriers to interaction with activity from external areas? Y N
 If YES, list barriers:

Description of zone.
 Bounds: N bdgs E other zone/ s bldgs/fence W with zone/prime area
 Primary uses in area include: street/sidewalk
 Other notes:
 - people hanging out in street here
 - shop and bar entrances.
 - motorcycle parking

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 95
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 0
 What percentage of the zone is surrounded by a psychological barrier? 5
 What elements are present that contribute to the psychological barrier (circle)?
 Low wall/open gateway/light standards/runs of steps/foliage/ground surface/water/topographic changes/other any but
 What percent of the zone seems to have little or no effective barrier? 0
 Rate relatively how well is the internal activity defined by physical elements? 3 4 3 2 1
 What are the primary activities of the zone? parking lot
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 3 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 1
 What blocks visibility into zone (circle)? Buildings/fencing/other structures/foliage
 How many windows offer view into zone? 0
 How many blind corners are there in zone or entering zone from primary activity area? 0
 * What percent of zone is adequately lit? 100%
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant entrepreneurship spots are in the zone? 0
 If there are entrepreneurship spots, are they adjacent to pedestrian paths? YN
 Is natural auditory ability notably diminished? YN
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, approximately what portion of the traffic is related to the use of the study area?
 most passed toward study area/about equal/other pass through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers: fence

Description of zone.
 Bound: N fence E fence S fence/st W bldg
 Primary uses in area include: parking
 Other notes:
 - attended lot
 - very open / no internal blockage

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 15
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 0 #9
 What elements are present that contribute to the psychological barrier (circle)?
 Low walls/open gateways/light standards/runs of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 25
 Rate relatively how well is the internal activity defined by physical elements. 3 4 3 2 1
 What are the primary activities of the zone? street
 Does the zone appear to exhibit a sense of private permanent ownership? Y N

Rate the relative internal visibility. 3 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 1 3 4 3 2 1
 What blocks visibility into zone (circle)? Buildings/fencing/other structures/foliage
 How many windows offer view into zone? 5 +
 How many blind corners are there in zone or entering zone from primary activity area? 0
 * What percent of zone is adequately lit? 90%
 Does a street pass through or immediately adjacent to the zone? Y N
 If YES, rate the relative amount of natural observation from vehicle into zone. 3 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? Y N
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 3 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant extrapoint spots are in the zone? 0
 If there are extrapoint spots, are they adjacent to pedestrian paths? Y N Y N
 Is natural auditory ability notably diminished? Y N
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? Y N
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
 most geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? Y N
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? Y N

Does this zone share substantially in the activity generated by the DERRA? Y N
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? Y N N A
 Does this zone border the edge of the study area? Y N
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? Y N
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? Y N
 If YES, are there substantial barriers to interaction with activity from external areas? Y N
 If YES, list barriers:

Description of zone:
 Bounds: N fence E JWP overpass S fence W blkg edge

Primary uses in area include: street
 Other notes:

- street past edge of contributing buildings & parking

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 10
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 3+
 What percentage of the zone is surrounded by a psychological barrier? 0 #10
 What elements are present that contribute to the psychological barrier (circle)?
 Low walls/open gateways/light standards/runs of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 60
 Rate relatively how well is the internal activity defined by physical elements. 54321
 What are the primary activities of the zone? rear bldg access
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 54321
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 54321
 What blocks visibility into zone (circle)? Building, fence, other structures
 How many windows offer view into zone? 1
 How many blind corners are there in zone or entering zone from primary activity area? 3+
 What percent of zone is adequately lit? 30%
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 54321
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 54321
 Rate the relative amount of non-travel activity in the zone (not to/from car). 54321
 Rate the relative amount of activity in adjacent areas from which readily visible. 54321
 How many significant entrapment spots are in the zone? 6+
 If there are entrapment spots, are they adjacent to pedestrian paths? YN
 Is natural auditory ability notably diminished? YN
 If YES, by what? over pass JWP

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 54321
 If a street or streets pass through or adjacent to the zone, summarizing what portion of the traffic is related to the use of the study area?
 most geared toward study area/about equal most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? YN

Does this zone share substantially in the activity generated by the DERJA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers:

Description of zone.
 Bounds: N fence E overpass S overpass W bldg
 Primary uses in area include: ? (unclear)
 Other notes:
 - very poorly defined
 - poor maintenance
 - blends into area under JWP

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 75%
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 75%
 What elements are present that contribute to the psychological barrier (circle)?
Low walls/open gateways/light standards/runs of steps/sloping ground surface/water topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 0
 Rate relatively how well is the internal activity defined by physical elements? 3 4 3 2 1
 What are the primary activities of the zone? parking
 Does the zone appear to exhibit a sense of private permanent ownership? YN gate/signs

Rate the relative internal visibility. 5 4 3 2 1 4.5+
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 4.5+
 What blocks visibility into zone (circle)? Building/sloping other structures/hedges
 How many windows offer view into zone? 2+
 How many blind corners are there in zone or entering zone from primary activity area? 0
 * What percent of zone is adequately lit? 90%
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant entrance spots are in the zone? 1+ 6 signs
 If there are entrance spots, are they adjacent to pedestrian paths? YN
 Is natural auditory ability noticeably diminished? YN
 If YES, by what? _____

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, roughly what portion of the traffic is related to the use of the study area?
most geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? YN gate

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers: tree/step

Description of zone:
 Bounds: N tree/street E bdy S bdy W fence
 Primary uses in area include: parking/bldg access
 Other notes:

-very open feel
 -back (south) end because of trees/bushes

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 70
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 70
 What elements are present that contribute to the psychological barrier (circle)?
 Low walls/open gateways/light standards/runs of steps/foliage/ground surface/water/topographic changes/other/ small fence
 What percent of the zone seems to have little or no effective barrier? 0
 Rate relatively how well is the internal activity defined by physical elements. 5 4 3 2 1 roped parking
 What are the primary activities of the zone? part-time lot
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 5 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 1
 What blocks visibility into zone (circle)? Buildings/fences/other structures/foliage
 How many windows offer view into zone? 2
 How many blind corners are there in zone or entering zone from primary activity area? 1
 What percent of zone is adequately lit? 90%
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant extrapoint spots are in the zone? 0
 If there are extrapoint spots, are they adjacent to pedestrian paths? YN NA
 Is natural auditory ability notably diminished? YN
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN NA
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
 most geared toward study area/about equal/about passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers: Fencing between parking

Description of zone.
 Bounds: N Street E fence S fence W Bridge

Primary uses in area include: parking

Other notes:

- very clean though unused
- appears to belong to spray warehouse even though no windows or customer entrance.

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

#13

What percent of the zone is surrounded by a physical barrier? 60
 How many openings are there towards the primary activity area? 2
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 20
 What elements are present that contribute to the psychological barrier (circle)?
Low wall/open gateway/light standards/runs of steps/fence/ground surface/water/topographic change/other
 What percent of the zone seems to have little or no effective barrier? 10
 Rate the relative internal visibility. 54321
 Rate relatively how well is the internal activity defined by physical elements. 54321
 What are the primary activities of the zone? high / dump site / access rear bldg.
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 54321
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 54321
 What blocks visibility into zone (circle)? Buildings/fence/other structures/shrubs
 How many windows offer view into zone? 4
 How many blind corners are there in zone or entering zone from primary activity area? 3
 What percent of zone is adequately lit? 70%
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 54321 NA
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 54321 NA
 Rate the relative amount of non-travel activity in the zone (not to/from car). 54321
 Rate the relative amount of activity in adjacent areas from which readily visible. 54321
 How many significant entrapment spots are in the zone? 2
 If there are entrapment spots, are they adjacent to pedestrian paths? YN
 Is natural auditory ability notably diminished? YN
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 54321
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
 most general toward study area/about equal/most passes through NA
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers: see blocks visibility above

Description of zone.
 Bounds: N Bldg E other zone / bldgs retaining wall / area w street alley
 Primary uses in area include: parking/rear bldg access
 Other notes:
- seems undefined except dump str.

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 80
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 10
 What elements are present that contribute to the psychological barrier (circle)?
 Low walls/~~concrete~~ light standards/runs of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 10
 Rate relatively how well is the internal activity defined by physical elements. 5 4 3 2 1
 What are the primary activities of the zone? alley/parking
 Does the zone appear to exhibit a sense of private permanent ownership? Y

Rate the relative internal visibility. 5 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 1
 What blocks visibility into zone (circle)? Buildings other structures foliage dumpsters
 How many windows offer view into zone? 10+
 How many blind corners are there in zone or entering zone from primary activity area? 1
 What percent of zone is adequately lit? 20%
 Does a street pass through or immediately adjacent to the zone? Y Jackson
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? Y Jackson
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant entrapment spots are in the zone? 2
 If there are entrapment spots, are they adjacent to pedestrian paths? Y
 Is natural auditory ability notably diminished? Y
 If YES, by what? _____

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? Y (NA)
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
 most geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? Y
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? Y

Does this zone share substantially in the activity generated by the DERRA? Y
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? Y (NA)
 Does this zone border the edge of the study area? Y
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? Y
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? Y
 If YES, are there substantial barriers to interaction with activity from external areas? Y
 If YES, list barriers: _____

Description of zone.

Bounds: N Jackson St E Bldg S dumpsters W fence

Primary uses in area include: alley parking

Other notes:

- alley to nowhere (not even on map!)
- very easy to see from tent next door.

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 90
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 0
 What percentage of the zone is surrounded by a psychological barrier? 10
 What elements are present that contribute to the psychological barrier (circle)? #15
Low walls/open gateways/light standards/runs of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 0
 Rate relatively how well is the internal activity defined by physical elements? 3 2 1
 What are the primary activities of the zone? outdoor patio for by parking/rear bldg access
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 3 2 1
 What blocks visibility into zone (circle)? Building/fencing/other structure/foliage
 How many windows offer view into zone? 20 ±
 How many blind corners are there in zone or entering zone from primary activity area? 20
 * What percent of zone is adequately lit? 50%
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 3 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 3 1
 How many significant entrapment spots are in the zone? 2
 If there are entrapment spots, are they adjacent to pedestrian paths? YN
 Is natural auditory ability notably diminished? YN
 If YES, by what? birds' whistle

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 3 2 1
 If a street or streets pass through or adjacent to the zone, assuming what portion of the traffic is related to the use of the study area?
most geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influences on adjacent areas within the zone as a result of individualized appearance or sounds? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers: _____

Description of zone:
 Bounds: N Bldg/1st Jackson E Fence S Fence W Bldg
 Primary uses in area include: birds
 Other notes: _____

- seems very private &/of permanent tent and equipment left outside
 - no general purpose 5

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet ~~434~~

What percent of the zone is surrounded by a physical barrier? 63
 How many openings are there towards the primary activity area? 2
 How many openings are there away from the primary activity area? 2
 What percentage of the zone is surrounded by a psychological barrier? 30
 What elements are present that contribute to the psychological barrier (circle)?
low walls upon gateways/light standards/runs of stone foliage/ground surface/vegetation/topographic characteristics
 What percent of the zone seems to have little or no effective barrier? 10
 Rate relatively how well is the internal activity defined by physical elements. 5432(1)
 What are the primary activities of the zone? rear bldg access/alley
 Does the zone appear to exhibit a sense of private permanent ownership? Y(N)

Rate the relative internal visibility. 5432(1)
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5432(1)
 What blocks visibility into zone (circle)? Building entrance/other structures/foliage
 How many windows offer view into zone? 2
 How many blind corners are there in zone or entering zone from primary activity area? 4
 What percent of zone is adequately lit? 40%
 Does a street pass through or immediately adjacent to the zone? Y(N)
 If YES, rate the relative amount of natural observation from vehicle into zone. 5432(1)
 Does pedestrian traffic pass through or adjacent to the zone? Y(N)
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5432(1)
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5432(1)
 Rate the relative amount of activity in adjacent areas from which readily visible. 5432(1)
 How many significant entrapment spots are in the zone? 2
 If there are entrapment spots, are they adjacent to pedestrian paths? Y(N)
 Is natural auditory ability notably diminished? Y(N)
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? Y(N)
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5432(1)
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area? Y(N)
 most geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? Y(N)
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? Y(N) back door?

Does this zone share substantially in the activity generated by the DERRA? Y(N)
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? Y(N)
 Does this zone border the edge of the study area? Y(N)
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? Y(N)
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? Y(N)
 If YES, are there substantial barriers to interaction with activity from external areas? Y(N)
 If YES, list barriers:

Description of zone:
 Bounds: N Bldg E os/fence S street/oz W Bldg
 Primary uses in area include: 3/alley/rear access/Plg
 Other notes:
 -very distended - no maintenance
 -can't tell who owns space
 -not visible from ~~entr~~ oz.
 -whole rear area (north) is entrapment zone

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 50
 How many openings are there towards the primary activity area? 0
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 25
 What elements are present that contribute to the psychological barrier? simple
Low walls/open gateways/light standards/runs of steps/foliage/ground surface/water/topographic changes/other string fence
 What percent of the zone seems to have little or no effective barrier? 25
 Rate the relative degree to which the internal activity defined by physical elements. 54321
 What are the primary activities of the zone? parking
 Does the zone appear to exhibit a sense of private permanent ownership? Y N

Rate the relative internal visibility. 54321
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 54321
 What blocks visibility into zone (circle)? Building/fencing/other structures/foliage
 How many windows offer view into zone? 0
 How many blind corners are there in zone or entering zone from primary activity area? 2
 What percent of zone is adequately lit? 95%
 Does a street pass through or immediately adjacent to the zone? Y N
 If YES, rate the relative amount of natural observation from vehicle into zone. 54321
 Does pedestrian traffic pass through or adjacent to the zone? Y N
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 54321
 Rate the relative amount of non-travel activity in the zone (not to/from car). 54321
 Rate the relative amount of activity in adjacent areas from which readily visible. 54321
 How many significant entrainment spots are in the zone? 1
 If there are entrainment spots, are they adjacent to pedestrian paths? Y N
 Is natural auditory ability notably diminished? Y N
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? Y N
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 54321
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
 most geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area?
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds?

Does this zone share substantially in the activity generated by the DERRA? Y N
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? Y N
 Does this zone border the edge of the study area?
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area?
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone?
 If YES, are there substantial barriers to interaction with activity from external areas?
 If YES, list barriers:

Description of zone:
 Bounds: N fence E 72/bldg edge s bldg W fence string
 Primary uses in area include: parking
 Other notes:
 - well hidden from oth act.
 - some act ~~behind~~ behind fence to north - not good vrb.
 - unclear markings
 - hidden from road

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet ~~187~~

What percent of the zone is surrounded by a physical barrier? 50 #18
 How many openings are there towards the primary activity area? 0
 How many openings are there away from the primary activity area? 2
 What percentage of the zone is surrounded by a psychological barrier? 25
 What elements are present that contribute to the psychological barrier (circle)?
Low walls/open gateways/light standards/runs of steps/foliage/ground surface/water/topographic changes/rocks/spring fence
 What percent of the zone seems to have little or no effective barrier? 25
 Rate relatively how well is the internal activity defined by physical elements. 5432(1)
 What are the primary activities of the zone? parking lot
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 5432(2)
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5432(1)
 What blocks visibility into zone (circle)? Buildings/fencing/other structures/foliage
 How many windows offer view into zone? 0
 How many blind corners are there in zone or entering zone from primary activity area? 3
 * What percent of zone is adequately lit? 90%
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 5432(1)
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5432(1)
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5432(1)
 Rate the relative amount of activity in adjacent areas from which readily visible. 5432(1)
 How many significant entrance spots are in the zone? 1 (creek)
 If there are entrance spots, are they adjacent to pedestrian paths? YN
 Is natural auditory ability notably diminished? YN
 If YES, by what? JWP overpass

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN (NA)
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5432(1)
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
 most geared toward study area/about equal/about passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN (NA)
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers: 1st creek

Description of zone:
 Bounds: N fence/recreating wall E JWP overpass/creeks at sidewalk W 02/bldg edge
 Primary uses in area include: parking lot
 Other notes:
 - edge distinct from road - not visible
 - unattended lot / not well marked
 - creek BHD - foliage & tops.

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 25
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 2 (small gate over grass)
 What percentage of the zone is surrounded by a psychological barrier? 50
 What elements are present that contribute to the psychological barrier (circle)?
low walls/open gateway/light standards/rise of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone appears to have little or no effective barrier? 25
 Rate relatively how well is the internal activity defined by physical elements. 5 4 3 2 1
 What are the primary activities of the zone? street/sidewalk/grass - 3
 Does the zone appear to exhibit a sense of private permanent ownership? Y N

Rate the relative internal visibility. 5 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 1 distant/foliage
 What blocks visibility into zone (circle)? Buildings/foliage/other structures/foliage
 How many windows offer view into zone? 0
 How many blind corners are there in zone or entering zone from primary activity area? 1
 * What percent of zone is adequately lit? 50%
 Does a street pass through or immediately adjacent to the zone? Y N
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? Y N
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant entrapment spots are in the zone? 1
 If there are entrapment spots, are they adjacent to pedestrian paths? Y N
 Is natural auditory ability notably diminished? Y N
 If YES, by what? overpass - JWP

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? Y N
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, summarizing what portion of the traffic is related to the use of the study area?
 most geared toward study area about equal amount passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? Y N
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? Y N

Does this zone share substantially in the activity generated by the DERRA? Y N
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? Y N NA
 Does this zone border the edge of the study area? Y N
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? Y N
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? Y N
 If YES, are there substantial barriers to interaction with activity from external areas? Y N
 If YES, list barriers:

Description of zone.

Bounds: N siderwalk E JWP overpass S fence W OE

Primary uses in area include: street/sidewalk/grassy area up to overpass & Summit Hill Dr.

Other notes:

- far from central CLOSE to overpass
- lots of parking free but close to bad places
- unknown grassy entrapment spot.

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 20
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 2
 What percentage of the zone is surrounded by a psychological barrier? 20 #20
 What elements are present that contribute to the psychological barrier (circle)?
 Low walls/open gateways/light standards/rails of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 80
 Rate relatively how well is the internal activity defined by physical elements. 3 4 3 2 1
 What are the primary activities of the zone? street/sidewalk
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 3 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 1 dist
 What blocks visibility into zone (circle)? Buildings/fencing/other structures/foliage
 How many windows offer view into zone? 5 2
 How many blind corners are there in zone or entering zone from primary activity area? 1
 *What percent of zone is adequately lit? 90%
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 3 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 3 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 3 4 3 2 1
 How many significant entrapment spots are in the zone? 1
 If there are entrapment spots, are they adjacent to pedestrian paths? YN
 Is natural auditory ability notably diminished? YN
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN NM
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
 most geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN NM
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers:

Description of zone:
 Bounds: N bdg/sidewalk E OE S plglat W OE
 Primary uses in zone include: street/sidewalk
 Other notes:
 -blank wall / block view from main part of central
 -next to behind area - bad
 -feel distant even though lots of parking usage

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet ~~#21~~

What percent of the zone is surrounded by a physical barrier? 60
 How many openings are there towards the primary activity area? 3
 How many openings are there away from the primary activity area? 7
 What percentage of the zone is surrounded by a psychological barrier? 10 #21
 What elements are present that contribute to the psychological barrier (circle)?
Low walls/open gateway/light standards/signs of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 30
 Rate relatively how well is the internal activity defined by physical elements. 5 4 3 2 1
 What are the primary activities of the zone? parking lot
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 5 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 1
 What blocks visibility into zone (circle)? Buildings/fencing/other structures/foliage
 How many windows offer view into zone? 5
 * How many blind corners are there in zone or entering zone from primary activity area? 0
 What percent of zone is adequately lit? 90%
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant extraneous spots are in the zone? 0
 If there are extraneous spots, are they adjacent to pedestrian paths? YN
 Is natural auditory ability notably diminished? YN
 If YES, by what? _____

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
 most geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN Na
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers: foliage/fencing

Description of zone:
 Bounds: N Street E 1st creek S S. Hill W sidewalk

Primary uses in area include: parking lot

Other notes:
 - foliage is very limiting because of height
 - attendant booth makes private
 - well used.

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 50
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 40
 What elements are present that contribute to the psychological barrier (circle)?
Low walls/open gateway/light standards/runs of steps/changes in ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 10
 Rate relatively how well is the internal activity defined by physical elements. 3 4 3 2 1
 What are the primary activities of the zone? street/sidewalk/access
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 5 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 1
 What blocks visibility into zone (circle)? building/fencing/other structures/foliage
 How many windows offer view into zone? 10
 How many blind corners are there in zone or entering zone from primary activity area? 4
 * What percent of zone is adequately lit? 80
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 3 4 3 2 1
 How many significant entrapment spots are in the zone? 2
 If there are entrapment spots, are they adjacent to pedestrian paths? YN
 Is natural auditory ability notably diminished? YN
 If YES, by what? CARS

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 3 4 3 2 1
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
traffic geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers: _____

Description of zone.
 Bounds: N OE E OE/pkg lot S street (SHD) W OE/bldgs
 Primary uses in area include: street/sidewalk/access
 Other notes:

- main area
 - trees block visib internally

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 50
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 10
 What elements are present that contribute to the psychological barrier (circle)?
Low walls/open gateways/light standards/runs of steps/fences/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 5
 Rate relatively how well is the internal activity defined by physical elements. 5 4 3 2 1
 What are the primary activities of the zone? Parking
 Does the zone appear to exhibit a sense of private permanent ownership? YN

#23

Rate the relative internal visibility. 5 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 1
 What blocks visibility into zone (circle)? Buildings/fences/other structures/foliage
 How many windows offer view into zone? 0
 How many blind corners are there in zone or entering zone from primary activity area? 0
 What percent of zone is adequately lit? 80%
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant entrapment spots are in the zone? 3
 If there are entrapment spots, are they adjacent to pedestrian paths? YN
 Is natural auditory ability notably diminished? YN
 If YES, by what? _____

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
 most geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sound? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers: Streets

Description of zone.

Bounds: N Bldg E sidewalk S Bldg W oth. zone/trees

Primary uses in area include: parking

Other notes:

- bad dumpster
- ownership bldg turns back
- visible as enter OC.

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 20
 How many openings are there towards the primary activity area? 2
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 50
 What elements are present that contribute to the psychological barrier (circle)?
low walls/gateways/light standards/rows of steps/plants/road surface water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 20
 Rate relatively how well is the internal activity defined by physical elements. 5 4 3 2 1
 What are the primary activities of the zone? pkg/street/sidewalk
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 5 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 1
 What blocks visibility into zone (circle)? buildings/fencing/other structures/plants
 How many windows offer view into zone? 25+
 How many blind corners are there in zone or entering zone from primary activity area? 2
 What percent of zone is adequately lit? 100%
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant entrainment spots are in the zone? 0
 If there are entrainment spots, are they adjacent to pedestrian paths? YN NA
 Is natural auditory ability notably diminished? YN
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
 most geared toward study area about equal most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sound? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN NA
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers: SUMMIT HILL

Description of zone:
 Bounds: N Trees/pkg E 4th zone/bldg S Street W bldg
 Primary uses in area include:
 Other notes: open feel
- almost suburban

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 10%
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 2
 What percentage of the zone is surrounded by a psychological barrier? 30%
 What elements are present that contribute to the psychological barrier (circle)?
Low walls/open gateways/high standards/runs of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 5%
 Rate relatively how well is the internal activity defined by physical elements. 5 4 3 2 1
 What are the primary activities of the zone? Parking
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 5 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 1
 What blocks visibility into zone (circle)? Buildings/fencing/other structures/ foliage
 How many windows offer view into zone? 25
 How many blind corners are there in zone or entering zone from primary activity area? 0
 * What percent of zone is adequately lit? 90
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant entrapment spots are in the zone? 0
 If there are entrapment spots, are they adjacent to pedestrian paths? YN
 Is natural auditory ability notably diminished? YN
 If YES, by what? _____

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
Most geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is noticeably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers: _____

Description of zone:

Bounds: N City Zone E Blvd/trees S Trees W Street

Primary uses in area include: pkg

Other notes:

- Close to diner, but not visible
- higher than adjacent/more visible than other pkg.

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 55
 How many openings are there towards the primary activity area? 2
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 5
 What elements are present that contribute to the psychological barrier (circle)?
 Low wall/open gateway/high standards/runs of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 40
 Rate relatively how well is the internal activity defined by physical elements. 5 4 3 2 1
 What are the primary activities of the zone? PARKING/REAR BLDG ACCESS
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 5 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 1
 What blocks visibility into zone (circle)? Building/fencing/other structures/foliage
 How many windows offer view into zone? 2
 How many blind corners are there in zone or entering zone from primary activity area? 2
 What percent of zone is adequately lit? 90
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant entrainment spots are in the zone? 1 (alley)
 If there are entrainment spots, are they adjacent to pedestrian paths? YN alley is path sometimes
 Is natural auditory ability notably diminished? YN
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
 most geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers:

Description of zone.

Bounds: N BLDG E BLDG/alley S oth zone W oth zone

Primary uses in area include: Parking/rear access

Other notes:

little interest in men from bldgs.
- barbed wire on fencing.
- No view from Jackson

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet #27

What percent of the zone is surrounded by a physical barrier? 90
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 10
 What elements are present that contribute to the psychological barrier (circle)?
 Low walls/open gateways/light standards/rare of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 0
 Rate relatively how well is the internal activity defined by physical elements. 5 4 3 2 1
 What are the primary activities of the zone? alley
 Does the zone appear to exhibit a sense of private permanent ownership? Y N

Rate the relative internal visibility. 5 4 3 2 1 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 1
 What blocks visibility into zone (circle)? Buildings/fencing/other structures/foliage
 How many windows offer view into zone? 5+
 How many blind corners are there in zone or entering zone from primary activity area? 3
 * What percent of zone is adequately lit? 80
 Does a street pass through or immediately adjacent to the zone? Y N
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1 NARROW
 Does pedestrian traffic pass through or adjacent to the zone? Y N
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5 4 3 2 1 slower
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant outplacement spots are in the zone? 0
 If there are outplacement spots, are they adjacent to pedestrian paths? Y N Y
 Is natural auditory ability notably diminished? Y N
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? Y N N
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
 Most geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? Y N
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? Y N
 If YES, list barriers:

Does this zone share substantially in the activity generated by the DERRA? Y N
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? Y N N
 Does this zone border the edge of the study area? Y N
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? Y N
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? Y N
 If YES, are there substantial barriers to interaction with activity from external areas? Y N
 If YES, list barriers:

Description of zone:
 Bounds: N BLDG E STREET S BLDG W ST/BLDG EDGE

Primary uses in area include: alley

Other notes:

- barely used
- sometimes blocked by single parked car(s)
- could pass through but not many do

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

#22

What percent of the zone is surrounded by a physical barrier? 60
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 8 #28
 What elements are present that contribute to the psychological barrier (circle)?
Low walls/open gateways/light standards/runs of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 60
 Rate relatively how well is the internal activity defined by physical elements. 5 4 3 2 1
 What are the primary activities of the zone? parking/access to rear lots
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 3 4 3 2 1
 Rate the relative visibility into zone from areas adjacent to the primary activity of the study area. 5 4 3 2 1
 What blocks visibility into zone (circle)? Buildings/fencing/other structures/foliage
 How many windows offer view into zone? 20+
 How many blind corners are there in zone or entering zone from primary activity area? 2
 What percent of zone is adequately lit? 50
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 3 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant entrance spots are in the zone? 2
 If there are entrance spots, are they adjacent to pedestrian paths? YN
 Is natural auditory ability notably diminished? YN
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
 most geared toward study area/about equal/about passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers:

Description of zone.

Bounds: N St E bldg S. ave/parking lot W bldg

Primary uses in area include: parking/access to rear lots

Other notes:

-very visible from st.

-still feels like close to street unlike rear parking areas

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 75%
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 0
 What elements are present that contribute to the psychological barrier (circle)?
 Low walls/open gateways/light standards/runs of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 25%
 Rate relatively how well is the internal activity defined by physical elements. 5 4 3 2 1
 What are the primary activities of the zone? road, dumpsters
 Does the zone appear to exhibit a sense of private permanent ownership? Y(N)

Rate the relative internal visibility. 5 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 1
 What blocks visibility into zone (circle)? (Building) (fencing) (other structure) (foliage) (dumpsters)
 How many windows offer view into zone? 4
 How many blind corners are there in zone or entering zone from primary activity area? 4
 * What percent of zone is adequately lit? 100%
 Does a street pass through or immediately adjacent to the zone? Y(N)
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? Y(N)
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant entrapment spots are in the zone? 4 door/dumpsters/vehicle entrance
 If there are entrapment spots, are they adjacent to pedestrian paths? Y(N)
 Is natural auditory ability notably diminished? Y(N)
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? Y(N)
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
street passed toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? Y(N)
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? Y(N)

Does this zone share substantially in the activity generated by the DERRA? Y(N)
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? Y(N)
 Does this zone border the edge of the study area? Y(N)
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? Y(N)
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? Y(N)
 If YES, are there substantial barriers to interaction with activity from external areas? Y(N)
 If YES, list barriers:

Description of zone.

Bounds: N JACKSON E BLDG S PARKER LOT EDGE W BLDG

Primary uses in area include: STREET/DUMPSTERS

Other notes:
ISOLATED FEEL

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 90
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 0
 What percentage of the zone is surrounded by a psychological barrier? 10
 What elements are present that contribute to the psychological barrier (circle)?
 Low walls/open gateways/light standards/rune of slope/foilage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barriers? 0
 Rate relatively how well is the internal activity defined by physical elements. 54321
 What are the primary activities of the zone? parking
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 54321
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 54321
 What blocks visibility into zone (circle)? Building/foilage/other structures/foilage
 How many windows offer view into zone? 0
 How many blind corners are there in zone or entering zone from primary activity area? 0
 * What percent of zone is adequately lit? 10
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 54321
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 54321
 Rate the relative amount of non-travel activity in the zone (not to/from car). 54321
 Rate the relative amount of activity in adjacent areas from which readily visible. 54321
 How many significant entrainment spots are in the zone? 3
 If there are entrainment spots, are they adjacent to pedestrian paths? YN
 Is natural auditory ability notably diminished? YN
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN (NA)
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 54321
 If a street or streets pass through or adjacent to the zone, assuming what portion of the traffic is related to the use of the study area?
 most geared toward study area/through enroute passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers:

Description of zone:
 Bounds: N St/patio E bdg S bdg W bdg/patio
 Primary uses in area include: parking/loading docks
 Other notes:

- access to?
 - visible from patio.

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet



#31

What percent of the zone is surrounded by a physical barrier? 30%
 How many openings are there towards the primary activity area? 2
 How many openings are there away from the primary activity area? 2
 What percentage of the zone is surrounded by a psychological barrier? 10
 What elements are present that contribute to the psychological barrier (circle)?
 Low walls/open gateway/light standards/runs of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 50
 Rate relatively how well is the internal activity defined by physical elements. 5 3 2 1
 What are the primary activities of the zone? Parking/road
 Does the zone appear to exhibit a sense of private permanent ownership? Y BLDGs Surrounding

Rate the relative internal visibility. 5 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 3 2 1
 What blocks visibility into zone (circle)? Buildings/fencing/other structures/foliage/damp spots
 How many windows offer view into zone? 225
 How many blind corners are there in zone or passing zone from primary activity area? 4
 What percent of zone is adequately lit? 90%
 Does a street pass through or immediately adjacent to the zone? Y
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? Y
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant entrapment spots are in the zone? 3 (west)
 If there are entrapment spots, are they adjacent to pedestrian paths? Y
 Is natural auditory ability notably diminished? Y
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? Y
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 3 2 1
 If a street or streets pass through or adjacent to the zone, sensibly what portion of the traffic is related to the use of the study area?
most stopped toward study area about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? Y
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? Y

Does this zone share substantially in the activity generated by the DERRA? Y
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? Y
 Does this zone border the edge of the study area? Y
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? Y
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? Y
 If YES, are there substantial barriers to interaction with activity from external areas? Y
 If YES, list barriers:

Description of zone.
 Bounds: N BLDGs EPK LOT/OTH ZONE S PK LOT/OTH ZONE W BLDG
 Primary uses in area include: PARKING/ STREET
 Other notes:
 - entrapment zone behind JFG
 - division of PK lot to reduce zone size for analysis
 - view from Jackson grad at east side

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 75%
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 0
 What percentage of the zone is surrounded by a psychological barrier? 1
 What elements are present that contribute to the psychological barrier (circle)?
 Low walls/open gateways/light standards/runs of steps/foiling/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 0
 Rate relatively how well is the internal activity defined by physical elements. 5 3 2 1
 What are the primary activities of the zone? Parkway
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 5 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 3 2 1
 What blocks visibility into zone (circle)? Buildings/fencing/other structures/foilage
 How many windows offer view into zone? 0
 How many blind corners are there in zone or entering zone from primary activity area? 2
 * What percent of zone is adequately lit? 50%
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant entrapment spots are in the zone? 0
 If there are entrapment spots, are they adjacent to pedestrian paths? YN
 Is natural auditory ability notably diminished? YN
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or stream passes through or adjacent to the zone, reasonably what portion of the traffic is related to the use of the study area?
most geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers:

Description of zone:
 Bounds: N BLDG E STATE STREET S BLDG W BLDG

Primary uses in zone include: PKG.
 Other notes:
 - little activity yet few internally land features.
 - "far" from prim. act. areas.

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 95
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 1
 What elements are present that contribute to the psychological barrier (circle)?
 Low walls/open gateway/light standards/runs of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 0
 Rate relatively how well is the internal activity defined by physical elements. 54321
 What are the primary activities of the zone? alley
 Does the zone appear to exhibit a sense of private permanent ownership? Y

#33

Rate the relative internal visibility. 54321
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 54321
 What blocks visibility into zone (circle)? Buildings/fencing/other structures/foliage
 How many windows offer view into zone? 3
 How many blind corners are there in zone or entering zone from primary activity area? 7
 * What percent of zone is adequately lit? 10%
 Does a street pass through or immediately adjacent to the zone? Y
 If YES, rate the relative amount of natural observation from vehicle into zone. 54321
 Does pedestrian traffic pass through or adjacent to the zone? Y
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 54321
 Rate the relative amount of non-travel activity in the zone (not to/from car). 54321
 Rate the relative amount of activity in adjacent areas from which readily visible. 54321
 How many significant extrapment spots are in the zone? 2
 If there are extrapment spots, are they adjacent to pedestrian paths? Y
 Is natural auditory ability notably diminished? Y
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? Y NA
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 54321
 If a street or streets pass through or adjacent to the zone, assuming what portion of the traffic is related to the use of the study area?
 Most geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? Y
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? Y

Does this zone share substantially in the activity generated by the DERRA? Y
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? Y
 Does this zone border the edge of the study area? Y
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? Y
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? Y
 If YES, are there substantial barriers to interaction with activity from external areas? Y
 If YES, list barriers:

Description of zone.

Bounds: N Bldg E street (gate) S Bldgs/fencing W alley

Primary uses in area include: alley

Other notes:

-barely any traffic / narrow

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet ~~722~~

What percent of the zone is surrounded by a physical barrier? 75
 How many openings are there towards the primary activity area? 0
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 1
 What elements are present that contribute to the psychological barrier (circle)?
 Low walls/open gateways/light standards/runs of slope/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 50
 Rate relatively how well is the internal activity defined by physical elements. 5 3 2 1
 What are the primary activities of the zone? Parking/Loading dock
 Does the zone appear to exhibit a sense of private permanent ownership? N

Rate the relative internal visibility. 5 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 3 2 1
 What blocks visibility into zone (circle)? Buildings/fencing/other structures/foliage
 How many windows offer view into zone? 0
 How many blind corners are there in zone or entering zone from primary activity area? 2
 * What percent of zone is adequately lit? 80%
 Does a street pass through or immediately adjacent to the zone? Y N
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? Y N
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant entrapment spots are in the zone? 1
 If there are entrapment spots, are they adjacent to pedestrian paths? Y N
 Is natural auditory ability notably diminished? Y N
 If YES, by what? _____

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? Y N NA
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, approximately what portion of the traffic is related to the use of the study area?
 most geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? Y N
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? Y N

Does this zone share substantially in the activity generated by the DERRA? Y N
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? Y N NA
 Does this zone border the edge of the study area? Y N
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? Y N
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? Y N
 If YES, are there substantial barriers to interaction with activity from external areas? Y N
 If YES, list barriers: _____

Description of zone:

Bounds: N BLDG E BLDG/FENCE S SIDEWALK W BLDG

Primary uses in area include: _____

Other notes:

- feels private /related to adj bldgs.
 - distant from prim. uses.

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 25
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 3+
 What percentage of the zone is surrounded by a psychological barrier? 0 #35
 What elements are present that contribute to the psychological barrier (circle)?
 Low walls/open gateways/light standards/runs of steps/foliage/ground surface/water/topographic changes/other street
 What percent of the zone seems to have little or no effective barrier? 75
 Rate relatively how well is the internal activity defined by physical elements. 54321
 What are the primary activities of the zone? sidewalk / bldg access
 Does the zone appear to exhibit a sense of private permanent ownership? Y/N

Rate the relative internal visibility. 54321
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 54321
 What blocks visibility into zone (circle)? Building/fencing/other structural/foliage
 How many windows offer view into zone? 10+
 How many blind corners are there in zone or entering zone from primary activity area? 5
 What percent of zone is adequately lit? 50
 Does a street pass through or immediately adjacent to the zone? Y
 If YES, rate the relative amount of natural observation from vehicle into zone. 54321
 Does pedestrian traffic pass through or adjacent to the zone? Y
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 54321
 Rate the relative amount of non-travel activity in the zone (not to/from car). 54321
 Rate the relative amount of activity in adjacent areas from which readily visible. 54321
 How many significant entrapment spots are in the zone? 4
 If there are entrapment spots, are they adjacent to pedestrian paths? Y
 Is natural auditory ability notably diminished? Y/N
 If YES, by what? cars

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? Y/N
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 54321
 If a street or streets pass through or adjacent to the zone, approximately what portion of the traffic is related to the use of the study area?
 most geared toward study area/about equivalent passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? Y/N
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? Y/N

Does this zone share substantially in the activity generated by the DERRA? Y/N
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? Y/N
 Does this zone border the edge of the study area? Y/N
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? Y/N
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? Y/N
 If YES, are there substantial barriers to interaction with activity from external areas? Y/N
 If YES, list barriers: street

Description of zone

Bounds: N bldg E street S street W etc.

Primary uses in area include: sidewalk / bldg access

Other notes:

- undefined area (poorly)
- pass through for dt office workers parked in OC.
- more visib w/ extron than OC.

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 0
 How many openings are there towards the primary activity area? 2
 How many openings are there away from the primary activity area? 0
 What percentage of the zone is surrounded by a psychological barrier? 50-100
 What elements are present that contribute to the psychological barrier? circle
 Low walls/open gateways/light standards/runs of steps/fencing/ground surface/water/topographic changes/other street
 What percent of the zone seems to have little or no effective barrier? 50
 Rate relatively how well is the internal activity defined by physical elements. 5 4 3 2 1
 What are the primary activities of the zone? sidewalk / grassy
 Does the zone appear to exhibit a sense of private permanent ownership? Y

Rate the relative internal visibility. 5 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 1
 What blocks visibility into zone (circle)? Buildings/fencing/other structures/foliage
 How many windows offer view into zone? 0
 How many blind corners are there in zone or entering zone from primary activity area? 1
 * What percent of zone is adequately lit? 50
 Does a street pass through or immediately adjacent to the zone? Y
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? Y
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (act to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant entrapment spots are in the zone? 0
 If there are entrapment spots, are they adjacent to pedestrian paths? Y N
 Is natural auditory ability notably diminished? Y N
 If YES, by what? car

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? Y N
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to this zone, approximately what portion of the traffic is related to the use of the study area?
 most geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? Y N
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? Y N

Does this zone share substantially in the activity generated by the DEIRA? Y N
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? Y N
 Does this zone border the edge of the study area? Y N
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? Y N
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? Y N
 If YES, are there substantial barriers to interaction with activity from external areas? Y N
 If YES, list barriers: _____

Description of zone:
 Bounds: N foliage E street S street W street
 Primary uses in area include: sidewalk
 Other notes:
 - undefined space
 - very visible from Summit Hill westbound.
 - more visibility w/ outside than in

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 40
 How many openings are there towards the primary activity area? 2
 How many openings are there away from the primary activity area? 2
 What percentage of the zone is surrounded by a psychological barrier? 50
 What elements are present that contribute to the psychological barrier (circle)?
 Low walls/open gateways/light standards/runs of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 10
 Rate relatively how well is the internal activity defined by physical elements. 3 4 3 2 1
 What are the primary activities of the zone? parking / bldg access
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 3 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 1
 What blocks visibility into zone (circle)? Buildings/fencing/other structures/foliage
 How many windows offer view into zone? 25+
 How many blind corners are there in zone or entering zone from primary activity area? 5
 * What percent of zone is adequately lit? 70%
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant entrapment spots are in the zone? 1
 If there are entrapment spots, are they adjacent to pedestrian paths? YN
 Is natural auditory ability notably diminished? YN
 If YES, by what? _____

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, approximately what portion of the traffic is related to the use of the study area?
 most geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers: Streets (gray & SH)

Description of zone:
 Bounds: N RIDGS/alley E drive/oth zone S trees W drive/oth zone
 Primary uses in area include: parking / bldg access
 Other notes:
 * -not busy evening
 -dist from main area
 - little connectivity

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 95
 How many openings are there towards the primary activity area? 2 (far away)
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 5
 What elements are present that contribute to the psychological barrier (circle)?
 Low wall, fence, gateways, high standards/runs of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 0
 Rate relatively how well is the internal activity defined by physical elements. 5 4 3 2 1
 What are the primary activities of the zone? alley
 Does the zone appear to exhibit a sense of private permanent ownership? Y(N)

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Rate the relative internal visibility. 5 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 1
 What blocks visibility into zone (circle)? Buildings/fencing/other structures/foliage
 How many windows offer view into zone? 0
 How many blind corners are there in zone or entering zone from primary activity area? 6
 What percent of zone is adequately lit? 100%
 Does a street pass through or immediately adjacent to the zone? Y(N)
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? Y(N)
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 5 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant entrapment spots are in the zone? 5+
 If there are entrapment spots, are they adjacent to pedestrian paths? Y(N)
 Is natural auditory ability notably diminished? Y(N)
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? Y(N) N/A
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, assuming what portion of the traffic is related to the use of the study area?
 most geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? Y(N)
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sound? Y(N)

Does this zone share substantially in the activity generated by the DERRA? Y(N)
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? Y(N)
 Does this zone border the edge of the study area? Y(N)
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? Y(N)
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? Y(N)
 If YES, are there substantial barriers to interaction with activity from external areas? Y(N)
 If YES, list barriers:

Description of zone:
 Bounds: N Zone/bldg edge E Bldgs S pking lot/zone W Bldgs/fence
 Primary uses in area include: alley
 Other notes:
 -virtually unused
 -very poorly maintained

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 95
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 5
 What elements are present that contribute to the psychological barrier (circle)?
 Low walls/open gateways/light standards/runs of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 5
 Rate relatively how well is the internal activity defined by physical elements. 5 4 3 2 1
 What are the primary activities of the zone? alley/ped access to underground
 Does the zone appear to exhibit a sense of private permanent ownership? YN

Rate the relative internal visibility. 5 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 5 4 3 2 1
 What blocks visibility into zone (circle)? Building/fencing/other structures/foliage
 How many windows offer view into zone? 1
 How many blind corners are there in zone or entering zone from primary activity area? 2 +
 * What percent of zone is adequately lit? 90%
 Does a street pass through or immediately adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from vehicle into zone. 5 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? YN
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. (4) 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 5 4 3 2 1
 How many significant entrapment spots are in the zone? 75 (9)
 If there are entrapment spots, are they adjacent to pedestrian paths? YN
 Is natural auditory ability notably diminished? YN
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? YN
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, seemingly what portion of the traffic is related to the use of the study area?
most geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? YN
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearance or sounds? YN

Does this zone share substantially in the activity generated by the DERRA? YN
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? YN
 Does this zone border the edge of the study area? YN
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? YN
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? YN
 If YES, are there substantial barriers to interaction with activity from external areas? YN
 If YES, list barriers:

Description of zone:
 Bounds: N JACKSON RAMP E BLDG other zone/
SEE Bldg edge W Bldg
 Primary uses in area include: alley/ped access
 Other notes:
 - dark/damp yet internally visible
 - busy at times.

Appendix 1: (continued) Zone Analysis Sheets (continued on next page).

Zone Analysis Sheet

What percent of the zone is surrounded by a physical barrier? 50
 How many openings are there towards the primary activity area? 1
 How many openings are there away from the primary activity area? 1
 What percentage of the zone is surrounded by a psychological barrier? 0
 What elements are present that contribute to the psychological barrier (circle)?
 Low walls/open gateways/light standards/runs of steps/foliage/ground surface/water/topographic changes/other
 What percent of the zone seems to have little or no effective barrier? 50
 Rate relatively how well is the internal activity defined by physical elements? 3 4 3 2 1
 What are the primary activities of the zone? sidewalk / street parking
 Does the zone appear to exhibit a sense of private permanent ownership? Y N

Rate the relative internal visibility. 3 4 3 2 1
 Rate the relative visibility into zone from areas related to the primary activity of the study area. 3 4 3 2 1
 What blocks visibility into zone (circle)? Building/fencing/other structures/foliage
 How many windows offer view into zone? 50+
 How many blind corners are there in zone or entering zone from primary activity area? 2
 What percent of zone is adequately lit? 50
 Does a street pass through or immediately adjacent to the zone? Y N
 If YES, rate the relative amount of natural observation from vehicle into zone. 3 4 3 2 1
 Does pedestrian traffic pass through or adjacent to the zone? Y N
 If YES, rate the relative amount of natural observation from the pedestrian path into the zone. 3 4 3 2 1
 Rate the relative amount of non-travel activity in the zone (not to/from car). 5 4 3 2 1
 Rate the relative amount of activity in adjacent areas from which readily visible. 3 4 3 2 1
 How many significant extrapment spots are in the zone? 0
 If there are extrapment spots, are they adjacent to pedestrian paths? Y N
 Is natural auditory ability notably diminished? Y N
 If YES, by what?

If this zone forms part of an entrance to the study area, is there a notable gateway between the study area and the external area? Y N
 Rate the relative degree to which the built environment of this zone matches the general image of the entire study area. 5 4 3 2 1
 If a street or streets pass through or adjacent to the zone, assuming what portion of the traffic is related to the use of the study area?
 most geared toward study area/about equal/most passes through
 Do buildings and their features in this zone appear substantially different than those in areas adjacent to the study area? Y N
 Does it appear that adjacent buildings or businesses exert notable influence on adjacent areas within the zone as a result of individualized appearances or sounds? Y N

Does this zone share substantially in the activity generated by the DERRA? Y N
 If there are building entrances in this zone, do they face immediately onto heavily trafficked paths, vehicular or pedestrian? Y N
 Does this zone border the edge of the study area? Y N
 If YES, does it appear that activity in the zone is notably influenced by areas external to the study area? Y N
 If YES, is the external area immediately adjacent to the zone readily visible from within the zone? Y N
 If YES, are there substantial barriers to interaction with activity from external areas? Y N
 If YES, list barriers: Building

Description of zone:
 Bounds: N St / Street E blg S at W Street
 Primary uses in area include: sidewalk / access to blg / parking
 Other notes:

more - more daytime activity
 - not much nighttime except pkgs for Jackson

Appendix 1: (continued) Zone Analysis Sheets.

Vita

Dan Johnson was born in October 1969 in Cincinnati, Ohio. He was raised in Wyoming, a suburb of Cincinnati and attended the public schools there until 1988. He attended Miami University in Oxford, Ohio for two years but received his Bachelor of Arts in Geography from the University of Florida in August 1992. He worked as a professional cartographer for two years in Cincinnati before he matriculated at the Graduate School of Planning at the University of Tennessee, Knoxville in August 1995. He officially graduated in December of 1997.