

STREETS AS SOCIAL SPACES: EVALUATION OF THE GREEN LIGHT MIDTOWN
PROJECT, NEW YORK

by

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Abstract

This report evaluates the success of the Green Light for Midtown in New York in order to understand the factors that led to its success and thereby determine how social spaces can be created along streets and the initiatives that can be taken by other cities to create such spaces. It begins with a review of historical trends of urbanization that shifted the focus on streets from open spaces to transportation networks. The report attempts to answer a two-fold research question. Firstly, the Green Light for Midtown project in New York that attempted to reinvent the public space on Broadway and Times Square is evaluated in depth to examine the design elements that resulted in a thriving public space. This is done with the help of documents produced by the city and the concerned organizations as well as interviews with the officials in charge of the project. Analysis of the Green Light for Midtown illustrates certain elements that are essential for the design of social spaces along streets and bring the focus back on the pedestrians. Through the second part of the research question, the report attempts to determine the lessons that can be learnt from the New York example. The study reveals certain key elements for the creation of successful public spaces along streets in urban areas. The primary element is to have a political will that enable these changes to take place in the public realm. In addition, the area should be able to maintain a competitive edge in order to attract people and keep them coming back to the area. Finally, the regulations should be made more specific to the context of the area so that the identity of the place can be maintained effectively.

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Dedication

This report is dedicated to my family and friends.

Chapter 1 - INTRODUCTION

With the rapid urbanization, automobiles have taken a prominent position in cities. The commuting time has increased dramatically; and along with the fast pace of city life, the opportunities for taking the time to enjoy public open spaces in cities are minimal. Open spaces in cities have usually been perceived in terms of parks and playgrounds. However, cities have now recognized the need to reinvent streets as public spaces. Everyday activities such as a detour along the way home, a pause at a bench near the door or at a store window, waiting a few minutes to watch a street performance, provide opportunities for the development of spontaneous local contacts (Gehl, 1987). These simple activities spark a chain of events, making the entire street lively and consequently, inviting more people to join in.

As planners and designers today, we need to reflect back upon how the streets were initially conceived to how these spaces are understood today. It is thus essential to have a comprehensive set of design goals that not only treat streets as a means of conveyance for people but also as a space in itself for social activities (Moudon, 1987). Streets, as they are now, are largely uninviting and unsafe for pedestrians. Bringing out the social character of streets and sidewalks enables the creation of a positive image for the city as well as a more efficient usage of the space. “As the pressures of metropolitan growth and governance manifest themselves amidst the networks of accumulated regulations, the opportunity for a fresh approach has appeared” (Ben-Joseph, 2005, p. 167). This report will examine the evolution of design principles of streets with the help of projects in cities that are bringing about a change and principles and recommendations for reinventing streets as social public spaces. This objective will be achieved through an study of the Green Light for Midtown project in New York City. This particular project was based in Times Square which as a public space has had a cyclical development process. Through the years, it progressed from being a world class public space to a place choked by vehicles and pedestrians. This transformation allows us to witness and analyze how the urbanization of cities affects our perception and design of streets and thereby the notion of public open spaces in cities. New York City and particularly the Times Square district have been concerned with the state of the area for a long time. PlaNYC, a comprehensive vision for the City of New York put forth the intention to reinvent the public spaces of the city. Organizations like Times Square Alliance and Project for Public Spaces have worked tirelessly to increase

awareness and advocate for improvements in Times Square and its surrounding areas. As a result, the groundwork for the Green Light for Midtown project was laid by a number of other projects; New York Streets Renaissance, Re-vitalization of Duffy Square and the expansion of sidewalks. All of these projects culminated in the Green Light for Midtown project implemented by the New York City Department of Transportation. The primary objective of the project was to alleviate the movement and safety of pedestrians and motorists (NYC Department of Transportation, 2010). Only by resolving these primary issues could the city reinforce the identity of Times Square and enable different activities and uses to exist cohesively. This study brought out the importance of dealing with cities on a human scale. Analysis of the case study and interviews with officials from NYC DOT and Project for Public Spaces also revealed how the streets can be re-invented as public spaces and the necessary principles for the same. The conclusions of this study also reveal what actions can be taken by other cities to utilize street space effectively and create thriving open public spaces.

PURPOSE AND FORMAT

The purpose of this report is to study the Green Light for Midtown project in order to understand what factors make it a success and thereby, determine how streets can be re-designed as public spaces. This research has been conducted in an effort to answer this primary question: How can streets be designed and projected as urban social places rather than just commuter routes? This was made possible by first analyzing the sub question; what made the Green Light for Midtown project in New York a success. Preliminary research indicated that certain cities were taking initiatives to bring about the paradigm shift and a study of the planning process of one of them would be the best method of garnering an understanding about such developments and the effects they have. After a review, the programs in New York were established to be the most appropriate project to serve as a case study.

A study of current programs and in particular, the Green Light for Midtown initiative in New York was used to examine what New York City has done to recreate streets and sidewalks as social spaces while simultaneously resolving issues of mobility and safety and maintaining the urban fabric. First, a review of reports documenting the project as well as its precedents was conducted to gather information about the actual case. This provided information about the changes that were made as part of the project as well as the resulting opinions and perceptions of

people through documented surveys. This was important in order to assess how the changes make a difference in the way people use and interact in the space. Further, interviews were conducted with officials from New York City Department of Transportation as well as Project for Public Spaces who played an active role in the project to identify important elements for the design of streets as social spaces and the requirements for a successful public space.

The data from the case study and the interviews were analyzed to answer the two research questions. First, the elements that made the Green Light for Midtown project a success were established. One of the primary reasons for its success was that the project was able to ease the congestion by simplifying the transportation network and thus, making travel in the area easier. Expansion of pedestrian pathways and effective utilization of median islands allowed for various other activities apart from walking taking place. This reinforced the dynamism that Times Square is known for and as the surveys conducted by TSA (Times Square Alliance) and NYC DOT indicated, brought the feeling of New York back into Times Square. As per the surveys conducted after the implementation of the project, 97 percent of the users agreed that the newly created plazas made Times Square more attractive as a public space by providing spaces to sit, relax while simultaneously allowing other spontaneous activities to take place (NYC Department of Transportation, 2010). The success of the project led to the analysis of what elements are necessary for the design of successful public spaces along streets. The study divulged certain key elements; density and diversity. A diverse mix of uses creates higher potential for interaction and communication between people and also provides cities with innovative ways to constantly attract people into the area. The study also revealed the need for more flexible urban design regulations in cities that are suitable to the identity and individual context of a place.

Through the following chapters, how New York effectively reinvented its streets and what lessons it provides us with will be dealt with in greater detail. The final outcome is a series of conclusions and recommendations as to the nature of urban public spaces and how other cities can emulate the example of New York and reinvent their streets.

Chapter 2 - LITERATURE REVIEW

“Essentially cities are not dwellings and pavings and parks, offices, warehouses, markets and manufactories; they are concentrations of people who insist on congregating, partly for company, partly for protection (many cities were fortresses before they were cities, Detroit for one), partly for work, partly for amusement and partly for anonymity” (Copper-Hewitt Museum, 1981, p. 14). History has revealed a number of factors that have led to urbanization and subsequently shaped the urban fabric of cities. The progression of the means of travel from horse drawn carriages; wagons and finally to the automobile led the change from narrow streets to the broad avenues that exist today (Ben-Joseph, 2005, p. 39). From, 1920 onwards, the current road systems were inadequate to cater to almost 10 million automobiles that were on the roads at the time (Ben-Joseph, 2005, p. 39). Amidst the chaotic and transformative atmosphere of the cities, a new spatial order emerged that sought to control growth, “through employment of expert knowledge, state regulatory mechanisms, and public-welfare provisions (Ben-Joseph, 2005, p. 45). This resulted in a long historical trend of planning and regulatory mechanisms.

The growth in cities through the ages as well as the changes in society has led to a reassessment of the goals and objectives of urban design and the vision. “The expanded application of alternative development regulations and improved development outcomes, such as new urbanism, reflect a kind of societal learning that has resulted from the variety of failures associated with conventional standards” (Ben-Joseph, 2005, p. xiv). There has been a move to recapture the human dimensions in cities, reducing the dependence on automobiles and in so doing facilitate communication between people. The intent of this study is to understand how streets in cities can serve as social spaces instead of just functional elements.

“Pioneering social workers and psychologists of the Gilded Age- men and women like Jane Addams, Jacob Riis, and W.I.Thomas- argued that outdoor recreation areas were a critical need in crowded industrial cities of the 1980s” (Copper-Hewitt Museum, 1981, p. 15). Parks and open spaces in cities satisfy the basic needs of diverse stimuli; energy, social relationships and security, in humans who spend a majority of their daily lives in the “built environment” (Copper-Hewitt Museum, 1981, p. 15).

Open spaces in urban areas were used not just for community meetings but also for religious, commercial or governmental purposes (Copper-Hewitt Museum, 1981, p. 7). Public

spaces like the Greek Agoras and Roman Forums illustrated that public space could not be designed for one activity alone. In the book, *Urban Open Space*, urban open space is classified into three types; “Streets and sidewalks that are conceived mainly in terms of access, vacant land not yet developed but used informally by the public and finally parks, playgrounds maintained by the public tax dollars” (Copper-Hewitt Museum, 1981). Streets have always been the most plentiful public space available. *Public Streets for Public Use* defines streets as, “the more or less narrow, linear spaces lined by buildings found in settlements, and used for circulation and, sometimes, other activities” (Moudon, 1987). Activities on streets are generally perceived in terms of demonstrations, parades, sidewalk vendors and outdoor performers. They are democratic centers of cities. “The experience of a district or even an entire city can be encapsulated or synthesized into the particular experience of a single street (or collection of streets), and the activity, buildings, and other sights along it” (Copper-Hewitt Museum, 1981).

In order to create social spaces along streets, an understanding of how space in a street is structured is essential. Street space can be conceptualized in two ways; “as individual streets similar to a cloth stretched between buildings or as a network of streets that irrigate the city and its different parts” (Moudon, 1987). It is the second definition of street space that is essential as it “leads to an understanding of their temporal dimensions, linking urban activities in time as well as in space” (Moudon, 1987).

Many cities are now realizing the importance of utilizing the open space effectively while also dealing with issues of vehicular and pedestrian conflicts. Congestion in our cities is not just a result of the increasing density of people and vehicles but rather the conflicting requirements of pedestrians, cars and buses (Copper-Hewitt Museum, 1981, p. 83). “Vehicles, which typically carry slightly over 50 percent of a street’s traveler’s, are given 66-75 percent of the street space” (Copper-Hewitt Museum, 1981, p. 83). Another factor that creates sidewalk congestion is the design of the street, sidewalk and its relation to the buildings. Activities on the sidewalks are in constant conflict with each other; for instance, people who wish to enter the stores or window shop are discouraged to do so by people standing in the alcoves of buildings either talking or waiting (Copper-Hewitt Museum, 1981, p. 83). These conflicts create tension between people and do not give enough freedom for each individual to fully enjoy the space. Obstructions and conflicts effectively eliminate any opportunity for conversation and instead create an atmosphere of hostility. Improving the traffic flow between pedestrians and automobiles will create a

cohesive environment and create a social space instead. However, now a day's streets and sidewalks are perceived as mere commuter spaces, a means of getting from one destination to the other. The current road system does not encourage walking or even biking. The cityscapes are dominated by heavily trafficked boulevards and it is not possible to make them disappear (Margaret Crawford, 2008). Instead, it is essential to work with them to create an interconnected environment. This is one of the key elements of urban planning today and this is the first step towards reestablishing streets as urban social spaces.

Jane Jacobs in her ground breaking book, *The Death and Life of Great American Cities* introduced innovative concepts of city planning. The underlying basis of the study is based upon Jacobs assertion that, "Streets in cities serve many purposes besides carrying vehicles, and the city sidewalks serve many purposes besides carrying pedestrians" (Jacobs, 1989). Stores and restaurants along the street give people reason to travel along the sidewalks and streets and thus become more than sheer routes to someplace. "The activity generated by people on errands, or people aiming for food or drink, is itself an attraction to still other people" (Jacobs, 1989). This is what creates a community of people on the streets and sidewalks. Jacobs states that in order to create new uses or activities along the street, it is important to understand the character of the neighborhood and the intended use of the space. The size of the



Figure 2.1: Usage of sidewalk space

Source: (Bartnett, 2011)

neighborhood, the existing use of the space and the demography of people using the space would be an important consideration while attempting to create new spaces. Jacobs also proposes that there is a relationship between the density of an area and the diversity present in an area (Jacobs, 1989). As more people use the streets and sidewalks, the possibilities of engaging people more consciously in the happenings of the streets and form a community of users.

In *Livable Streets*, Donald Appleyard, further explores this relationship between density and diversity by relating the intensity of traffic on the streets with methods to make the streets more safe and livable (Appleyard, 1981). Similar to the ideas of Jane Jacobs, Appleyard states that the street has other functions apart from increasing mobility and safety for people, having

personal and social meaning attached to them (Appleyard, 1981). For instance, in certain residential areas, children play out in the streets and it thus forms a crucial space of freedom and security for them (Appleyard, 1981). Appleyard categorizes streets as Light, Medium and Heavy Streets based on traffic volumes (Appleyard, 1981). He states that the number of friends and acquaintances decline with the increase in traffic volumes. Due to this barrier created by traffic, the communication between people reduces, thus impacting the feeling of community (Appleyard, 1981).. He states that streets should be places where community life is possible. Streets should be a space where people are able to stay outside, facilitating conversation and thus, reduce the number of strangers (Appleyard, 1981). “Street communities can not only reduce the anomie of urban life, they can encourage street activities, keep the street clean, engage in common actions and care for the detailed design of the street, the sidewalks, benches, street furniture and play places” (Appleyard, 1981). Appleyard refers to Jacobs’s arguments for “retaining mixed uses based upon a sense of community provided by shopkeepers, the convenience and the diversity of interest that such uses bring to a street” (Appleyard, 1981).

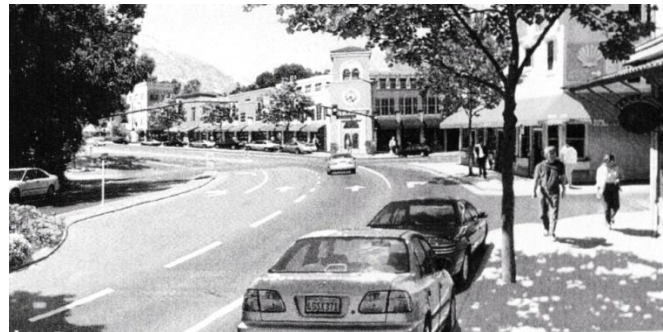


Figure 2.2: Acquaintance in relation to street traffic

Source: (Barnett, 2003)

Margaret Crawford in her book, *Everyday Urbanism* states that due to this diversity of uses, the spaces contain constantly shifting meanings (Crawford, 2008). Thus, the designers need to take into account this ‘temporal’ character of urban spaces. Margaret Crawford first introduced the concept of ‘Everyday Urbanism’; as spaces like streets and sidewalks are independent of the dictates of built form, they become venues for the expression of new meanings through the individuals and groups who appropriate the spaces for their own purposes (Crawford, 2008). Uses and activities vary according to the seasons, vanishing in winter and born again in spring. Improving everyday pedestrian lives entail installing a diversity of features and activities that people can be used on a regular basis. Common street objects such as bus shelters, drinking fountains, mailboxes, pay phones, newspaper vending machines give pedestrians a richer program of possible activities for a sidewalk sojourn and strengthen bond between strollers and the streetscape (Crawford, 2008).

In order for such activities to start and for more and more people to join in, all it takes is at least one person to be involved in it.

The use of streets is more of a choice than a necessity. In Whyte's study of New York spaces, he found that the likelihood of an exchange between people was more where the tendency to pass other people was greater (Whyte, 1980). This can sometimes be hindered in a space with an overcrowding of pedestrians or vehicles in inadequate street conditions relating to Appleyard's theory. There is not enough space or opportunity to facilitate interaction. This creates a barrier between people as it becomes increasingly difficult to recognize people and develop any form of contact with them. Successful spaces need some external stimuli to create connections between strangers like music or sculpture (Whyte, 1980). He also stresses that most of the outdoor spaces are designed for some ideal climate, always sunny and warm which is not realized and hence, this is where a lot of the urban spaces fail (Whyte, 1980). During the study of spaces in New York, suggestions were made to the New York City Planning Department for change in the zoning laws (Whyte, 1980). The proposal included making basic food facilities a requirement for all public parks and plazas (Whyte, 1980).



Figure 2.3: Activities in public spaces

Source: (Barnett, 2003)

According to Jan Gehl, public open spaces can be successful provided when they fit in with the social and physical ecology of a place (Gehl as cited in Makovsky, 2002). His work in Copenhagen is testament to this theory. Although the city inherited a narrow medieval street grid, Jan Gehl's work in the city has made it one of the best pedestrian cities in the world (Makovsky, 2002). Jan Gehl pioneered the method of study, problem identification, and generation of alternatives and methods of development (Makovsky, 2002). The Copenhagen experience illustrates the gradual process that is required to make a change in the urban spaces; armed with concrete studies, the city laid the groundwork for the widespread adoption of the same (Makovsky, 2002). Some of the steps that Copenhagen took to create more people friendly spaces include converting traditional main streets to pedestrian thoroughfares, the parking lots were turned to public squares by reducing the

traffic and parking, the population in the city center was increased in order to reduce the dependence on cars and enhance a feeling of safety (Makovsky, 2002). Dealing with seasonal changes is one of the most important challenges in the design of public spaces (Lang, 1994). In the summer, the outdoor cafes, public squares and street performers attract thousands of people. And in the winter, skating rinks, heated benches and gaslight theatres on street corners make the space enjoyable (Makovsky, 2002).



Figure 2.4: Activities in public spaces based on seasons

Source: Google Images

Social norms play an important role in the design of spaces and they must be considered while designing public spaces instead of having a “one size fits all” scenarios (Ben-Joseph, 2005, p. 24). “Indeed, social norms become even more important as technology becomes ubiquitous, economies globalize, and development is standardized” (Ben-Joseph, 2005, p. 24). The building of human settlements is steered by the societal norms regarding behavior and organization of communal spaces. Lang asserts that even though the city growth appears to be piecemeal and largely uncoordinated, it is usually governed by certain laws and nature of the market (Lang, 1994). These laws guide individuals towards producing a desirable environment. With respect to the laws concerning the design of public social spaces in urban areas, architects, planners and local business owners all play a pivotal role in the process. Each of the groups sees the built environment in terms of their own attitudes and the cost and benefits and most importantly the public interest. This coordination takes place by setting the design policies and the guidelines in place. There are two methods of conceiving public spaces; following impersonal regulations and procedures to create public spaces or allowing the environment to naturally evolve into lively open spaces (Moudon, 1987). Land use planning and zoning laws are ordered mechanisms for regulating growth and change within a city. “Although streetscape design should be seen as in

integral part of all decisions affecting the urban environment, in practice it is too often conceived as a task wholly separate from, and less important than, issues such as building design, land use zoning, or vehicular traffic circulation” (Moudon, 1987). It is essential to have a comprehensive set of urban design goals for the street that not only treat streets as “paths to transport goods and people” but rather as a potential space for human activity and “as an organizing element in the city” (Moudon, 1987). Cities should strive for streetscape design goals that address form, amenity, use and character apart from circulation.

CASE STUDY

New York City launched the ‘Green Light for Midtown’ project in 2009 to transform commuter spaces like streets to public spaces. The project area was located on Broadway along Times Square and Herald Square and included Broadway in Times Square, 47th to 42nd Streets and Herald Square, 35th to 33rd Streets, as illustrated in Figure 2.1 (Transportation, 2010). The scope of the project included changes in the traffic system and improvement of conditions along the sidewalk to make it more walkable and livable (Transportation, 2010). The project area consists of some well-known public spaces like Times Square, Herald Square and Columbus Circle. These spaces attract thousands of visitor’s every day, tourists, residents as well as workers. As a result, the sidewalks and streets are excessively crowded. The project was an effort to convert the important public spaces in the city from vehicular to pedestrian usage (Transportation, 2010). The aim of the “green light for midtown” project was to increase mobility and safety while also creating a better place to “live, work and visit” (Transportation, 2010). The following are the essential documents related to the case that have been used to analyze it further for the purpose of the study.



Figure 2.5: Green Light for Midtown Project Area

Source: Green Light for Midtown Evaluation Report

The Green Light for Midtown Evaluation Report is produced by the New York City Department of Transportation. The report outlines the problems, the studies and the solutions that were implemented. The objective of the project was to enhance the city by providing improved mobility, a comfortable walking environment, inviting streetscapes and pleasant spaces for workers, residents, shoppers and visitors to rest and congregate. The other goals of the project were to simplify intersections, remove conflicts between pedestrians and automobiles and provide additional traffic and pedestrian capacity where needed. As per the current conditions, pedestrians outnumber all other forms of traffic in the downtown area. Due to this high number and a lack of effective utilization of space available, pedestrians spill out onto the roadway endangering their lives. The project created spaces from where one could enjoy the space or catch up with friends. The report also lists examples of how attractive urban streetscape and urban public space improvements can enhance local businesses like retail and real estate sectors.

The report states that while it is too early to determine whether the Green Light for Midtown Project has had a significantly positive local economic impact due to the global meltdown in the economy; factors do suggest that the public space improvements has created public value. The new spaces have attracted more foot traffic to Times Square and Herald Square areas. It is a combination of preexisting demand that could not be met by the sidewalks before the project and the new demand created by the new plaza spaces. The proportion and types of pedestrian activities in which people engaged in Times and Herald Square were analyzed to provide a measure of whether people are spending time in a place as opposed to merely passing through. The mix of activities in the public spaces has shifted as well. For most blocks surveyed, the overall increase in the number of people was comprised of a sharp increase in the number of people sitting in the public space (Transportation, 2010). More people were observed eating, reading and taking photographs. These findings generally agree with the findings of TSA, Times Square Alliance, in a new survey about changes in behavior with positive economic implications related to the new public areas. A substantial portion of respondents to TSA surveyors said that they were going out in the Times Square area after work (Transportation, 2010).

The other report produced in connection with the project is the Times Square: The Second Century Workshop Brief (Re-imagining the Bowtie) by TSA (Times Square Alliance). TSA, Times Square Alliance, formerly known as the Times Square Business Improvement District founded in 1992, worked to improve and promote Times Square so that it retains the

energy, edge, and distinctiveness that have made it an icon for entertainment, culture, and urban life for almost a century (Times Square Alliance and Project for Public Spaces, 2008). TSA conducted an intensive workshop to generate ideas for the planning and design of the Times Square Bowtie and published a report. The workshop focused on enriching the pedestrian in the Bowtie. In December 2006, Mayor Bloomberg announced plaNYC, a long term planning effort that will guide New York City's growth into the 21st century (Times Square Alliance and Project for Public Spaces, 2008). It is also stated that the city has committed public funds towards reconstructing Times Square. The objective of the workshops was to create innovative alternatives to the Department of Transportation and add to their efforts at re-envisioning the area. The architects, designers, urban planners, artists, officials and thinkers who participated in the workshop developed a set of guidelines for design interventions which also formed the basis for NYDOT to implement the project. The principles are as stated:

- “Balance the different elements that give Times Square its energy
- Recognize the diversity of who and what is here as well as the layers of history
- Create places where people can stop, meet, and observe
- Make Times Square a place to which New Yorkers want to come
- Look for opportunities to reinforce and recognize what is authentic, what is historic
- Allow for the exhibition of creativity, through distinctive design, public art, and small-scale performances
- Re-think the relationships between pedestrian and vehicular spaces
- Think of Times Square as an ever-changing theater set, with both fixed and changing elements
- Look for ways to make the horizontal plan as exciting and dynamic as the vertical
- Keep it simple and don't overdesign” (Times Square Alliance and Project for Public Spaces, 2008).

In 2006, Project for Public Spaces also underwent a similar analysis to outline the specific planning and design issues facing Times Square and the surrounding areas (Times Square Alliance and Project for Public Spaces, 2008). PPS in collaboration with TSA conducted a series of studies using time lapse filming, behavior mapping, and surveying to perform a

detailed site analysis (Times Square Alliance and Project for Public Spaces, 2008). In addition to the guidelines developed by TSA, they pointed out certain key areas of focus:

- “Movement and Circulation
- Creating the Times Square District
- Great ground floors
- Flexible and Multifunctional spaces
- Enhanced Pedestrian Circulation
- Creates a Unique, Authentic and Attractive Destination
- Surface Treatment
- Street Furniture” (Times Square Alliance and Project for Public Spaces, 2008).

TSA published another report ‘Problems and Possibilities’, which provides an account of the issues that need to be dealt within the Times Square district. Times Square’s pedestrian spaces are insufficient to handle the current demands (Times Square Alliance and Project for Public Spaces, 2008). Crowding produces padlock, a state of extreme sidewalk congestion creating pedestrian paralysis. Transit ridership is growing and planned commercial and residential development over the next 10-15 years will bring even more pedestrians (Times Square Alliance and Project for Public Spaces, 2008). The workshops conducted in 2003, tried to identify what is unique about Times Square as a public space and generate ideas about enhancing it. Recommendations to the NYC DOT were developed based upon the ideas of the people involved in the workshops. One of the quotes that effectively sum up the inspiration behind the project is that “One ultimately has to distinguish between what gets privileged, the automobile or the pedestrian and how you can engage people in some kind of activity that might have them having more contact than just that brief bumping into each other” (Times Square Alliance and Project for Public Spaces, 2008).

As is evident, there has been a resurgence of interest in physical planning where the dynamics of space are considered (Ben-Joseph, 2005, p. 174). New York has taken the initiative through a number of programs culminating in the Green Light for Midtown project. The project illustrated the importance of effectively utilizing space on the streets in order to create spaces for social activity. Through analysis of the studies, surveys and data from the project, this report aims to understand how streets can be designed as social spaces by analyzing the success of the Green Light for Midtown project. This objective will be achieved through a case study

methodology. “A case study is an exploration of a ‘bounded system’ of a case (or multiple cases) over time through detailed, in-depth data collection involving multiple sources of information rich in context” (Creswell, 1998). Creswell also illustrates the importance of setting the case within its physical, social, historical and/or economic context (Creswell, 1998). The multiple sources of information that will be used for the purposes of this study are documents and interviews. The data gathered will be organized and analyzed into the following structure; “the problem, the context, the issues and the lessons learned” (Creswell, 1998). The ultimate objective is to generate a series of essential elements that need to be in focus and the directions that need to be taken in the future for the design of social spaces along streets.

Chapter 3 - METHODOLOGY

Design of public spaces in urban areas has historical roots dating back more than a century but over the years it has been overshadowed by urbanization and the resulting dependence on automobiles. However, in recent times some cities are taking the initiative to revive the vitality of their public spaces and cater more for the needs for the pedestrians. The intent of this research is to determine the necessary factors for creating a successful public space in a highly urbanized area and what steps can be taken by other cities to move towards the same direction in the future. The research was initially defined within the following framework. What has been the role of streets within the arena of public spaces in cities? In contemporary times, how can we facilitate more social interaction along streets in order to effectively utilize the space?

To begin to understand the current perception of urban public space design, research was undertaken to examine how public spaces have evolved through the ages. A review of the literature revealed that there are different classes of open space in cities and streets are the most used space available. Studying how cities and the regulations that shape the city evolved helped to understand the transition today. History also reveals how the urbanization of cities and the inception of the automobile evolved as the primary mode of transportation and consequently transformed the design and conception of streets in cities.

A collection of books were reviewed to understand how streets can facilitate social interaction and how they fit into the urban fabric of the city. Research was first conducted as to how interactions between people are facilitated in social settings which were then related to the planning and design theories illustrated in *The Death and Life of Great American Cities* by Jane Jacobs. Further research divulged how the increase in population, vehicular traffic and progress in technology led to socially disconnected environments. Literature revealed the relationship between density and formation of social connections. Research also revealed how the traffic volumes on streets affect the number of friends and acquaintances that exist. Further research led to the examination of how people interact within these spaces through the pioneering studies of William H Whyte. Whyte's *The Social Life of Urban Spaces* illustrated how people use open public spaces in cities and the factors they are influenced by.

Through review of a number of sources, the initial research questions evolved to enable the use of a case study methodology. The purpose of the project was to study the Green Light for Midtown project in order to analyze what makes it a success and determine the essential elements needed for the design of public spaces on streets. NYC DOT measured the success of the project by conducting surveys that analyzed the impact of the changes made as a result of the Green Light for Midtown process. Although the results of the surveys were converted to more quantifiable variables, no defined threshold to measure the success of the changes was utilized. However, for the purposes of this study, the success of the project will be determined through the analysis of these changes as illustrated by the studies and surveys conducted by NYC DOT, PPS (Project for Public Spaces) and TSA (Times Square Alliance). The successful elements from the example of New York City will then be analyzed to understand how other cities can follow and better utilize their streets.

SELECTION OF THE CASE

The case selected for the purpose of the study is the ‘Green Light for Midtown’ project in New York. The objective of this project was to resolve the mobility and safety issues of the Broadway area in New York while establishing ‘streets as important social spaces’. The study of the New York case enables an understanding of the problems and issues of the area, the use and perception of the space and the process involved in establishing streets as social spaces. This direct information is more effective in communicating the information to other cities and communities in order to implement similar projects. Scott Campbell in his paper says that the choice of the case study determines the type of generalization that can be made from it (Campbell, 2003). Since the main objective of the report is to generate preliminary recommendations for use by other cities, it is important to understand whether this case can be used to make a larger generalization. New York is not a typical city as it cannot always be compared with other cities in the nation. Even though projects in more “typical cities are better as proxies to represent and replicate patterns of larger population, exceptional cases are more effective for challenging existing assumptions and pushing theory forward” (Campbell, 2003). Jane Jacobs in her book, ‘The Death and Life of Great American Cities’ also used an exceptional case study. “Her dense streets of Greenwich village are hardly typical of the American landscape, and perhaps this is exactly the power of the study: to use the exaggerated urbanism of Manhattan to

both accentuate what is possible and amplify what is being lost” (Campbell, 2003). Thus, for the purposes of this study; the project in New York will illustrate what other cities can achieve.

DATA COLLECTION METHODS

The primary methods for gaining a comprehensive picture of the case were document review and interviews. The data collection methods were aimed at obtaining a description of the problems and the processes of the ‘Green Light for Midtown’ project. The document review consisted of a study of the reports available online through the New York Department of Transportation, New York Department of City Planning, and People for Public Spaces and Times Square Alliance.

The document review was essential as the first step in the case study in order to understand the background of the case and the objectives of the implementing agency. The document review allowed for a broad coverage of data and also gave an official account of the project. The interviews then added to the information gained by the document analysis to present a coherent depiction of the case.

DOCUMENT REVIEW

The first step in understanding the case was to gain information about the issues and problems that existed and what led the need for the implementation of the project. The documents by the official agencies presented a comprehensive coverage of the condition of the area before the project was implemented. Review of documents leads us partly towards achieving the purpose of the study, which was to understand the planning process behind the success of the project. Document review consists of content analysis of the documents with two series of questions: descriptive and interpretive (Thomas & Brubaker, 2008). The descriptive analysis consists on focusing on what a document contains while interpretive questions focus on what those contents are likely to mean (Thomas & Brubaker, 2008). The documents were analyzed for information about the problems of the area, the studies conducted for the project, the main intent and objectives of the project, the usage of the space and the implementation measures used.

The following documents formed an essential part of this study. The *‘Green Light for Midtown’ Evaluation Report* and the *Problems and Possibilities: Re-Envisioning the Pedestrian*

Environment in Times Square by the New York Department of Transportation and the Times Square Alliance respectively illustrate the issues and problems that created the need for the implementation of the project and the effects the project had on the area. They also provide the traffic and pedestrian studies that were conducted to analyze the problems in more depth and the suggested improvements. The report by the Times Square Alliance also provides information about the views and perspective of the general public and how these were dealt with. *Times Square: The Second Century Workshop Brief (Re-imagining the Bowtie)* deals with providing the context of the area and a more detailed site analysis. The report also provides the suggested recommendations by the collaborators of the project. It includes details about sidewalks, crosswalks, streets, street furniture, street lighting and crowd control. These suggestions lead directly towards the achievement of the original objective. Analysis of documents by different sources helps in constructing the validity of the evidence as it relies on more than one source and addresses distinct explanations.

INTERVIEWS

The review of documents alone does not provide an extensive and in depth image of the project. Interviews provide an “in depth understanding of the respondent’s motives, pattern of reasoning and emotional reactions” (Thomas & Brubaker, 2008). Though the documents give a detailed description of the background, they do not illustrate the design principles that were used to implement the recommendations suggested. Interviews helped to get information about the reasoning behind the project that will enable the formulation of an outline of recommendations and preliminary direction for the future. Officials from the New York Department of Transportation, People for Public Spaces were interviewed.

As defined by Thomas and Brubaker, a converging question strategy will be used for the interviews (Thomas & Brubaker, 2008). The interview begins with broad open ended questions and then based upon the response; they are followed by more narrow focus questions (Thomas & Brubaker, 2008). The broad questions in the beginning help to bring forth the experiences of the interviewee and acquire a different perspective on the case. The main intent of the interview was to determine the principles behind the design of the Green Light for Midtown project as well as the elements required for creating social spaces along streets. The main questions to be asked of the interviewees were as follows:

- What was the main objective of the project?
- What were the foremost issues that created the need for the project?
- How did the idea of establishing streets as social spaces come about? And how would you define social spaces?
- What role do streets and sidewalks play in this regard?
- How was the planning process carried out?
 - What were the studies conducted?
 - What were the proposed solutions to deal with the problems?
 - Were there any other alternatives other than the one that was implemented?
- How was the best alternative selected? Was the public involved in the process? And if so, how?
- What were the specific planning interventions during the project?
- What were the particular regulations enacted as a result of the project?
- Were some of these regulations also implemented in other areas of the city?

DATA ANALYSIS

The multiple sources of data were used to construct a chronology of steps in the evolution of the case (Campbell, 2003). For the purposes of the study, the original research question was analyzed in two parts. First, the Green Light for Midtown project was evaluated and analyzed. A review of various documents helped to identify some of the recurring concerns of the area and the different organizations that have been advocating for them for a long time. This led to the need to understand the history of how Times Square evolved through the years in order to understand how its image as a public space and a transportation network has transformed with the growth in the city. This was an essential step in formulating the basis of the study. This objective was achieved through a review of several historical resources online. These sources confirmed that Broadway and Times Square have been affected by the same issues since New York City rapidly urbanized. Studying the history of the area also divulged details about how it was originally conceived to what in fact it has now become. This then led to the discovery of certain organizations in the area who had been working to improve Broadway and Times Square since the 1900s. A review of documents relating to the area brought out the various programs that were conceived of and implemented prior to the Green Light for Midtown project.

These projects and workshops conducted by Times Square Alliance, Project for Public Spaces and New York City Department of Transportation among others, to visualize Broadway and Times Square. The workshops by TSA and the advocacy campaign of Project for Public Spaces created a new vision for the area which departed from the current congested automobile dominated area to one where the focus was on pedestrians and activities and thus, allowing people to actually observe and experience the space. Thereby, enabling the recreation of Times Square as the public space it was intended to be. These programs also formed the basis of the Green Light for Midtown project that was implemented by the NYC DOT. The New York City Department of Transportation produced a detailed documentation of the evaluation of the Green Light for Midtown project which was reviewed to get information about the goals of the project and the specific changes that were implemented to accomplish the objectives. In order to analyze whether or not the project was a success, the surveys conducted by NYC DOT and TSA both prior and post implementation of the project examined people's perception about the project. This helped to gauge just how successful the Green Light for Midtown project was.

The next part of the research question dealt with the necessary for the creation of a successful public space along streets and what steps can be taken by other cities to create similar spaces. In order to understand what principles led to the success of the project, interviews were conducted with officials from the Pedestrian Projects division of the NYC DOT and Project for Public Spaces. The interviews generated information concerning the important elements for the design of a successful public space. The interviews also revealed information as to what factors are essential for any city to be able to emulate the example of New York City. Both direct interpretation of the documents and a more categorical aggregation of viewpoints obtained through interviews were analyzed. This analysis led to conclusions about what made this particular case successful and therefore, the elements that need to be in focus by other cities when attempting to create similar social spaces along streets and the directions that need to be taken in the future. This report will present a comprehensive description of the case and the lessons to be learnt from it.

Chapter 4 - CASE STUDY

HISTORY OF TIMES SQUARE

Broadway is a street in New York that is well known the world over for its remarkable theatre and tourism opportunities. The historical roots of the area take us back to the Commissioner's "Gridiron" Plan of 1811, refer to Figure 4.1. Even during the platting of the plan, Broadway was an important north south avenue in the city (www.faslanyc.blogspot.com). While Broadway follows the grid in most places, it diagonally slices across the grid in Midtown Manhattan (www.faslanyc.blogspot.com).

After Broadway was integrated into the grid, large six way intersections were created in places where Broadway crossed the North-South avenues in Midtown. This resulted in a number of significant public open spaces every ten blocks; Union Square at 14th Street, Madison Square Park at 23rd Street, Herald Square at 34th Street, Times Square at 46th Street, and Columbus Circle at 59th Street (www.faslanyc.blogspot.com).

Longacre Square, as Times Square was originally known began with just a few brownstones, as an up and coming neighborhood for the new and migrating middle class (www.timessquare.com). The increasing population in the area consequently led to high crime rates and an explosion of brothels. The area soon became a thriving red light district.



Figure 4.1: Commissioner's Plan of 1811

Source: www.library.cornell.edu

In 1895, Longacre Square had a new tenant, Oscar Hammerstein, a newly arrived immigrant who envisioned a plan for a complete entertainment complex (www.timessquare.com). “While Hammerstein was not the first to erect theatres in the district, his decidedly high class expansion did help a proliferation of new theatres on The Great White Way, so named for Broadway's constantly beckoning light show” (www.timessquare.com).

When the office of New York Times moved to 42nd street in 1904, the mayor of New York City, Mayor McClellan, changed the name of the square there from Longacre square to Times Square (www.timessquare.com). Coupled with the opening of the first subway line, Midtown and Broadway began to grow in importance during the 20th century (www.timessquare.com). “During this time Broadway had come to symbolize the American metropolis in many ways: it was the print media mecca during the newspaper age, the center of retail during department stores’ heyday and the setting for entertainment shows during the broadcast era” (www.timessquare.com). The growth in tourism at this time was another reason for Broadway and Times Square to shine. “It became synonymous with thronging crowds, seas of yellow taxis, and obscene and spectacular commercial displays delighting and offending all comers” (www.timessquare.com).

However, due to the depression, many of the theatres and businesses were forced to close down and thus; they needed some other form of entertainment to draw people into the area. Consequently, Times Square’s “era of vice” were born (www.timessquare.com). During the 1960’s and 1970’s, there were numerous X-rated movie houses, erotic bookstores and live nude shows. By 1975,

Times Square was described as a ‘sinkhole’ by many newspapers (www.timessquare.com).

However, during the 1980’s, the city recognized the need for a change in the area and reverse the trend of decline. “The post-World War One era was one of dramatic and rapid change- large scale urbanization, an explosion of jazz and automobiles, new evolutions of fashion, design, advertising and marketing”



Figure 4.2: Red Light District in New York

Source: <http://www.timessquare.com>

(www.timessquarenyc.org). In 1992, the Times Square Business Improvement District (now Times Square Alliance) began operations, with the goal of making Times Square clean, safe and welcoming. In 1993, crime in Times Square dropped by 23% (www.timessquarenyc.org). By the late 1900's, Times Square once again became known as the symbol for the City of New York.

CASE STUDY

BACKGROUND

Faced with the threats of overcrowding in both the transportation networks and in the public spaces, New York City has been losing its sense of distinctiveness and vibrancy for which it was known. In 2006, Mayor Bloomberg launched *PlaNYC 2030*, a comprehensive vision for the City of New York. *PlaNYC* outlined certain goals for transportation, open space, housing, brownfields, climate change and energy that the city desired to attain (City of New York, *PlaNYC Progress Report 2010*, 2010). *PlaNYC* was created with the aim to reduce congestion and restore the city's unique identity (Times Square Alliance & Project for Public Spaces, 2008, p. 1). *PlaNYC* outlined the vision for a "Re-Imagined Public Realm"; greener streets and an increase in the number of public spaces (City of New York, *PlaNYC Progress Report 2010*, 2010, p. 19). *PlaNYC* also delved into the issues and perceptions of pedestrians in New York to enable themselves to better design for their needs.

PlaNYC identified the main issues facing New York with a focus on transportation and open spaces. The streets and sidewalks in New York have become overcrowded and are unable to deal with the current demands of people (City of New York, *PlaNYC Progress Report 2010*, 2010). Sidewalks are teeming with people hastening towards their respective destinations. Thus, streets and sidewalks are seldom perceived of as anything other than "a means to an end" (City of New York, *PlaNYC Progress Report 2010*, 2010, p. 36). However, there are still people who yearn to spend time outdoors eating lunch, reading a book or simply observe people (City of New York, *PlaNYC Progress Report 2010*, 2010, p. 36). New York City thus recognized the need to enhance the pedestrian experience, encouraging more social activities along sidewalks and streets; making them pleasant than "narrow strips of concrete" (City of New York, *PlaNYC Progress Report 2010*, 2010, p. 36)

Based upon the vision illustrated in plaNYC, the New York City Department of Transportation (NYC DOT) announced the ‘Green Light for Midtown’ project in February 2009. NYC DOT aimed to “simultaneously improve mobility and safety in the midtown core, and ultimately to make the area a better place to live, work and visit” through traffic changes along Broadway” (NYC Department of Transportation, 2010, p. 4). The areas covered under the project included Broadway from Columbus Circle to 42nd street and from 35th to 26th street (NYC Department of Transportation, 2010, p. 1).

Times Square and Herald Square along Broadway have been the most recognized symbols for New York City. Though these spaces are largely believed to be among the most popular public spaces from around the world, they are avoided by most New Yorkers. Broadway is crowded with office workers, residents and tourists. Apart from being an important public space and tourist attraction, the Broadway route is also a vital sector of the city’s transportation network and creates, “complex multi-legged intersections with intensely active north-south avenues causing congestion and high crash rates compared to other intersections in Manhattan” (NYC Department of Transportation, 2010, p. 4). The streets and sidewalks are jam-packed with vehicles and pedestrians far exceeding their capacity; resulting in pedestrians being forced off the sidewalk. Through the project, NYC DOT aimed to create a “world class destination in tune with Broadway’s reputation” (NYC Department of Transportation, 2010, p. 4) The NYC DOT identified three primary issues to be dealt with through the project; improvement of mobility, safety and creation of an enhanced pedestrian experience.

Due to the complex intersections at Broadway, the ease of travel for motorists as well as pedestrians is greatly affected which results in a substantial amount of crashes. NYC DOT worked to “improve safety by eliminating long crossings and awkward traffic movements created by Broadway” (NYC Department of Transportation, 2010, p. 6). By alleviating the congested and therefore unsafe conditions, NYC DOT aimed to enrich and reinforce the identity of Times Square as a public space by creating “inviting streetscapes and pleasant places for workers, residents, shoppers and visitors to rest and congregate” (NYC Department of Transportation, 2010, p. 6).

The issues facing Times Square are long-standing and the ideas for reinventing Times Square and its surrounding areas have been around for a while. Since, 2003, Times Square Alliance (TSA) and Project for Public Spaces (PPS) have conducted workshops and studies in

the Times Square district. These programs have influenced the work done by NYC DOT on Broadway. Through their studies, these institutions have brought the dilemmas faced by the areas in the vicinity of Times Square to light. A brief exploration of these programs provides us with an insight into the Green Light for Midtown project implemented by NYC Department of Transportation.

PUBLIC SPACE IMPROVEMENTS IN MIDTOWN, MANHATTAN

Times Square Alliance, formerly known as the Times Square Business Improvement District was founded in 1992 to promote Times Square and help develop ideas for its improvement in order for it to retain its distinct identity and live up to its reputation through advocacy (Times Square Alliance & Project for Public Spaces, 2008, p. 1). Through the years, TSA recognized a need to re-envision Broadway and Times Square; an area that has become increasingly cluttered and unattractive through the years (Times Square Alliance & Project for Public Spaces, 2008, p. 1). In 2003, TSA along with Design Trust for Public Space held workshops, bringing together architects, designers, urban planners, artists and officials to visualize developments in the area (Times Square Alliance & Project for Public Spaces, 2008, p. 2). The primary focus of the workshop was to enhance the pedestrian experience in the area with the expectation that the efforts of the workshops will influence future endeavors of the city on Broadway (Times Square Alliance & Project for Public Spaces, 2008, p. 1). The site covered as part of the workshop was bounded by Broadway and 7th avenue between 42nd and 47th streets within the Times Square district (Times Square Alliance & Project for Public Spaces, 2008, p. 1).

The workshop identified ten key principles that should be the basis of any design or planning intervention in the area:

- “Balance the different elements that give Times Square its energy;
- Recognize the diversity of whom and what is here as well as the layers of history;
- Create places where people can stop, meet, and observe;
- Make Times Square a place to which New Yorkers want to come;
- Look for opportunities to reinforce and recognize what is authentic, what is historic;
- Allow for the exhibition of creativity, through distinctive design, public art, and small-scale performances;

- Re-think the relationships between pedestrian and vehicular spaces;
- Think of Times Square as an ever-changing theater set, with both fixed and changing elements;
- Look for ways to make the horizontal plan as exciting and dynamic as the vertical;
- Keep it simple and don't over design" (Times Square Alliance & Project for Public Spaces, 2008, p. 2)

In 2005, Project for Public Spaces launched the New York Streets Renaissance Campaign which was a grassroots program to transform the city's transportation policy and create more urban public spaces in cities through advocacy (www.pps.org). PPS developed a series of demonstration projects in New York City's most congested neighborhoods such as Times Square, Union Square, Meatpacking district and Columbus Avenue (www.pps.org). These projects were developed in collaboration with the Business Improvement Districts and local communities (www.pps.org).

To further the work done through the workshops and the New York Streets Renaissance Campaign, Times Square Alliance hired Project for Public Spaces during May 2006 to June 2007 in order to "better understand and reimagine how Times Square performs as a public space" (www.pps.org). PPS first conducted a site analysis of Times Square through techniques such as time lapse filming, behavior mapping, surveying and best practice research (Times Square Alliance & Project for Public Spaces, 2008, p. 2). The site analysis divulged certain concerns and potential spheres for improvement.

One of the most noticeable problems in Times Square is that of movement and circulation. Initial analysis of the pedestrian circulation in Times Square revealed that the sidewalks are crowded with vendors, tourists and office workers forcing people onto the busy intersections (Times Square Alliance & Project for Public Spaces, 2008, p. 2).

PPS illustrated a number of methods through which these problems could be resolved:

- "Encouraging crosswalk movement between sidewalk and median
- Encouraging crosswalks wherever possible
- Extending the curbs (neckdowns) on side streets, especially outbound legs to help increase sidewalk space at intersections" (Times Square Alliance & Project for Public Spaces, 2008, p. 2).

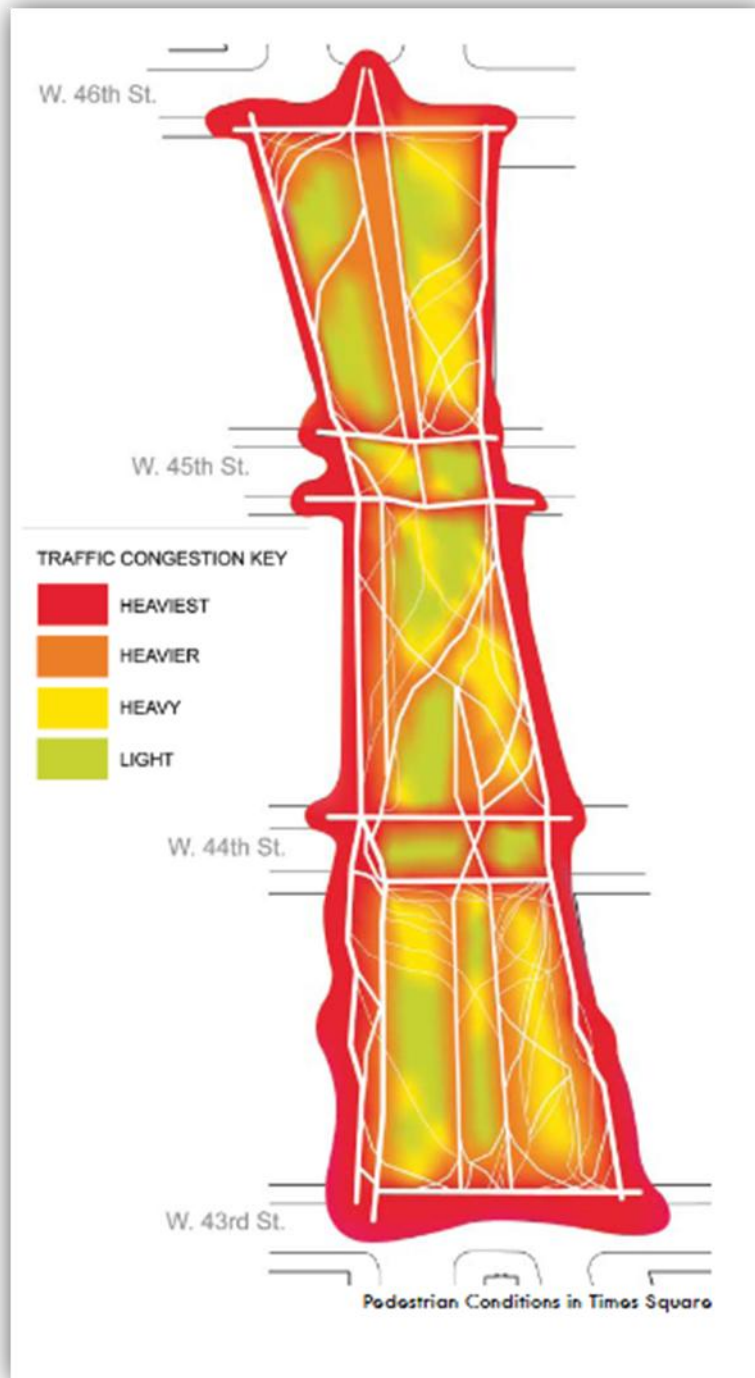


Figure 4.3: Pedestrian Conditions in Times Square

Source: Times Square: The Second Century Workshop Brief

It was also found that the sidewalks are not adequately designed to support the number of people who use them (Times Square Alliance & Project for Public Spaces, 2008, p. 2). PPS recognized the need for sidewalks and alternate spaces that allow tourists to take pictures while

finding their way around and at the same time allowing office workers and residents to get to their destination quickly (Times Square Alliance & Project for Public Spaces, 2008, p. 2).

Another important issue according to PPS was for Times Square, “to live up to its potential as a destination, better defining its limits and harnessing the richness that comes from its many users” (Times Square Alliance & Project for Public Spaces, 2008, p. 2). Broadway along Times and Herald Square is designed primarily for vehicular traffic and even though Times Square is host to a number of social events, “the urban design of Times Square is antagonistic to these uses, functioning first and foremost as a series of traffic islands” (Times Square Alliance & Project for Public Spaces, 2008, p. 2). The objective was to “maximize the functioning of the sidewalks, streets and center islands to accommodate activities ranging from planned events, to regular foot traffic, to spontaneous performance, to observation of these things” (Times Square Alliance & Project for Public Spaces, 2008, p. 3).

In order to effectively redesign Times Square, the entire Times Square district needed to be reinvented. “TSA approached the project with the intention of “exploring ways to infuse the rest of the district with the bowtie’s vitality” (Times Square Alliance & Project for Public Spaces, 2008, p. 2). One of the methods proposed was to structure street furniture at street corners, thus creating nodes of activity. This would create attractive spaces in the side streets and help draw the crowd out of Times Square, easing the congestion on the primary street networks. TSA developed a tactic to cater to the needs of different users on the streets and sidewalks by bringing the “faster-paced pedestrian traffic to the sidewalks and core side streets while using the center islands as gathering places for picture taking, meeting up and other slow paced activities” (Times Square Alliance & Project for Public Spaces, 2008, p. 3) This would create a balance for the different types of uses.

PPS also recommended improvement of the building facades as they are extremely unappealing and do not encourage people to hang around the sidewalks (Times Square Alliance & Project for Public Spaces, 2008, p. 2). “The 42nd Street Redevelopment in the 1900’s built off of the history of Times Square as the Great White Way and created regulations for signage and lights which have greatly invigorated the vertical plane of the square” (Times Square Alliance & Project for Public Spaces, 2008, p. 3). However, this aspect is the most difficult to deal with since the buildings are under private ownership and only a limited amount of intervention is possible (Times Square Alliance & Project for Public Spaces, 2008, p. 2).

GREEN LIGHT FOR MIDTOWN

The New York Streets Renaissance and the workshops held by TSA raised the level of awareness of public space issues and eventually led to a change of power in the NY Department of Transportation administration (www.pps.org). “The most direct accomplishment for PPS was to have Andy Wiley-Schwartz, a 10 year PPS veteran and director of the transportation program, hired as Assistant Commissioner of NYC DOT and put in charge of implementing the department’s public spaces initiatives and several of PPS’ demonstration projects” (www.pps.org).

Based on the recommendations by Project for Public Spaces and Times Square Alliance, NYC DOT launched the Green Light for Midtown project and directed their attention to Broadway from Columbus Circle to 42nd Street and from 35th Street to 26th Street. The first and most immediate problem that required a solution was that of pedestrian circulation and mobility. New York Department of Transportation worked “to enhance New York City by improving mobility, a comfortable walking environment, inviting streetscapes and pleasant places for workers, residents, shoppers and visitors to rest and congregate” (NYC Department of Transportation, 2010, p. 6)

STUDY PROCESS

The current trends and impacts of vehicular and pedestrian traffic within the site were analyzed through GPS data and field travel time surveys (NYC Department of Transportation, 2010, p. 6). The Taxi and Limousine Commission provides GPS data to DOT, who in turn compiles the data in order to provide a comprehensive look at the trips made in the area (NYC Department of Transportation, 2010, p. 6). “The taxi GPS data are an excellent measure of Manhattan travel speeds since they provide direct observation for travel times for actual trips in the area and reflect the routes chosen by taxi drivers and/or their passengers based on actual traffic conditions” (NYC Department of Transportation, 2010, p. 7). The data also includes the time delay due to congestion (NYC Department of Transportation, 2010, p. 7). After collecting information for all the 13,000 taxi cabs in the study area, it was found that taxis account for 45% of all vehicles in the study area (NYC Department of Transportation, 2010, p. 7). The field travel time surveys on the other hand, provide a measure of the actual amount of time taken for each trip. The travel time is calculated with the help of a driver staying in the main flow of traffic and

recording the time taken to start and end the trip at designated checkpoints (NYC Department of Transportation, 2010, p. 7). The field travel time survey was conducted in the month of March in 2009 to understand the travel patterns in the midtown area (NYC Department of Transportation, 2010, p. 8). The overcrowded streets and sidewalks also led to unsafe conditions for both vehicles and pedestrians. The need for dealing with safety in the Times Square district arose due to the fact that pedestrian crashes were up to 137% higher than at other avenues in the city (NYC Department of Transportation, 2010, p. 26). The safety indicators were measured using the NYPD crash data (NYC Department of Transportation, 2010, p. 26).

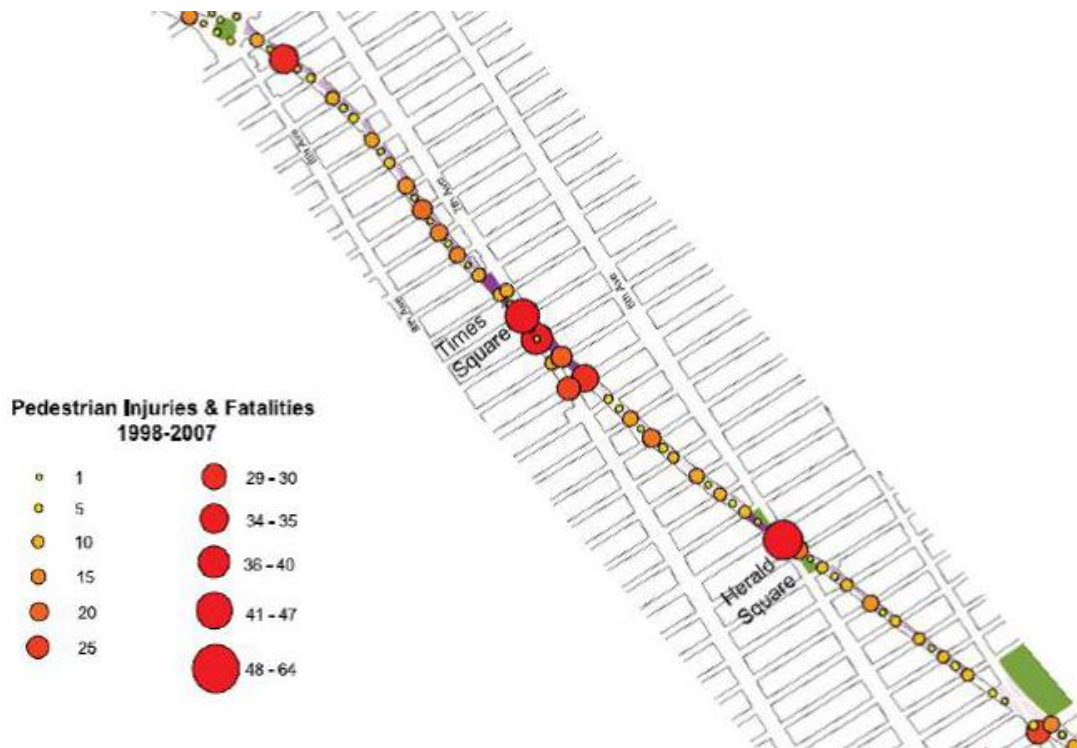


Figure 4.4: Rate of Pedestrian Conditions in Times Square

Source: Broadway Pilot Program: Improving Traffic Flow and Safety in the Heart of Midtown

Surveys were also conducted by both NY DOT and Times Square Alliance in order to understand the usage of the public space in Times Square. An NYC DOT survey conducted on Broadway in Midtown Manhattan indicated that, “only 40% of respondents ‘strongly agreed’ to the statement ‘I like being out on street here’ (NYC Department of Transportation, 2010, p. 34). The survey conducted by Times Square Alliance in 2008 also illustrated that over 90% of the respondents from the New York City and tri-state area stated that, “they typically try to avoid Times Square at certain times and that most people, “typically try to avoid Times Square at certain times and on certain days” (NYC Department of Transportation, 2010, p. 34). Another

survey conducted by Times Square Alliance illustrated that, “over-crowded streets were the number one reason why area employees would wish to work elsewhere” (NYC Department of Transportation, 2010, p. 34).



Figure 4.5: Identification of problems at Broadway

Source: Green Light for Midtown Evaluation Report

TRAFFIC CHANGES

Based upon the data obtained and the analysis conducted, a series of traffic changes were established to the existing street patterns (refer to Figure 4.7), along Broadway along the course of the Green Light for Midtown Project. Certain sections of Broadway were completely closed to vehicular traffic; West 47th street to West 45th street, West 45th street to West 42nd street and West 35th street to West 33rd street, refer to Figures 4.9 and 4.10 (Quinn, 2011). To ensure the smooth flow of traffic in the east-west direction, intersections with side streets were left open. Along sections of Broadway between Columbus Circle and Union Square, part of the roadway was specifically reserved for pedestrians and bikers. Thus, the number of travel lanes was reduced to just two; with turn lanes north of 47th street and one with turn lanes south of 33rd street as illustrated in Figure 4.8.

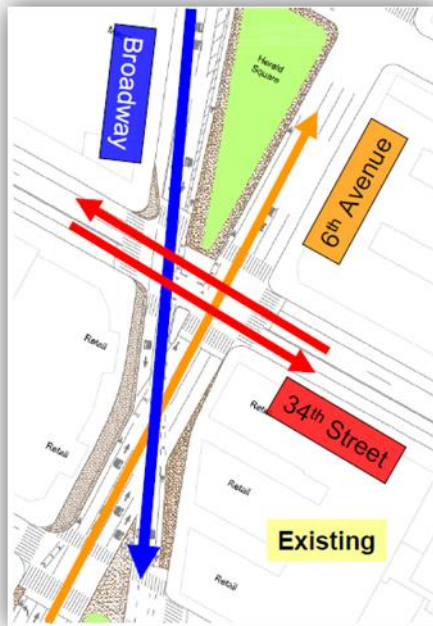


Figure 4.6: Existing Traffic System in Midtown

Source: Broadway Pilot Program

¹The 7th Avenue traffic was allowed to continue southbound on 7th Avenue through Times Square by opening the Times Square Shuffle. Also, left turns were permitted from southbound 7th Avenue onto West 42nd street. Consequently, 7th Avenue was widened to four lanes between West 48th and West 44th Streets. The signal timings were also changed between Broadway and 7th Avenue and also on intersections along 6th Avenue from 26th to 34th streets. This in turn allowed an additional amount of green time for northbound direction approaching 34th street. In order to clear the block of traffic of West 42nd street between 7th Avenue and Broadway, the signal offset at Broadway and West 42nd street was adjusted.

Since a large number of vehicles use Eastbound Central Park South to access 7th Avenue, the parking on the south side of Central Park South between Columbus Circle and 7th Avenue was limited in order to create an additional turn lane at 7th Avenue. The signal timing was also adjusted at this intersection. The bus routes along Broadway to 7th Avenue and 5th Avenue were

¹ The information about the traffic changes is based upon the interview with Sean Quinn, Planning Coordinator of the Pedestrian Projects Group of NYC DOT in January, 2011.

rerouted. A rush hour bus lane was also created along the west curb of 7th Avenue between West 42nd and 35th streets.

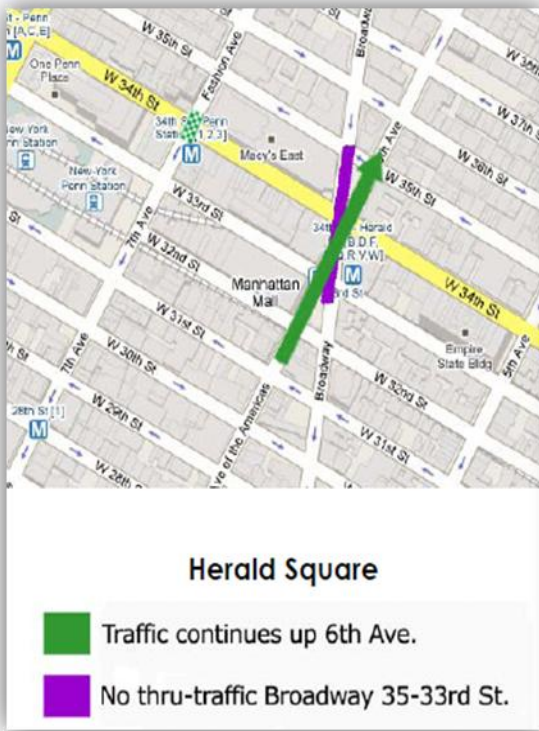


Figure 4.9: Traffic Changes on Herald Square

Source: Broadway Pilot Program

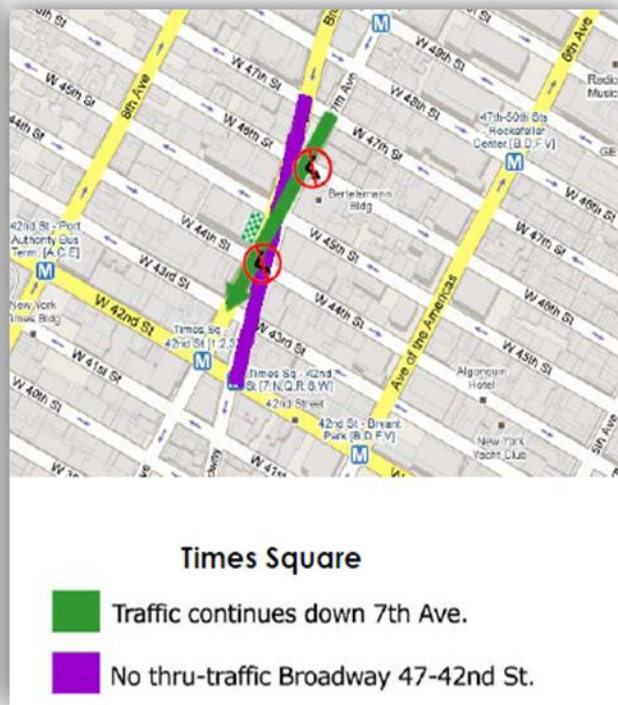


Figure 4.10: Traffic Changes on Times Square

Source: Broadway Pilot Program

PUBLIC PARTICIPATION

In order to analyze the impacts of the changes made through the Green Light for Midtown Project, a detailed traffic micro-simulation model based upon the data collected from 2007 to 2008 was created (NYC Department of Transportation, 2010, p. 38). The model was built to assess the proposed impacts during the peak hours of the evening when the traffic is most congested and make any necessary changes if needed (NYC Department of Transportation, 2010, p. 38). As part of the process, NYC DOT also involved a number of stakeholders. “The design and operation of Green Light for Midtown benefitted from the informed comments and recommendations made by a broad spectrum of concerned and interested individuals and organizations (NYC Department of Transportation, 2010, p. 40). In order to ensure that people and all the stakeholders were properly informed about the project, NYC DOT used its website to

distribute project details, designs, timelines, projected impacts, scheduled public meetings, photos and other project information and also distributed brochures and specialized flyers (NYC Department of Transportation, 2010, p. 43). NYC DOT invited comments from the following parties; “elected officials from all levels of government; business improvement districts, community boards and civic organizations; local businesses including the hotel, theatre, parking, livery, trucking, real estate and tourism industries; transportation and planning professionals; governmental and other official agencies (NYC Department of Transportation, 2010, p. 40). This was accomplished with the help of extensive public outreach. There were several public and private meetings held with all the stakeholders, multiple press events, wide distribution of targeted brochures and flyers to inform as many people as possible of the project and upcoming project meetings to solicit feedback to its implementation (NYC Department of Transportation, 2010, p. 40).

There were two public meetings and open houses held by NYC DOT to present the design to the people. The open houses enabled a more direct interaction between the staff from NYC DOT and members of the public and the various stakeholders (NYC Department of Transportation, 2010, p. 40). This in turn led to a series of focus meetings with the stakeholders to develop aspects of the project in a collaborative manner. Interaction with Building Owners and Managers Association (BOMA) as well as the Real Estate Board of New York (REBNY) led DOT to address certain specific issues of property owners after traffic realignment such as the need for truck loading and unloading at individual buildings as well as broader issues such as, “how the project could enhance the desirability of the Broadway area for tenants, investors, and other stakeholders (NYC Department of Transportation, 2010, p. 41). The stakeholders later became partners in maintaining the public space created. With the Broadway theaters being a major attraction, NYC DOT met with representatives of theatres including, Schubert Organization, Nederlander Productions Theatre, Jujamcyn Theatres, The league of American Theatres and Producers, The Manhattan Theatre Club, The Roundabout Theatre, and The New 42nd Street Theatre to discuss and analyze how they would be affected by the project and address their concerns (NYC Department of Transportation, 2010, p. 41). The theatres expressed concerns over the proposed turn restrictions which could potentially restrict access to the theatres. “In response to their concerns, a turning lane was added to allow vehicles to turn from southbound 7th Avenue to westbound 45th street, which houses a number of theatres” (NYC

Department of Transportation, 2010, p. 41). To further make theatre going an easy and comfortable experience for New Yorkers, NYC DOT published a flyer informing people about the changes and directions for accessing each of the theatres (NYC Department of Transportation, 2010, p. 41).

Another important set of stakeholders were the hotel owners in Midtown that cater to all the tourists. As an additional part of the outreach phase, the NYC DOT staff met with representatives of the Hotel Association, specifically those that were more directly affected by the project; The Double tree Hotel in Times Square, Crowne Plaza Times Square and the Sheraton New York Hotel (NYC Department of Transportation, 2010, p. 41). After evaluation, DOT assessed how the hotel services such as the valet operations given the new traffic patterns (NYC Department of Transportation, 2010, p. 41).

During the final phase of the outreach, NYC DOT held extensive meetings with tour bus companies, both Gray Line Sightseeing and City Sights to address the routes for tourists (NYC Department of Transportation, 2010, p. 41). Since Times Square is such an important tourist spot, NYC DOT worked to ensure that the new bus stops are allocated within Times Square and that the operations run smoothly and in turn creating an attractive tourists destination (NYC Department of Transportation, 2010, p. 41). NYC DOT also worked with Times Square Alliance and 34th Street Partnership to reach out to the retailers such as parking and deliveries (NYC Department of Transportation, 2010, p. 42).

“Communication with the various stakeholders helped to define important project elements and ensure that people who use Broadway on a daily basis were able to influence the project development (NYC Department of Transportation, 2010, p. 42). One of the most important changes made due to the public outreach and the stakeholder meetings was the revoking the ban of the right turn from 7th avenue onto W.45th street (NYC Department of Transportation, 2010, p. 42). “Local hotels, theatres and other interested parties that requested that DOT consider allowing this turn to allow patrons arriving in private cars and taxis to access their venues and ensure business operations would not be adversely impacted by the project (NYC Department of Transportation, 2010, p. 42). Another concern brought out by the public input sessions was the request for swapping of the bicycle lane and plaza spaces from W.42nd Street to W.35th streets (NYC Department of Transportation, 2010, p. 42). Thus, the new

pedestrian zones were placed directly adjacent to the sidewalk with the bicycle lane closer to the parking lane (NYC Department of Transportation, 2010, p. 42).

SUMMARY

This chapter has covered the public space improvements on Broadway and Times Square that culminated in the Green Light for Midtown project in New York City. The background of the area informs us about a number of public organizations that have played an active role and have also been responsible for taking small steps to improve the conditions of the public space in the vicinity of Times Square. The primary organizations and their objectives are listed in Table 4.1.

ORGANIZATIONS WORKING IN MIDTOWN, MANHATTAN	
ORGANIZATION	OBJECTIVE
Times Square Alliance	Promote Times Square and develop ideas for improvement
Project for Public Spaces	Create and sustain public spaces
NYC DOT	Enhance transportation infrastructure and movement of people and goods
Design Trust for Public Space	Improving New York City’s parks, plazas, streets and public buildings

Table 4.1: Summary Table showing organizations working in Midtown, Manhattan

Source: Bhimarazu, 2011

These organizations in collaboration with the New York City Department of Transportation implemented a number of improvements that have assisted in improving the quality of the public space and generate awareness about the issues faced by the area. The workshops and the programs were aimed at providing recommendations for any future work by the NYC DOT and were successful in doing the same. Table 4.2 shows the primary programs by the individual organizations as well the intended goals. The following chapter will analyze more in depth the effects that each of these programs and the Green Light for Midtown project had on Broadway and Times Square.

PROGRAMS IN MIDTOWN, MANHATTAN PRIOR TO GREEN LIGHT FOR MIDTOWN			
YEAR	PROGRAM	ORGANIZATION	GOAL
2003	Workshops: Re-Envisioning Times Square	TSA & Design Trust for Public Space	Enhance the pedestrian experience-influence future endeavors in the area
2004	Design Times Square	TSA	Promote high quality design
2004	Re-Vitalization of Duffy square	TSA, NYC Department of Parks and Recreation, Theatre Development Fund and the Coalition for Father Duffy	Utilized street space effectively while creating space to experience Times Square
2005	New York Streets Renaissance	Project for Public Spaces	Advocacy and support for reimagining public spaces
2006	Expansion of sidewalks	TSA, NYC DOT and Philip Habib associates	Catered to the increasing pedestrians in the area
2006	Times Square Shuffle	TSA and NYC DOT	Traffic reconfiguration
2006	plaNYC 2030	Mayor Bloomberg	Comprehensive vision for City of New York-“Re-Imagined Public Realm”

Table 4.2: Summary Table showing programs in Midtown, Manhattan prior to Green Light to Midtown

Source: Bhimarazu, 2011

Chapter 5 - IMPACTS OF THE CASE STUDY

The next step of the research process is to study the success of the Green Light for Midtown project. Thus, this following chapter aims to access how efficacious NYC DOT was in implementing the desired objectives. This was done through an evaluation of the documents by NYC DOT as well as TSA (Times Square Alliance). The surveys conducted by both NYC DOT and TSA were used to gauge the perception of people about the public spaces both before and after the changes were implemented. The interviews conducted with the officials from NYC DOT and PPS (Project for Public Spaces) were used in support of the documents. The second part of the chapter identifies certain important aspects that made the Times Square design a success. The interviews conducted were geared toward achieving the final outcome: understanding of what elements are essential for a successful social public space on streets and the steps that can be taken by other cities to create such spaces in the future.

Times Square and Broadway have gone through a cyclical process of development from the 1900s to the present experiencing periods of prominent growth at the time of foundation to the adverse conditions of the 1960s. Times Square however was brought back to its glory through the proliferation of tourists and entertainment centers in the area. The 1980s, “posed multiple challenges for Times Square, as commercial development seemed to be the best way to contract the areas criminal degeneration but wouldn’t the same development destroy the neighborhood’s unique ambience and essential character?” (www.timessquare.com). Times Square felt the effects of urbanization after it went from being a “symbol of the new metropolis” to a degenerate area (www.timessquare.com). The same development that led to it being an icon of the 20th century also led to it facing its downfalls. Development needed to be continued in a way that would ensure that the identity was maintained without the area going into decline. In order to achieve this, Times Square transformed itself into a cultural icon. Local officials and businesses got together to further this image and thus gave birth to the Times Square Improvement District. The formation of the Times Square Business Improvement District in the 1900’s was a step in this direction. A number of organizations came together to revitalize the district including the 42nd Street Development Project, The New 42nd Common Ground, The Midtown Community Court and the New York Police Department (www.timessquare.com).

Since then, there have been a number of programs to evaluate the area and better improve the urban design. These programs included the 2003 workshops held in joint collaboration by Times Square Alliance and Design Trust for Public Space, the 2006 site analysis conducted by Times Square Alliance and Project for Public Spaces. The New York Streets Renaissance was another program of significance. These workshops and projects brought together architects, urban designers, artists and city officials to visualize the Times Square area. The site analysis and the recommendations that were developed as a result of the study influenced the NYC DOT's Green Light for Midtown Project.

IMPACTS OF PROGRAMS IN MIDTOWN, MANHATTAN

The recommendations that the Green Light for Midtown project was loosely based upon were a result of the workshops held by TSA (Times Square Alliance) and the New York Streets Renaissance Campaign. Some of these recommendations were directly implemented by NYC DOT prior to the Green Light for Midtown project as illustrated in Figure 5.1.

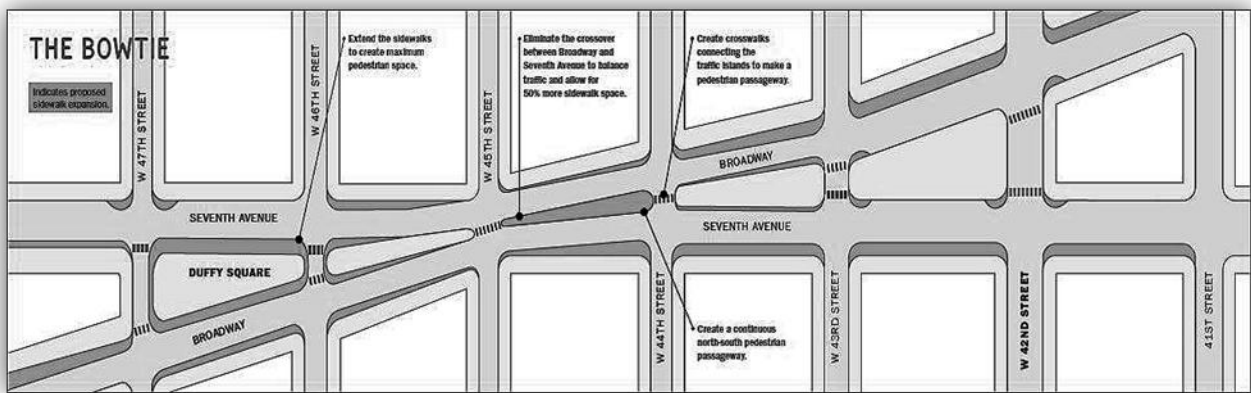


Figure 5.1: Recommendations for improvements by TSA

Source: Times Square: The Second Century Workshop Brief: Re-Imagining the Bowtie

PPS (Project for Public Spaces) launched the New York Streets Renaissance Campaign which was initiated with the objective of raising awareness about the importance of streets as places by facilitating city wide conversation and certain demonstration projects (Kent, 2011). The campaign brought together city officials and local business groups to work together to explore ideas (Kent, 2010). Times Square was one of the areas explored under this program. During the interview, Ethan Kent, the Vice President of PPS stated that the program was set up

to go beyond the typical advocacy of encouraging public transit and getting more pedestrians on the streets and instead look more holistically at great streets and what they can accomplish (Kent, 2010). The site analysis done by PPS (Project for Public Spaces) during May 2006 to June 2007 in Times Square conducted in collaboration with TSA (Times Square Alliance) was several folds and affected the improvements that followed. They collected baseline data on how the square was functioning for pedestrians, cars and gatherings for social activities (Kent, 2010). Consequently, according to Ethan Kent, the New York Streets Renaissance supported what NYC DOT came up with for the Green Light for Midtown project (Kent, 2010). The following were some of the recommendations made as part of the programs that were implemented in collaboration with NYC DOT and laid the groundwork for the Green Light for Midtown project.



Figure 5.2: Revitalization of Duffy Square

Source: Times Square: The Second Century

Workshop Brief: Re-Imagining the Bowtie

The revitalization of Duffy Square was the central element in the revitalization of the entire Times Square district. Duffy Square is the largest open space in Times Square. However, the square failed to live up to its potential. This was due to the fact that even though there was an open space for the public; there was no way to actually enjoy it, it was just a traffic island on a busy street. NYC Department of Parks and Recreation in collaboration with Times Square Alliance, Theatre Development Fund and the Coalition for Father Duffy devised a plan to redesign the square and secure the required funding for the same. As illustrated in Figure 5.2,

“The plan includes a new TKTS booth; amphitheater-style seating on top of the booth; and an upgraded plaza, set with granite and ground lighting, which will be significantly wider (up to 18 feet wider) and will provide the most flexible and usable public space in the area” (Times Square Alliance & Project for Public Spaces, 2008). Apart from the funding secured by the three partners, additional money was secured by federal transportation funds earmarked for streetscape improvements. This was the first step in creating a social public space for people to experience. A space where people could actually get away from the hustle and bustle of the Times Square’s streets and sidewalks and actually stop and absorb the experiences the area has to offer. It created spaces to watch, sit or just slow down and talk to people.

Another program was the expansion of sidewalks. NYC DOT allocated funds in 2006 for a sidewalk reconstruction project for a 15% increase in sidewalk space, refer to Figure 5.3. “The Times Square Alliance, working with Philip Habib & Associates and DOT, and using the results of the Design Trust Workshops as a guide, is studying a plan to further increase sidewalk space, to create a new pedestrian passageway and to decrease vehicular congestion on Seventh Avenue in the Bowtie” (Times Square Alliance & Project for Public Spaces, 2008). It was recognized that even though the sidewalks are heavily congested, the median traffic islands could be better utilized to create plaza spaces. The proposal called for a network of islands and crosswalks that would create a pedestrian passageway down the center of Times Square from One Times Square to Duffy Square creating areas that house art and allow for photo and viewing opportunities (Times Square Alliance & Project for Public Spaces, 2008). This enabled the creation of separate nodes for each activity such that there was the possibility now for a more cohesive environment.

Through the workshops, Times Square Alliance also created a plan to ease the traffic flow and consequently create more space for pedestrians. The new plan not only allows for the creation of far more pedestrian space, but it also redirects traffic more evenly and lessens the bottleneck on Seventh Avenue below 45th Street (Times Square Alliance & Project for Public Spaces, 2008). TSA also proposed changing the Times Square signal timings and alternate turning systems to ensure smoother pedestrian traffic flows (Times Square Alliance & Project for Public Spaces, 2008). This would ensure that a maximum number of people could travel through the spaces with limited interruption. TSA proposed that further analysis of these schemes was required to understand the feasibility of these proposals and the effect they would have on the surrounding street networks.

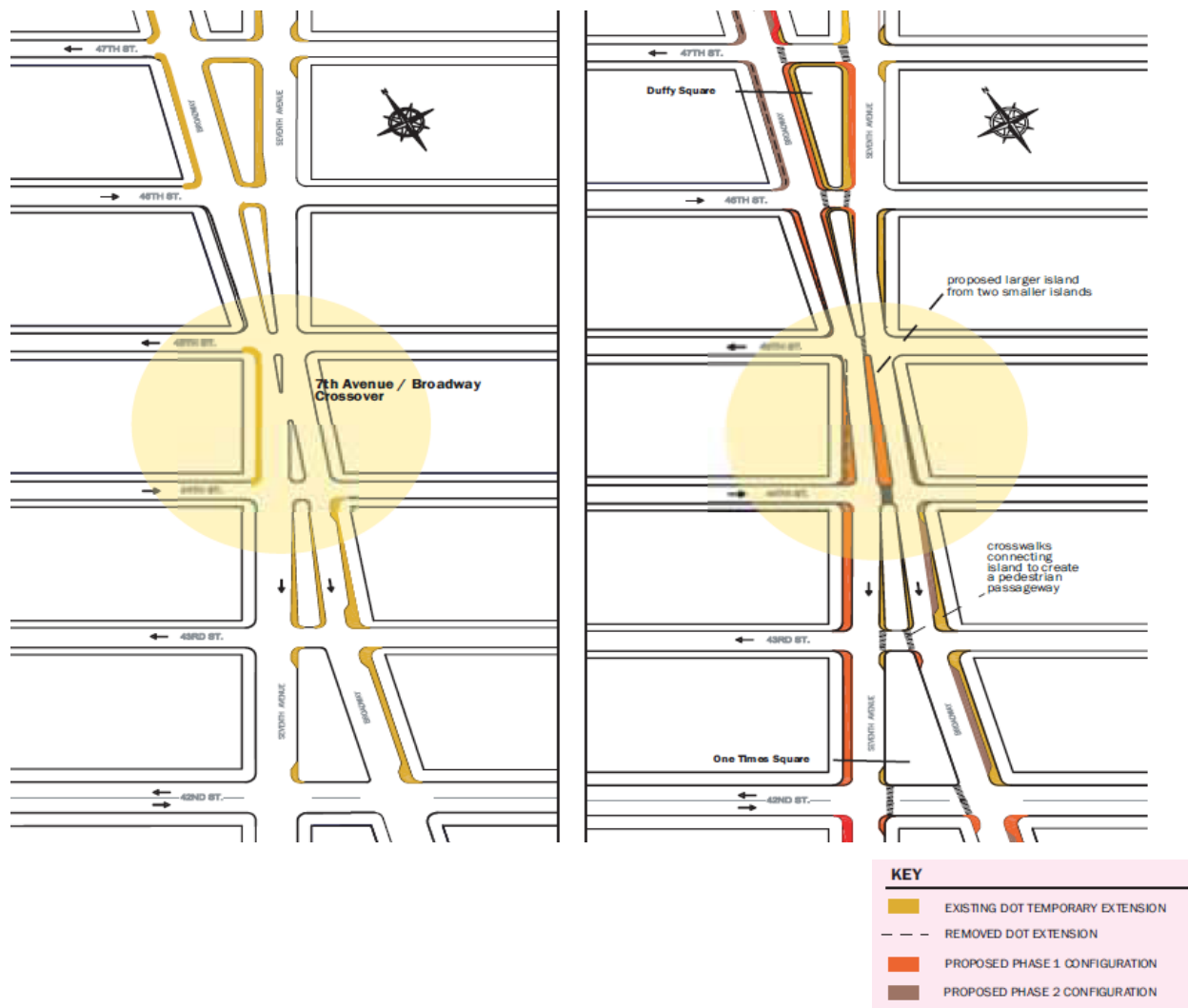


Figure 5.3: Sidewalk Extension

Source: Problems and Possibilities: Re-Imagining the Pedestrian Environment in Times Square

Times Square Alliance also recognized the need to reinforce the unique identity of Times Square. The creation of pedestrian plazas would also create spaces for temporary public performances and display of art. Incorporating these elements into the vibrant identity of the Times Square streetscape would bring that the vibrancy that was characteristic of the area (Times Square Alliance & Project for Public Spaces, 2008).

In addition, TSA proposed a series of streetscape improvements in the surrounding districts. The potential streetscape improvements included news racks, landscaping, and way finding signage as well as the placement of temporary art. “The streetscape program would create a dynamic vocabulary that recognizes each area’s distinctiveness while also establishing a coherent design for the district” (Times Square Alliance & Project for Public Spaces, 2008).

To endorse the visualization and understanding what the area needed, TSA launched the ‘Design Times Square’ program to promote high quality design in and around Times Square, among commercial establishments, office buildings, theatres, outdoor advertising and public art that are accessible to the public (Times Square Alliance & Project for Public Spaces, 2008). The first program of Design Times Square was launched in 2004 as part of the centennial celebration of Times Square.

The project was based on the principle illustrated by Ethan Kent of Project for Public Spaces who stated that, “It’s still in a minority to change the paradigm of thinking which is plan for people and places first because if you create great destinations for people to go, you are actually eliminating the number of trips that people need to take and you are creating places that people need to accomplish many planned and unplanned things in one place, reduce trips and there cities become compatible with walking, biking and transit” (Kent, 2010). The Green Light for Midtown was sort of a final step among a series of actions taken since 2006 (Quinn, 2011).

GREEN LIGHT FOR MIDTOWN

The Green Light for Midtown project was implemented with the aim of alleviating the vehicular and pedestrian congestion in Midtown and thereby creating a successful public space. The Green Light for Midtown Evaluation Report, “uses a comprehensive set of quantitative information to measure and assess how well the changes achieved the project goals” (NYC Department of Transportation, 2010, p. 7). The outcomes of the projects were divided into three sections; mobility, safety and the pedestrian influence. The mobility and safety impacts of the project were measured with the help of a number of indicators. Field travel time surveys were conducted before and after project implementation; during March 2009 and then again in September and October 2009 (NYC Department of Transportation, 2010, p. 7). NYPD crash data were also used to document the crash histories and the pattern of pedestrian behavior in complying with signals (NYC Department of Transportation, 2010, p. 7). The following sections denote the specific impacts that the project had on mobility, safety and pedestrian usage.

MOBILITY

“The Green Light for Midtown project was designed to enhance mobility in West Midtown by simplifying intersections, removing conflicts and providing additional traffic and

pedestrian capacity where needed”. The following factors were assessed in order to evaluate the project’s success in resolving mobility issues; general traffic speeds, bus speeds, traffic volumes, bus ridership and pedestrian volumes (NYC Department of Transportation, 2010, p. 7). The upshot of the traffic flow changes were studied using GPS data and field travel time surveys (NYC Department of Transportation, 2010, p. 7). The analysis controlled for seasonal variations that had no direct impact on the Green Light for Midtown project but nonetheless influenced the data. One of these factors was the change in traffic counts that reduced as a result of the economic recession in 2008 (NYC Department of Transportation, 2010, p. 8).

The traffic changes that were implemented during the project positively impacted the city in a number of ways. The closing of Broadway at the 34th street intersection improved northbound travel along 6th Avenue (NYC Department of Transportation, 2010, p. 10). Field travel time surveys show a 15% improvement in travel time on 6th avenue and 4% improvement on 7th avenue (NYC Department of Transportation, 2010, p. 11). “The northbound taxi trips in West Midtown were 17% faster in fall 2009 compared with fall 2008; this compares with an 8% increase in East Midtown”, refer to Figure (NYC Department of Transportation, 2010, p. 8).



Figure 5.4: Zones of Analysis

Source: Green Light for Midtown Evaluation Report

The speed of eastbound trips in West Midtown improved by 5% and westbound trips improved by 9% in fall 2009 compared to fall 2009; East Midtown showed improvements of 2% for eastbound trips and 7% for westbound trips (NYC Department of Transportation, 2010, p. 10). Between fall and spring of 2009, the northbound travel time between 23rd street and Central Park South improved by 5% while southbound travel remained the same (NYC Department of Transportation, 2010, p.



Figure 5.5: Subway Riders at Times Square

Source: Broadway Pilot Program

11). The taxi GPS data are important as they show the actual route followed by people as they tend to take the quickest possible route (NYC Department of Transportation, 2010, p. 13). As a result of the improvements at Herald Square, the speed of bus travel on 6th avenue also improved by about 13.5% (NYC Department of Transportation, 2010, p. 14). “After implementation, more than 90% of this through traffic with destinations south of Times Square remained on Broadway south of Columbus Circle, using short eastbound blocks to access 7th avenue” (NYC Department of Transportation, 2010, p. 19). The improvement in taxi speeds show the easing of traffic flow in Midtown. This in turn results in a greater number of people using the area and thereby visiting or just being aware of the pedestrian plazas.

“Based on GPS records of taxi trips, the number of drop-offs in the Times Square area on an average weekday increased by 14% (from 1369 to 1565), while the number of pick-ups decreased by 9% (from 2169 to 1982)” (NYC Department of Transportation, 2010, p. 21). This indicates that more people are visiting the area while utilizing alternate modes of transportation including buses and subways. This also encourages more sustainable forms of transportation.

For the subway ridership, “Data from NYCT (New York City Transit) subway turnstile boarding’s were analyzed to identify the changes in the behaviors of subway customers based on the Green Light for Midtown project. It was found that the stations that were closer to the newly created plaza spaces saw an increase of 0.7% to 4.4% in boarding (NYC Department of Transportation, 2010, p. 25). On the other hand, the stations farther from plaza spaces saw a decrease in boarding. This suggests that the presence of improved public spaces attracts more

people into the area. The Usage of public transportation also has an alternate effect of easing the congestion on the streets.

SAFETY

Creating a safe public space for the existing users of the space as well as the new users (brought on as a result of the changes), was an important aspect of the Green Light for Midtown project. “The project was designed to increase safety for pedestrians, bicyclists, and vehicle occupants on the most heavily used sidewalks and roadways in the city” (NYC Department of Transportation, 2010, p. 26). The improvements to safety, i.e. reduction in crash rates in the Midtown area were analyzed by measuring the crash rate before and after implementation of the project and also by observing the changes in pedestrian behavior and to what extent they comply with the signals (NYC Department of Transportation, 2010, p. 26).

The safety features in the Green Light for Midtown project were divided into three major categories: simplified intersections, shortened crosswalks, organized and defined traffic lanes, and separation of conflicting movements (NYC Department of Transportation, 2010, p. 27). Since the Broadway diagonal was creating a safety hazard for both motorists and pedestrians, it was



Figure 5.6: Organized Traffic Lanes

Source: Green Light for Midtown Evaluation Report

important to resolve the issue of the conflicting lanes at the main intersection as illustrated in Figure 5.6. “Simplifying these multi-legged intersections by removing one of the three streets from the intersection has had an immediate safety impact (NYC Department of Transportation, 2010, p. 26). Thus, “Vehicles approach and leave the intersections in fewer directions making traffic more predictable, more organized and therefore safer” (NYC Department of Transportation, 2010, p. 26). The complex intersections also created unsafe walking conditions for pedestrians due to the, “unusually long crosswalks where pedestrians had to cross both Broadway and the adjacent avenue in a single cycle” (NYC Department of Transportation, 2010, p. 27). By closing the sections of Broadway at avenue intersections shortened these crosswalks,

reducing pedestrian exposure to vehicle traffic and thus, creating a much safer walking environment in Times and Herald Squares (NYC Department of Transportation, 2010, p. 27).

“Rerouting Broadway to 7th avenue required creating specialized turn lanes to accommodate the new traffic patterns. “The improved predictability of traffic movements at these intersections improves safety for motorists and pedestrians alike” (NYC Department of Transportation, 2010, p. 28). Pedestrian and motor lanes were separated and controlled by traffic signal phases to reduce conflicting movements (NYC Department of Transportation, 2010, p. 28).

Analysis of all these changes showed that there has been a dramatic decrease in the number of crashes since the project was implemented. The crash rate of vehicles is down by 63% in the project area since the project was implemented (NYC Department of Transportation, 2010, p. 28). “Pedestrian injuries fell by 35% in the project area, including Broadway from 26th street to 36th street and 42nd street to Columbus Circle, 6th Avenue from 33rd street to 35th street, and 7th Avenue from 42nd street to 47th street (NYC Department of Transportation, 2010, p. 28).

“Pedestrian signal compliance rates (based on manual counts) in the Herald Square area increased substantially, with compliance increasing from 76% to 89% at 6th avenue and 34th street and from 38% to 78% at 6th Avenue and 33rd street, indicating that the new, simplified traffic system at Herald Square better accommodates pedestrian trips (NYC Department of Transportation, 2010, p. 28).

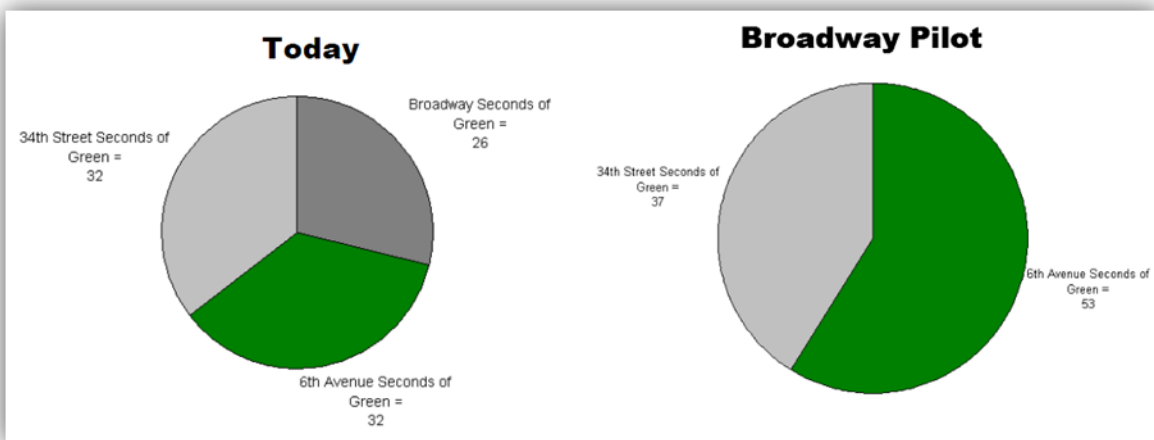


Figure 5.7: Signal Compliance Rate

Source: Broadway Pilot Program

Another factor leading to increased pedestrian safety is the expanded pedestrian spaces in Times Square which has long since been one of the most crowded places in the world (NYC Department of Transportation, 2010, p. 28). “After implementation of Green Light for Midtown, the number of pedestrians walking in the roadway on 7th Avenue between 45th and 46th streets decreased 80%, to 1,022 from 5,025” (NYC Department of Transportation, 2010, p. 30). This indicates that though there has been a decrease in the number of people walking on the road, the number of pedestrians in the area has still remained the same, illustrating that the, “pedestrian flow on 7th Avenue has become safer and more efficient as stationary activities and some pedestrian travel have shifted to the Broadway plazas” (NYC Department of Transportation, 2010, p. 30).

PEDESTRIAN TRAVEL

Pedestrians outnumber other modes of transportation ten to one in both Times and Herald Square (NYC Department of Transportation, 2010, p. 23). Pedestrian volumes in Times Square have increased by 11% in Times Square and by 6% in Herald Square (NYC Department of Transportation, 2010, p. 23). “The increase in traffic represents a combination of preexisting demand that could not be met by the sidewalks before the project and new demand created by the new plaza spaces” (NYC Department of Transportation, 2010, p. 23). “The pedestrians in Times Square may include commuters and shoppers for whom 7th avenue and Broadway are the most direct and desirable routes, but whom once avoided sidewalk congestion in Times Square by using alternate routes” (NYC Department of Transportation, 2010, p. 23). Pedestrian volumes also increased on Broadway at 42nd street (+16%), where the new plazas connects with existing plazas south of 42nd street. Previously, during the peak periods, where crowding may have limited the attractiveness of Herald Square, the number of pedestrians were even greater, with eastbound and westbound volumes increasing 32% and northbound and southbound volumes increasing 34%. The increases that were seen were highest at the locations where the new plazas were created.

SURVEY RESULTS

As a result of the project implementation, there has been a change in the way pedestrians use the open public spaces in Midtown. “Based on survey observations and feedback from the

public, the project has moved the “stopping” activities- such as looking at billboards, consulting a transit map, taking a picture- from the sidewalk to the new public spaces in the Broadway roadbed” (NYC Department of Transportation, 2010, p. 24). This has opened up the sidewalks for those who need to hurry to their destinations. “Pedestrian volumes shifted in the Times Square and Herald Square areas, with the opening of new crosswalks in Times Square and the simplified crossings in Herald Square attracting many more pedestrians” (NYC Department of Transportation, 2010, p. 24).

In order to access the perception of the changes made across Times Square and Herald Square, DOT conducted surveys of residents, visitors, workers and tourists. These surveys were conducted with specific demographics and also conducted public forums after implementation to gauge the reactions of people (Quinn, 2011). TSA (Times Square Alliance) on the other hand conducted their surveys online (Quinn, 2011). According to Sean Quinn, the Planning Coordinator of the Pedestrian Projects Group, even though the information provided by TSA (Times Square Alliance) was not directly used, it nonetheless reinforced the results obtained by NYC DOT (Quinn, 2011).

These surveys were conducted in early May (before implementation) and early October (after implementation) at three locations within the project area: in Times Square between 44th and 45th streets; in Herald Square between 34th and 35th streets and on Broadway between 27th and 29th streets (NYC Department of Transportation, 2010, p. 35). The surveys took place in Times Square place on weekdays and weekends and covered a broad sample of pedestrians who were both tourists and theatregoers (NYC Department of Transportation, 2010, p. 35).

“Overall opinion among TSA survey respondents was 81%, favoring the Times Square pedestrian plaza, with 37% indicating a “very positive” opinion” (NYC Department of Transportation, 2010, p. 34). “These findings represent a significant increase in positive response from a July 2009 Quinnipiac University Polling Institute survey, which found that the registered voters in New York City favored the changes along Broadway by roughly two to one” (NYC Department of Transportation, 2010, p. 34).

In January 2010, Times Square Alliance commissioned Strategy One, an independent applied research consulting firm to conduct a multi-phase research program to, “gauge awareness and perceptions of the pedestrian plaza in Times Square” (Strategy One, 2010). The research

program was also aimed at evaluating “the impact of overall perceptions of Times Square” and also to “inform communications about, and programs for, Times Square (Strategy One, 2010).

The surveys conducted were divided up into tri-state residents, the employees at Times Square, the plaza users and the retail owners across the area. In the first phase, online surveys were conducted among 600 tri-state area residents; 300 NYC residents and 300 non NYC residents (Strategy One, 2010). Also, 503 people working in the vicinity of Times Square were also surveyed. In order to analyze how the plaza space was used, a face to face survey of 177 users of the pedestrian plaza was conducted (Strategy One, 2010). To analyze the retail trends, 148 face to face surveys among retail managers in Times Square were conducted. 128 surveys were conducted online and via mail in survey among executives of Times Square companies and property owners (Strategy One, 2010).

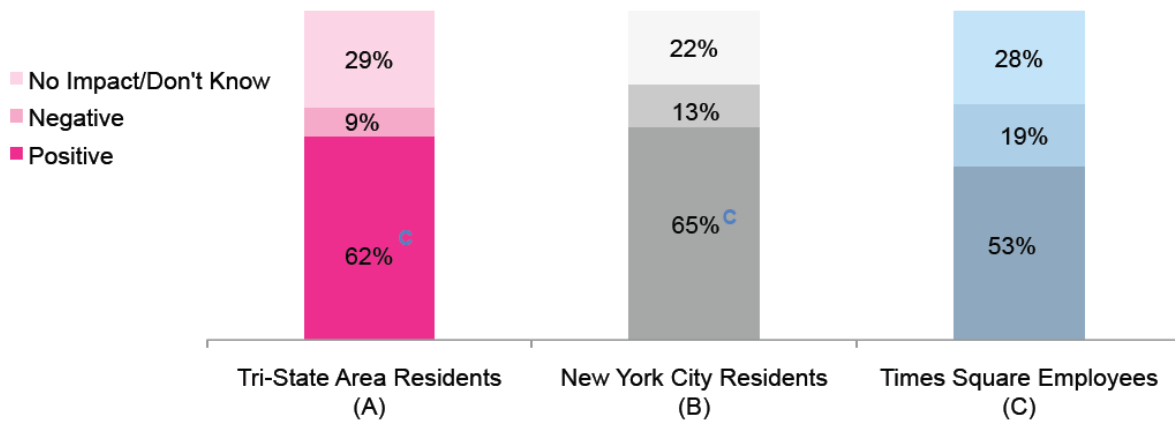


Figure 5.8: Overall Opinion of Plazas

Source: Times Square Pedestrian Plaza Audit

“The majority of Tri-State area residents, NYC residents and Times Square employees believe that the neighborhood, in general, has improved dramatically over the past year” (Strategy One, 2010). Most of the residents and the theatre goers were aware of the new pedestrian plazas and had used them at some point. The overall impression about the plazas is quite positive with words such as ‘nice’, ‘good’ and ‘cool’ used to describe the spaces (Strategy One, 2010). A majority of the constituents including employees believe that Times Square has become a better place to go out, work and engage in activities such as shopping or just spending time there on weekends compared to before. “One in four employees is more likely to leave the office for lunch than they were before the pedestrian plazas were established” (Strategy One,

2010). About 95% of the people who have had some engagement with them are positive about the changes (Strategy One, 2010).

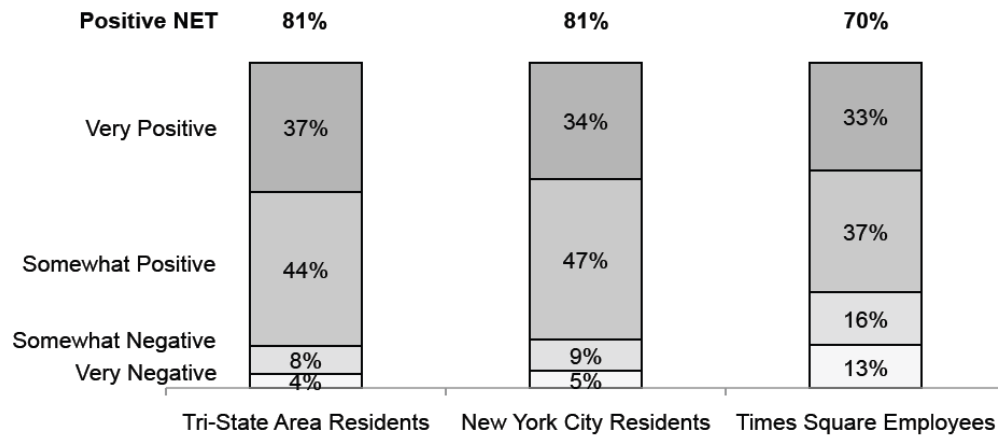


Figure 5.9: Perception of Plazas among users

Source: Times square Pedestrian Plaza Audit

66% of tri-state area residents, 74% of New York City residents and 60% of Times Square employees agree that Times Square has improved dramatically over the past year (Strategy One, 2010). 96% of the tri-state area residents and the New York City residents are aware of the plaza and 40% have used the plaza spaces (Strategy One, 2010). 70% of theatre goers feel that the pedestrian plazas have had a positive impact on the theatre going experience; 84% of tri-state area residents and 72% of Times Square employees agree that the plazas have also made the midtown area safer for pedestrians (Strategy One, 2010). A majority of the residents from the tri-state and New York City feel that the experiences and activities in Times Square have been enhanced by the Green Light for Midtown project. People now engage more in live entertainment, dining out and shopping among others. 84-86% of the residents also agree that the Times Square district is now a better place to go out (Strategy One, 2010). 35-42% of the Times Square employees go out on Times Square after work to relax or spend more time there on weekends (Strategy One, 2010).

Users are overwhelmingly positive about the plazas- particularly in the areas of improved safety and reduced congestion; 8 in 10 of the plaza users say that the plazas make Times Square feel more like New York and 9 in 10 want the pedestrian plazas to become permanent in Times Square (Strategy One, 2010). The plazas create a sense of identity and ‘uniqueness’ for Times Square. Though, the locals indicated that they would like to see certain changes made to the existing plazas; for example, people feel that that the current furniture in place should be

changed. And most people said that they want to see live music performances in the area (Strategy One, 2010). They also thought that it would be helpful if everyone was kept informed of the events in Times Square through email or by posting it on the Times Square Alliance website (Strategy One, 2010). “While live music and permanent, aesthetically appealing furniture would improve the area, the look and feel of the plazas does not seem to be hindering engagement with the space” (Strategy One, 2010).

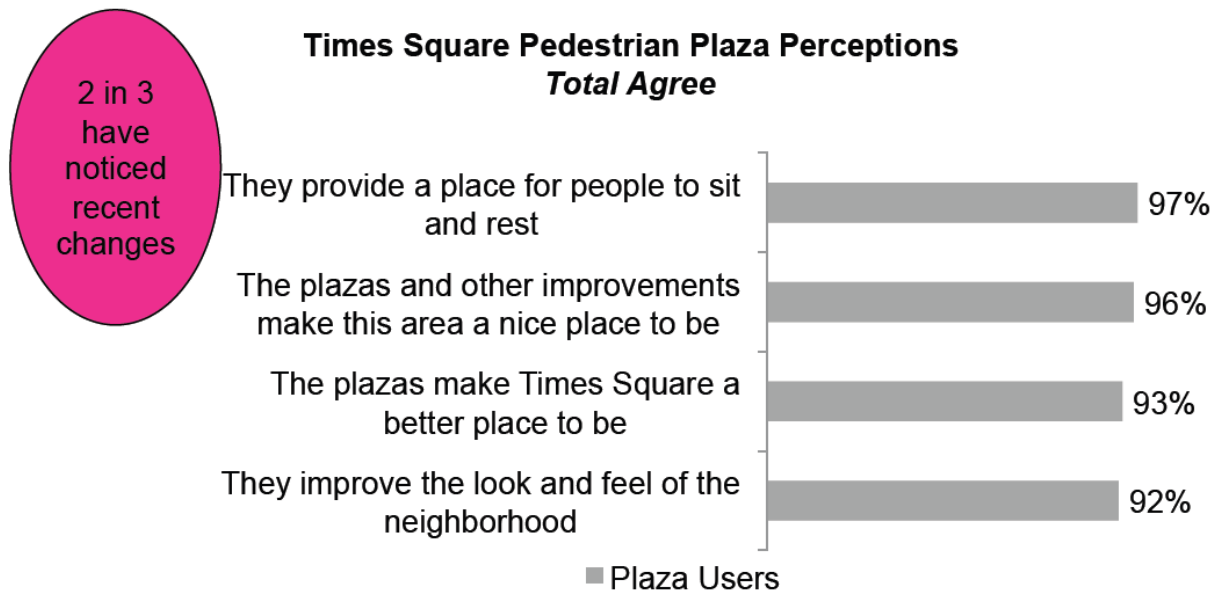


Figure 5.10: Times Square Pedestrian Plaza Perceptions

Source: Times Square Pedestrian Plaza Audit

Apart from obvious physical impacts, the Green Light for Midtown has also had certain economic impacts. Compared to the previous year 32% of the retail managers say that their business is doing better after the improvements in Times Square (Strategy One, 2010). Two-thirds or 68% of the retail managers agree that the plaza changes should become permanent as it has had a positive impact on their ability to conduct business (Strategy One, 2010). In most commercial areas, a good method of analyzing the amount of sales that could potentially take place is by measuring the amount of pedestrians passing through the area (NYC Department of Transportation, 2010, p. 32). “The project has alleviated pedestrian crowding and difficult walking conditions in both Times and Herald Squares leading to increased pedestrian volumes and a shift in pedestrian activities” (NYC Department of Transportation, 2010, p. 32). As a result, the economic activity of the area has also seen an increase. Further analysis was also done to gauge whether people were merely passing through or spending time and money in the area

(NYC Department of Transportation, 2010, p. 32). The surveys showed that there has been an overall increase of 84% in the number of people staying i.e., reading, eating and taking photographs in Times Square and Herald Square (NYC Department of Transportation, 2010, p. 32). “The number of people who stopped to use public space were counted to create “snapshots” of the stationary population at four sites:

- Between 34th and 35th streets
- Between 38th and 39th streets
- Between 39th and 40th streets
- Between 44th and 45th streets” (NYC Department of Transportation, 2010, p. 33).

These data were collected over a period, from May to October of 2009 (NYC Department of Transportation, 2010, p. 32). “In the busiest locations (34th and 35th streets), typical midafternoon counts in October showed between 100 and 150 stationary pedestrians at any given time, representing increases of 84% over peak periods (mid to late weekday afternoons)” (NYC Department of Transportation, 2010, p. 33). Overall, there has been an increase of 42% in the number of people shopping in the neighborhood of Times Square since the changes (NYC Department of Transportation, 2010, p. 32). Also, 26% more employees step out of their offices during lunch to spend time outdoors in the plaza (NYC Department of Transportation, 2010, p. 32).

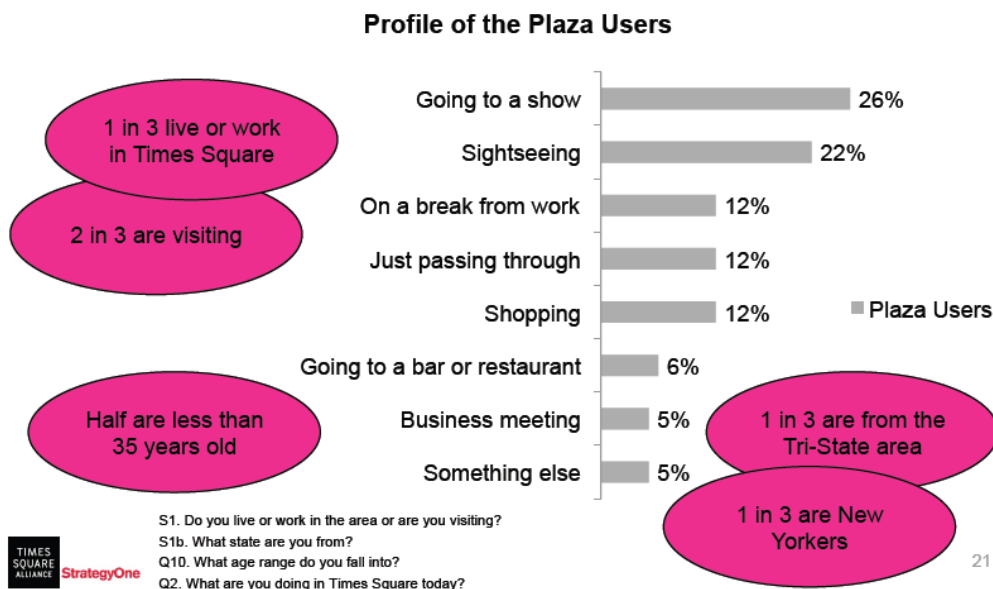


Figure 5.11: Activities in Times Square

Source: Times Square Pedestrian Plaza Audit

Another section of population that were impacted were the theatre goers of the city, 70% of whom reported that they were more pleased with their experience compared to the (NYC Department of Transportation, 2010, p. 32)previous year . These findings are also consistent with the results of the survey done by Times Square Alliance. “A substantial portion of respondents to TSA surveyors said that they were going out in the Times Square area after work, shopping in the neighborhood and spending time in the area on weekends more often since the implementation of Green Light for Midtown” (NYC Department of Transportation, 2010, p. 33).

“The project greatly benefited from the input and participation of numerous area stakeholders” (NYC Department of Transportation, 2010, p. 37). After implementation of the project, DOT held two open public forums in both Times Square and Herald Square. Discussions were held with the help of representatives from DOT and Times Square Alliance about traffic issues, pedestrian spaces, programming and urban design (NYC Department of Transportation, 2010, p. 45). DOT also conducted onsite and online surveys to gather input and feedback from people about the Green Light for Midtown project. Based upon the positive feedback from people and the improvements in public space due to the project, DOT recommended that the changes be made permanent.

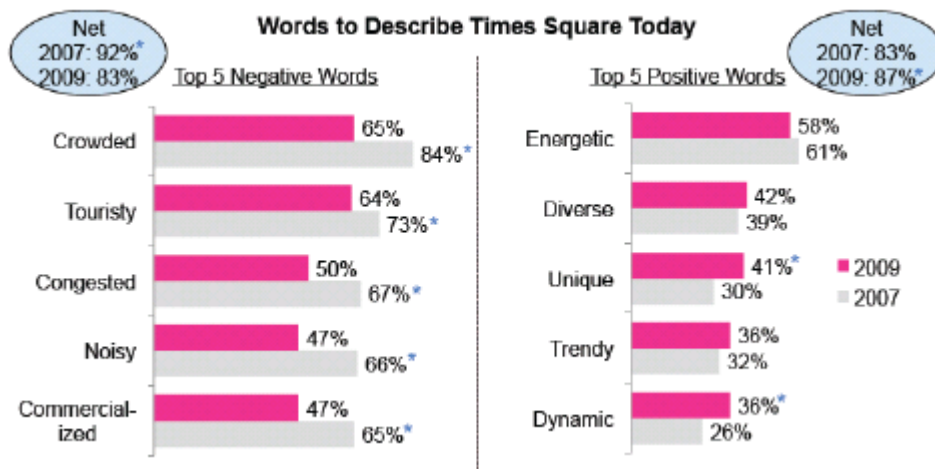


Figure 5.12: Description of Times Square by Users

Source: Times Square Pedestrian Plaza Audit

During the interview with Sean Quinn (Planning Coordinator, Pedestrian Projects Group), he revealed that the ground breaking to make the Green Light for Midtown project permanent will begin in 2012 (Quinn, 2011). The process of making the permanent changes is largely dependent upon funding. Since the funding is dependent upon Department of

Transportation, city money as well as federal funding, it is hard to obtain and the work is believed to begin as soon as the necessary funding is secured (Quinn, 2011). Implementing the project temporarily has been very advantageous rather than making the changes permanent right from the start. Installing it temporarily helped the authorities to assess the impacts of the project and understand what differences the project would make in the public space. According to Sean Quinn, it also becomes slightly easier to secure funding when the project is implemented temporarily as an experiment. However, Ethan Kent, the Vice President of Project for Public Spaces believed that there was another reason also behind implementing the project temporarily. He believed that NYC DOT implemented the project temporarily so as to get around the planning processes (Kent, 2010). Consequently, NYC DOT did not have to get the same approval process and community participation process that many planning and design projects have to because they were just temporary (Kent, 2010). They showed the people what was possible and implemented it based on the effects. After assessing the effects, any changes if necessary were made to the implemented project. The only change made after surveys and consultations with various stakeholders was the addition of a separate bike lane which was not part of the original project (Quinn, 2011).

ANALYSIS

According to Ethan Kent, the Green Light for Midtown project was the culmination of years of advocacy and grassroots support built up over the years. The initiative and the leadership to make the changes should first come from the communities (Kent, 2010). The degree to which participation can be fostered among various members of the community is essential. “It’s not just about implementing changes to the roadway but changing the way we think about the road and how people come together to help create the public spaces” (Kent, 2010). The precedents used by PPS for the study were not U.S. examples but instead Tokyo, London and Dublin as these were found to be more contextually similar to New York City (Kent, 2010). Ethan Kent stated that even though Times Square is a place unlike any other in the U.S; if you can do it in Times Square, you can do it anywhere (Kent, 2010). The principles remain the same even though the context changes; the ideas implemented in Times Square can also be executed in towns of a few hundred people (Kent, 2010). Even though the principles implemented in New York to create dynamic streets might not be directly applicable to other

cities, certain principles can nonetheless be applied. The recommendations were developed for the concept plan was based upon benchmarks explored of similar places throughout the world.

The interviews were also geared towards understanding what elements lead to the design of a successful public space. Public spaces can be perceived of as the “ground floor” of a city; spaces where people actually want to spend time, which are sociable and have viable economic activity. Anything outside of a person’s home or office can be categorized as a public space. Streets are the most important public spaces of a city. However, the streets that are in existence now are for the most part planned to move cars; they are not planned for people and places. We thus, need to change the way cities operate. Project for Public Spaces propagated this by emphasizing on the need to focus at the human scale in a city through program such as ‘Streets as Places’. This presents a transformative opportunity for cities once we start perceiving of streets as a series of places that connect and support the way a city operates. According to Sean Quinn of NYC DOT, the most important aspect is that the street space or public space should attract people as this makes the area vibrant and boosts economic activity (Quinn, 2011). In Times Square, this process was easy as it was already a focal point of the city and an important tourist place (Quinn, 2011). Sean Quinn also stated the importance of political will to transform the city without which it is very difficult to execute such projects (Quinn, 2011).

The Green Light for Midtown project was successful in bringing ‘New York’ back into Times Square. The perceptions of the plaza users who are both locals as well as tourists are very positive. A significant impact of the project has also been felt by the employees in the area. However, only 50 percent of the employees working in the Times Square area are of the opinion that there has been a positive impact due to the project. This could be due to the fact that even though there has been a significant improvement in the easing the traffic, the streets and sidewalks remain crowded. Even though the sidewalks are less congested now, the plaza improvements have brought even more new people into the area. About 62-65 percent of New Yorkers feel that the impacts of the project has largely been positive and the incidences of people going out for live entertainment, shopping, dining, going to the theatre as well as other activities have increased dramatically.

As Jane Jacobs illustrated in *The Death and Life of Great American cities*, a community of people is created on streets through activity generated by people being out on the street, on errands or those aiming for food or drink. This in turn attracts far more people facilitating

interaction (Jacobs, 1989). The Green Light for Midtown project was a success as it enabled such interaction between people. By alleviating the traffic and pedestrian congestion, more space was created for activities in ways that people could finally interact with each other rather than merely jostling against each other to get to their destination. Times Square and Broadway being such a highly dense area, is also extremely diverse. This diversity provides more opportunities to engage people together. The project also follows Appleyard's theory that an increase in traffic volumes causes a decline in the number of acquaintances (Appleyard, 1981). Although, Appleyard's theory essentially relates to neighborhood streets, this project slightly digresses to also relate to commercial and public streets. Though his principle of forming more acquaintances on streets with fewer crowds is valid, this project takes that principle a little further. Even though the streets of New York are extremely crowded, instead of this being a hindrance for the formation of a 'community', it helps to draw out the diversity of the area. By having spaces to stop, observe or eat, provides increased likelihood of exchange between people and creating a more pleasant atmosphere in general.

In New York, the process of creating this social space long Broadway has been a gradual process. The seeds of the project were implemented in the minds of the people through various programs and workshops by organizations like Project for Public Spaces and Times Square Alliance. Even though, the Green Light for Midtown project by the NYC Department of Transportation is not directly attributed to the other programs, they definitely played a direct role in bringing about the transformation from just a commuter route to a well-designed public space.

SUMMARY

This chapter attempted to assess the impacts of the Green Light for Midtown project. The impacts of the project were measured in three parts; mobility, safety and the influences on the pedestrians. Table 5.1 summarizes the individual goals of the project as well as the success in achieving them. The results show that the project was largely successful in maximizing the utilization of the street space. At the same time, NYC DOT was also successful in reinventing the urban public space into a space that is used by people and facilitates communication between people. The second part of the chapter was concerned with identifying the elements that made this a success as a public space. The project highlighted the diversity and worked with the

density of the area to create a space that can be used for multiple uses by multiple demographics simultaneously and therein lays the key to its success.

The next chapter draws conclusions about the crucial aspects for the design of urban public spaces in cities and how other cities can explore ideas to create social spaces along their streets.

IMPACTS OF THE GREEN LIGHT FOR MIDTOWN PROJECT IN NEW YORK CITY			
	MOBILITY	SAFETY	PEDESTRIAN INFLUENCE
METHOD OF STUDY	Field Travel Time Survey and GPS Data	NYPD Crash Data	Surveys by TSA and NYC DOT
EFFECTS	Increased speeds of vehicles	Simplifying multi legged intersections:	Pedestrian volume in Times Square increased by 11% and 6% in Herald Square (highest at plaza locations)
	Improved bus speeds	Shortening crosswalks	95% of users are positive about the changes
	Number of drop offs in the Times Square area increased by 14% and pick-ups decreased by 9%	Defined traffic lanes	35-42% of employees go out on Times Square after work or on weekends
	Subway stations close to new plaza spaces increased boarding by 0.7% to 4.4%	Crash rate of vehicles	32% of retail managers believe that their business is doing better after the improvements
			84% increase in people staying, i.e., reading, eating and taking photos in Times Square and Herald Square

Table 5.1: Summary Table showing the impacts of the Green Light for Midtown project

Source: Bhimarazu, 2011

Chapter 6 - CONCLUSIONS AND RECOMMENDATIONS

This report has attempted to examine how the existing urban fabric of streets and sidewalks can be used to create thriving public spaces through the success of the Green Light for Midtown project in New York. Although, historically, cities have always centered on open public spaces, the advent of the automobile led to rapid urbanization resulted in cities being developed around automobiles instead of pedestrians. Streets in the older cities functioned as public spaces that were the center of city life and broke down the barriers between people. “The origin of early cities and their later evolution was, in fact based on the need for places of interactive exchange: the marketplace, the government, and the spiritual and the intellectual centers” (Safdie, 1997, p. 30). With the growth in cities and population, streets are now viewed solely as road networks. Nevertheless, in recent times there has been a paradigm shift as to the way public spaces are perceived; a return to the principles of planning cities around pedestrians. Cities are recognizing the need for re-structuring the urban space to cater to the pedestrians and create open public spaces in the midst of cities. As streets are the most widely available public space available in cities, the importance of effectively utilizing them is important. There is a need to change the design principles and the way the cities and urban spaces are planned so as to create successful public spaces. The Figure 6.1 illustrates the cyclical development process that cities have been going through as the paradigm shifts takes place. This process is clearly evident in Times Square.

The research questions posed at the beginning of the report will now be revisited. The questions will be individually addressed to explain why the Green Light for Midtown project was a success and thereby understand what elements are needed to develop streets and sidewalks as public spaces and how other cities can follow suit.

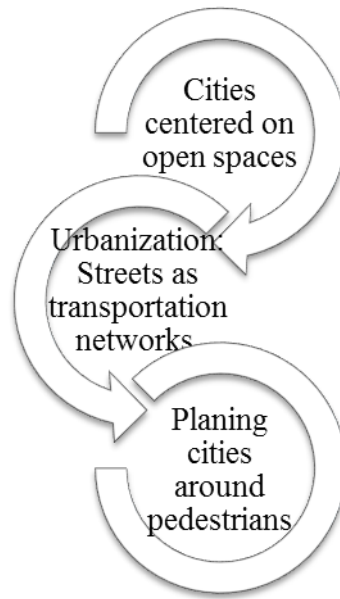


Figure 6.1: Development process of cities

Source: Bhimarazu, 2011

The first step of the study was to establish how successful the Green Light for Midtown was in creating an efficacious public space. A documentation of the study by the New York City Department of Transportation suggests that the Green Light for Midtown project was effective in resolving the mobility and safety for both automobiles and pedestrians in the area. By making the area less congested, DOT was more effectively able to convert the street and sidewalk space for increased pedestrian usage. Based on the surveys conducted by TSA and the New York City Department of Transportation about 88% of the overall users of the plaza; including tri-state and New York City residents, tourists as well as employees working in the Times Square area (Strategy One, 2010). Prior to the implementation to the project, New Yorkers were longing to bring the feeling of New York back into Times Square. The original goals of the Green Light for Midtown project were to make Times Square a better place to live, work and visit. While 84-86% of the tri-state and New York City residents feel that Times Square is a better place to go out, only 48-53% of the residents feel that it is a better place to live (Strategy One, 2010). Also, a fewer percentage (59%) of people believe that the implementation of the Green Light for Midtown project has improved the flow of street traffic. Despite the fact that the project has eased the traffic conflicts, congestion still remains an issue to some extent especially for the people working in the area. Even though the project created a successful public space, the

number of people using the area has increased, consequently the sidewalks remain crowded. About 90% of the plaza users also believe that the project has been successful in making the Times Square safe for pedestrians and motorists. Thus, while 78-80% of the tri-state and New York residents believe that Times Square is a better place to shop, only 45% of the employees working the area agree (Strategy One, 2010). The crowded sidewalks are the reason why only a limited number of people agree that Times Square is a good place to live. About 61-67% of the residents and employees also believe that Times Square is a better place to work after the implementation of the Green Light for Midtown project. As per the goals of the project, 97% of all plaza users agree that the new pedestrian plazas created by the project provide space to sit and rest within Times Square making it a more attractive space to visit. Table 6.1 provides a summary of the conclusions.

CONCLUSIONS			
OBJECTIVE	CRITERIA FOR SUCCESS		
Green Light for Midtown: “A better place to Live, work and Visit”	48-53% of the residents feel that Times square is a better place to live.	61-67% of the residents and employees believe that Times Square is a better place to work.	84-85% of tri-state and New York City residents feel that Times Square is a better place to visit.
Successful elements of the Green Light for Midtown Project	Created space for separate activities to take place simultaneously	Brought 'New York' back into Times Square	Dynamic environment to experience the spaces on Broadway and Times Square
Important design elements for the creation of Public Spaces along streets	Political will to make the changes on a city wide level	Attract people to the space and maintain the competitiveness of the area to keep people coming back	Flexible Design regulations

Table 6.1: Summary Table of Conclusions

Source: Bhimarazu, 2011

One of the key reasons for the success of the Green Light for Midtown project is because it was implemented as a temporary project. This enabled NYC DOT to implement the changes based on the studies and the recommendations by other organizations and then assess the impacts. NYC DOT conducted public forums and open houses to evaluate and understand the public opinion and their needs. This had an added benefit of garnering public support for the project since the citizens had a say in the project and their feedback was considered. The temporary approach also allowed NYC DOT to make adjustments to the original plan after measuring the actual impacts as well as the perceptions of people. This was more effective than implementing it permanently for a number of reasons. In order to gauge the reactions, NYC DOT conducted open public forums and relied primarily on surveys conducted. Firstly, by implementing it temporarily, NYC DOT showed people what was possible and built support for the project over time. Support for such public space projects is very essential for the city to be able to actually implement the project. Secondly, implanting the project as an experiment also makes it slightly easier to secure funding for the same. By showing what a success the project can be and the benefits it has, funding to make it permanent is less difficult to come by.

As illustrated, the surveys conducted by PPS (Project for Public Spaces), TSA (Times Square Alliance) and NYC DOT clearly show that the Green Light for Midtown project was a success. An analysis of the entire project as well as the surveys indicates a number of factors for its effective design. Before the implementation of the project, Times Square was a square by name only due to its crowded sidewalks, excessive vehicular traffic and lack of seating. “Until we actually had Duffy Square as a kind of concrete, tangible paradigm, it was all theoretical, and people couldn’t really experience it” (Roth, 2009). By resolving the basic issues first, those of mobility and safety, New York was able to build upon them. The Green Light for Midtown project created more walking room, made the area less congested and improved the flow of street traffic. Only once these were resolved was New York able to create a vision for the area that would retain the people who already visit and make it a pleasant experience for them. The changes resulted in a harmonious atmosphere for the fast moving pedestrians as well as more leisure spaces for visitors and tourists. Green Light for Midtown created a much needed space to actually observe and enjoy the area. By creating an open public space in the midst of a chaotic urban fabric, it for the first time provided a space to actually experience Times Square and Broadway. “And so sometimes it’s about looking up, sometimes it’s about noticing the store

across the street, but as much as anything it's about watching this urban fugue, which is the special nature of a public space in the city, where you've got all these different things going on" (Roth, 2009). These primary changes met with a wide range of success due to the fact that there was already an existing supply of pedestrians in the area. Another factor for success was that Times Square has a strong presence in the urban landscape along with a clear visualization for the future. Overall, the project has been successful in utilizing street space in one of the busiest locations in the world and creating a valuable urban public space. The re-vitalized space was also flexible in design as it allowed various activities like street performances, vendors and outdoor cafes to co-exist. And, the Green Light for Midtown project by creating spaces to observe, relax, participate in activities or stand still did just that. Even though Times Square is renowned the world over and would attract people no matter what, in order for it to retain its identity and not become a mere busy street over time, it is important to create a space that is reflective of its unique characteristic.

Once we understand how New York was successful with its Green Light for Midtown project, it is important to analyze the lessons learnt to recognize what goes into the creation of public spaces along streets. With the growth and urbanization, we have come to appreciate the classes of open public spaces now available in cities apart from parks. "Widening streets and displacing pedestrians has resulted in an unprecedented scale and pattern: large amounts of paved open space devoted primarily to roadways and parking; with structures interspersed at distances" (Safdie, 1997, p. 5). Over time, streets and sidewalks lost their prominence as a public space and remained as networks, it is only now that organizations like Project for Public Spaces and Transportation Alternatives have asserted that, "There is another part of the public realm, there is another part of city life that we need to pay attention to" (Roth, 2009). Creating entirely different environments for pedestrians and the vehicular traffic resulted in streets being perceived as merely utilitarian (Barnett, 2003, p. 35). As Safdie notes, there is a 'new breed of place', where different parts of the city are connected instead of establishing districts onto themselves integrated with uses that are "truly public by definition" (Safdie, 1997, p. 49). With the chaotic and harried nature of people in cities, it is essential to create spaces of refuge. There is a revitalization of cities that is in action. The works of the likes of Donald Appleyard and William Whyte have always emphasized the importance of streets and the potential for creating them as community spaces. Density and diversity are essential characteristics of a public space. As

Appleyard stated, streets with less traffic and crowds provide more of an opportunity for interaction between people and thereby create a social community of people. This is true with traditional main streets where people had unexpected encounters with other people when walking from one destination to the other (Barnett, 2003, p. 23). However, it is also true that with increased density comes a wide range of diversity which in turn fosters different activities. “Now, designers of retail development are trying to create park-once districts, partly to foster interaction and communication, but also create synergy among the different retail tenants” (Barnett, 2003, p. 23).

With the way that cities are now structured, re-establishing streets as public spaces requires a hierarchy of efforts. Once we begin to understand that streets are built for more than just to move cars around, we can begin to perceive of streets at the human scale. In order to do this, it is important to reconfigure streets from the pedestrian’s view point. Once the basic needs such as ease of mobility and safety are resolved, streets can be appreciated as social spaces. Then, attracting people becomes the first and foremost factor for creating a public space. The public realm is represented of the people and thus, paying attention to their needs and getting them to use the space is important. In the Times Square area, this was not a problem since it was a tourist destination and already attracted people. However, in most other places this can be accomplished through a number of ways; attractive streetscapes, possibilities for activities, spaces for congregation and spontaneous events and performances and spaces to relax and observe. The space should be both a destination as well as an important component to the road network. A diverse mix of uses will bring more people into the area, marking the success of the first step. Another requirement is for an area to retain and maintain its own unique identity. A good example of this is the special zoning districts enforced by New York that helped Times Square maintain its unique identity. “The Times Square special zoning district has preserved and enhanced the area’s distinctive electric signs, ensuring it didn’t become just another business district- an interesting inversion of the typical role of zoning in restricting private signs” (Barnett, 2003, p. 36). A thriving economic district is also necessary as it attracts both people and business into the area. It is also important to keep the long term competitiveness in mind (Roth, 2009). “In a place like San Francisco, in a place like Times Square, they’re major tourist destinations, and people can choose to go somewhere else. Just like whether it’s an amusement park, or it’s a beach resort, they’ve got to do some upgrades, they’ve got to pay attention to the

competitive environment and say, "What's going to keep people coming here?" (Roth, 2009). Constantly evaluating the changing needs and perception of the area is necessary to maintain the area especially with the rate at which cities are expanding now a days.

This effort by cities requires a grassroots effort of spreading awareness. Advocacy of organizations like Project for Public Spaces and Times Square Alliance have gone a long way. This also helps garner political support and funding for the project without which implementation is very difficult. These spaces offer spaces to slow down and actually observe and experience the city life and allow for the perception of cities as places.

The Green Light for Midtown project in New York offers important lessons for other cities too. Times Square is unlike any other area in the United States and is usually compared with the international cities of Tokyo, London and Dublin. However, even though the context might be different, the basic principles remain the same (Kent, 2010). Because of its diverse identity, it is believed that if it can be done in Times Square, it can be done anywhere. This is due to the fact that Times Square and Broadway are among the busiest locations in the world. If a public space for people to sit down and rest can be created there, it can definitely be implemented in other places also. The most important factor is to attract people into the area and thereby retain the people.

There are a number of steps that cities of all sizes can take to create dynamic destinations on their downtown districts. The first step is to raise awareness about the benefits of creating such open public spaces along main streets in towns. Communities should form Business Improvement Districts in their downtowns to not only advocate for changes but also to enable the improvements to take place. The initiative and leadership to make the changes should come from the community itself. The primary aim is to create an urban fabric that fosters "simulating and vital interactive centers" (Safdie, 1997, p. 31). Small low cost improvements go a long way towards creating sociable spaces and enhancing the streetscape if the community. For instance, removing even two parking spots and putting in a small plaza space will have a distinct effect in a small town in bringing together people. An important point to remember while designing downtowns in small communities is that they tend to largely consist of retail uses. It is thus important to create a central space that is host to a diverse mix of uses and activities rather than only retail. Similar to Times Square, the areas should be distinct in character and centrally connected with information, signage and way finding. The ground level experience of the public

space can be further improved by creating interesting building facades that also encourage people to linger in the doorways and thereby, interact with other people. Like in the Times Square district, better sidewalk amenities such as places to sit and relax, will encourage people to interact and better use the space. “In a similar fashion, much of the main-street development in small towns and cities represents an attempt to evoke the old functions of these commercial pathways, to bring shoppers back to downtown areas at a time when increasing numbers are drawn outside the towns” (Carr, Francis, Rivlin, & Stone, 1992, p. 221)

Planners can take a number of steps to create development in the area that is both socially and economically sound as was done in the Times Square district. These steps range from zoning policies to architectural standards. As described by Architect Hugh Hardy, buildings in downtown can be subject to specific design guidelines that require them to be “welcoming and sprightly at the base, an armature for signage as they set back, and a celebration, both night and day, at the top” (Carr, Francis, Rivlin, & Stone, 1992, pp. 216-217). In order to ensure that the street retains a mix of uses, zoning policies can be utilized. Following, the example of Times Square, creating of special zoning districts may aid in maintaining the distinctive identity of Main Street. “The special zoning district created for lower Manhattan landfill development was ultimately based on three essential criteria: design continuity, visual corridors, and visual permeability” (Loukaitou-Sideris & Banerjee, 1998, p. 70). It is important for communities to ensure that the streets are connected with appropriate street widths to maintain the human scale to provide for pedestrian circulation and create a sense of destination.

In order for us to change the way the streets are designed, our perspective must change. The understanding that streets are important social spaces and an essential aspect of community life is first step toward achieving the goal of making street networks more sociable spaces. The regulations and design must be more flexible to cater to the individual contexts of place and environment. The idea is not to drastically alter the form and pattern of streets but rather let the streets evolve through its own interpretation. “Let the street remain a theater, a marketplace, and a playground, but let’s encourage it to become more than just a sum of these parts and serve all of our needs, either simultaneously or at different moments” (Copper-Hewitt Museum, 1981, p. 80).

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